reference document 2018

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INCORPORATION BY REFERENCE

Pursuant to Article 28 of European Regulation No. 809/2004 of April 29, 2004, this Reference Document incorporates the following information by reference:

- with regard to the fiscal year ended December 31, 2017: annual report, consolidated financial statements and the corresponding Statutory Auditors' report, appearing in chapters 9, 20.1 and 20.2 respectively of the Reference Document registered with the AMF on April 10, 2018 under number D. 18-0313;
- with regard to the fiscal year ended December 31, 2016: annual report, consolidated financial statements and the corresponding Statutory Auditors' report, appearing in chapters 9, 20.1 and 20.2 respectively of the Reference Document registered with the AMF on April 5, 2017 under number D. 17-0330.

AMF | AUTORITÉ DES MARCHÉS FINANCIERS

This Reference Document was registred with the AMF (French Financial Markets Authority) on April 5, 2019, pursuant to the provisions of Article 212-13 of the AMF's general regulations. It may not be used in support of a financial transaction unless supplemented by an offering memorandum approved by the AMF. It has been prepared by the issuer and is binding on the signatories.

This document is a free translation of the French language Reference Document that was registered with the Autorité des marchés financiers *(the "AMF") on April 5, 2018. It has not been approved by the AMF. This translation has been prepared solely for the information and convenience of shareholders of SUEZ. No assurances are given as to the accuracy or completeness of this translation, and SUEZ assumes no responsibility with respect to this translation or any misstatement or omission that may be contained therein. In the event of any ambiguity or discrepancy between this translation and the French Reference Document, the French version shall prevail.*

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Notice

The Company = SUEZ
The Group = the Company and its subsidiaries
The Reference Document serves as the Management Report (see Concordance Table)

The items of the Annual Financial Report are clearly identified in the summary subsections using the AFR pictograms AFR

1 persons responsible for information

1.1 Person responsible for the Reference Document

Jean-Louis Chaussade, Chief Executive Officer of SUEZ.

1.2 Declaration of the person responsible for the Reference Document

"I hereby certify, after taking all reasonable measures to that effect, that the information contained in this Reference Document is, to the best of my knowledge, accurate and does not include any omission that would distort its substance.

I certify that, to the best of my knowledge, the financial statements have been drawn up in accordance with applicable accounting standards and give a true and fair view of the assets, financial position and results of the Company, as well as of that of all the companies included in the consolidation, and that the Management Report enclosed presents a true and fair picture of the way in which business is developing, the results, and the financial position of the Company, and all the companies included in the consolidation, as well as a description of the main risks and uncertainties they face.

I have received a letter from the Statutory Auditors stating that they have completed their engagement, indicating that they have audited the information concerning the financial position and the financial statements presented in this Reference Document, and have read the entire document."

Jean-Louis Chaussade
Chief Executive Officer

2 statutory auditors

2.1 Principal Statutory Auditors

ERNST & YOUNG et Autres

1/2, place des Saisons
92400 Courbevoie – Paris-La Défense 1 – France

Appointed by decision of the Combined Shareholders' Meeting of December 21, 2007 and reappointed by the Shareholders' Meetings of May 24, 2012 and then May 17, 2018 for a six-year term expiring at the close of the Ordinary Shareholders' Meeting convened in 2024 to approve the financial statements for the fiscal year ending December 31, 2023. Represented by Jean-Pierre Letartre and Stéphane Pedron[1].

MAZARS

61, rue Henri Regnault – Tour Exaltis
92400 Courbevoie – France

Appointed by decision of the Combined Shareholders' Meeting of July 15, 2008 and reappointed by the Shareholders' Meeting of May 22, 2014 for a six-year term expiring at the close of the Ordinary Shareholders' Meeting convened in 2020 to approve the financial statements for the fiscal year ending December 31, 2019. Represented by Dominique Muller and Achour Messas[2].

2.2 Deputy Statutory Auditor

CBA

61, rue Henri Regnault – Tour Exaltis
92400 Courbevoie – France

Appointed by decision of the Combined Shareholders' Meeting of July 15, 2008 and reappointed by the Shareholders' Meeting of May 22, 2014 for a six-year term expiring at the close of the Ordinary Shareholders' Meeting convened in 2020 to approve the financial statements for the fiscal year ending December 31, 2019.

Auditex's term of office expired on May 17, 2018. Its reappointment was not submitted for approval to the Shareholders' Meeting of May 17, 2018, as Article L. 823-1-I 2nd paragraph of the French Commercial Code *(Code de commerce)* now only requires the appointment of a deputy Statutory Auditor when the principal Statutory Auditor is an individual or single-member company.

The fee schedule for the Statutory Auditors is found in Note 27 to the Consolidated Financial Statements, in chapter 20.1 of this Reference Document.

(1) ERNST & YOUNG et Autres is a member of the Compagnie Régionale des Commissaires aux comptes de Versailles.
(2) MAZARS is a member of the Compagnie Régionale des Commissaires aux comptes de Versailles.

3 selected financial information

The tables below present excerpts from the consolidated income statements, statements of financial position, cash flow statements of the Group financial statements for the years ended December 31, 2018, December 31, 2017 and December 31, 2016.

The selected financial information below should be read in conjunction with the Consolidated Financial Statements in chapter 20.1 of this Reference Document and with the financial review of the Group in chapter 9 of this Reference Document.

Key data from the consolidated income statements

(in millions of euros)	2018	2017 restated	2016
Revenues	17,331.1	15,783.0	15,322.0
EBITDA [a]	2,768.3	2,578.4	2,651.0
Current operating income	1,142.4	1,000.2	1,101.6
Net income, Group share	334.9	295.5	420.3

(a) The Group uses EBITDA to measure its operating performance and its ability to generate operating cash flows. EBITDA is not defined in IFRS and does not appear directly in the Group's consolidated income statement. The transition from current operating income to EBITDA is described in section 9.2.1 of this Reference Document.

Key data from the consolidated statements of financial position

(in millions of euros)	2018	2017 restated	2016
Non-current assets	22,680.9	22,516.8	20,197.9
Current assets	10,872.0	10,314.1	8,954.3
Assets classified as held for sale	–	–	131.8
Total assets	**33,552.9**	**32,830.9**	**29,284.0**
Shareholders' equity, Group share	6,391.8	6,510.4	5,495.9
Non-controlling interests	2,600.8	2,511.4	1,869.9
Other liabilities	24,560.3	23,809.1	21,825.7
Liabilities related to assets classified as held for sale	–	–	92.5
Total liabilities	**33,552.9**	**32,830.9**	**29,284.0**

Key data from the consolidated cash flow statements

(in millions of euros)	2018	2017 restated	2016
Cash flows from/(used in) operating activities	1,973.4	1,962.4	1,913.4
Cash flows from/(used in) investing activities	(1,230.3)	(3,426.0)	(833.0)
Cash flows from/(used in) financing activities	(593.0)	1,145.9	(272.9)
Impact of changes in foreign exchange rates and others	4.7	(51.6)	38.2
Total cash flows for the period	**154.8**	**(369.3)**	**845.7**

4 risk factors

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4.1 Main risks

Given the broad range of its businesses, locations and products, the Group represents a portfolio of risks and opportunities of a financial, industrial and commercial nature. Its position as a key player in the environmental sector and its development goals also expose the Group to strategic risks, which are particularly contingent upon regulatory, economic and industry developments in the segments in which it is involved.

The Group operates in a rapidly changing environment that poses numerous risks, including some beyond its control. The Group presents hereafter the significant risks to which it believes it is exposed. The occurrence of any one of these risks could have a significant negative impact on the Group's business, financial position, earnings, image, outlook, or on the Company's share price.

Non-financial risks as well as measures taken by the Group under the Law of March 27, 2017 on the vigilance duty of parent companies and contractors are described in chapter 6.8.

4.1.1 Risks related to the Group's business sector

A changing competitive environment

The Group's core businesses continue to face strong competition from major international operators and, in some markets, from "niche" players. New industrial (equipment manufacturers) and financial players (Asian conglomerates) have been adopting aggressive strategies to invest in markets or reposition themselves within the value chain. In addition, the Group also faces competition from public sector operators in some markets, such as the semi-public companies in France. Finally, some cities may want to retain or assume direct management of water and waste services (notably in the form of public control, *régie*) instead of depending on private operators. This risk could materialize particularly in France as well as in Spain.

This strong competitive pressure, which could increase in a context of consolidation among private entities (which is already underway in the waste sector in Europe), may put pressure on the commercial development and prices of the services offered by the Group, which could have a negative impact on its operations, earnings and outlook.

The risk of price pressure is exacerbated in the waste treatment sector in some countries, where the Group could see the profitability of its facilities fall due to a reduction in the utilization rate resulting from the development of overcapacity.

The risk of price pressure is aggravated in the water treatment engineering sector due to the ramping up of new Spanish and South Korean players, in the context of a contraction of the European municipal market related to the worsening financial health of local public entities and the risk of a lack of competitiveness.

Moreover, in order to offer services that are comparable to or better than those offered by its competitors, the Group may have to develop new technologies and services, thus enabling it to generate additional revenues, which brings with it substantial costs that could have a negative impact on the financial position and earnings of the Group. Taking risks on innovation is key to being successful.

Finally, certain technological choices made by SUEZ to remain competitive or conquer new markets may not produce the expected results and may have a negative impact on the Group's operations, earnings or outlook.

Group exposure to economic cycles

2018 was characterized by revenue growth (organic growth of +3.6% as of the end of December 2018). Because of its businesses, the Group is sensitive to economic factors whose potential impacts are described below.

Some Group business lines, particularly services to industrial clients in both the water and waste segments, are sensitive to economic cycles. Since the Group is mainly present in Europe, North Africa, the United States, Chile and the Asia-Pacific region, a proportion of its activity is sensitive to changes in the economic conditions in those geographic regions. Any economic slowdown in a country where the Group is present lowers consumption as well as investments and industrial production and, therefore, negatively impacts demand for the services offered by the Group, which could in turn have a negative impact on the Group's operations, earnings and outlook.

A persistent economic downturn could also result in payment difficulties for customers. However, to date there is no relationship of dependence vis-à-vis major customers due to the granularity of the customer base. Indeed, the largest municipal client accounts for annual revenues of EUR 173 million, 1% of total revenues (the top five clients account for EUR 515 million, 3% of revenues). The largest industrial client accounts for EUR 107 million (0.6% of revenues), while the top five account for EUR 399 million (2.3% of revenues).

As of December 31, 2018, provisions for bad debts in the consolidated statement of financial position cumulatively amounted to EUR 356.1 million. The final losses recorded do not represent a significant challenge for the Group.

Group exposure to changes in consumption trends

In the supply of drinking water in some developed countries, a decrease is being observed in volumes consumed mainly due to social factors and the idea that water is a resource that needs to be preserved. For example, in France, the Group estimates that billed water volumes are declining structurally by approximately 1% per year on average.

The productivity gains achieved by the Group, the fact that some contracts provide for a fee portion that is independent of volume consumed, the development of services with higher added value, particularly services supporting public authorities in their obligation to meet changing regulations, and rate adjustments have helped the Group to offset this reduction in volume.

However, if these developments are insufficient in the future to offset the reduced volume, there may be a negative impact on the Group's activity, earnings and outlook.

Impact of weather conditions on earnings from Group water operations

The Group's earnings in the water sector can be affected by significant weather changes.

Exceptional weather conditions in Europe in the summers of 2015 and 2017 caused increased water consumption in France compared to previous years, going against the downward structural trend.

Conversely, exceptional rainfall could negatively impact the Group's activity and earnings, as was the case in Spain during the summer of 2018.

Evolution of the regulatory context regarding environmental, health and safety, and tariffs regulation issues

The Group's businesses are subject to environmental protection, public health, and safety rules that are increasingly restrictive and differ from country to country. These rules apply to water discharge, drinking water quality, waste treatment, long-term monitoring of landfills, soil and water table contamination, air quality, compliance of equipment and chemical products, and greenhouse gas emissions (see chapter 6.7, "Legal and regulatory framework").

Overall, regulatory changes offer new market opportunities for the Group's businesses. The Group strives to limit all of these risks through a proactive environmental and industrial risk management policy (see section 6.8.2, "Main non-financial challenges related to the Group's business activities") and by managing an extensive insurance program (see section 4.2.7, "Management and financing of insurable risks").

However, there are still many risks that result from the vagueness of some regulatory provisions or the fact that regulatory bodies can amend their enforcing instructions and that major developments in the legal framework may occur. In addition, the competent regulatory bodies have the power to bring administrative or legal proceedings against the Group, which could lead to the suspension or revocation of permits or authorizations the Group holds, injunctions to cease or abandon certain activities or services, fines, civil penalties, or criminal convictions, which could negatively and significantly affect the Group's public image, activity, financial position, earnings and outlook.

Moreover, amending or strengthening regulatory provisions could result in additional costs or investments for the Group. As a result of such measures, the Group might have to reduce, temporarily interrupt, or even discontinue one or more activities with no assurance that it will be able to offset the corresponding losses. Regulatory changes, such as the proposed Act amending the Water Code in effect in Chile, which is currently under review, could also have an impact on prices, margins, investments, operations and consequently the Group's business activities, earnings and outlook. The "National Sword" policy put in place by China in 2017 aims to limit or prohibit imports of certain types of recyclable waste into the country (plastic, paper and other materials) and will probably have an impact on sales volumes and prices for recyclable materials in Europe. In 2018, an amendment to the Australian Heavy Vehicle National Law requires every participant in the vehicle transport supply chain to ensure transportation activities are safe.

The applicable regulations involve investments and operating costs not only for the Group, but also for its customers, and particularly contracting local or regional public authorities, notably due to compliance obligations. Failure by the customer to meet its obligations could injure the Group as operator and harm its reputation and ability to grow.

Finally, even if the Group complies with applicable regulations, for example regarding lead content in water, it has no control over privately owned interior pipes that may be the source of some quality issues with tap water. Any overstepping of the regulatory standard for drinking water, whatever its origin, could have a negative impact on the Group's image.

Despite the monitoring systems implemented, it is impossible to predict all regulatory changes. However, by engaging in its businesses in several countries, each with its own regulatory system, the Group diversifies this risk.

Some Group activities require administrative authorizations that can be difficult to obtain or renew

In order to perform its activities, the Group is required to hold various permits and authorizations, which often require lengthy, costly and seemingly arbitrary procedures to obtain or renew.

Moreover, the Group may face opposition from local citizens or associations when setting up or operating certain facilities (specifically landfills, incinerators and wastewater treatment plants) involving nuisances, landscape degradation or, more generally, damage to the environment, making it more difficult for the Group to obtain construction or operating permits and authorizations, or resulting in non-renewal or even legal challenges. In this respect, the Group could face legal action from environmental organizations that could delay or impede its operations or the development of its activities despite the various initiatives and actions it has undertaken.

Finally, the conditions attached to authorizations and permits that the Group has obtained could be made substantially more stringent by the competent authorities.

The Group's failure or delay in obtaining a permit or authorization, non-renewal of or a challenge to a permit or authorization, or significantly more stringent conditions associated with the authorizations and permits obtained by the Group could have a negative impact on its activity, financial position, earnings and prospects for development.

Risks linked to climate disruptions

Article 173 of the Law on Energy Transition for Green Growth, paragraph 3 in particular, stipulates that companies must publish information regarding financial risks linked to climate change and the measures they are taking to reduce them by implementing low-carbon strategies in all the components of their activities. The Group is already determining and making public annually the risks of climate disruption on its activities as part of its response to the Carbon Disclosure Project.

BUSINESS RISKS

In its fifth assessment report published in 2014, the Intergovernmental Panel on Climate Change (IPCC) stated that the average rise in temperature due to climate change will probably be between 1.5°C and 4°C compared to pre-industrial levels, depending on greenhouse gas emission scenarios. These disruptions could have a significant impact on natural environments, especially on water resources, including a significant reduction of available surface water and groundwater resources, an increase in the frequency of agricultural droughts, changes in the flow and quality of water, and a reduction in the quality of fresh water reserves. The report specifies that the impacts from climate change on water resources should intensify significantly with the increase in greenhouse gas emissions. Every additional degree could cause around 7% of the world population to suffer a reduction of at least 20% in renewable water resources. Furthermore, in a high emissions scenario, the percentage of the population exposed to the risk of an exceptional flood at the end of the 21st century could be three times greater compared to a low emissions scenario.

The publication of the UNEP (United Nations Environment Program) report on global climate change in October 2017 pointed out the strong possibility of major consequences of climate change occurring if major economies do not start to act quickly to rectify the situation. The report shows that current commitments made by countries participating in COP21 to reduce emissions by 2025 or 2030 would lead to temperatures increasing by more than 3°C by the end of the century. In November 2018, the IPCC published a special report on the consequences of a 1.5°C global warming, underscoring the significant differences between 1.5°C and 2°C warming, especially in terms of impacts on health, food, water supply, extreme weather events and economic growth.

Modifications to the physical parameters of the climate are likely to bring on a slowing of world economic growth because of increasing North-South imbalances and of the increase in migratory flows linked to climate change. Moreover, uncertainty around changing climate scenarios may create a risk of over- or under-investment for the Group.

OPERATIONAL RISKS

In general, increased drought frequency and intensity could lead to a localized decrease in the availability of groundwater and surface water resources. This increasing scarcity of water resources, in combination with demographic and metropolitanization pressures, could reduce or interrupt production capacity and cause increased conflicts of use between agriculture, industry and domestic consumption, impacting more specifically energy supply and food safety. Moreover, the increase of drought phenomena could increase the risk of saltwater intrusion into groundwater. On a secondary level, it could lead to an increase in sedimentation of rivers, a worsening of raw water quality and a modification of the natural assimilative capacity of the receiving environment, increasing the risks related to the treatment of drinking water, including after standard treatment processes. Droughts could also cause landslides that could degrade the performance of drinking water networks.

The increasing occurrence of significant rainfall events, as well as an increase in their intensity, creates a growing risk in coming decades of flooding in Group-managed facilities, generating service interruptions and overloading storm sewer networks. Meanwhile, the disruption of transportation systems by flooding could affect power supply, waste collection and the delivery of reagents for water treatment.

The gradual increase in such weather events could have increasingly significant financial and image-related consequences on the Group's activities. While these are long-term risks, the Group is already preparing for them by directing its innovation policy and business strategy towards managing the effects of climate change as it relates to drought risk and risks related to exceptional rainfall.

REGULATORY RISKS

Regulatory changes in environmental and tax legislation in France (Grenelle II, Law no. 2015-992 of August 17, 2015 on energy transition for Green Growth) and in Europe (Climate and Energy Package and revision of the EU Emissions Trading System) do not seem to include the waste sector in any emissions taxation mechanism, although certain Group activities related to energy production or secondary raw materials (Refuse-Derived Fuel, chemicals) may be eligible for them. The most intensive activities of the Group in terms of energy consumption will nevertheless be increasingly covered by carbon pricing mechanisms, such as in the United Kingdom, where industries using more than 6 GWh of energy per year are subject to a tax per ton of greenhouse gas emitted.

However, accelerating national initiatives to set up a carbon price or open up national carbon markets (this has been the case for all of China since 2017) could lead to a new economic reality that must be taken into account in the business models. This could apply to greenhouse gas emissions generated by the Group, and also create financial value from the emissions that these solutions reduce for its customers. The Paris Agreement signed by the 196 parties to the United Nations Framework Convention on Climate Change on December 12, 2015 and effective as of November 2016 works in that direction, as Title V of the document acknowledges the importance of providing incentives for emissions reduction activities, particularly involving tools such as national policies and carbon pricing. This is why the Group decided to gradually include a base price for carbon in the business models for its new projects starting in 2015, with the goal of applying it to 60% of the amount of its annual expenditure commitments by 2021.

The steps taken by the Group to implement its low-carbon strategy and to reduce risks related to climate change are presented in section 6.8.2.2.3 of this Reference Document.

4.1.2 Risks related to the Group's business activities

Risks related to major projects

The Group's organic growth is in part based on various major projects involving the construction of industrial assets, including water production plants, water desalination plants, and wastewater and waste treatment plants.

The profitability of these assets, which have a lifespan of several decades, is contingent in particular on controlling costs and construction timeframes, operating performance and long-term trends within the competitive environment, any of which could reduce the profitability of certain assets or result in loss of revenues and asset impairment.

Risks related to design and construction activities

In the water and waste sectors, the Group is involved in the design and construction of certain installation projects through its specialized subsidiaries in the Treatment Infrastructure and Consulting activities.

These risks are related to the completion of fixed-price turnkey contracts. Under the terms of such contracts, the specialized subsidiaries operating in the Treatment Infrastructure segment agree to engineer, design and build operation-ready plants for a fixed price. Actual expenses resulting from performing a turnkey contract can vary substantially from initial projections for a variety of reasons, such as:

- unforeseen increases in the cost of raw materials, equipment or labor;
- unexpected construction conditions;
- delays due to weather and/or natural disasters (particularly earthquakes and floods);
- non-performance by suppliers or subcontractors.

The terms of a fixed-price turnkey contract do not necessarily make it possible to increase prices to reflect elements that were difficult to predict when the bid was submitted. For these reasons, it is impossible to determine with certainty the final costs or margins of a contract at the time the bid was submitted, or even at the start of the contract's performance phase. If costs were to increase for any of these reasons, the specialized subsidiaries in the Treatment Infrastructure business unit could see their margins shrink, potentially causing them to sustain a significant loss on the contract.

Engineering, Procurement and Construction projects (EPC) can encounter problems that may entail a reduction in revenues, disputes or lawsuits. These projects are generally complex, and require major purchases of equipment and large-scale project management. Schedule delays could occur, and the specialized subsidiaries in the Treatment Infrastructure business unit could encounter difficulties in design, engineering, the supply chain, construction and/or installation. These factors could have an impact on their ability to complete certain projects by the original deadline.

Certain terms of the contracts entered into require the client to provide particular design or engineering-related information, in addition to the materials or equipment to be used for the project. These contracts may also require the client to compensate them for additional work done or expenses incurred, if (i) the client changes its instructions, or (ii) the client is unable to provide them with adequate design or engineering information or appropriate materials or equipment for the project.

In such cases, these subsidiaries usually negotiate financial compensation with their clients for the additional time and money spent due to the client's failure to meet its contractual obligations. However, the Group cannot guarantee that it will receive sufficient compensation to offset the extra costs incurred, even if it takes the dispute to court or arbitration. In such cases, the Group's earnings and financial position could be significantly affected.

The Group, as part of the guarantees given to cover its subsidiaries' commitments, may be required to pay financial compensation if it breaches contractual deadlines or other terms of the contract. For example, the new facility's performance may not comply with project specifications, a subsequent accident may invoke the Group's civil or criminal liability, or other problems may arise (now or in the future) in the performance of the contract that may also significantly impact the Group's operating income.

Risks of dependency on certain suppliers

Group companies may depend on a limited number of suppliers for their construction, operation or delegated management activities. A distinction is made between three main groups of suppliers.

SUPPLIERS OF RAW WATER, WHOLESALE TREATED WATER, AND PRIMARY ENERGY

Some Group companies depend on raw water, treated water or primary energy suppliers for their distribution activities. Such dependence is generally imposed by regulation or local technical configurations, leading to the de facto monopoly of these suppliers. It is always possible that such suppliers may fail to meet their obligations due to technical issues (breakdowns), pollution or for other reasons, causing a risk of service interruption. The Group seeks to mitigate this risk by diversifying sources of supply, interconnecting networks where possible and ensuring that contracts provide for adequate exclusion of liability clauses in case insufficient amounts of water or electricity are delivered to the concession holder.

BUILDERS

Some Group companies depend on "Builders" – suppliers or subcontractors in civil engineering, combustion and energy recovery systems, etc. – for their design and construction activities. A one-off or wholesale failure by any of these suppliers or subcontractors could result in unforeseen delays in the construction schedule resulting in the application of late penalties under the agreement. This risk is managed as part of the project and can be spread throughout the supplier portfolio, given the multiple intervening parties. In addition, special provisions may be adopted when designing projects to reduce dependence on certain suppliers.

Other Group companies also depend on "Builders" suppliers and subcontractors as part of their concession or public services contracts. The failure of one of these "Builders" resulting in delays in the commissioning of concession facilities could have an impact on contractual rate increases and consequences on the overall profitability of the investment. The Group manages this risk through a careful selection process and by monitoring its "Builders". This risk is also not critical, as it is dispersed within the supplier portfolio.

OTHER SUPPLIERS

The Group's companies also use various suppliers and subcontractors in connection with their business and activities: service providers (temporary workforce agencies, design offices, transportation companies, etc.), suppliers of energy, fuel, equipment, chemicals, etc.

The failure of any of these suppliers could have an impact on the continuity of service that is the critical performance indicator for the public service activities of Group companies in both the Waste and Water sectors.

The Group considers that this risk is adequately covered by the measures in place: careful selection of suppliers, backup equipment, availability of generators, crisis management plans, stockpiling of chemicals, and diversification of suppliers.

WEIGHT OF THE LARGEST SUPPLIERS IN THE GROUP'S PROCUREMENT PROCESS

Out of total purchases of EUR 7.3 billion in 2018, the largest supplier accounts for EUR 69 million, the top five account for EUR 267 million, and the top ten account for EUR 443 million. The Group considers that currently there are no relationships of dependency on its main suppliers.

Non-performance risks of long-term contracts

The Group carries out most of its business activities under long-term contracts with terms of up to 50 years or more. The conditions for performing these long-term contracts may be different from those that existed or that were anticipated at the time the contract was entered into and may change the balance of the contract, particularly the financial balance.

SUEZ makes every effort to obtain contractual mechanisms that allow it to adjust the balance of the contract in response to changes in certain significant economic, social, technical or regulatory conditions. However, not all long-term contracts entered into by the Group have such mechanisms. Moreover, when the contracts entered into by the Group contain such adjustment mechanisms, the Group cannot guarantee that its contractual partner will agree to implement them or that they will be effective in re-establishing the financial balance of the contract.

The absence or potential ineffectiveness of the adjustment mechanisms provided for by the Group in its contracts or the refusal of a contractual partner to implement them could have a negative impact on the Group's financial position, earnings and outlook.

Risks of unilateral cancellation, non-renewal or amendment of contracts with public authorities

The contracts entered into by the Group with public authorities make up a significant share of its revenues. However, in most of the countries in which the Group operates, including France, Spain and Morocco, local public entities have the right, under certain circumstances, to amend or even terminate the contract unilaterally, subject to compensation. If a contract is unilaterally canceled or amended by the contracting public authority, the Group may not be able to obtain compensation that fully offsets the resulting loss of earnings.

Moreover, the Group does not always own the assets that it uses in its operations under a public service delegation contract (primarily through public service concessions or leases). SUEZ cannot guarantee that the contracting authority will renew each of its existing public service delegation contracts or that the financial conditions of the renewal will be the same as the initial delegation. This situation could negatively impact the Group's operations, financial position, earnings and outlook.

Risks related to external growth operations

The Group's development strategy prioritizes organic growth, but may include external development or growth transactions through the acquisition of assets, companies, or interests, or the establishment of alliances in the waste and water business in geographic areas in which the Group wishes to expand. The Group may be unable, given the competitive environment, to successfully complete development or external growth transactions that it may be planning based on its investment criteria.

Moreover, external growth transactions, and particularly the GE Water acquisition on September 29, 2017, may involve a certain number of risks related to integrating the acquired businesses or staff, difficulty in generating the expected synergies and/or savings, increases in the Group's debt and the emergence of unexpected liabilities or costs. The occurrence of one or more of these risks could have a negative impact on the operations, financial position, earnings or outlook of the Group.

Risks related to operations in certain countries

Although the Group's activities are concentrated mostly in Europe, the United States, Chile, China and Australia, it also conducts business in other markets, particularly in certain emerging countries. The Group's activities in these countries involve a certain number of risks that are higher than in developed countries, such as GDP volatility, relative economic and governmental instability, sometimes major amendments to, or imperfect application of regulations, the nationalization and expropriation of private property, payment collection difficulties, social problems, substantial fluctuations in interest and exchange rates, claims by local authorities that call into question the initial tax framework or the application of contractual provisions, foreign exchange control measures, and other unfavorable interventions or restrictions imposed by governments.

Although the Group's activities in emerging markets are not concentrated in one country or a specific geographic region, events or unfavorable circumstances that take place in any of these countries could have a negative impact on the Group's business and could also result in the Group having to book provisions and/or impairments in its accounts, which could have a significant negative impact on its financial position, earnings and outlook. In addition, the Group could be unable to defend its rights in the courts of these countries if there were a conflict with their governments or other local public entities.

These risks are not strictly specific to emerging countries. They can also take place in countries that experienced social and political upheavals such as Spain in late 2017.

The Group manages these risks in connection with its partnerships and contractual negotiations on a case-by-case basis. In order to limit the risks related to operations in emerging countries, the Group decides where it operates by applying a selective strategy based on a detailed analysis of the country's risks and, to the extent possible, taking out political risk insurance and putting international arbitration clauses in place.

Risks linked to partnerships

In several countries, the Group carries out its activities through partnerships with local public authorities or private local entities. Moreover, the Group may be required to enter into new partnerships in order to develop its activities.

Partnerships are one of the means by which the Group shares the economic and financial risk inherent in certain major projects by limiting the amount of its capital employed and allowing it to better adapt to the specific context of local markets. Moreover, partnerships may be required by local laws and regulations. The partial loss of operating control is often the downside of this reduced exposure in terms of capital employed. However, this situation is managed contractually on a case-by-case basis.

Changes in a project, in the local political and economic situation, in the economic position of a partner, or the occurrence of a disagreement between the partners may lead to the termination of the partnerships, particularly if partners exercise put options or call options on shares, if one of the partners requests the dissolution of the joint venture, or through the exercise of a pre-emptive right. These situations can also lead the Group to choose to strengthen its financial commitments for certain projects or, in the event of conflict with its partner (s), to seek solutions in court or before the appropriate arbitration bodies. These situations could have a significant negative impact on the Group's business, financial position, earnings and outlook. Moreover, the Group cannot guarantee that the projects it carries out in partnership will be implemented on time and according to satisfactory economic, financial and legal conditions, or that they will deliver the long-term profitability that was originally projected.

Risks of civil and environmental liability

The business areas in which the Group operates involve a major risk of civil and environmental liability. The increase in legal, regulatory and administrative requirements exposes the Group to greater risk of liability, particularly in terms of environmental responsibility, including liability for assets the Group no longer owns or for activities that it has discontinued.

Specifically, existing regulations require that environmentally classified sites be restored when operations end, which requires the booking of provisions (refer to section 6.8.2.2.1, "Environmental management: aiming for operational excellence-Expenditure related to the protection of the environment" of this Reference Document).

In addition to contractual precautions, the Group strives to limit all these risks as part of its environmental responsibility policy (see sections 4.2.2, "Management of industrial and environmental risks" and 6.8.2, "Main non-financial challenges related to the Group's activities") as well as through its insurance policies (see section 4.2.7, "Management and financing of insurable risks"). However, the civil liability and environmental risk insurance policies taken out by the Group may prove insufficient in certain cases, and could generate major costs and negatively impact the Group's financial position, earnings and outlook.

Risks related to facilities management

The facilities that the Group owns or manages on behalf of third parties carry risks to the surrounding environment (air, water, soil, habitat and biodiversity) and may pose risks to the health of consumers, local residents, employees, or even subcontractors.

These health and environmental risks, which are governed by strict national and international regulations, are regularly monitored by the Group's teams and by the public authorities. These changing regulations with regard to environmental responsibility and environmental liabilities carry the risk of increasing the Company's vulnerability in relation to its activities. This vulnerability must be assessed for older facilities (such as closed landfills) and for sites in operation. It may also involve damage caused to habitats or species.

As part of its activities, the Group must handle, or even generate, hazardous products or by-products. This is the case, for example, with certain chemicals used in water treatment. In waste treatment, some Group facilities treat special industrial or medical waste that may be toxic or infectious.

In waste management, gas emissions to be considered include greenhouse gases, gases that induce acidification of the air, noxious gases and dust. In water activities, potential air pollutants mainly include chlorine or gaseous by-products resulting from accidental emissions of water treatment products. Wastewater treatment and waste treatment activities can also cause odor problems or produce limited but dangerous quantities of toxic gas or micro-organisms.

In the absence of adequate management, the Group's activities could have an impact on water in the natural environment: leachates from poorly monitored landfills, discharges of heavy metals into the environment, and aqueous discharges from flue gas treatment systems at incineration plants. These various types of emissions could pollute water tables or watercourses.

Wastewater treatment plants discharge decontaminated water into the natural environment. For various reasons, these plants may temporarily fail to meet discharge standards in terms of organic, nitrogen, phosphorus or bacteriological load.

Soil pollution issues could arise in the event of accidental spills of stored hazardous products and liquids, leaks from processes involving hazardous liquids and the storage and spread of sludge.

Various mechanisms are used to monitor all of the above risks. The Group carries out its industrial activities under regulations that give rise to safety rules for the use of infrastructure or the performance of services. The care taken in the design, execution and operation of its works cannot prevent all industrial accidents that might interfere with the Group's activities or generate financial losses or material liability.

The laws and contracts that govern the Group's operations clarify the division of responsibilities with respect to risk management and financial liability; however, failure to comply with standards may lead to contractual financial penalties or fines.

There are risks related to the operation of waste treatment facilities, water treatment facilities, water supply networks and certain services rendered in industrial settings. These risks can lead to industrial accidents with, for example, operational incidents such as fires or explosions, design faults, external events beyond the Group's control (actions by third parties, landslides, earthquakes, etc.), or an outbreak of Legionella disease. Such industrial or health accidents may cause injuries, loss of human life, significant damage to property or to the environment, as well as business interruption and loss of output.

If a major drinking water production or distribution facility is offline, this could result in a stoppage of water delivery across a fairly large area, resulting in loss of revenues and the corresponding risk of paying compensation, as well as harm to the Group's public image and/or breach of a public service obligation.

Industrial risks are managed by implementing a safety management system at each site based on the principle of continuous improvement and aimed at reducing residual risk by giving priority to handling the most significant risks. An internal risk control procedure is implemented and coordinated by the Department of Innovation and Industrial Performance, following an internal reference framework.

Although the Group has premium civil liability and environmental risk insurance, it may still be held liable above the amount of its coverage or for items not covered in the event of claims involving the Group.

Moreover, the amounts provisioned or covered may be insufficient if the Group incurs environmental liability, given the uncertainties inherent in forecasting expenses and liabilities related to health, safety and the environment.

Therefore, the Group's liability for environmental and industrial risks could have a significant negative impact on its public image, activity, financial position, earnings and outlook.

The Group's industrial and environmental risk management policy is described in section 4.2.2 of this Reference Document.

Specific risks related to operating high-risk sites ("Seveso" sites)

According to Directive 2012/18/EU of July 4, 2012, SUEZ operates Seveso-designated sites within the European Union.

The main sites classified as Seveso "high threshold" sites as of December 31, 2018 are as follows:

Business unit	Location	Country	"Threshold"	Activity
R&R France	Villeparisis	France	High	Storage and pre-treatment of hazardous waste
R&R France	Airvault	France	High	Storage and pre-treatment of hazardous waste
R&R France	Champteussé-sur-Baconne	France	High	Storage and pre-treatment of hazardous waste
R&R France	Bellegarde	France	High	Storage and pre-treatment of hazardous waste
R&R France	Drambon	France	High	Storage and pre-treatment of hazardous waste
R&R France	Jeandelaincourt	France	High	Storage and pre-treatment of hazardous waste
R&R France	Vaivre	France	High	Storage and pre-treatment of hazardous waste
R&R France	Givors	France	High	Storage and pre-treatment of hazardous waste
R&R France	Pont-de-Claix	France	High	Hazardous waste treatment
R&R France	Péage-de-Roussillon	France	High	Hazardous waste treatment
R&R France	Beautor	France	High	Hazardous waste treatment
R&R France	Amnéville	France	High	Hazardous waste treatment
R&R France	Frontignan	France	High	Storage and pre-treatment of hazardous waste
R&R France	Barlin Hersin	France	High	Storage and pre-treatment of hazardous waste
WTS	Crissey	France	High	Production of reagents for water treatment
R&R France	Herne	Germany	High	Thermal desorption of soils polluted with PCBs and mercury
WTS	Herentals	Belgium	High	Production of reagents for water treatment
R&R France	Barbera	Spain	High	Hazardous waste treatment

R&R: Recycling and Recovery.
WTS: Water Technologies and Solutions.

In addition to the facilities identified in Europe as Seveso "high threshold" sites, SUEZ operates other hazardous industrial sites for which it is committed to applying the same high industrial safety standards. Accordingly, the Group conducts one-off checks and audits to ensure that these obligations are being met.

Any incident at these sites could cause serious harm to employees working at the site, neighboring populations and the environment, and expose the Group to significant consequences. The Group's insurance coverage (see section 4.2.7 of this Reference Document) could be insufficient. Any such incident could, therefore, have a negative impact on the public image, activity, financial position, earnings and outlook of the Group.

The Group follows an accident prevention policy through a series of initiatives and actions described in section 4.2.2 of this Reference Document.

Risks related to Human Resources Management

The Group employs specialists and executives with a broad range of expertise applied to its various businesses. In order to prevent the loss of key skills, the Group must anticipate labor shortages in certain businesses. In addition, the Group's international growth and changes in its businesses require new know-how and a great deal of mobility among its staff, particularly its executives. In order to meet this need, the Group has developed a Human Resources policy focused on employment management tailored to the various locations and on fostering employability through the development of training.

The Group's success depends upon its ability to map existing skills and to hire, train and retain a sufficient number of employees, including managers, engineers, technicians and sales professionals, with experience in industrial markets who have the required skills, expertise and local knowledge. Competition for this kind of profile is strong.

To retain skilled personnel, the Group has implemented a management policy aimed at key staff, which includes essential and high-potential profiles for whom special loyalty arrangements are in place.

The Group's success also depends on the ongoing progress of its organizations to make it more agile and innovative in response to competitive pressure.

Risks of labor conflicts

Organizational changes and lack of understanding of the Group's strategy can lead to cooperation and negotiation being ineffective in regulating labor relations.

The Group must consider the possibility of labor disturbances, such as strikes, walkouts, claim actions or other labor problems that could disrupt its business and have a negative impact on its financial position and earnings.

Moreover, in the Waste segment, the occurrence of labor disruptions could have a significant negative impact on the Group's image.

Health, security and safety risks

The Group is very aware of the risks of deteriorations in employees' and subcontractors' health. It takes measures to protect their health and safety and closely monitors the relevant indicators (frequency and severity rate) in each BU (business unit). It also takes great care to remain in compliance with legal and regulatory Health and Safety provisions at its various sites. However, it may be confronted with occupational illnesses that could lead to legal action against the Group and, potentially, to the payment of damages, which could be significant.

Personnel working at water production and distribution facilities and on hazardous industrial waste treatment sites may be exposed to chemical risks. Chemical risk is one of the risks managed under the Health and Safety system.

Many Group vehicles travel on public roads, resulting in risks of traffic accidents.

In addition, the risk of a pandemic, such as avian flu, has been anticipated by implementing continuity plans and measures to protect and prevent infection of employees who continue to work during pandemics.

Risks of criminal or terrorist acts at Group sites

Despite security measures taken by the Group as part of the operation of its water and waste facilities, the possibility remains that they could be affected by malicious acts and acts of terrorism, with consequences for public health or harm to employees, equipment or sites.

In addition, some of the Group's employees work or travel in countries where the risks of terrorism or kidnapping may be high.

The occurrence of such acts could have a significant negative impact on the public image, activity, financial position, earnings and outlook of the Group.

Risks related to natural disasters or other major events the impact of which is difficult to predict

Because of its diverse geographical presence, some of the Group's facilities could be exposed to natural disasters such as earthquakes, heavy rainfalls, storms, hailstorms, freezing, drought and landslides, etc. Apart from the occurrence of natural disasters, other major events, whose extent is difficult to predict (major epidemics, etc.), could impact the Group's activities.

The Group's policy is to cover those risks through its insurance programs with premium insurance companies and suitable coverage. However, the Group cannot guarantee that the measures taken to control these risks will prove fully effective if any such event were to occur. Moreover, the Group may not always be able to maintain a level of coverage that is at least equal to its existing coverage and at no higher cost. The frequency and extent of natural disasters observed in recent years could impact both the capacity of insurance markets to cover such risks and the cost of insurance coverage.

Risks related to information systems

Information systems are critically important in supporting all the Group's business processes.

Increasingly, they are interconnected and cut across business segments. Any failure could lead to loss of business, loss of data or breach of confidentiality, and could negatively impact the Group's operations, financial position and earnings.

The implementation of new applications may require considerable development, which is then carried out in project mode, with risks relating to development costs, quality and deadlines.

Cybersecurity and malicious intrusion risks to information systems are increasing. These risks are a threat to data security and can lead to acts of fraud. They also heighten the vulnerability of SCADA control and supervision systems at our industrial facilities.

Risks related to ethics breaches

Actions by staff, Corporate Officers or representatives contravening the principles affirmed by the Group could expose it to legal and civil penalties as well as lead to loss of reputation. Compliance with the "Sapin 2" Law, which aims to increase transparency and better combat corruption, requires setting up appropriate measures such as setting up an Ethics and Compliance Department and developing a corruption risk map.

Risk related to the Group's transformation

Transforming the Group is necessary to adopt more agile and efficient operations to better seize opportunities and be more innovative. It is also a way to respond to increasing competition, digitization and changing business models. However, remaining efficient and motivated while profound changes are impacting support functions is a challenge to be overcome.

As a result, any delay pertaining to Group transformation could have an adverse effect on the Group.

4.1.3 Market risks

4.1.3.1 Interest rate risk

The Group's exposure to interest rate risk derives mainly from its floating rate net financial debt. As of December 31, 2018, the Group had net debt[1] (excluding derivatives and amortized cost) of EUR 8,998.2 million, with -15% at floating rate, 103% at fixed rate and 12% at inflation-indexed fixed rate before hedging, and 8% at floating rate, 80% at fixed rate and 12% at inflation-indexed fixed rate after hedging.

The table below presents the breakdown of the Group's net debt by rate type after hedging as of December 31, 2018:

(in millions of euros)	Total	Fixed rate net debt	Floating rate net debt	Inflation-indexed net debt	Less than 1 year	1 to 5 years	Over 5 years
Amount	8,998.2	7,214.5	722.4	1,061.3	(818.1)	3,597.6	6,218.7

The following table shows the Group's net debt position exposed to floating interest rates as of December 31, 2018:

(in millions of euros)	Total
Gross debt	2,149.7
Financial assets measured at fair value through income	(29.2)
Cash and cash equivalents	(3,424.1)
Net position before management	**(1,303.6)**
Impact of interest rate derivatives	2,026.0
Net position after management	**722.4**
Impact of a 1% increase in short-term interest rates on income after management	(2.7)

An interest rate risk sensitivity analysis is presented in Note 14.1.3.2 to the Consolidated Financial Statements, chapter 20.1.

An increase in interest rates could also force the Group to finance or refinance acquisitions or investments at a higher cost.

The interest rate Risk Management policy is described in section 4.2.5.1.

4.1.3.2 Currency risk

Given the nature of its activities, the Group has limited exposure to currency risk on transactions (except for the WTS division), meaning flows relating to the activities of SUEZ and its subsidiaries are primarily denominated in their local currency.

The geographic diversification of its activities exposes the Group to translation risk, *i.e.*, its financial and income statements are sensitive to foreign exchange rate fluctuations when consolidating the accounts of foreign subsidiaries outside the Eurozone. As a result, fluctuation in the value of the euro against these various currencies may affect the value of these items in its financial statements, even if their intrinsic value has not changed in their original currency. In addition, the Group implements currency hedges to create synthetic debt in foreign currency based on the euro, mainly to fund some of its foreign subsidiaries.

The following table shows the distribution of the Group's net debt by currency as of December 31, 2018 (including impact of derivatives and amortized cost):

(in millions of euros)	Euro [a]	US dollar	Pound sterling	Chilean peso	Hong Kong dollar	Other	Total
Net debt before the effects of forex derivatives	7,129.8	750.2	236.7	1,089.7	(3.7)	(248.8)	8,953.9
Net debt after the effects of forex derivatives	3,813.4	2,557.6	480.8	1,092.6	685.6	323.9	8,953.9
Impact on income of a 10% net appreciation of the euro on net position after management	3.3	1.0	(0.3)	(0.7)	(0.5)	(1.8)	1.0

(a) The euro impact comes from the net euro position of Group entities whose operating currency is not the euro. The share of net financial debt in euros declines after the effects of forex derivatives due to the Group's use of a portion of its debt in euros to create synthetic debt in foreign currency and finance foreign subsidiaries, mainly in US dollars and Hong Kong dollars.

(1) Refer to section 20.1.6, "Notes to the Consolidated Financial Statements," Note 13.3.1 for a reconciliation between net debt and net debt excluding amortized cost and impact of derivative financial instruments.

The following table shows the distribution of the Group's capital employed by currency as of December 31, 2018:

(in millions of euros)	Euro [a]	US dollar	Pound sterling	Other [b]	Total
Capital employed	8,904.1	5,757.2	1,059.8	2,923.7	18,644.8

(a) Euro: including SUEZ Spain and its subsidiaries.
(b) Mainly the Australian dollar, Czech koruna, yuan, Hong Kong dollar and Swedish krona.

With respect to the US dollar, the table below presents the impact of changes in US dollar exchange rates between 2018 and 2017 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2018:

(in millions of euros)	Change
Revenues	(133.0)
EBITDA	(11.7)
Net debt	48.6
Total shareholders' equity	140.4

Revenue and EBITDA calculations were based on an average USD/EUR rate variation from 2017 to 2018 (-4.4%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the USD/EUR closing rate on December 31, 2018 and 2017 (+4.7%).

With respect to the pound sterling, the table below presents the impact of changes in pound sterling exchange rates between 2018 and 2017 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2018:

(in millions of euros)	Change
Revenues	(9.0)
EBITDA	(0.9)
Net debt	1.6
Total shareholders' equity	(13.0)

Revenue and EBITDA calculations were based on an average GBP/EUR rate variation from 2017 to 2018 (-0.9%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the GBP/EUR closing rate on December 31, 2018 and 2017 (-0.8%).

With respect to the Chilean peso, the table below presents the impact of changes in Chilean peso exchange rates between 2018 and 2017 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2018:

(in millions of euros)	Change
Revenues	(21.8)
EBITDA	(12.5)
Net debt	(67.8)
Total shareholders' equity	(71.1)

Revenue and EBITDA calculations were based on an average CLP/EUR rate variation from 2017 to 2018 (-3.2%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the CLP/EUR closing rate on December 31, 2018 and 2017 (-7.0%).

With respect to the Hong Kong dollar, the following table presents the impact of changes in Hong Kong dollar exchange rates between 2018 and 2017 on revenues, EBITDA, net debt and on the amount of shareholders' equity as of December 31, 2018:

(in millions of euros)	Change
Revenues	(12.0)
EBITDA	(0.6)
Net debt	6.8
Total shareholders' equity	17.8

Revenue and EBITDA calculations were based on an average HKD/EUR rate variation from 2017 to 2018 (-4.9%); for net debt and shareholders' equity, the calculation was based on the fluctuation of the HKD/EUR closing rate on December 31, 2018 and 2017 (+4.5%).

An exchange rate sensitivity risk analysis appears in Note 14.1.2.2 to the Consolidated Financial Statements, in chapter 20.1. The foreign exchange rate Risk Management policy is described in section 4.2.5.2.

4.1.3.3 Liquidity risk

The table below presents the maturity schedule for the Group's borrowings and the amount of its cash as of December 31, 2018:

(in millions of euros)	Total	2019	2020	2021	2022	Beyond 2022
Total borrowings	11,522.7	1,706.4	557.5	1,164.1	875.5	7,219.2
Overdrafts and current accounts	928.8	928.8				
Total outstanding borrowings	**12,451.5**	**2,635.2**	**557.5**	**1,164.1**	**875.5**	**7,219.2**
Financial assets measured at fair value through income	(29.2)	(29.2)				
Cash and cash equivalents	(3,424.1)	(3,424.1)				
Net debt (excluding derivative financial instruments and amortized cost)	**8,998.2**	**(818.1)**	**557.5**	**1,164.1**	**875.5**	**7,219.2**

Some borrowings contracted by Group subsidiaries, or by SUEZ Groupe on behalf of its subsidiaries, include clauses requiring certain ratios to be maintained. The definition and level of these ratios, that is, the financial covenants, are determined in agreement with the lenders and may potentially be revised during the term of the loan. Information about these covenants is presented in chapter 10.4 of this Reference Document. As of December 31, 2018, 12% of borrowings exceeding EUR 50 million were subject to financial covenants. Failure to comply with these covenants could lead lenders to declare a covenant event of default and demand early repayment. As of December 31, 2018, and as of the date of this Reference Document, none of these clauses has been activated. The Company also believes that the existence of these covenants does not have a material impact on the Group's financial position. Finally, none of these financial covenants is based on SUEZ Groupe's or SUEZ's share price, or on the Group's rating. Details on short- and long-term ratings and their evolution over the course of fiscal year 2018 appear in section 10.3.3 of this document. As of the date of this Reference Document, there is no payment default on the Group's consolidated debt. There was also no payment default on the Group's consolidated debt as of December 31, 2018.

The following table shows borrowings contracted by the Group as of December 31, 2018, in excess of EUR 50 million:

Type	Fixed/floating rate	Total amount of lines as of December 31, 2018 *(in millions of euros)*	Amount used as of December 31, 2018 *(in millions of euros)*	Maturity
Bond issues	Fixed rate	800	800	2019
Bond issues	Fixed rate	750	750	2022
Bond issues	Fixed rate	750	750	2021
Bond issues	Fixed rate	700	700	2029
Bond issues	Fixed rate	500	500	2032
Bond issues	Fixed rate	500	500	2030
Bond issues	Fixed rate	500	500	2028
Bond issues	Fixed rate	500	500	2025
Bond issues	Fixed rate	500	500	2025
Bond issues	Fixed rate	500	500	2024
Bond issues	Fixed rate	500	500	2023
Bond issues	Fixed rate	311	311	2020
Bond issues	Fixed rate	280	280	2030
Bond issues	Fixed rate	250	250	2027
Bond issues	Fixed rate	200	200	2021
Bond issues	Fixed rate	167	167	2033
Bond issues	Fixed rate	109	109	2035
Bond issues	Fixed rate	100	100	2033
Bond issues	Fixed rate	100	100	2020
Confirmed credit facilities	Floating rate	90	90	2019
Commercial paper	Floating rate	80	80	2019
Confirmed credit facilities	Floating rate	80	80	2019
Bond issues	Fixed rate	80	80	2037
Bond issues	Fixed rate	80	80	2035
Bond issues	Fixed rate	75	75	2029
Bond issues	Fixed rate	69	69	2043
Bond issues	Fixed rate	69	69	2040
Bond issues	Fixed rate	69	69	2037
Bond issues	Fixed rate	69	69	2036
Other bank borrowings	Fixed rate	67	67	2021
Bond issues	Fixed rate	66	66	2047
Bond issues	Fixed rate	66	66	2031
Bond issues	Fixed rate	66	66	2030
Bond issues	Fixed rate	61	61	2032
Bond issues	Fixed rate	61	61	2031
Bond issues	Fixed rate	57	57	2048
Bond issues	Fixed rate	57	57	2033
Bond issues	Fixed rate	57	57	2032
Bond issues	Fixed rate	56	56	2038
Confirmed credit facilities	Floating rate	55	55	2019
Bond issues	Fixed rate	52	52	2033
Bond issues	Fixed rate	52	52	2025
Bond issues	Fixed rate	51	51	2025
Bond issues	Fixed rate	50	50	2030
Commercial paper	Floating rate	50	50	2019

As of December 31, 2018, the Group had the following unused confirmed credit facilities available:

Year of expiration	Confirmed but unused credit facility programs (in millions of euros)
2019	227.0
2020	165.9
2021	1,575.7
2022	80.0
2023	152.0
Beyond	90.1
Total	**2,290.7**

These credit facility programs include a syndicated loan of EUR 1.5 billion in the name of SUEZ, the maturity of which was extended to February 2021. The liquidity Risk Management policy is described in section 4.2.5.3.

4.1.3.4 Counterparty risk

The Group's exposure to counterparty risk is linked to its cash investments and its use of derivatives to control its exposure in certain markets.

The Group's surplus cash is invested in short-term deposits and interest-bearing current accounts with international banks with a minimum A- rating (Standard & Poor's rating), while ensuring that its counterparty diversification policy is stricter and more limiting in terms of counterparty selection.

The derivative financial instruments used by the Group are intended to manage its exposure to currency and interest rate risks, as well as its risks related to commodities. The financial instruments used are essentially forward purchases and sales as well as derivative products.

The counterparty Risk Management policy is described in section 4.2.5.4.

4.1.3.5 Equity risk

The Group has equity interests in publicly traded companies, the value of which changes depending on trends in global stock markets, the performance of these companies and how the markets perceive them.

As of December 31, 2018, the Group held shares in listed companies for a market and book value of EUR 22.2 million. An overall 10% drop in the value of these shares with regard to their price on December 31, 2018 would have had an impact of approximately EUR 2.2 million on the Group share of the shareholders' equity.

The equity Risk Management policy is described in section 4.2.5.5.

4.1.3.6 Risks linked to price fluctuations of certain commodities and energy

The Group's activities use commodities and energy, especially diesel and electricity, so it is exposed to any fluctuations in their prices.

The Group's contracts generally provide for indexation mechanisms, particularly in long-term contracts. The Group cannot guarantee that such mechanisms will cover all of the additional costs generated by increases in electricity and oil prices. In addition, some contracts entered into by the Group do not include indexing provisions. Accordingly, any major increase in the price of electricity or oil could have a negative impact on the Group's earnings and outlook.

In addition, the Group's waste activities produce plastic, wood, cardboard, metals and electricity. A significant reduction in their price could affect the profitability of certain investments or the economic balance of certain contracts and have a negative impact on the Group's operations, earnings and outlook.

4.1.4 Insurance risks

The Group's policy with respect to insurance is described in section 4.2.7 of this Reference Document.

However, in certain cases, it is still possible that the Group may have to pay significant indemnities that are not covered by the existing insurance program or incur very significant expenses that will not be reimbursed or will be insufficiently reimbursed under its insurance policies. In particular, with respect to civil liability and environmental risks, although the Group has premium insurance, it is possible that it may incur liability beyond the amount of its coverage or for events not covered.

4.1.5 Legal risks

In the normal course of activities, the Group's companies may be involved in legal, administrative or arbitration proceedings. The most significant current or potential disputes are detailed in section 20.6 of this Reference Document. In the context of some of these proceedings, financial claims of a significant amount are or may be brought against one of the Group's entities. Although the Group's policy in this regard is cautious, the provisions booked for this purpose by the Group could be insufficient, which could have significant negative consequences for its financial position and earnings.

Generally, it is possible that new proceedings, either related or unrelated to current proceedings, may subsequently be brought against one of the entities of the Group. An unfavorable outcome in such proceedings could have a negative impact on the operations, financial position, or earnings of the Group.

4.1.6 Tax-related risks

Independently of the Group's policy of compliance with applicable laws and regulations in each country where Group companies operate as well as with international tax rules, certain provisions may present a source of risk because they are unclear, difficult to interpret or subject to changing interpretation by local authorities. Moreover, tax rules in the European Union that currently apply to Group entities may be reviewed by the European Commission, and could be reconsidered.

During the normal course of business, Group companies could also face tax investigations by local authorities. In this respect, tax investigations performed by the French or foreign authorities are in progress. The tax investigations may result in adjustments and sometimes result in tax disputes before the competent courts.

Finally, several Group companies benefit from tax-approval decisions issued by competent local authorities. If necessary, these approval decisions may be challenged. A challenge may result if, for example, the company or the companies that are party to an approval decision breach an undertaking that was assumed in exchange for its issuance, and/or the facts based on which the approval decision was issued change, and/or the position of the relevant tax authority changes.

4.1.7 Risks relating to the Company's shares

The Company's share price may be volatile and subject to market fluctuations. Financial markets are subject to significant fluctuations that are at times unrelated to the results of the companies whose shares are traded on them. Market fluctuations and economic conditions could significantly affect the Company's share price.

The Company's share price could also be affected by numerous events that affect the Group, its competitors or general economic conditions, and the water and waste sectors in particular. Accordingly, the Company's share price could fluctuate significantly in reaction to events such as:

- variations in the financial results of the Group or of its competitors from one period to the next;
- competitors' announcements or announcements about the water and waste sectors;
- announcements of changes in the Company's Shareholders;
- announcements of changes in the Group's management team or key personnel;
- changes in the future outlook for the Group and its activities or the water and waste sectors in general;
- changes in the content of financial analysts' reports about the Group;
- changes in economic and market conditions.

4.2 Risk Management and control within the Group

4.2.1 General framework for Group risk management and control

Management of the risks the Group is facing involves identifying and assessing such risks and putting in place the appropriate action plans and hedges.

The Group has adopted an integrated corporate Risk Management policy, which aims to provide a complete overview of the risk portfolio through the use of methods and tools common to all subsidiaries and functional departments.

The Chief Risk Officer (CRO) is responsible for coordinating this integrated approach. He is supported by a network of Risk Officers who are responsible for seamlessly and consistently executing the risk assessment and management techniques at the various subsidiaries. The network is headed by the Chief Risk Officer.

A risk-mapping process for the whole Group has been in place for several years. Risks are identified, classified by category (strategic, financial or operational), assessed (by significance and frequency), and quantified wherever possible. The method for handling them is then reviewed, which provides information for action plans at different levels of the Company.

This process, which is overseen centrally by the Chief Risk Officer and at the subsidiaries by the network of Risk Officers, makes it possible, in particular, to draw up an annual summary of the major risks for the Group. It includes steps to select significant individual risks and, if applicable, aggregate homogeneous risks and to take into account possible links. The summary is discussed and validated by the Management Committee.

The subsidiaries maintain responsibility for implementing the most appropriate Risk Management policy for their particular activities. However, certain trans-Group risks are directly managed by the corporate departments involved:

- within the Office of the General Secretary:
  - the Legal Department analyzes and manages the Group's legal risks, based, in particular, on periodic reporting from the subsidiaries and their network of in-house legal counsel,
  - the Internal Audit, Risk and Investments Department ensures:
    - that internal audits are conducted on all the Group's activities around the world. It proposes its annual audit plan based on an analysis of the operational and financial risks of Group companies. This audit plan is approved by General Management. The objectives of the internal audit are to assess the contribution of the audited entities in relation to their commitments, validate their risk analysis and control, assess their internal control system and verify that the Group's procedures, guidelines and charters are followed. At the end of every assignment, the Internal Audit Department communicates its conclusions and recommendations for corrective actions,
    - that the overall Enterprise Risk Management process is carried out and the networks/communities concerned are managed: Risk Officers, Contract Managers,
    - that the Group's and subsidiaries' main projects in terms of investments, acquisitions and disposals, in particular, are analyzed in collaboration with the Planning and Control Department and the Legal Department;
  - the Insurance Department, in conjunction with the subsidiaries, is the contracting authority for the Group's insurance programs for industrial and environmental damage, business interruption, and liability (third-party, professional, etc.). Specifically, it monitors risks of fire and machinery breakdown by implementing an annual prevention and protection program for the Group's key sites,
  - the General Secretary, acting as the Ethics Officer for the Group, is responsible for the prevention and management of ethical risks (see section 4.3.2.3 below). He relies on the Ethics and Compliance Department, which identifies and manages risks related to ethics violations and compliance gaps. It also has a network of compliance officers;
- within the Finance Department, the Treasury and Capital Markets Department, together with the subsidiaries, analyzes the Group's main financial risks (interest rates, major currencies and banking counterparties), develops instruments for measuring positions and sets policy for hedging such risks. The Planning and Control Department performs critical analyses of the subsidiaries' actual and forecast financial performance through the monthly review of operating and financial indicators. It develops the Group's short- and medium-term financial forecasts and contributes to the analysis of development projects by the Group and its subsidiaries. The Internal Control Department has rolled out a documentation, improvement and annual internal control assessment program at the main subsidiaries of the Group in collaboration with the Group's functional and operational management teams. The Tax Department's primary responsibility is to identify and analyze the Group's tax risks. The Accounting and Consolidation Department ensures compliance with accounting standards;
- the Human Resources Department analyzes the main labor risks, gaps in terms of skills, corporate culture, and employee mobilization and engagement. It develops action plans for recruiting local talent and skills development. The Health and Safety Department monitors and ensures the prevention of occupational illnesses and accidents related to the Group's businesses. It ensures the implementation of warning and crisis management procedures within SUEZ Groupe entities to establish a culture of prevention at all levels, which further enhances the quality and continuity of operations;
- the Innovation and Industrial Performance Department:
  - studies and monitors environmental and industrial risks and coordinates the actions needed to strengthen risk control and compliance with requirements in this area. To do so, it implements a schedule of environmental audits and coordinates a network of Environmental and Industrial Risk Officers charged with rolling out the environmental Risk Management policy uniformly and consistently at each main subsidiary,
  - studies the operating risks associated with the Group's production systems and assists the subsidiaries in resolving operational issues at their sites, establishes and distributes best practices and operational benchmarks to the

subsidiaries, and prepares solutions for a certain number of emerging risks by developing suitable research programs;

- the IT Department analyzes and manages risks relating to IT systems to guarantee the availability, integrity and confidentiality of information;
- the Security Department: the Group has developed specific security know-how over a long period of time through various large projects in Central America, South America, Africa, the Middle East and Asia. Faced with increasingly complex and unstable security conditions, the Group has developed its own upstream analysis system for potential risks and an overall security management system based on scalable solutions that are adapted to the specific local and regional context. In this way, the Group continually analyzes unstable situations so as to identify early signs of deterioration. This internal system is operational, as we saw several times through the proactive management of crises particularly in Africa and the Middle East;
- the Sustainable Development and Communications Department analyzes and manages primarily image and reputation risks and prepares and implements suitable crisis communication plans in connection with the subsidiaries. The Best Practices Charter of the SUEZ communications network reminds employees of the confidential nature of information held by some employees and the internal obligations relating to the dissemination of information.

In addition, the Treatment Infrastructures business line actively contributes to managing risks related to design and construction.

Aside from these functional departments, the Board of Directors is assisted by an Audit Committee whose assignments in terms of risks are as follows:

- obtain regular updates on the Group's financial position, cash position and significant commitments and risks;
- examine the risk control policy and the procedures selected to evaluate and manage these risks;
- evaluate the efficiency of the Group's internal control system.

The results for 2018 of the overall Risk Management policy were presented on October 24, 2018.

Internal control is implemented according to the risks identified during the risk-mapping process as being a part of the Group's activities.

4.2.2 Management of industrial and environmental risks

Controlling environmental and industrial risks is a priority for the Group. For this reason, a specific management policy for these risks was enacted in 2014. It addresses risks which may be of accidental or natural origin. They may be due to human or organizational factors, equipment accidents or malicious acts. The scope of this policy covers all types of pollution (air, soil, aquatic environments) and environmental nuisance (noise, vibration, odor, visual discomfort, etc.). It also covers environmental damage as well as property damage and personal injury caused by fire, explosion, machine breakage, natural disaster, the collapse of structures, etc.

In 2016, this policy was clarified to include the management of the cybersecurity risk for Industrial Control Systems, consistent with the IT Security policy.

This policy is consistent with the Global Risk Management and Health and Safety policies.

A structured management system ensures that the management principles it contains are applied across all business units internationally.

4.2.2.1 Governance

Within their organizations, SUEZ and each of its business units each appoint an Environmental and Industrial Risk Officer (EIRO) to ensure the coordinated functional management of these risks at every level of the organization. The Group EIRO reports to the Innovation and Industrial Performance Department. This individual is responsible for coordinating the network of EIROs in the business units. Commitments are formalized with the business units or other operating entities based on the principle of subsidiarity with the aim of continuously improving the management of environmental and industrial risks. First, "Progress Contracts" are signed periodically with each CEO. These contracts define and list areas for improvement and related action plans for each business unit to control risk and reduce the occurrence of accidents and near accidents. Next, the annual "Compliance Letter" is used to disclose the significant risks identified and report on the measures taken as a result. Depending on the nature of the risk, action plans may be developed over one or more years. However, action plans seeking to mitigate significant risks must be developed within a limited time frame to minimize the risk of major accidents. This document is signed by the CEO of each business unit, based on the Compliance Memorandum of its EIRO.

4.2.2.2 Management Rules and Operational Rules

A series of management rules offer guidance on how to apply the SUEZ Environmental and Industrial Risk Management Policy. Compliance with local regulations is required in all cases. Any business unit, subsidiary or facility with industrial operations, and over which the Group has a dominant influence on technical operations, must comply with these management rules. They also apply to any service performed on behalf of a third party at their facilities.

The management rules make it possible to roll out the main components of the Environmental and Industrial Risk Management policy in the business units and operating entities. The main components of the policy are as follows: organization, risk management, design, operation and modification of facilities, standards, reporting, training, subcontractor management, integration of new companies, management and communication of accidents and near accidents, as well as other actions. They also lay down the roles and responsibilities for its implementation and the monitoring systems in place.

In addition, a series of environmental and industrial operational rules define the mandatory rules for all Group operations. The business units' management systems must take into account and adhere to the principles of these operational rules.

The purpose of the operational rules is to enable operating entities or subsidiaries to check that the operations under their control comply with the Group's established criteria. Failure by existing entities or newly acquired companies to comply with the operational rules must be addressed through an action plan to return them to compliance within an appropriate time frame.

The operational rules are accompanied by Practical Guides that offer guidance and examples for the practical application of these rules. Since 2015, the operational rules and practices include the rationales for fire and machinery breakdown risk prevention. The practices are supplemented depending on accident analysis feedback in collaboration with insurance company claims experts.

A series of external training modules was designed and distributed to the business units to support the dissemination of these operational rules.

4.2.2.3 Control

The operating entities to which this policy applies must follow the SUEZ environmental and industrial Risk Management system and its three-step approach: risk identification; risk assessment; and implementation of risk management measures.

The operating entities must introduce an appropriate method (or a combination of different methods) to identify potential environmental and industrial risks associated with their activities or specific to their facilities. Several risk identification methods are accepted: internal audits, self-assessment questionnaires, hazard studies conducted as part of applications for authorization to operate, process risk studies, risk prevention programs carried out by third parties (*e.g.*, specialized risk prevention companies on behalf of insurance companies), site visits by management or by functional departments, and integration or acquisition of new facilities.

In addition, audits are conducted by the Innovation and Industrial Performance Department (including a general audit of the environmental and industrial risk management system and audits on selected operational sites). These audits are intended to verify the business units' ability to identify environmental and industrial risks, to determine measures for controlling such risks and to guarantee efficiency of these measures over time. Failure to apply the management rules and standards is reported to the appropriate management level for analysis and decision-making on the measures to be implemented. A summary of the reported gaps is presented annually to the Group's General Management.

4.2.2.4 Crisis alert and management

A crisis alert and management procedure is in place to anticipate and manage accidents or any unforeseen and sudden events that may have a negative impact on the environment, operating or third party assets, business continuity or Group reputation, as well as associated impacts on employees and local residents. Such measures serve to ensure immediate and reliable communication about emergency situations to appropriate levels of the organization (alert) and to prepare and implement a "crisis organization" that is able to decide, communicate, and respond locally and globally, even in situations made worse by events. The procedure specifies the type of events that must be communicated through SUEZ's emergency stand-by team and the severity thresholds that should trigger an alert.

Each of the Group's subsidiaries has emergency plans in place that involve two modes of intervention: a local emergency stand-by team that issues the alert and mobilizes Crisis Management resources, and a dedicated Crisis Management system that can handle the crisis effectively over time. This system provides in particular for the creation of Crisis Management units that are capable of taking into account internal or external impacts, whether technical, social, health related, economic or reputational.

The details regarding the creation of the Crisis Management unit at the Group level were outlined in 2016.

4.2.2.5 Consideration of feedback

Following an environmental or industrial accident, the operating entities must analyze the event to determine the facts and understand the technical, organizational and human causes leading to the event. This analysis allows management to take appropriate measures to prevent a reoccurrence; update the risk analyses and reassess the robustness of risk control measures; and improve understanding about safety issues and the Group's safety culture by sharing feedback.

In the case of severe accidents, a news flash is circulated throughout the organization by the EIROs and *via* a post on Yammer (the Group's internal social media network). A review panel may also be set up. Chaired by a representative of the Group's General Management, these panels aim to ensure that the causes of the accident are analyzed and corrective measures are taken at the business unit level to prevent a repeat of such an accident; to validate the report and the measures taken; to propose any additional measures or investigations; to decide on possible actions at the Group level; to decide on the classification of the accident and the possible consequences for the people involved (employees and managers), and to decide on how to communicate about the event.

4.2.3 Management of IT risks

Development of major IT projects: the Group has introduced a policy for managing major IT projects and is progressively rolling out a method aimed at addressing any possible deviations.

Cybersecurity risk: this risk concerns the operation of industrial sites managed by the Group and the protection of data relating to the Group, its employees and its customers. Based on recommendations from a series of international standards, such as ISO 27000, and the guide on industrial systems cybersecurity published by the French National Information System Security Agency (ANSSI), the Group has defined a policy and set up a governance structure, a SOC [1] and a SIEM [2], and in 2017, hired a Group Chief Information Security Officer, an Industrial Control Systems Risk Officer and a Data Privacy Officer to analyze risks, set standards and ensure the Group remains in compliance with regulatory obligations. Local employees at the various BUs assist them in carrying out their duties. The cybersecurity action plan includes the following measures:

In order to enhance IT security management, the Group took out a comprehensive cybersecurity insurance policy covering all legal entities in mid-2018. New BUs have been added to the cybersecurity network and all BUs actively participate in the new dashboard. With regard to Operational Technology (OT), the Group has rolled out 10 operation security rules at all the BUs that include a secure IT architecture model in compliance with local businesses and regulations.

The Group is also gradually applying a uniform security level. In 2018, SUEZ rolled out a cybersecurity Crisis Management governance structure throughout the entire Group and was able to test out this structure by conducting its first crisis exercise. A SUEZ digital footprint monitoring and analysis solution has also been developed. In 2018, the Group created a Cybersecurity Center of Expertise to assist the international BUs and roll out Group Security services to the BUs (SOC, ISSO, DPC, etc.). In 2018, SUEZ Groupe launched its first Cybersecurity month; an annual program to raise awareness about cybersecurity among all employees. Regarding OT, a list of critical sites as well as a self-assessment grid have been developed to define and monitor cybersecurity readiness levels. The first awareness e-learning module has been released and an awareness-raising campaign is planned for early 2019.

The Group has taken measures to ensure that data is available and protected. It has rolled out Office 365 and Group-wide tools to make job postings secure; improved and expanded security monitoring *via* the Group's SIEM-SOC solution; and started deploying the SIEM-SOC solution at international BUs in 2018, which has continued in 2019.

Lastly, measures have been taken to ensure compliance with GDPR, including an ongoing review and roll-out to analyze IT project risks. This review and roll-out have been supplemented by a Privacy Impact Assessment for projects involving private data. The Project Security methodology has been updated by including data security from the project outset ("Privacy by Design") as well as throughout the entire length of the project until production.

4.2.4 Management of legal risks

As a result of its international operations, its activities, and an increasingly complex, restrictive regulatory environment, the Group pays particular attention to the management of legal risks.

The Group has specifically implemented internal legal vigilance rules aimed at the various operating entities and their employees. More specifically, these rules cover the process to be followed for entering into certain contracts, as well as feedback on litigation risks (to foster proactive management) and developments regarding major pending litigations.

The terms and conditions for certain Group activities, particularly the fact that certain contracts have very long terms (30-50 years) and are consequently subject to periodic renegotiations, also require ongoing involvement of the Group's legal departments in order to assist the operating departments in conducting such renegotiations.

Moreover, the Group frequently uses training to raise employee awareness of the importance of managing legal risks and of following the legal vigilance rules it has implemented.

4.2.5 Management of market risks

In the context of its operating and financial activities, the Group is exposed to market risks such as interest rate risks, currency risks, liquidity risks, or the risk related to certain commodity prices. To ensure greater control of these risks, the Group has implemented the management rules described below.

Market Risk Management issues are presented at a monthly Treasury Committee meeting chaired by the Chief Financial Officer and decisions regarding the management of these risks are taken by this Committee.

The Group primarily uses financial instruments to manage its exposure to fluctuations in interest rates, exchange rates and commodity prices.

(1) SOC: Security Operations Center.
(2) SIEM: Security Information and Event Management.

4.2.5.1 Management of interest rate risk

The Group's exposure to interest rate risk is described in section 4.1.3.1.

The Group's policy is to diversify net debt interest rate references between fixed and floating rates. The aim is to achieve a balanced distribution among various interest rates and maturities.

The Group also uses hedging instruments (particularly swaps) to protect itself from interest rate fluctuations in the currencies in which its debt is denominated. The financial instruments held by the Group in order to hedge interest rate risk are detailed in Note 14.1.4 to the Group's Consolidated Financial Statements, chapter 20.1.

The Group's exposure to interest rate risk is for the most part centrally managed and regularly reviewed during meetings of the Treasury Committee. Hedges decided upon by the Treasury Committee are executed and implemented on behalf of the Group by its Treasury and Capital Markets Department.

4.2.5.2 Management of currency risk

The currency risk to which the Group is exposed is detailed in section 4.1.3.2.

The geographic diversification of its activities exposes the Group to currency risk. Its statement of financial position and income statement are impacted by changes in exchange rates. Currency risk includes:

- transaction risk associated with purchases and sales made by the Group;
- transaction risk associated with sale and acquisition transactions;
- fair value risk associated with construction contracts;
- currency risk related to assets and liabilities denominated in a foreign currency, including loans and borrowings taken out by subsidiaries;
- consolidation risk, which arises when consolidating the financial statements of subsidiaries with a reporting currency other than the euro.

The financial instruments held by the Group to hedge currency risk are detailed in Note 14.1.4 to the Consolidated Financial Statements, chapter 20.1.

The Group's exposure to currency risk is for the most part centrally managed and regularly reviewed at meetings of the Treasury Committee. Hedges decided upon by the Treasury Committee are executed and implemented on behalf of the Group by its Treasury and Capital Markets Department.

4.2.5.3 Management of liquidity risk

The liquidity risk to which the Group is exposed is described in section 4.1.3.3.

The Group's 2018 financing policy had the following objectives:

- diversifying financing sources through the use of banking and capital markets;
- optimizing financing costs;
- balancing the repayment profile of financial debt.

As of December 31, 2018, following different transactions made throughout the year as described in chapter 10 of this Reference Document, bank loans accounted for 7.0% of total outstanding borrowings (excluding bank overdrafts and short-term borrowings, as these items do not constitute sustainable financial resources). Financing through capital markets represented 90.3% of this total (84.8% for bonds and 5.5% for commercial paper).

Net cash amounted to EUR 3,632.6 million as of December 31, 2018, and confirmed credit facilities reached EUR 2,609.8 million, EUR 319.1 million of which had been drawn down.

Available cash and cash equivalents (EUR 3,424.1 million), financial assets carried at fair value through income (EUR 29.2 million), net of bank overdrafts and short-term borrowings (EUR 928.8 million), totaled EUR 2,524.5 million as of December 31, 2018.

The Group's total liquidity as of December 31, 2018 is compatible with its size and the maturities it faces.

Liquidity risk is regularly monitored by the Treasury Committee and the Audit Committee; monthly reporting of consolidated Group debt includes a debt schedule for the current year, years y+1 to y+8 and beyond.

Access to long-term capital markets is mostly concentrated in the Parent Company SUEZ for new bond and structured bank debt.

4.2.5.4 Management of counterparty risk

The counterparty risk to which the Group is exposed is described in section 4.1.3.4.

The Group's policy for managing counterparty risk is based on the diversification of its counterparties and an assessment of the financial position of these counterparties.

The Group invests the majority of its cash surplus in, and negotiates its financial hedging instruments with, leading counterparties. Within the framework of its counterparty Risk Management policy, the Group has implemented management and control procedures based, on the one hand, on counterparty accreditation according to external rating and objective market aspects (credit default swaps, stock market capitalization), and on the other hand, on the definition of risk limits. Similarly, the Group selects its insurers in a way that limits its counterparty risk.

4.2.5.5 Management of equity risk

The equity risk to which the Group is exposed is described in section 4.1.3.5.

The Group's portfolio of listed equities is part of its long-term investment policy. As of the date of this Reference Document, equity risk is not subject to any particular hedging, but the Finance Department monitors price changes in the Group's equity interests in various companies on a regular basis.

4.2.5.6 Management of commodity and energy risks

The commodity risk to which the Group is exposed is described in section 4.1.3.6.

The Group's hedging policy mostly concerns the risk associated with oil price fluctuations, in particular due to the fuel consumption of its main subsidiaries active in the waste management sector (SUEZ R&R France, SUEZ Deutschland, SUEZ Recycling & Recovery Netherlands).

Volumes that are not purchased under contracts where revenues are indexed to the change in diesel prices are considered "at risk" volumes and are financially hedged through the use of derivative products (particularly swaps – see section 20.1.6, "Notes to the Consolidated Financial Statements", Notes 1.5.9.3 and 14.1.1).

In order to best implement the planned hedges, the Group's Treasury and Capital Markets Department monitors changes in the market and hedging prices and makes recommendations to the Treasury Committee and to the subsidiaries concerned.

4.2.6 Ethics Program

The Group pays particular attention to sharing and adhering to ethical values. Given its presence in many countries, it specifically ensures compliance with related local regulations and obligations.

The SUEZ ethics policy was designed to promote a Group culture that encourages responsible behavior (in compliance with the applicable ethical values and regulations) by each employee of the Group. It is based on three pillars:

- a charter, supplemented by procedures and practical guidelines;
- governance provided by the Ethics and Sustainable Development Committee, the Board of Directors, the Ethics Compliance Committee [1] and the Ethics Officers network;
- ethics reporting tools.

SUEZ has made ethics an indispensable element of its overall performance improvement. Adherence to these values is essential in all the Group's activities, both in internal relationships within the Company and in its relationships with clients, suppliers and all external stakeholders. To this end, the Group has established an expanded Ethics Program, as follows:

- an Ethics Charter updated in 2016 and a Handbook are available in nine languages: French, English, Spanish, German, Dutch, Czech, Arabic, Russian and Polish. These documents can be consulted by all Group employees and are available on the SUEZ intranet site. They have been developed to affirm the Group's values and be a frame of reference for every employee regarding how to behave and act. This Charter takes into account applicable regulations, standards, and rules on ethics and professional conduct issued by national and international institutions (such as the Global Compact, the International Labour Organization Conventions and the OECD Guidelines for Multinational Enterprises);
- specifically addressing the fight against corruption, the Handbook provides rules and detailed procedures that apply to the whole Group when it comes to signing agreements for patronage or sponsorships, as well as contracts with institutional or business consultants;
- the Group regularly provides training on ethical issues, particularly on compliance with competition rules and anti-corruption rules;
- SUEZ's commitment to Ethics has been reaffirmed through its support for the United Nations Global Compact;
- SUEZ is also a member of Transparency International.

The Group's Ethics Program now fully includes former GE Water, and the new "Water Technologies and Solutions" business unit complies with the Group's compliance policy and program.

In 2008, the Company's Board of Directors set up an Ethics and Sustainable Development Committee responsible for, among other things, monitoring the Group's Ethics and Sustainable Development Policies and ensuring that Group employees comply with the individual and collective values on which the Group's activities are based (for a description of the Ethics and Sustainable Development Committee, see section 3 in chapter 16.4 of this Reference Document).

The General Secretary as Group Ethics Officer coordinates the implementation of the Ethics Program, which applies to the entire Group. This program aims to prevent or detect behaviors that are contrary to the Group's ethics rules.

The Group created an Ethics and Compliance Department in 2017 in accordance with recommendations issued by the French anti-corruption agency. The Head of the Ethics and Compliance Department coordinates a network of compliance officers, the scope and membership of which are regularly reviewed to ensure that it is aligned with the Group's operations.

As of December 31, 2018, 18 Ethics Officers were employed at "top tier" subsidiaries and entities. In addition, to facilitate the smooth roll-out of the Ethics Program at some companies or business units that have many subsidiaries, additional Ethics Officers have been appointed in order to effectively relay the Ethics Program. The Ethics Officers are also responsible for initiating internal and external investigation procedures for any issue brought to their attention that may breach the Group's ethics rules.

An ethics guide to commercial relations, validated by the Management Committee and then approved by the Board of Director's Ethics and Sustainable Development Committee, has been available since 2016 in order to increase awareness of ethical matters. This guide is available in nine languages and prescribes rules, especially regarding gifts and invitations, and outlines practices that are prohibited in a given situation. In accordance with the requirements of the Sapin 2 Law, this Code of Conduct is included in the Internal Regulations of the entities concerned.

In-person training and e-learning modules consider the specific circumstances of each location in an effort to increase prevention of ethics risks, and especially corruption risk. As a result, in 2018, more than 12,000 employees took ethics training courses, and around 3,300 employees received specific training on anti-corruption rules. Personalized training for employees exposed

(1) This Committee is made up of the General Secretary (as Group Ethics Officer), the Human Resources Director, the Group Legal Counsel and the Internal Audit, Risk and Investments Director of the Group.

to the greatest amount of risk will continue in 2019 based on a corruption risk map conducted at Group and business unit level pursuant to the provisions of the Sapin 2 Law.

In 2018, nearly a hundred emails requesting information or reporting unethical behavior were sent to the Group's email address (ethics@SUEZ.com).

When ethical concerns arise, the Head of Ethics and/or Compliance concerned is either involved directly or immediately notified. This individual can decide to examine them if necessary in close collaboration with the Legal and Human Resources departments. The most serious cases are reviewed by the Group's Ethics Compliance Committee and are subject to an internal audit or specific external audit.

SUEZ and a significant number of its subsidiaries have set up ethics-related email addresses or telephone hotlines so that employees and third parties can easily seek the support of Ethics Officers.

In 2018, there were several dozen proven breaches of ethical rules reported in the Group. These behaviors were sanctioned in a proportionate manner (with sanctions leading to dismissal, where necessary).

More generally, each year the Ethics Officers at each main subsidiary send a report on the application of the Ethics Program at their subsidiary to their General Management team as well as to the Group Ethics and Compliance Officer. A compliance letter signed by the Chief Executive Officer of each major subsidiary or entity is sent to the Group Chief Executive Officer and the Group Ethics Officer every year. The Group has also taken into account requirements related to other Sapin 2 Law measures.

The Group Ethics Officer produces an Annual Report on the Ethics Program's activities within the Group and sends it to the Chairman of the Board of Directors. It is then sent to the Ethics and Sustainable Development Committee, which reports on it to the Board of Directors.

Compliance with ethical principles is also an integral part of the Group's internal control program.

In order to enhance control over the application of Group ethics rules, the audit plan developed by the Management Committee and approved by the Audit and Financial Statements Committee provides for general reviews at the Group level. All such audits specifically include an ethics component, and particularly the implementation of the anti-corruption program. Additionally, specific audits to verify compliance with the Sapin 2 Law are regularly scheduled.

4.2.7 Management and Financing of Insurable Risks

The roll-out of the industrial Risk Management policy described in section 4.2.2 helps to further reduce the occurrence or effects of accidental events.

To limit the impact of certain events on its financial position, or to meet contractual or legal requirements, the Group has created dedicated insurance programs to cover its main risks of damage to property, civil liability, and personal insurance.

The policy for transferring risk to the insurance market is approved every year and updated as necessary in order to reflect not only changes in the Group, its activities and the risks it faces, but also changes in the insurance market.

The Insurance Department organizes the policy defined by the Group: selection of the brokers and insurers, monitoring of the policies and, if necessary, control of the prevention or protection policies. For this purpose, it works with a network of specialists or agents at the Group's subsidiaries.

In each of the traditional insurance domains (namely property damage and interruption of business, civil liability and employee benefits), the Group transfers risks to the insurance market or uses self-financing plans:

- the transfer of risk to the insurance market is performed as often as possible through Group-wide programs in areas that are considered strategic because of either the potential severity of the risks covered or the economies of scale generated by Group-wide programs;
- the financing of low or moderate intensity random risk relies mostly on self-financing schemes, particularly through risk retentions, or through the captive non-life reinsurance subsidiary SUEZ Ré, whose activities consist of reinsuring all or part of the risks transferred by SUEZ Groupe and its subsidiaries to non-life insurers. Its expert-led Technical and Financial Committees validate each commitment and monitor management transactions.

In 2018, the premiums (including taxes and retentions) relating to the main insurance programs established by the Group in the areas of asset protection (covering property damage and interruption of business) and third-party claims amounted to approximately 0.4% of Group consolidated revenues, considering the changes in scope.

Property damage and interruption of business

The protection of Group assets covers property the Group owns as well as property that it leases or that has been entrusted to it.

Facilities are covered by programs that are generally underwritten at the Group level. However, insurance policies are also taken out by subsidiaries and, under exceptional circumstances, by sites, if justified by contractual requirements. These local insurance policies are identified and checked by the Insurance Department.

The underwriting limits for property damage cover the maximum loss assessed for each site.

With respect to interruption of business resulting from property damage, the coverage periods take into account an estimate of the consequences of the total or partial shutdown of a site (repair period, amount of daily losses, additional expenses and redundancy).

Construction projects are covered by a "Construction All Risks" policy taken out by the project manager, the general contractor or the main company involved.

Civil liability

The Group's third-party civil liability is covered by various types of civil liability insurance.

General civil liability, product liability, professional liability or civil liability for environmental damage coverage fall under an insurance program underwritten and managed by SUEZ Groupe on behalf of its subsidiaries.

The maximum coverage under this policy was EUR 300 million in 2018.

Insurance for certain types of civil liability that correspond to legal obligations (vehicle fleet and workplace accidents) are covered by specific policies.

Employee benefits

In accordance with legislation currently in force and with company agreements, programs for protecting employees against the risk of accidents and medical costs are set up at the operating entity level. These programs may either be financed through retention based on capacity, or transferred to the insurance market. In France, mutual and insurance programs are largely consolidated and are subject to at least one review per year to analyze risks and trends, as well as to anticipate changes in the economic balance of the plans concerned.

4.3 Internal control procedures implemented within the Company

4.3.1 Group objectives and standards for internal control

4.3.1.1 Objectives

The aim of the internal control procedures implemented within the Group is to provide reasonable assurance that the applicable laws and regulations are complied with, and that accounting and financial information is reliable.

Generally speaking, it helps to safeguard assets and control and optimize operations. Like any control system, it can only provide reasonable assurance that the risks of error or fraud are completely under control or have been eliminated.

The Group adopted an integrated corporate Risk Management policy that aims to provide a complete overview of the risk portfolio through the use of methods and tools common to all subsidiaries and functional departments, as well as to put in place and follow up action plans to manage those risks.

4.3.1.2 Reference framework

The Group internal control program was developed according to the "COSO" model promoted by the Committee of Sponsoring Organizations of the Treadway Commission and complies with the principles described in the reference framework supplemented by the application guide published by the French Financial Markets Authority (AMF) and updated by an AMF working Group on the Audit Committee (whose final report was published on July 22, 2010).

General Risk Management principles are consistent with professional standards (such as ISO 31000, the reference framework of the Federation of European Risk Management Associations (FERMA) and the practices it recommends).

4.3.2 Steering of operations and implementation of internal control and Risk Management objectives

4.3.2.1 Steering of operations

In terms of steering of operations, the Group's organization is based on the following principles, which form the general control framework in force within SUEZ.

- The Board of Directors establishes operational guidelines for the Group and oversees their implementation. In this regard, it tasks the Audit and Financial Statements Committee with (among other things) monitoring the internal control and Risk Management systems (see section 4.3.2.2 below). The Board deals with all issues concerning the proper running of the Company, deliberates and settles relevant matters, and carries out checks and inspections as it deems appropriate. The

Chairman or Chief Executive Officer must provide each Director with all the documents and information required to carry out their duties;

- the Chief Executive Officer holds the most extensive powers to act, under all circumstances, on behalf of the Company. He exercises those powers within the limit of the corporate purpose and subject to the powers granted by law to Shareholders' Meetings and the Board of Directors, and to internal limits on executive powers;
- the Management Committee is an advisory and decision-making body comprising the Chief Executive Officer and the five Deputy CEOs in charge of Finance and Recycling and Recovery operations in Northern Europe; France, Italy and Central Europe; Africa, the Middle East, India, Asia and the Pacific region; Spain, North America and Latin America, Group transformation, and Key Industrial Accounts, as well as the Chairman and the Chief Executive Officer of WTS, the Chief Executive Officer of the Water and Waste Treatment Infrastructures Global Business Line, the Head of Human Resources, and the Head of Sustainable Development and Communications. The Management Committee reviews the Group's main decisions and strategic objectives and sets the Business Units' operational and performance objectives at two business reviews during the year;
- the Executive Committee includes the members of the Management Committee, the heads of the Business Units and the senior managers of the support functions. Its role is to coordinate management actions;
- the Operations Committee is chaired by the Chief Executive Officer or the Deputy CEO in charge of Finance and Recycling and Recovery activities in Northern Europe and also includes the General Secretary and the operational Deputy CEO of the division concerned. Its role is to evaluate significant disposal or development projects for commitment decisions and to analyze the performance of specific projects in progress;
- the Treasury Committee, chaired by the Deputy CEO in charge of Finance and Recycling and Recovery activities in Northern Europe, is the management body for financial risks;
- the Group is organized according to four main segments (Water Europe, Recycling and Recovery Europe, International and WTS); these are in turn divided into 14 Business Units to which the Group's operating subsidiaries are linked.

  The Business Unit managers and the management teams of the operating subsidiaries are responsible, within their area of responsibility, for conducting business within the framework of the strategic objectives set by the Board of Directors and the Management Committee.

  After setting the operational and performance objectives of the Business Units (see above), their progress is monitored at monthly business reviews, in which a representative of the Management Committee, the Business Unit managers and the functional departments involved all take part;
- the functional departments assist the Management Committee with controlling and guiding operations and act in support of the Business Units according to principles and procedures applicable across the entire Group.

The functional departments mainly include the Financial Department, the General Secretary (which heads the Legal Department and the Internal Audit, Risk and Investments Department), the Innovation and Industrial Performance Department, the Procurement Department, the IT Department, the Sustainable Development and Communications Department, and the Human Resources Department.

4.3.2.2 Monitoring and evaluation of internal control

The Group's internal control monitoring is organized according to the following principles:

- the role of the Audit and Financial Statements Committee (as provided for in the Board of Directors' Internal Regulations) is to assess the effectiveness of the Group's internal control systems and examine the procedures applied to assess and manage the Group's significant risks (pursuant to the Decree of December 8, 2008, which transposes the Eighth European Directive into French law);
- the Group's Management Committee is responsible for implementing the internal control systems; that responsibility is rolled out to the Business Unit managers and the management teams of the operating subsidiaries. The Group's guidelines and rules of operation are distributed by the operational or functional departments concerned. All Group employees can also find them under the "Policies and procedures" section of the Group's intranet site. The Chief Executive Officers and Chief Financial Officers of the main operating subsidiaries confirm, *via* half-year and year-end representation letters, their responsibility for implementing an efficient internal control system within their organization;
- the internal control system is implemented in a manner consistent with the risks identified in the Group's activities through a risk-mapping process managed by the Group's Chief Risk Officer;
- the Internal Control Department, which is under the Finance Department, manages the Group's internal control program; its mission is to analyze and improve the internal control system in collaboration with the Group's main subsidiaries and functional departments. Its actions are supported by a network of internal Control Officers and Process Owners identified within the main subsidiaries of the Group, who are trained in the Group's internal control principles and methods.

  As part of the Group's internal control program, a questionnaire on the general control environment has been created and risk benchmarks have been defined. These cover key operational processes: sales management, procurement management, asset management and contract management; support processes: the preparation of accounting and financial information, financial management, IT system management, legal management, tax management, external communications, as well as global processes: the management of commitments, corporate governance and external communications.

  For each process, in conjunction with the risk matrix prepared by the Director of Internal Control, risks and examples of controls considered necessary for maintaining an effective internal control system have been identified. The controls implemented to meet these risks are generally specific to the business and organization of each entity.

The Group's internal control program is based on dedicated tools that:

– disperse risks to be covered and provide examples of controls,
– describe, update and conduct annual assessments of controls *via* the Process Owners for each key process identified at the main subsidiaries;

- the mission of the Internal Audit, Risk and Investments Department, which reports to the Audit and Financial Statements Committee and to the Office of the General Secretary, is specifically to ensure that the Group has an efficient internal control system and manages its risks properly.

  To assess the reliability of the internal control system, the Internal Audit, Risk and Investments Department performs audits intended to evaluate the design of controls aimed at covering risks, particularly by reviewing processes and testing key control activities at each of the main subsidiaries. Furthermore, at the end of each audit, the Department makes recommendations, monitors their implementation and reports regularly to the Management Committee and the Audit and Financial Statements Committee;
- external audit: assessment and analysis of internal controls within the Group are performed in close coordination with the Group's Statutory Auditors. They are informed of the results of the internal audit tests, among other things.

4.3.2.3 Compliance with laws and regulations

Compliance with laws and regulations is the responsibility of the Business Unit managers, the management of the operating subsidiaries and the functional departments in their respective areas of competence. For example, certain cross-divisional compliance objectives are managed by the functional departments concerned:

- the General Secretary, acting as the Group's Ethics Officer, is responsible for ensuring compliance with the Ethics and Compliance Program, which aims to prevent or detect any behaviors contrary to the Group's rules of ethics (see section 4.2.6 above);
- the General Secretary oversees implementation of the procedures circulated within the Group to ensure compliance with its obligations on insider information and insiders;
- the Finance Department ensures the Group's compliance in accounting, financial and tax-related matters. It is responsible for producing the financial reports required by law;
- the Human Resources Department ensures compliance with the labor legislation and regulations in force and produces the labor reports required by law. It implements the Group's labor policies, particularly those relating to health and safety;
- the Innovation and Industrial Performance Department oversees the Group's compliance in environmental matters. It produces the necessary environmental reports within the framework of non-financial communications. An annual representation letter regarding environmental compliance, signed by the subsidiaries' Chief Executive Officers, confirms their commitment in this regard.

4.3.2.4 Internal control procedures relating to the preparation, treatment and circulation of accounting and financial information

1) Accounting standards and procedures

The main procedures put in place for the preparation of the statutory and Consolidated Financial Statements are based on:

- the Group's accounting policies manual, which is accessible *via* the intranet to all Group finance professionals. It is regularly updated based on changes in IFRS; and
- the Group closing instructions are circulated before every phase of the consolidation process by the Accounting and Consolidation Department. These instructions cover the closing assumptions (exchange rates, discount rates and tax rates, etc.), processes for specific topics (*e.g.* pensions, impairment tests and off-balance sheet items), the scope of consolidation, the timetable for submitting information, items relating to closing that require particular attention, changes in the chart of accounts and significant new standards introduced.

2) Preparation of accounting and financial information

Responsibilities for preparing accounting and financial information are assigned at every organizational level of the Group. These include the set-up and maintenance of efficient internal control systems. Within the Finance Department:

- the Accounting and Consolidation Department organizes the Group financial statement production process, which includes producing and controlling the statutory and Consolidated Financial Statements of SUEZ, producing forecasts and monthly consolidated financial reports as well as the medium-term plan. This work is carried out with input from the accounting and planning and control Departments of each consolidated subsidiary. Each party involved performs checks to enable the circulation, assimilation and correct application of Group accounting standards and procedures in their area of responsibility. These responsibilities are confirmed by the Chief Executive Officers and Chief Financial Officers of each subsidiary or each consolidation level *via* a biannual representation letter.

  The Accounting and Consolidation Department is responsible for relations with the AMF Accounting Department;
- the Planning and Control Department is responsible for analyzing the Consolidated Financial Statements, forecast reports, monthly consolidated financial reports, as well as the medium-term plan.

3) Management of accounting and financial information systems

The Group and its subsidiaries use a single, standardized consolidation software application, managed by the Group, to secure and standardize the preparation process for forecasts, monthly reports, financial statements and the medium-term plan.

Each of the Group's subsidiaries is responsible for and manages its own information system used to prepare accounting and financial information, including their statutory financial statements.

4) Setting objectives and steering

Within the Finance Department, the Planning and Control Department steers the process for preparing financial forecasts and writes the budget instruction letters sent to each Business Unit, relaying the macroeconomic assumptions to be applied and the financial and non-financial indicators to be measured the following year through the various forecast reviews.

The Planning and Control Department steers the monthly business reviews. The purpose of these meetings is:

- to define the financial objectives and forecasts twice a year;
- each time, to analyze the operational and financial performance of each Business Unit, how their business is going and key events, as well as monitor their operational Risk Management using management reports based on the Group's consolidated monthly financial reports.

The consolidated Group budget is presented to the Board of Directors.

The Group's Chief Executive Officer sends each Business Unit a budget letter outlining its annual quantitative and qualitative objectives.

5) Financial communications

a) Preparation and approval of the interim and annual reports

Within the Finance Department, the Accounting and Consolidation Department is in charge of preparing the Reference Document filed with the AMF as well as the interim Financial Report, and heads up a dedicated Steering Committee jointly with the Legal Department whose purpose is:

- to coordinate the process for submission and validation by all relevant functional departments of the information contained in the Reference Document and in the interim Financial Report;
- to ensure that the regulations and AMF recommendations on financial communications are applied.

b) Preparation and approval of press releases

The Sustainable Development and Communications Department and, within the Finance Department, the Financial Communication Department and the Legal Department are responsible for reporting all information that could have an impact on the SUEZ share price.

Since the Group was listed on the Stock Exchange, the Sustainable Development and Communications Department and the Financial Communication Department have implemented procedures aimed at ensuring the reliability of the regulatory information communicated to the market.

c) Relationships with rating agencies

Within the Financial Department, the Treasury and Capital Markets Department maintains relationships with rating agencies in cooperation with the Financial Communication Department.

4.3.3 Changes in 2018 and outlook

The Group improves its internal control system every year. This continuous improvement process relies, in particular, on defining and operating an internal control plan that is specific to each of its main subsidiaries. The progress of these plans is presented yearly to the Audit and Financial Statements Committee.

While maintaining the current internal control program, the Group is also continuing its process to simplify the internal control system to make it more accessible for operational processes and to be able to expand its implementation as a result.

In 2018, internal control actions mainly included:

- designing a new tool to disseminate the risk guidelines updated in 2017 and to conduct a self-assessment of the controls;
- adapting the system and the internal control methodology to changes in Group's organizations;
- automating controls and integrating internal control mechanisms as part of the implementation of new IT systems related, among other things, to the upgrading of procurement and accounting software programs.

The main internal control development areas for 2019 are:

- rolling out the new internal control approach (strategy, risk guidelines and self- assessment tool) to all Group entities;
- increasing the business Process Owners' understanding of internal control with the support of the updated risk guidelines and the roll-out of the new tool;
- adapting the internal control system and methodology to changes in the organization;
- improving how the Group manages access to IT applications and making segregation of duty reviews more systematic.

5 Group information

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5.1 Group history and reorganization

5.1.1 Legal name

As of April 28, 2016, the legal name of the Company is SUEZ. Before that time, the legal name of the Company was SUEZ ENVIRONNEMENT COMPANY.

5.1.2 Trade and Company Register

The Company is registered in the Trade and Company Register of Nanterre (France) under the number 433 466 570.

5.1.3 Company's date of incorporation and term

The Company was incorporated on November 9, 2000 for a term of 99 years. Except in the event of early dissolution or extension, the Company will cease to exist on November 9, 2099.

5.1.4 Registered address, legal form and applicable legislation

The Company's registered address is Tour CB21, 16, place de l'Iris, 92040 Paris-La Défense Cedex, France.

Telephone: + 33 (0)1 58 81 20 00.

The Company is a French *société anonyme* (public limited company) with a Board of Directors, and is governed by the provisions of Book II of the French Commercial Code applicable to commercial companies and all legal provisions applicable to commercial companies. It is governed by current legal and regulatory provisions and by its bylaws.

5.1.5 Group history

Since 2003, SUEZ Environnement has handled all the expertise in water management, wastewater treatment and waste management services within the SUEZ Group (which became GDF SUEZ and then ENGIE). This expertise was supported by companies such as Degrémont (which became SUEZ International), Safège, Lyonnaise des Eaux (which became SUEZ Eau France) and Sita (which became SUEZ RV France), which are renowned for their highly-developed know-how, in some cases serving their customers for more than a century.

1880, ESTABLISHMENT OF LYONNAISE DES EAUX ET DE L'ÉCLAIRAGE

The company operated in the public services of water, electricity and gas distribution in rapidly growing cities and suburbs such as Cannes, Bordeaux, Lille and Rouen. From the very beginning, Lyonnaise des Eaux was also developing its activities abroad.

1919, CREATION OF SITA

The Société Industrielle des Transports Automobiles (Sita) was one of the two service providers selected to collect household waste in Paris. At that time, Sita had two activities: transport of all kinds and public service delegation. It later diversified into passenger transport and corporate vehicle leasing.

1946, PARTIAL NATIONALIZATION OF LYONNAISE DES EAUX

In 1946, France nationalized the gas and electricity sectors. Lyonnaise des Eaux et de l'Éclairage was partially nationalized. The company therefore focused on water-related activities to meet the growing demand for services and network development in the suburbs of large cities. In line with this same growth strategy, Lyonnaise des Eaux became a majority shareholder in Degrémont, a water treatment company established in Paris in 1939.

1971, ACQUISITION OF SITA

In order to meet increasing environmental protection requirements, Sita set up a waste sorting and recycling line in the 1970s. In 1971, Lyonnaise des Eaux acquired a stake in Sita, which became the Group's "Waste division". Since 2000, Sita (now called SUEZ RV France) has been 100% owned by the Group.

1974, COMPAGNIE FINANCIÈRE DE SUEZ, MAJORITY SHAREHOLDER OF LYONNAISE DES EAUX

In 1974, Compagnie Financière de SUEZ became majority shareholder of Lyonnaise des Eaux. After being nationalized by the French government in 1982, Compagnie Financière de SUEZ was again privatized in 1987.

1997, MERGER OF COMPAGNIE FINANCIÈRE DE SUEZ AND LYONNAISE DES EAUX

In 1997, the merger between Lyonnaise des Eaux and Compagnie Financière de SUEZ resulted in SUEZ Lyonnaise des Eaux, the world's leading group for local services.

2001, SPIN-OFF OF THE SUEZ GROUP WATER ACTIVITIES

In 2001, SUEZ Lyonnaise des Eaux became SUEZ and, through a contribution in kind, combined all of its water-related activities within Ondeo as part of a spin-off process. Water activities in France were consolidated under the name Lyonnaise des Eaux France.

2003, FORMATION OF SUEZ ENVIRONNEMENT

In 2003, the water and waste activities were combined within SUEZ Environnement following the merger of Sita with Ondeo Services, which changed its name to SUEZ Environnement. SUEZ Environnement then united almost all of the environmental activities of the SUEZ Group (which became GDF SUEZ and then ENGIE) in the water, waste and engineering sectors.

2008, LISTING OF SUEZ ENVIRONNEMENT COMPANY

As part of the merger between SUEZ and Gaz de France, which created a global leader in the gas and electricity sectors with a strong French-Belgian base, SUEZ completed the consolidation of all its environmental operations within a new company: SUEZ ENVIRONNEMENT COMPANY. SUEZ contributed all the shares of the former company SUEZ Environnement to this new company, and distributed 65% of the capital of SUEZ ENVIRONNEMENT COMPANY to the SUEZ company's shareholders prior to the merger. Since that distribution, the merged entity GDF SUEZ, later ENGIE, has had a stable equity stake in the Company (32.06% as of December 31, 2018).

2010, TAKEOVER OF AGBAR

On June 8, 2010, the Company completed the process of taking over Aguas de Barcelona (Agbar), announced in October 2009. As a result of this transaction, SUEZ owned 75.23% of Agbar, a company formed in 1882 which specializes in water cycle management in Spain and other countries (primarily Chile). On September 17, 2014, the Company acquired the indirect interest owned by Criteria Caixa in Agbar and at the conclusion of this transaction held 99.49% of Agbar, a stake that was increased to 100% in 2015. On this occasion, Criteria Caixa became the second largest shareholder of the Company, acquiring a 4.1% stake in its share capital, which was increased to 5.97% as at December 31, 2018.

2012-2013, END OF THE SHAREHOLDERS' AGREEMENT

On December 5, 2012, the Board of Directors of the Company recorded the decision by ENGIE and all signatories of the Shareholders' Agreement (as described in section 18.3.1 of the 2013 Reference Document), except the Company, not to renew the Shareholders' Agreement, which therefore ended on July 22, 2013.

This decision resulted in ENGIE losing control of the Company. As of July 22, 2013, the stake held by ENGIE in the Group (32.06% as of December 31, 2018) is accounted for by the equity method in the Consolidated Financial Statements of ENGIE.

ENGIE remains a long-term strategic partner and reference shareholder of the Company.

2015, A SINGLE BRAND, SUEZ, TO ACCELERATE THE GROUP'S DEVELOPMENT AND TO SUPPORT IT IN MEETING CHALLENGES TO GROWTH

In 2015, all the Group's trademarks were federated under a single brand, SUEZ, positioned in the sustainable management of resources.

This change has three goals: to simplify a multi-brand architecture to improve performance and commercial efficiency, to meet the new needs of customers, and to reinforce the convergence between the Group's activities in order to address the challenges of a circular economy.

The Group is now organized around four main activities: management of the extended water cycle, recycling and reuse of waste, water treatment solutions and consulting services (Safège) for sustainable urban and regional development.

2017, ACQUISITION OF GE WATER AND CREATION OF THE WATER TECHNOLOGIES & SOLUTIONS (WTS) BUSINESS UNIT

On September 29, 2017, SUEZ finalized the acquisition of GE Water, announced in March 2017. At the same time, SUEZ created a "Water Technologies & Solutions" (WTS) Business Unit that includes former GE Water entities and SUEZ entities specialized in Industrial Water. This transaction was carried out in partnership with Caisse de Dépôt et Placement du Québec (CDPQ), which holds 30% of the newly created entity named SUEZ Water Technologies and Solutions.

This acquisition fulfills one of SUEZ's strategic objectives: to be a major player in industrial water services that covers the entire value chain. This transaction, in particular, enables the Group to increase its international presence and innovation capacities.

5.2 Investments

5.2.1 Main investments made by SUEZ over the past two years

A description of the principal investments made by the Group over the course of 2017-2018 is provided in section 9.3.1, "Cash flows from investing activities", of this Reference Document.

5.2.2 Main investments of the Company in progress

None.

5.2.3 Main investments planned or subject to firm commitments from the management bodies

None.

6 overview of activities

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6.1 General information

With total revenues of EUR 17.3 billion, and close to 89,000 employees as of December 31, 2018, the Group is a major player in the global environmental market (water and waste).

The Group is active in each stage of the water and waste cycles and therefore has thorough expertise in these areas. It operates both on behalf of public authorities and private sector players.

The Group's water-related activities specifically include:

- catchment, treatment and distribution of drinking water;
- maintenance of networks and operation of plants;
- customer management;
- collection and treatment of municipal and industrial wastewater;
- design, building, occasional financing and operation of drinking water production and wastewater treatment plants, as well as desalination and water treatment plants, for reuse purposes;
- studies, master plans, modeling of underground water tables and hydraulic flows and general contracting for water management infrastructure projects;
- biological and energy recovery of treated sewage sludge;
- supply of processes and technologies for the treatment of drinking water and wastewater;
- supply of integrated chemical solutions for water and industrial assets.

The Group's activities in the waste sector notably include:

- waste collection (household waste, waste from local authorities, and industrial waste; non-hazardous and hazardous waste, excluding waste that may be contaminated by radioactive residues from nuclear activities) and urban cleaning services;
- pretreatment of such waste;
- sorting, recycling, and material, biological or energy recovery of recoverable fractions;
- disposal, by incineration and landfilling of residual fractions;
- integrated management of industrial sites (industrial wastewater treatment, *in situ* waste collection and treatment, pollution clean-up and remediation of polluted sites or soil);
- sludge treatment and recovery.

The Group engages in its activities through public and private customers, under various types of contracts:

- in the water sector, the Group primarily enters into delegation of public service contracts (leases or concessions) and public contracts, as well as service, operational and maintenance contracts, and building and engineering contracts;
- in the waste sector, the Group enters into service or management contracts (delegated and non-delegated, integrated and non-integrated), operational and maintenance contracts, and design, build and operate contracts.

In 2018, 55% of the Group's consolidated revenues were generated in the Water segment, and 45% in the Waste segment.

As of December 31, 2018, the Group's structure was built around four operational divisions – Water Europe, Recycling and Recovery Europe, International, and Water Technologies & Solutions – comprising fourteen business units and three cross-divisional businesses (Treatment Infrastructures, Advanced Solutions and Industrial Markets, and Key Accounts). Another segment, known as "Other", mainly covers corporate functions, as well as the activities of SUEZ Consulting.

The chart below shows the structure of the Company's operational divisions and cross-divisional businesses.

Breakdown of 2018 revenue by Division

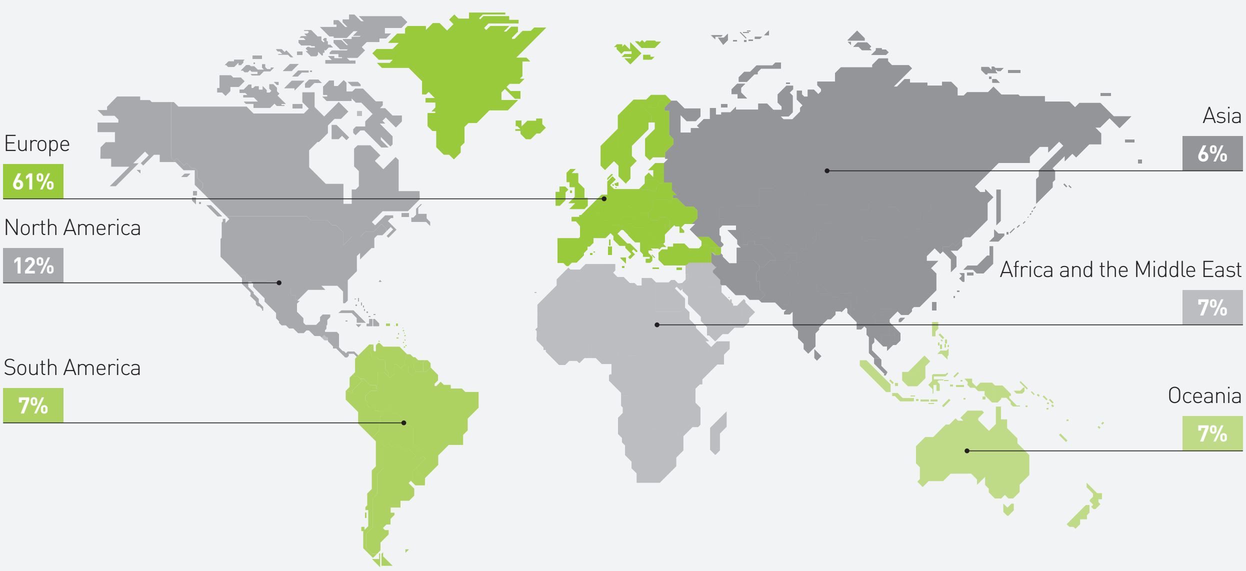
SUEZ
Corporate functions

- **Water Europe** – 27% of 2018 revenues
  - Water France
  - Water Spain
  - Latin America
- **Recycling and Recovery (R&R) Europe** – 36% of 2018 revenues
  - R&R France
  - R&R UK and R&R Scandinavia
  - R&R Germany and Benelux
  - IWS (hazardous waste)
- **International** – 23% of 2018 revenues
  - North America
  - Asia
  - Africa, Middle East and India
  - Australia
  - ICEE (Italy, Central and Eastern Europe)
- **Water Technologies & Solutions** – 14% of 2018 revenues
- **Treatment Infrastructures**
- **Advanced Solutions**
- **Industrial Markets and Key Accounts**

Revenue of "Other" segment represents approximately 1 % of 2018 revenues.

Europe is the Group's historical development area. Thanks to this foothold in Europe, particularly in France, the Group is able to leverage its know-how and skills and adapt them to other continents.

Breakdown of 2018 revenue by geographical regions as of December 31, 2018 (1)



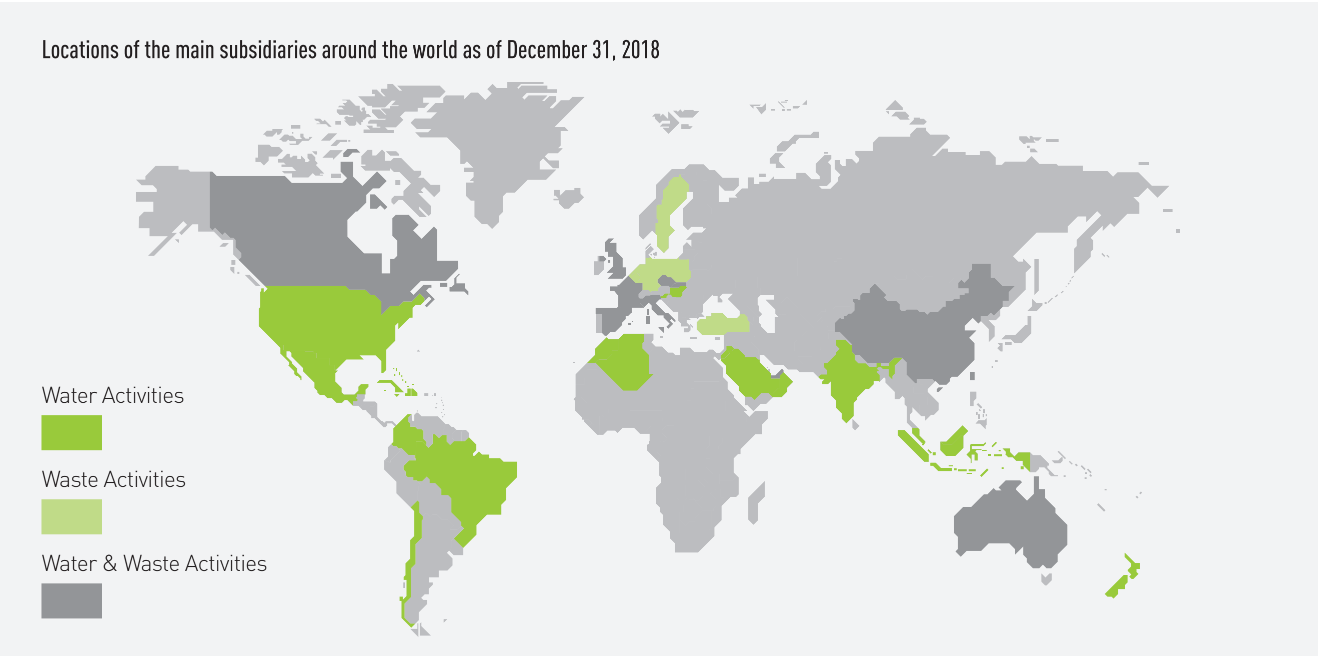
(1) This map shows the geographical distribution of the Group's revenues irrespective of the accounting segmentation assumed in the Group's Consolidated Financial Statements in chapter 20.1 of this Reference Document.

The Group benefits from an extensive network of subsidiaries and agencies. As of the end of 2018, the Group was active as an operator in over 70 countries. Outside Europe, major cities such as Hong Kong, Perth, Casablanca, Algiers, Santiago and New Delhi have awarded the Group all or part of the management of their water, wastewater and waste-related services, as well as the building of major infrastructure in these areas. The Group is most often active through its partnerships with local public or private players (industrial, financial or non-profit organizations) that have an in-depth knowledge of the local context.

Until 2015, the Group was active around the world under various well-known brands, such as Sita for waste and Lyonnaise des Eaux, Grupo Agbar, United Water Inc., Degrémont and Degrémont Industry for water.

From 2015 onward, all of the commercial brands that make up the Group were melded into a single brand: SUEZ.

This map shows the locations of the Group's main subsidiaries around the world as of December 31, 2018:



Finally, the Group has always placed research and development at the core of its activities, particularly through major partnerships, joining with both public players (for example, with IRSTEA and CNRS in France, Tongji and Tsinghua universities in China and UCLA in the United States) and private operators.

6.2 The Group's strengths

A major player in environmental activities

With total revenues of EUR 17.3 billion for 2018, the Group is one of the two main global environmental players and the only international player exclusively dedicated to Water and Waste activities. Through its presence in all Water and Waste cycles, the Group believes that it holds leading positions in all of its activities (in terms of revenues):

- no. 2 in France and Europe and No. 2 worldwide in the water sector (2018 Group estimate);
- no. 1 in water activities in Spain;
- no. 1 in France, No. 2 in Europe and No. 4 worldwide in the waste sector (2018 Group estimate).

In the water sector, in 2018, the Group operated 1,417 drinking water production plants[1] and 2,701 wastewater treatment sites.

In the waste sector, in 2018, the Group treated nearly 45 million metric tons of waste. Through its waste collection activities, it served over 363,000 customers in services and industry and some 32.7 million people.

Furthermore, it holds a key competitive advantage that sets it apart from its competitors through its treatment solutions construction activities. Finally, the Group enjoys an excellent reputation in all markets in which it is active, as well as brand recognition.

(1) Determination of the number of drinking water production plants, introduced in 2010, excludes "ordinary disinfection" plants.

A strong environmental market

The Group's strategy is based on solid long-term growth factors: the strengthening of health and environmental regulations, demographic growth, urbanization, scarcity of resources and the emergence of an environmental consciousness from the middle classes which is deeply penetrating and transforming the political sphere as well as the industrial and financial sectors.

The environmental market benefits from favorable demographic and social changes.

Growing urbanization in certain areas and increasing infrastructure needs are also economic and social assets that benefit the Group. Thus, while 1 billion inhabitants are projected to be added to the current urban population over the next 20 years (*source*: *World Bank, 2017*) – thereby considerably increasing water infrastructure needs – 2.3 billion people (*i.e.* approximately 30% of the world's population) do not currently have access to a sophisticated wastewater treatment system (*source: World Health Organization 2018*).

Regulatory changes brought about by increasing concerns for environmental protection are an additional factor driving the growth of this market. This regulatory pressure – increasingly popular with the public – has resulted in an increasing demand for complex services and facilitates the growth of players in these markets, particularly global players such as SUEZ. For example, 85% of Europeans would, according to the European Commission, agree to the European Union spending more to support environmentally friendly activities and development (*source: Special Eurobarometer 468 Nov 2017*).

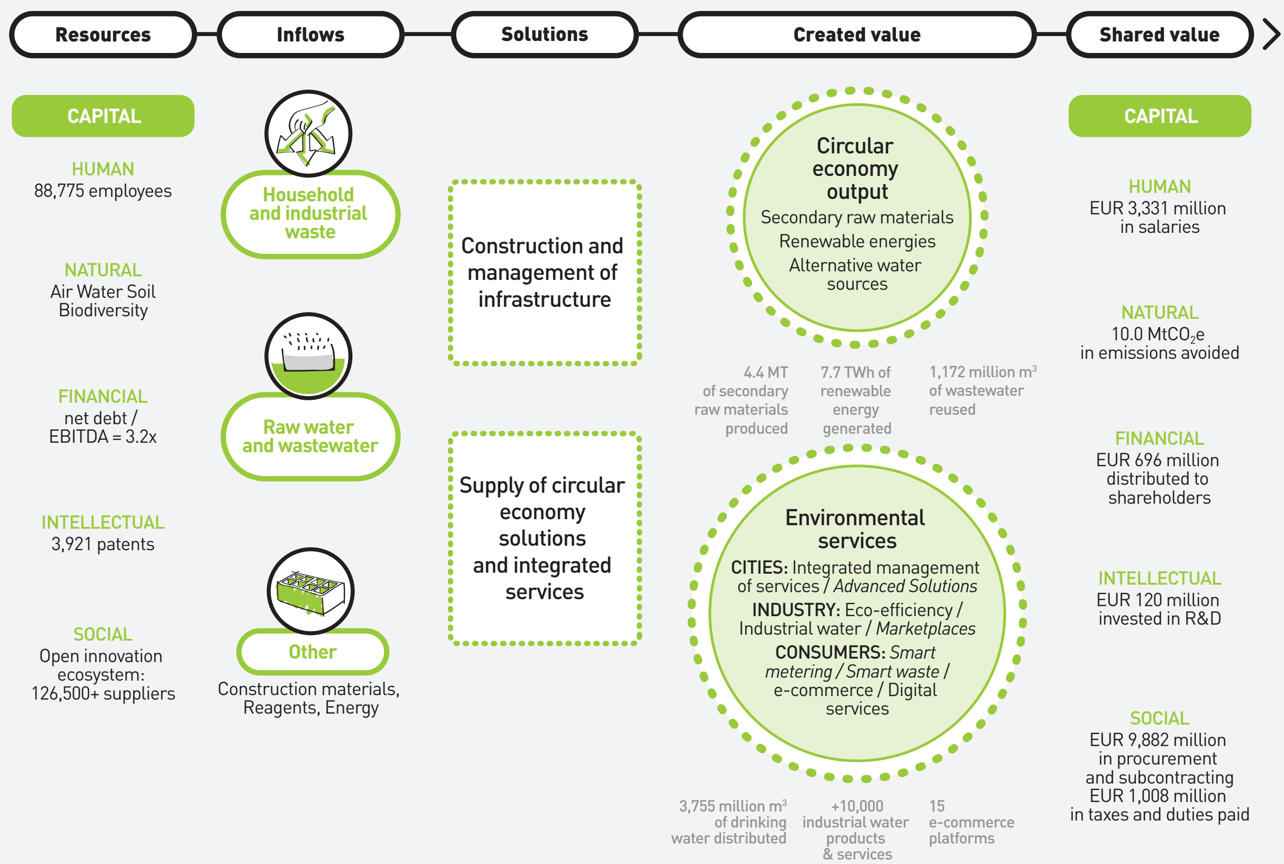
Finally, the development of new technologies to address the growing complexity of environmental issues and the increasing role of private operators (the portion of the global population served by the private sector in the Water segment exceeded the threshold of one billion people in 2013 (*source: GWI, 2013*), are also positive factors for the expansion of the Group's markets.

An integrated player throughout the entire water and waste value chain

The Group has completely mastered each step of the water and waste cycles, allowing it to implement commercial and technological synergies within each activity.

The Group is thus able to offer a complete range of services in terms of types of services and contracts, adapted to all categories of customer, including both public authorities and private industrial players.

The SUEZ value creation chain



A player able to benefit from the complementary aspects of the Water and Waste businesses

The Water and Waste businesses offer certain complementary features, which the Group has turned into one of its strengths.

Thus, the Group is able to generate synergies between the two activities, particularly by sharing certain technologies (for example, in sludge and compost treatment), combining research and development in various targeted programs (such as biomass management for material and energy recovery purposes) and realizing operating synergies by pooling certain corporate functions. By way of illustration, the Group's development in China with the Shanghai Chemical Industry Park (SCIP) marked an important step in trade collaboration between the two activities, by combining a wastewater treatment plant and China's largest hazardous waste incineration plant at a single site. Similarly, the sludge drying facility and wastewater treatment plant at the Suzhou industrial park, which supplies the neighboring cogeneration plant, using dried sludge as a secondary fuel, is an example of a practical application of circular economy principles.

An emphasis on research and development at the core of the Group's culture

For over 70 years, the Group has been the source of significant innovation: the first waste-compacting collection trucks in 1936 (the "Rey-Sita compacting dumper"), the world's first reverse-osmosis desalination plant for the production of urban drinking water in 1985, the first compartmentalized collection trucks, allowing the separate collection of recyclable packaging (the "combi system"), in the early 1990s, the first hazardous waste stabilization-solidification processes in 1993 and the first water ultra-filtration process in 1998.

The Group's research is based on a global scientific and technical network consisting of experts grouped within expertise and research centers. The technological developments resulting from this research are the fruit of close collaboration and knowledge-sharing between internal experts, as well as with the Group's university and industrial partners. The technical research and development teams included around 650 researchers, technicians and experts, with an effective budget of EUR 120 million, (the Group's share of the expenses). Finally, convinced that innovation also means encouraging external partnerships, particularly with start-ups, the Group has implemented a deliberate approach of stimulation, promotion and co-funding for innovative technical, commercial and management initiatives and projects by methodically reviewing the various project proposals put forward by local teams (technological tests) and by investing in innovative start-ups *via* SUEZ Ventures, the investment fund created in 2010 for this purpose.

The Group believes its technological expertise allows it to meet its customers' expectations effectively and to rank among the leading players as regards technological developments in environmental management services.

A balanced economic model

One of the Group's principal strengths lies in the diversity and balance of its businesses and geographical exposure.

The Group's consolidated revenues show a balance between its water and waste activities. SUEZ has a European base: 61% of its 2018 revenues were earned in Europe. SUEZ is mainly positioned in developed markets with stable political and legal systems: 80% of its 2018 revenues were generated in Europe, North America and Australia.

The equilibrium in the Group's business model is also due to the variety of its exposure: service contracts, equipment and chemical supply, short-, medium- or long-term O&M contracts, exposure to local authorities or industrial customers as well as to regulated/non-regulated markets, and finally investment, construction and operation of proprietary assets.

Targeted international growth based on a strong partnership culture

The Group is pursuing a selective international growth strategy (outside Europe) based on identifying the fastest-growing markets with controlled risk profiles. For example, the positioning of SUEZ in the United States in regulated activities allows the Group to establish the solid position it needs for future development in the regulated market as well as in services for municipalities and industry.

The Group maintains a strong partnership culture, particularly in countries offering high growth potential in environmental activities and where teaming up with local partners deepens its understanding of local challenges, while allowing risks and invested capital to be shared.

A few examples include:

- Lydec, the Group's spearhead in Morocco since 1997, is an example of a partnership with local investors in a listed company, which distributes water and electricity to the cities of Casablanca and Mohammedia;
- SUEZ NWS has operated since 1985 (in an equal partnership until 2016) with New World Services Holding, a Hong Kong-based company. SUEZ NWS is an example of an operating partnership, which is itself based on a large number of partnerships with local municipalities for the co-financing of assets. A flexible economic model that preserves the economic balance of long-term contracts.

In 2016, SUEZ has announced the extension of this historical partnership with NWS Holdings Limited (NWS Holdings), expanding cooperation over all of the Group's businesses – Water, Recycling and Recovery – in China, within their joint entity. SUEZ now controls 58% of the joint company (SUEZ NWS). This partnership will be a vector for strengthening the Group's development in continental China, Hong Kong, Macao and Taiwan, in an area of strong growth potential.

A significant proportion of the Group's business is conducted through delegated management contracts (delegation of public service in France, or the equivalent outside France), entered into for long periods of time.

These contracts generally afford the Group the flexibility needed to maintain their economic balance, notably by continually improving the quality and sophistication of the services provided, thus meeting the needs of both parties by offering innovative and profitable services or technologies.

A balanced financial structure and a selective development project management policy

The Group has a balanced financial structure.

The development choices are based on a strict financial discipline that allows the Group to maintain a sound balance sheet.

Sustainable development at the core of the Group's organization

Following on from the previous Roadmaps (2008-2012; 2012-2016), the new Sustainable Development Roadmap for 2017-2021 was drawn up following extensive internal and external consultation, approved by the Management Committee and then reviewed by the Ethics and Sustainable Development Committee and the Board of Directors. It covers all the Group's activities throughout the world and is based on four priorities, translated into 17 commitments (see chapter 6.8).

It is based on the roll-out of integrated governance reflected in commitment 17 of the Roadmap. Management is provided by the Group's Sustainable Development Department, which provides an Annual Report to the Management Committee and the Ethics and Sustainable Development Committee on the progress made in fulfilling the objectives and the action plans put in place. Each member of the Executive Committee acts as a sponsor for a specific objective in the Roadmap.

Group subsidiaries ensure the implementation of the Roadmap according to the priority expectations of stakeholders in their geographical area and the level of contribution to objectives expected by the Group. An agreement is signed with each subsidiary, setting objectives and establishing the reporting processes. An annual review is carried out in collaboration with the Group's Sustainable Development Department.

The offerings and solutions introduced will also be evaluated against the Group's sustainable development criteria, *via* the introduction of an internal tool.

The results and best practices associated with these commitments are described in the Group's Sustainable Development Reports, which are published annually. The Group's performance is assessed regularly by non-financial rating agencies.

Agencies	Index	2010	2011	2012	2013	2014	2015	2016	2017	2018
RobecoSAM	DJSI	71	77	84	80 [a]	80	79	82	82	79 [a]
Oekom research	Corporate Responsability			B Prime	B Prime		B Prime	B- Prime	B Prime	B- Prime
Vigeo Eiris	EURONEXT Vigeo Eiris		56		59		58		66	
FTSE Russell	FTSE4Good				99	90	85			91
CDP	CDP Climate List	74	84	84	88	95	99	A [b]	A	A
Sustainalytics	STOXX					82.2	83			84

All ratings are 100 unless otherwise noted and in the case of a letter scoring method,'A' is the maximum score.
a) Downgraded due to a change in methodology.
b) Change in rating system in 2016.

A stable shareholding structure

ENGIE holds a 32.06% equity interest in SUEZ, making it the Group's largest shareholder. The stock exchange listing gives SUEZ greater visibility and direct access to the financial markets.

The second largest shareholder is La Caixa, through its subsidiary Criteria Caixa, with a 5.97% equity interest as of December 31, 2018. La Caixa took an initial 4.1% stake in the Company in 2014 and will progressively strengthen its position with a target of 7%. In addition, the Caltagirone Group, which became a shareholder in September 2016, held 3.49% of the capital at December 31, 2018.

6.3 Strategy

Being the only international company focusing solely on the water and waste businesses, SUEZ aims to be the leader in sustainable resource management, by offering its customers innovative solutions that reconcile the economic and environmental performances of water and waste services. Its industrial plan reflects this desire for development in all its businesses by giving priority to sustainable and profitable growth, combined with a balanced risk profile. This plan aims to establish the Group as one of the leaders in one and/or both of its businesses, in each country where it operates.

Leveraging its strengths in the context of changing demand in its traditional markets, the Group intends to meet the challenges of rising urbanization, changes in world demographics and the impact of global warming – all challenges that are contributing to the reduction of available resources in the world – as a key player in the Resource Revolution. This revolution proposes a different kind of action model based on the logic of the circular economy and is grounded in offering specific, innovative and collaborative solutions to assist in securing resources, their level of quality, their efficiency and their recovery.

To serve this ambition, the Group's strategy is underpinned by two pillars:

- transformation of its core businesses by focusing on the circular economy in both water and waste management, and on intelligent solutions, leveraging the digital revolution to the benefit of the inhabitants and business operators of a particular region;
- expanding SUEZ's activities towards new frontiers in water and waste, allowing it to capture new growth markets beyond its traditional businesses in four key areas: development of integrated offerings for industrial companies, support for regional transition policies in waste recovery, new water services and new international business models.

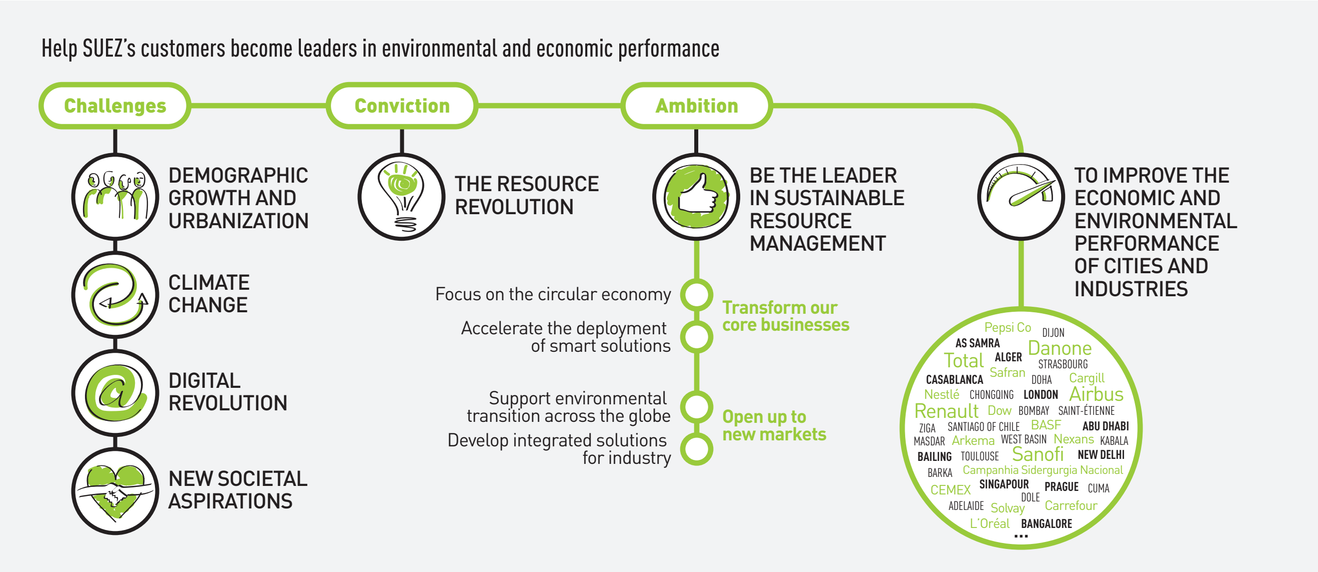
SUEZ's strategy is based on a clear objective: to make its customers – cities, industrial entities, farmers – leaders in economic and environmental performance. To achieve this, emphasis is given to co-building solutions; the Group is changing from a status of service provider to partner, acting at the core of its customers' processes.

On September 29, 2017, SUEZ completed its acquisition of GE Water from General Electric Company.

This development consolidates SUEZ's global leadership in industrial wastewater services and its positioning as an integrated service supplier, managing more than 450,000 industrial and business customers worldwide. It also strengthens its international presence, particularly in the United States.

The SUEZ Group Sustainable Development Roadmap for 2017-2021

The Group's ambition to be the leader in sustainable resource management relies on its new Roadmap for 2017-2021, which applies to all SUEZ activities throughout the world, and is designed to act as a lever for the Group's transformation and as a tool for management control. The 17 commitments of the Roadmap fall into 4 priority areas: to be a collaborative, open and responsible business, leading the way in the low-carbon, circular economy, providing practical solutions to support its customers' environmental transition, and contributing to the common good (see chapter 6.8. "Non-financial performance statement – Group environmental, corporate and social responsibility policy").



6.3.1 Environmental performance and operational and technological know-how: the Group's core strategic ambitions

6.3.1.1 Offering customers solutions that make them leaders in environmental performance

The growing aspiration for harmonious and sustainable development means a greater focus on environmental protection and rational consumption of non-renewable resources. The supply and distribution of drinking water, wastewater services and waste recovery and disposal are services essential to the well-being of people and the successful operation of businesses, and constitute real challenges in certain regions of the world. The demand for these services, and for the expansion and improvement in their quality, will continue to increase over the long-term.

In offering high-quality water and waste management services, the Group will specifically seek to:

- assist its customers in managing resources in a sustainable, reasonable way as well as in limiting their environmental impacts by leveraging alternative water resources or by developing local circular economy loops;
- offer optimized energy consumption solutions, as well as solutions that combine environmental protection and the production of renewable energy.

The Group will also ensure that it continues its involvement in improving environmental management governance, in both its traditional markets and emerging countries, so as to promote the emergence of favorable conditions to the development of Group activities. For example, SUEZ is a member of the steering committee for the OECD Water Governance Initiative, whose work led to the adoption in June 2015 of the OECD Principles on Water Governance, a set of guidelines on water governance for OECD member countries.

Contractual and social innovation therefore has an integral role within the Group. Thus, for Water in France, the Group has played a pioneering role in the introduction of new models, such as the single-purpose public-private partnership (PPP), or the sharing of competitiveness gains with the local authority as in Sète (through a SEMOP) or in Toulouse.

6.3.1.2 Identifying and using resources, energy and material generation potential in the value chains

The water and waste businesses are facing new challenges, to which the Group must respond and adapt. Waste, through appropriate treatment and under controlled conditions, can and must be recovered and reincorporated as much as possible in the economic cycle: landfills and incinerators can also operate as renewable energy production sites, recycled materials can be used as secondary raw materials in industrial circuits, and organic matter can be recovered in the form of energy or compost. The Group is thus active in the progressive evolution towards a cycle of materials preservation, which is one of the major challenges of the 21st century. Likewise, in the water sector, wastewater treatment plants are becoming a kind of biorefinery, producing reusable water, renewable energy in the form of heat from electricity, biomethane, and fertilizers, as well as final waste to be eliminated without risk to the environment.

6.3.1.3 Making research and technological expertise a priority in the Group's future development

At the heart of the Group's strategy is research focused on applications that strive to improve its operational performance (anticipation and control of health and environmental risks, and energy efficiency) and perfect its technical expertise (treatment of sludge, desalination, reuse of wastewater and environmental compatibility of landfilling).

The Group also seeks to continue developing optimum technical solutions with the best experts, specifically in order to:

- adapt to climate change and prevent it from worsening, preserve natural resources and biodiversity, and protect the environment and quality of life;
- improve the quality of drinking water and customer service and anticipate the needs linked to a more rapid urbanization;
- extend its technological leadership to new areas, especially related to waste recovery and disposal, including becoming a key player in clean energy by capturing and leveraging the potential of organic waste;
- expand our offerings for industry to become their partner of choice in managing their environmental challenges.

To boost and provide an additional outlet for the research and innovation policy, in 2010, the Group created SUEZ Ventures, an innovation investment fund for new water and waste technologies. SUEZ Ventures, with a budget of EUR 50 million over 10 years (EUR 0.5 to EUR 2 million initial investment per project), acts as an investor and industrial partner for young companies developing innovative technologies.

The fund complements the Group's efforts in the area of research and innovation and will contribute to discovering innovative technologies and converting the results of research into industrial solutions.

6.3.1.4 Supporting the Group's employees in transforming their businesses

Accelerating the transformation of the SUEZ businesses has specifically resulted in more integrated organizational structures that are better suited to the necessary change in decision-making processes, with fewer reporting lines, closer cooperation, cross-disciplinary expertise and shared support functions. All of these developments involve increased support for employees.

The Human Resources policy has therefore resolutely placed the emphasis on four aspects of support: more detailed explanation of the strategy; scaling up training and skills development, in line with changes in the Group's markets and the content of its businesses; enhancements to internal mobility policy; and the implementation of dissemination.

6.3.2 Continued global development of the Group's activities with its public and industrial customers

The Group's activities are local by nature, and the Group's objective is therefore to be recognized by its customers as a local player. Its strategic goals reflect the dynamics of each region and the positions achieved by the Group.

6.3.2.1 Consolidating the Group's positions in Europe

A) IN WATER

In France, a market in which it is firmly rooted, the Group intends to both (i) expand its core business activities in drinking water, wastewater and customer management for local authorities and industry, and (ii) diversify its offering by selling higher value-added services:

- to local authorities (major water cycle and water resources protection, dynamic and predictive management of water and wastewater networks with the support and development of smart technologies, etc.);
- to professionals as well as to major public and semi-public institutions.

These actions should also strengthen the Group's competitiveness, particularly in terms of the renewal of some of its major contracts.

In Spain, the Group is focused on both consolidated and high potential businesses:

- concessions related to the management of the full water cycle in which activity is very mature and where the Group's focus is on contract renewals and keep market leadership, with, for example, the renewals of Pontevedra (Galicia) and Arona (Canary Island) among other;
- SUEZ continues to improve its range of solutions and technologies with SUEZ Advanced Solutions by striving to adapt to new markets and to customers' requirements to align the business strategy and optimize the use of water resources. For instance, in 2018 the Group thus extended the O&M of the wastewater plant of Benidorm (Valencia region) or that of the plant on the Costa Brava (Catalonia).

In 2018, as part of its "Smart Agriculture" business, the Group signed a joint venture agreement with Galpagro, an agricultural service provider based in the south of the Iberian Peninsula (Andalucia, Extremadura and southern Portugal). This model will help ramp up other regions, with the aim of building a major platform that integrates local businesses.

In Italy, based on its strong positions in Tuscany, the Group intends to seize the development opportunities on offer, either on its own or through public-private partnerships. This management model still offers plenty of potential in Italy, particularly given its performance in Tuscany and the investment needs in this sector, estimated at EUR 65 billion over the next 30 years. The Group has anticipated a very slow shift to public-private partnerships, and the needs of Italy's local authorities in terms of very significant infrastructure investment. Under present conditions, municipalities will still be able to call on private operators under public service delegation contracts. SUEZ will be able to contribute its expertise to the design, financing and operation of complex water and wastewater treatment systems in Italy such as those currently in use in Tuscany, with the Arezzo basin concession, or in Campania with the management of an urban residual water treatment plant for Naples, which is among the largest in Europe, and a second to come. The establishment of a national regulator with responsibility for defining common contractual rules applicable to public corporations, mixed enterprises and private companies, is helping to make the market more professional. The current priorities are service efficiency and improving network performance, areas in which the Group has built up considerable expertise that it makes available to its customers. These same reasons led SUEZ to increase its stake in Acea, the largest water and wastewater treatment utility in Italy, which also operates in Rome distributing energy and processing waste.

Finally, in the rest of Europe, the Group will seek growth based on its strong positions in the region, taking advantage of opportunities associated with the requirements to comply with European Union standards for water management infrastructure. The Group is monitoring the reforms envisioned by some national authorities to achieve the dual aim of compliance with European quality and service standards and ensuring the long-term economic equilibrium of these services.

B) IN RECYCLING AND RECOVERY

The Group plans to consolidate its traditional collection and treatment businesses and expand its waste recovery activities. In addition, the Group aims to manage the entire waste value chain and strengthen certain positions, both in terms of geographical coverage and business expertise.

In France, the Group intends to occupy a significant place in the materials or energies resource recovery sector and to participate in the development of the circular economy by implementing the experience it has acquired over many years, while:

1) continuing to develop and improve profitability in the traditional businesses of collection, sorting and processing waste by making efforts in productivity and elevating operating and innovation standards;
2) continuing with industrialization and improving the performance of innovative technologies for transforming plastics and recovering wood, metal, biological waste, etc., building on structural partnerships or internal research platforms;
3) developing and bolstering its positions in emerging lines of business, such as remediation of polluted soils and sites.

In Benelux and Germany, the Group intends to continue its integration across the value chain, by working with partnerships to jointly develop closed-loop solutions. Specifically, the Group seeks to position itself to seize selected opportunities related to the recovery segments where it can capitalize on its existing strengths. Its functional services have also been consolidated to take utmost advantage of opportunities for synergies presented by these regions in their border areas. In Germany, SUEZ Deutschland has a strong presence in the western part of the country, particularly in industrial and commercial collection. The Group is also strongly positioned in incineration in the Leipzig region through its Zorbau site, as well as in the sorting of household packaging through its site in Ochtenburg, and a new sorting plant in Oelbronn, which is going to start production in April 2019. A more flexible organization, with an emphasis on the control of the value chain rather than its ownership or operation, is also favored to allow SUEZ Deutschland to adapt to market demand. In the Netherlands, in a highly competitive market, the Group's aim is to target the waste management value chain, in which it intends to be a leader, optimizing resources (assets, staff and marketing) and developing partnerships to expand SUEZ R&R's existing offering. As in Germany, the objective is to control the value chain, rather than own or operate it. In parallel, the Group's strategy is to capitalize on its energy recovery capacities in both waste (*i.e.* through the new ReEnergy plant) and materials (through the Rotterdam plastic packaging sorting facility or its QCP plastics processing site in partnership with LyondellBasell, for example).

In Belgium, where the Group is one of the market leader, it intends to retain its industrial and business customers through a selective acquisition strategy, particularly for medium/large customers and public authorities, and through logistics excellence. With Belgium's ambitious regulatory program (especially in the Flanders region), SUEZ R&R is well positioned to meet the rapidly changing needs of its customers.

In the UK and Sweden, the Group plans to support changes in treatment methods in the Recycling and Recovery of various material flows. In the UK, the Group will also pursue its policy of developing complex integrated waste management projects and intends to grow its market share of industrial and business customers. It is also now building several energy recovery units.

In Spain, the Recycling and Recovery activities are reinforced by a clearly defined action plan for the treatment of municipal and industriel waste in order to create a robust platform.

In Central Europe, the Group's objective is to seize growth potential through its local presence and through opportunistic approach for large PPP (public-private partnership) contracts with international financing. The Group should benefit from higher sophistication of the market. It will focus on hazardous waste and the I&C (Industrial and Commercial) segment in the Czech Republic, on recycling and the I&C segment in Poland. In the remediation and energy from waste sector, it will target large-scale projects, such as PPPs of energy produced from waste at Poznań and Belgrade.

6.3.2.2 Developing Group strongholds in the United States, China and Australia

A) UNITED STATES

The Group's objective is to (i) develop its regulated activities through maintenance capital expenditure and the expansion of its asset base, and through the corresponding rate increases expected from the regulator; (ii) consolidate its service contract activities, specifically by entering into new contracts and selling technical assistance, providing operating and maintenance services through public-private partnerships that also meet the needs of government customers in terms of debt relief, and sustainable investment by partnering with private equity funds; and (iii) develop its service activities through SUEZ Water Advanced Solutions, LLC. At the same time, the Group intends to increase its portfolio of regulated and non-regulated activities around its current bases.

The Group also furnishes equipment and water treatment services to municipalities and industrial customers, particularly in the oil and gas, petrochemical and energy sectors.

B) CHINA AND SOUTH-EAST ASIA

In November, 2016, SUEZ Asia signed an agreement with New World Services (NWS) to group its operational assets in Greater China (China, Hong Kong, Macao and Taiwan) into a single entity: SUEZ NWS. SUEZ controls 58% of the capital of SUEZ NWS, making it the company's leading shareholder, and the remaining 42% is held by NWS. Consequently, the Group has management control of SUEZ NWS. This new entity carries the Group's activities into the water and waste markets and bolsters its presence in China. This new organizational structure has been in place since January 2017. Derun Environment is not included in this new entity.

In Southeast Asia, the Group is positioning itself to take up future opportunities in the water and waste markets. The main target countries are Thailand, Vietnam, Singapore, Indonesia and Philippines. In addition to the existing water supply projects in Indonesia, a waste-to-energy facility is under construction in Thailand. In Singapore, smart systems to optimize water resource management are managed in cooperation with the Public Utility Board (PUB), and several water and wastewater facilities are currently under development in Vietnam and the Philippines.

SUEZ Asia is closely following changes on the market in Japan. In fact, the Japanese government should put forward laws that facilitate the introduction of private investment in municipal water supply systems.

In water, the Group intends to continue its growth by means of the selective development of new concessions and other projects, in Asia and in China, especially in drinking water and working with municipalities. The Group also intends to develop its wastewater services to municipalities and industrial parks, especially in the area of integrated sludge management, focusing on its bases in Macao, Shanghai, Beijing and Chongqing, and in line with its current investment structures (joint ventures and partnerships), with the objective of seeking out stable, mature and high-performance customers.

In waste, SUEZ NWS, leads the market in Hong Kong and for over 40 years has offered a wide range of waste management services to its municipal, industrial and business customers. The current scope of its activities includes waste transfer stations, landfills with biogas recovery, hazardous waste incineration, and energy recovery from waste. In Mainland China and Taiwan SUEZ NWS are concentrating efforts on the Industrial Hazardous Waste market with, by the end of 2018, six incinerators in service and another two under construction.

Given the demand from authorities and public and private customers for sustainable waste management solutions, SUEZ NWS in China and SUEZ in South East Asia consider that their future growth will come from selected sectors and market segments.

Together with its local and international partners, SUEZ NWS is preparing to turn these challenges into opportunities in the form of joint ventures and partnerships in the various markets in China, through which it will expand and safeguard its new activities by building on its strong positions, networks and synergies. Examples of this include capturing the potential of the new energy recovery market in Hong Kong, where SUEZ NWS built the first food waste treatment plant, which produces energy from the daily treatment of 200 metric tons of waste.

SUEZ will also explore opportunities and contribute to selected energy recovery and hazardous waste treatment projects in Thailand, Indonesia, Malaysia and Singapore. In October 2017, SUEZ won its first energy recovery project in Thailand. The new facility, located in Chonburi, is expected to be operational by the end of 2019 and will generate energy from non-hazardous industrial waste incineration.

Furthermore, SUEZ has invested in Derun Environment *via* Suyu, a 50/50 joint venture between SUEZ and NWS Holdings Limited (NWS). Derun Environment will work on major projects in the area of waste treatment such as recycling, energy recovery from waste and soil remediation, and in a more general sense, the development of environmental protection-related technologies. Derun's development efforts will be focused primarily in the Chongqing region and it may, with the agreement of its shareholders, invest in other opportunities in China. Additionally, Derun is the majority shareholder of Chongqing Water Group and Sanfeng (one of China's largest waste to energy companies).

Finally, as illustrated by its five industrial and chemical parks, for example in Shanghai, the Group intends to promote its two activities, water and waste, through a common trading approach, to meet the growing demand from industrial sites for an integrated multi-utilities management service.

C) AUSTRALIA

Australia is one of the Group's largest subsidiary in its International division, with more than 2,278 employees and revenues over EUR 1.1 billion in 2018.

The Group is present in both the water and waste segments in Australia.

SUEZ is positioned across the entire value chain in waste management, with a significant presence in collection (of household and similar waste, and industrial and commercial waste) as well as in the treatment and final disposal of waste, through the use of an extensive network of facilities. SUEZ will continue to leverage its local presence and its international expertise to drive the development of waste-to-energy in Australia. In 2018, SUEZ signed a memorandum of understanding with Australian Paper for the joint development of a waste-to-energy plant processing 650,000 metric tons per year in the Latrobe Valley, subject to the award of municipal waste volumes by the Municipality of Melbourne following a call for tenders in 2019. SUEZ also won a tender to work with an industrial manufacturer in Sydney to jointly develop a co-gen plant to process up to 250,000 metric tons per year of alternative fuel for a period of up to 30 years. SUEZ also recorded 30 per cent growth in National Key Accounts' revenue linked to winning the contract for Westfield (New South Wales, Southern Australia and New Zealand) to Woolworths cardboard bailing operations in Western Australia, with Lion (nationally) and the renewal of contracts for BUPA, JLL, Marriot Hotels and Calvary Group.

In the Water segment, SUEZ's primary focus is on long-term "BOT" and "O&M" contracts with municipal customers. The Group also remains alert to opportunities for "DBO" contracts, such as the contract won in September 2018 for the upgrade of the South East Water Boneo Recycling Plant in Victoria, a joint venture with John Holland and Beca as well as the construction of the Beenyup Advanced Water Recycling Facility in Perth, Western Australia.

The Group's strategic development in Australia is based on five key priorities: people, customer focus, resource optimization, innovation, and efficiency. The Group is pursuing development based on asset growth, organic growth and a strategy of targeted acquisitions. New offerings in resource recovery and data optimization will be targeted to keep pace with the development and maturity of the Australian market. Alongside the creation of the value proposition and the Smart City tenders, the Group has identified a portfolio of opportunities in this field. The Water Technologies & Solutions (WTS) division is working closely with SUEZ Australia to achieve the desired synergies.

6.3.2.3 Seizing attractive development opportunities in certain regions of the world

The Group is looking for countries in which the "risk/return on investment" ratio will allow it to establish long-term bases for development. It is using the full range of delegation of public service contracts available and is seeking new forms of partnership adapted to the specific features of the markets in question. Thus:

- on a global scale, the consulting activity, through Safège and its subsidiaries, positions the Group well upstream in its activities and provides it with a clear competitive advantage. As such, SUEZ Consulting is involved in master plan reviews, program management and infrastructure design, thereby differentiating itself from its competitors through its genuine long-term vision as an operator/manager with a strong grasp of the challenges of sustainable development;
- for its part, the Treatment Infrastructure activity intends to pursue its global growth on every continent in the four areas of design-build, operation and services, equipment and BOT contract management for its two categories of customers – local authorities and industry – in both its mature markets and its emerging markets;
- in Water Services, the Group is also promoting new business models such as a DBO approach to build and operate networks in India, where municipalities grant SUEZ with long term concession type contracts to upgrade and operate their drinking water networks that include smart and innovative solutions. Leases projects are also being developed across Africa.

In addition, the Group is positioned to seize future opportunities in new industrial markets in water (in Brazil, China, the Middle East and India), to meet the growing demand for new municipal waste treatment solutions (in Africa, the Middle East and India) and to support SUEZ's key industrial clients in improving their environmental performance.

6.3.3 Maintaining a balanced industrial model and improving operating performance

6.3.3.1 Maintaining a balanced industrial model

One of the Group's principal strengths lies in the diversity and balance of its exposure: service contracts, equipment and chemical supply, short-, medium- or long-term O&M contracts, exposure to local authorities or industrial clients as well as to regulated/non-regulated markets, and finally investment, construction and operation of proprietary assets.

The Group seeks to allocate the capital invested in order to preserve the diversity and balance of its business portfolio, depending on the expected profitability and risks incurred by each activity. This approach is all the more significant since some of the Group's businesses will become more capital-intensive, despite the development of new service activities. The Group considers itself well positioned to address this change and has the financial strength necessary to make the corresponding investments.

The Group's investment policy is carried out in accordance with strict financial criteria addressing the principles set forth in section 6.3.4 of this document.

6.3.3.2 Exploiting potential synergies

The Group is organized to promote maximum integration between both water and waste businesses:

- joint research programs (odor treatment, energy recovery and biogas recovery);

- implementation of shared technologies (composting activities, methanization, treatment and recovery of sludge and treatment of leachates in wastewater treatment plants);
- joint commercial activities in the water and waste segments, to ensure an integrated multi-utilities management service;
- savings in general expenses generated by combining corporate functions (finance, strategy, Human Resources, IT, communications, legal and development).

Within the businesses of water and waste themselves, the expertise of the Innovation and Industrial Performance Department promote the sharing of good practices within the Group.

The Group also intends to pursue the exploitation of operational synergies with the ENGIE Group's energy activities:

- combined project management, such as the recovery of renewable energy from waste, or the desalination of seawater (plants that combine energy production, thermal desalination and membrane desalination);
- developing synergies as part of service offerings for the metering of fluids (in case of identical customer issues);
- pooling resources in order to benefit from significant economies of scale, especially in procurement and R&D.

6.3.3.3 Improving performance

Historically, the Group has given high priority to the optimization of business profitability, notably through ongoing performance improvement plans.

The Group plans to pursue and expand its profitability efforts through the COMPASS program, which is part of an ongoing plan that has been in place for a number of years. COMPASS is an internal benchmark that aims both to promote industrial excellence and control operating costs. The COMPASS plan is deployed across a wide variety of activities at all levels of the organization in order to foster a strong culture of performance improvement and convey the Group's intention to adapt to increasingly uncertain economic conditions.

The Group pursues its continuous improvement measures including process industrialization, purchasing efficiencies, and the reduction of SG&A costs. Permanent net gains will amount to EUR 200 million per year, over the period 2019-2020. All of the Group's subsidiaries will contribute to the achievement of these strong results.

The initiatives implemented cover three main areas:

- purchasing:

  Savings on purchases made under the COMPASS plan are achieved through initiatives that span the entire Group, such as tendering procedures or negotiating master agreements at European level – and even internationally in some cases – as well as more local initiatives. With respect to business categories, for example, standardized specifications between countries ease negotiations at the international level for equipment such as construction machinery and trucks for the Waste activity, and for pumps, pipes, drying equipment, instrumentation and air production machinery for the Water activity. Similarly, in indirect categories, streamlining the needs and the organization of joint negotiations regarding interim work, the management of the vehicle fleet, energy and IT equipment generate significant savings. In addition, managing the performance of strategic suppliers generates productivity gains and enables the design of innovative products and services (Redesign-to-Cost);
- operational benefits, as the result of:
  - a reduction in the cost of interventions on the network through standardization and scheduling, and the use of GPS tools (Water France); a more focused management of large numbers of customers in Water, and the promotion of electronic billing, along with the conversion of incoming correspondence to a paperless system,
  - the optimization of waste flow management (greater insourcing of flows, orientation toward more cost-effective treatment systems, etc.), the optimization of collection costs (use of alternative fuels, vehicle maintenance, reduction in distances covered, and optimization of vehicle fleets); highly professional management of operating processes in household and industrial waste and, more generally, through the continuous benchmarking of all Water and Recycling and Recovery sites to promote the dissemination of standards (which are themselves based on the best practices identified). Finally, the Group is working hard to bring down the costs of its energy consumption and enhance its production capacities as effectively as possible (incinerators, treatment plants, new processes, promotion of new energies and biogas),
  - an increased focus on the least profitable commercial contracts,
  - the continuation of specific plans for the Recycling & Recovery Europe business involving the optimization of the collection vehicle fleet, site closures, and lesser reliance on temporary workers;
  - the reduction of general and administrative costs was continued and intensified, with the implementation of a transformation plan for cross-disciplinary support functions in France. This transformation is based on the change in the management methods, a simplification of the processes, bolstering of our integration logic, and better convergence of functional expertise to support operational requirements;
- the creation of the "France" division led to the implementation of a multidisciplinary transformation plan for support functions in France. This transformation is based on a change in management methods, a simplification of processes and improved convergence of the Group's expertise to deal with operational requests. From 2019 on, it will generate savings in overheads and administrative costs.

6.3.3.4 Mobilizing employees to assimilate the industrial project

Implementation of this strategy involves the permanent mobilization of the Group's expertise and employees. Priority is given to local recruitment, centralized Career Management and increased employee mobility among the Group's various subsidiaries and activities.

To offer employees incentivizing professional career paths, the Group will continue to anticipate changes in activities and to adapt skills to new needs through a dynamic training policy. The Group intends to promote long-term relationships with its employees and to boost their commitment.

Finally, the Group's strategic plan includes a chapter on the long-term challenges facing Human Resources, to ensure that the objectives that have been set are consistent with projected growth in activities.

6.3.4 Outlook

In 2018, SUEZ had an excellent year and exceeded the revenue, EBIT, and free cash flow goals it set at the beginning of the year. Every division contributed to this strong momentum and growth. WTS and the international division performed especially well. As a result, WTS's first year of full contribution to the consolidation has shown that it has a promising future and reinforces how good of a strategy this transaction was for the Group.

In a more volatile environment where the services SUEZ offers its customers are becoming increasingly necessary by the day, the Group intends to deliver consistently better results.

Maintaining a selective investment policy, delivering at least EUR 200 million in cost savings and achieving synergies with the WTS consolidation should help SUEZ meet the goals it has set for 2019[1]:

- organic revenue growth of around +2 to 3%,
- organic EBIT growth of around +4 to 5%
- FCF growth of around +7 to 8%
- Net financial debt/EBITDA ratio of around 3x in 2019[2]

On this basis, and with the Board of Directors' agreement, the Group intends to propose a dividend of EUR 0.65 per share for 2019 to the Shareholders' Meeting in May 2020.

In the medium-term, SUEZ is confident in its future, given its numerous assets in responding to strong demand throughout the world for environmental services and new solutions for managing water and waste cycles for its municipal and industrial clients. SUEZ has gradually transformed into an integrated services group and places great importance on its sustainable development commitments.

This strategy is based on maximizing the organic growth of its business activities, without excluding opportunities for external growth, which would be pursued wherever they satisfy the Company's strict profitability criteria.

This outlook is based on data, assumptions and estimates considered reasonable by the Group, and assumes the successful implementation of the strategy presented in chapter 6.3 of this Reference Document. It may change or be modified due to uncertainties, especially in economic, financial, competitive, regulatory and climatic conditions. In addition, the occurrence of certain risks described in chapter 4 of this document, "Risk factors", could impact the activities of the Group and its ability to achieve its objectives. As a result, the Group does not make any commitments or give any guarantees on the achievement of the objectives and forecasts described in this section 6.3.4.

These objectives and forecasts are based on accounting principles defined by the Group in drawing up the Consolidated Financial Statements featured in chapter 20.1 of this Reference Document.

(1) Assuming water volumes sold are in line with historically recorded trends, waste volumes treated are up +1% and raw material prices are stable compared to December 31, 2018.
(2) Excluding the impact of applying IFRS 16.

6.4 Presentation of the market and competitive position

6.4.1 Presentation of the water and waste sectors

6.4.1.1 General presentation of the environmental management services sector

A) GENERAL CHARACTERISTICS

The environmental management services sector covers all services provided to residential, municipal and industrial customers relating to (i) the production and distribution of drinking water or industrial process water, wastewater collection and treatment, waste management (activities that represented approximately 74% of total environmental expenditure in France in 2015 (*source: Les comptes de l'environnement en 2015, MEDDE, 2018*), as well as (ii) air protection, measures for combating noise, protection of biodiversity and management of radioactive nuclear waste which, together, represented some 17% of total environmental expenditure in France in 2015; (*source: Les comptes de l'environnement en 2015, MEDDE, 2018*).

Increased demand for high levels of environmental protection has resulted in an increasingly strict, dedicated regulatory framework. This entails major investments within the required deadlines and effective and global management of related issues, which has led to the emergence of European or global players that specialize in environmental management services. This change is occurring at different speeds, depending on the country.

The public's expectations for measures and actions to promote environmental protection are not diminishing, even in the most advanced countries in this regard. For instance, 95% of French people are worried about the planet, and say that they are concerned about environmental protection (*source: Eurobaromètre, 2018*). Growth in expenditure related to environmental protection is generally greater than growth in gross domestic product. In France, from 2000 to 2014, the average annual rate of growth in expenditure related to environmental protection was 3.5%, compared to average annual growth of 2.6% for gross domestic product over the same period (*source: IFEN, 2016, INSEE 2017*).

B) CHANGES IN ENVIRONMENTAL MANAGEMENT SERVICES

Changes in regulatory requirements, higher end-user expectations and, consequently, the complexity of the corresponding infrastructure and services are encouraging public authorities to seek the expertise and collaboration of private operators.

Like public authorities, in order to concentrate on managing their core business and satisfy the need to control environmental costs, large international companies in the industrial and service sectors are increasingly outsourcing to specialized players disposing of the technical and operational resources to provide these environmental management services efficiently.

The use of specialized private operators by these major international players in the industrial and service sectors is also increasing due to the global deployment of these companies; concerned with efficiently managing these problems, they want to entrust these services to specialists that are just as global, in order to facilitate management and be assured of receiving uniform service at all their sites.

C) GROWTH FACTORS IN ENVIRONMENTAL MANAGEMENT SERVICES

The Group believes that the environmental management services markets will grow in the long term, notably because of a combination of macroeconomic factors, including:

- world demographic growth (average annual growth of 1.09% by 2020 – *source: United Nations, 2017*);
- increased urbanization, particularly in emerging countries (in 2050, nearly 68% of the world's population will be living in urban regions, compared to 55% today – *source: United Nations, 2018*);
- world economic growth estimated at an average of almost 3.7% per year during 2016-2021 (*source: IMF, October 2017*);
- increase in the prices of raw materials, which are set to remain high over the long term, increasing the economic attractiveness of waste recovery, through either recycling or energy recovery.

In addition to these macroeconomic factors, the Group believes these markets should expand through a combination of various factors specific to the sector:

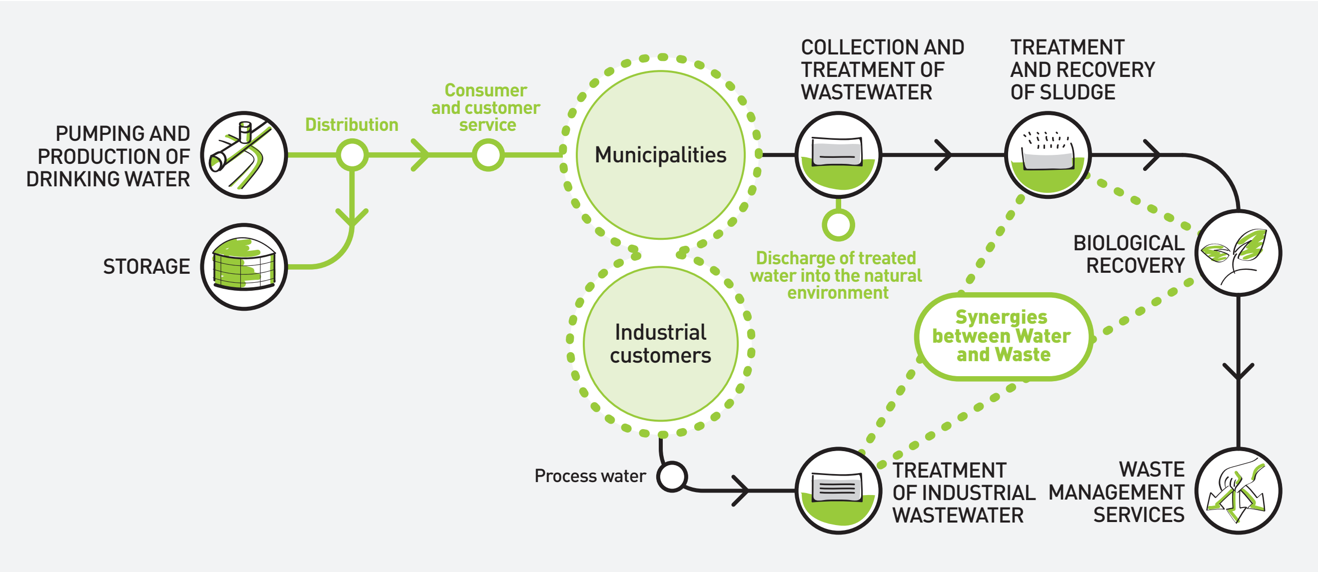
- greater attention paid to environmental protection around the world;
- greater demands from the public for better hygiene, quality of life and health, and changes in consumption linked to an improvement in living standards (in particular from the middle classes);
- stricter and more rigorously applied environmental regulations;
- very large and yet unfulfilled needs for access to drinking water and wastewater facilities (currently, over 663 million people have no access to a permanent supply of drinking water and it is estimated that 2.4 billion people lack an adequate wastewater system – *source: MDG Report, 2015*);
- the growing number of areas affected by insufficient water resources, or that are in a state of water stress, particularly related to global warming. The number of individuals in a situation of severe water stress is expected to rise from 1.2 billion in 2013 to 1.8 billion in 2025 (*source: UN Water, 2013*) and world demand for water should increase by 55% in 2050 compared to 2000 due to strong growth of industrial activities, energy requirements and household demand (*source: UN Water, 2015*);

- the need to adapt to climate change, which will affect water resources most particularly.

The Group believes that it is possible to expect higher long-term growth in its markets compared to GDP growth.

6.4.1.2 Presentation of the water sector

A) A VALUE CHAIN THAT USES COMPLEX INDUSTRIAL PROCESSES



B) A SECTOR CHARACTERIZED BY SIGNIFICANT INVESTMENT AND CUSTOMIZED GROWTH BASED ON SPECIFIC LOCAL CHARACTERISTICS

The size of municipal and industrial water-related environmental management services is estimated at EUR 663 billion worldwide, and the world market for water[1] will grow at an average annual rate of 3.8% up to 2020 (*source: GWI, 2016*).

The Group estimates that across the European Union, the water-related environmental services sector represents about EUR 90 billion per year (*source: 2013 estimate*). All the European countries are expected to invest some USD 800 billion in water production and distribution and wastewater treatment between 2006 and 2025 (*source: Financing water and wastewater to 2025, D. Lloyd Owen, 2006*).

With regard to the supply of drinking water in some developed countries, a slight decrease in volumes consumed is being observed, notably due to the increasing use of water-saving equipment, and the implementation of industrial production processes that consume less water. For example, in France, the Group estimates that the volumes of water billed have declined by over 1% per year on average for the last 15 years.

Nevertheless, this trend has been offset by the provision of more sophisticated services and additional consumer benefits in terms of water production, water distribution and wastewater treatment.

In the United States, the size of the environmental management services sector relating to water is USD 103 billion (*source: GWI study, 2015*). It offers major opportunities for consolidation due to the very high number of small local players as well as acute needs in terms of infrastructure replacement (a USD 650 billion investment is anticipated between now and 2030 – *source: GWI 2017*).

C) A MARKET INCREASINGLY CONTROLLED BY PRIVATE OPERATORS

The Group believes that the use of private operators (the portion of the world population served by the private sector totaled almost 14% in 2013 – *source: GWI, 2013*) should grow significantly in the long term, particularly in the form of public-private partnerships, notably for the following reasons:

- private operators, which benefit from long-standing and diversified experience, have top-level skills;
- consumer requirements in terms of water quality and related services are increasing;
- regulations continue to tighten throughout the world; particularly in the European Union, environmental directives and their various revisions define and strengthen the current regulatory obligations;
- among the 15 "original members" of the European Union[2], some are late in transposing the technical European Directives related to water into domestic law, particularly the 1991 European Directive on urban wastewater;

(1) According to 2016 estimates by Global Water Intelligence, the world market for water is made up of water for municipal use (67.2%), water for industry (15.4%), bottled water (13.9%), point-of-use water systems (1.9%) and water for agriculture (1.6%).
(2) Namely, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

- the "new Member States" of the European Union [1] must comply with the European standards;
- pressure on public expenditure, greater demand from consumers for efficient public services and the increased technical level of the business are encouraging many municipal customers to take the path of public-private partnerships.

Local situations vary as to the use of the private sector by public authorities with regard to water services; thus:

- in France, the management of municipal water systems is often entrusted to the private sector, with municipalities retaining ownership of their assets. In 2015, 32% of municipalities and 61% of drinking water customers were serviced by private companies operating in the water sector. In the wastewater treatment sector, the proportion is lower, with 23% of municipalities and 43% of customers served (*source: GWI 2015*);
- in Spain, the Group estimates that private operators currently represent approximately 54% of the drinking water production and distribution sector, and approximately 85% of the wastewater treatment sector in the form of concessions or O&M contracts (*source: internal estimates*);
- in the United States, private operators represented approximately 13% of the drinking water production and distribution sector in 2012, and approximately 2% of the wastewater treatment sector (*source: GWI 2015*). The Group believes that the share of the private sector in this segment should increase in the coming years: with regard to service contract activities, growth may originate from the increased use of private operators by municipalities, and in terms of regulated activities, the private sector is expected to benefit from the consolidation underway in this sector.

6.4.1.3 Presentation of the waste sector

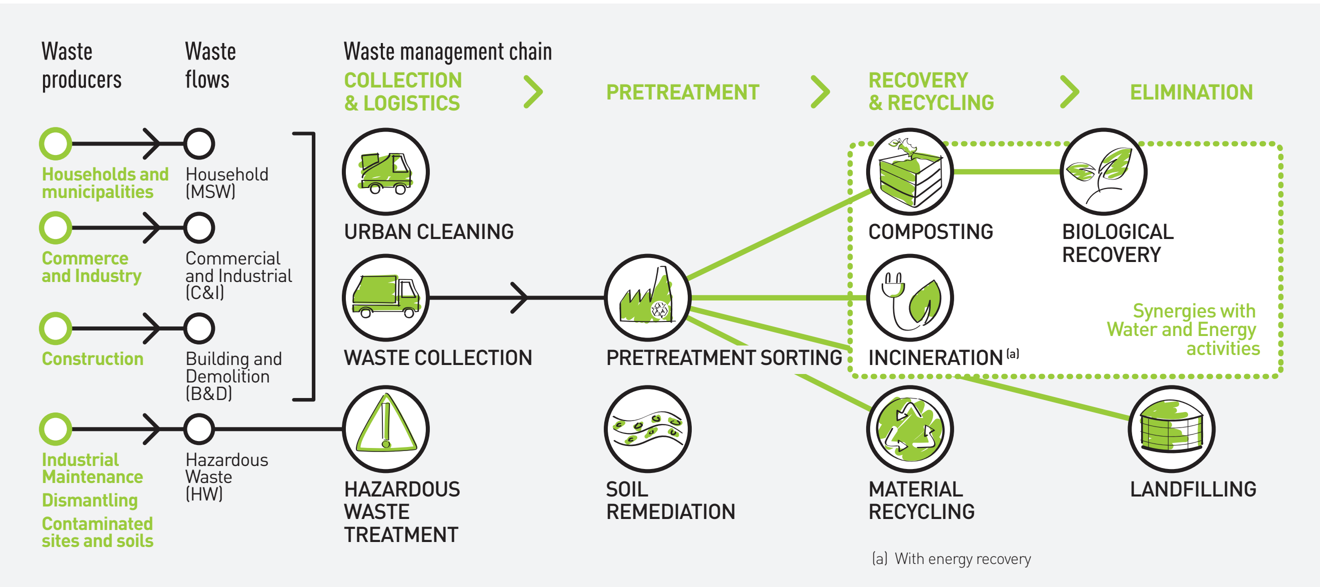
The existence of a market for waste management services requires:

- a minimum level of economic development: countries only allocate a portion of their wealth to waste management after meeting their other, higher-priority needs (particularly access to drinking water);
- the definition and application of environmental regulations;
- the guarantee of a certain degree of contractual stability;
- public awareness of environmental issues.

Each country has specific features and therefore the nature of the services offered by operators must be adapted accordingly. Thus, in the least developed countries, demand mainly corresponds to waste collection and removal services provided by local operators; in emerging countries (Central and Eastern Europe, North Africa, the Middle East and China), demand extends to additional selective collection services, pretreatment and sorting; finally, for more mature countries (the "original members" of the European Union, North America, Japan and Australia), demand is for a full range of services including material recovery (sorting and recycling), biological recovery (composting and methanization) and energy recovery (energy recovery unit and alternative fuels from waste).

Given these specific features and the complexity of market/business approaches that vary by country and region, there is, with few exceptions, little pertinent, up-to-date data available on individual markets and/or geographical regions.

A) A COMPLEX VALUE CHAIN INTEGRATING SEVERAL SEGMENTS



(1) Namely, Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia.

B) THE VARIOUS TYPES OF WASTE

Four principal sources of waste define the scope of the Group's activities: household and similar waste, industrial and commercial waste, building and demolition waste and hazardous industrial waste (excluding waste that may be contaminated by radioactive residues from nuclear activities). In 2016, these sources, including extraction industries, manufacturing, energy, construction and demolition activities, household and other economic activities, represented an annual waste volume of around 2.5 billion metric tons in Europe (*source: Eurostat 2017*); this total covers a range of scenarios from more mature countries to less developed countries in terms of waste management services.

Waste products from agricultural activities, mining activities, and quarries also represent very significant flows, but are not included, or count for very little, in the scope of management of the sector's operators[1].

Household and similar waste

The production of municipal solid waste should increase by 3.4 billion metric tons per year between now and 2050 (*source: World Bank, 2018*). Household and similar waste produced was nearly 214 million metric tons in 2016 within the 28 member countries of the European Union (*source: Eurostat, 2018 data*).

The volumes of household and similar waste produced grew steadily in Europe between 2004 and 2010 (average annual growth of 0.72% – *source: Eurostat, 2015 data*[2]) and decreased between 2010 and 2016 (annual average decrease of 0.38%). In 2016, quantities of municipal waste amounted to some 240 million metric tons in Europe and quantities of waste generated was 475 kg per person, down by 10% compared to the peak of 527 kg per person recorded in 2002 (*source: Eurostat 2016*).

The volume of household and similar waste depends primarily on the following:

- economic growth and consumption trends: a richer population consumes more and acquires more complex products, which it replaces frequently, thereby generating greater quantities of waste requiring more elaborate treatment;
- population growth and its social organization: thus, for example, the increasing number of single-individual households results in increased individual packaging;
- the country's level of development and its environmental culture: the higher the level of development and the greater the awareness of environmental issues, the more the population agrees to allocate a greater part of its income to waste management services; this dynamic can even result in a reduced amount of waste produced. The Group believes that the volume of household and similar waste in Europe should remain stable or decrease slightly, but with significant disparities between the "original" and the "new" member states of the European Union;
- current regulations and the implementation of taxes levied on household waste: the European Union took on a directive in 2008 introducing a "waste hierarchy" that sets a priority order of reducing waste at the source, reusing waste, recycling waste, recovering waste and ultimately eliminating it.

Industrial and commercial waste

Industrial and commercial waste production totaled approximately 2.3 billion metric tons in 2016 in the European Union, with 73% of this amount being generated by the "original" members of the European Union (*source: Eurostat, 2018 data*). The main activities that generate industrial and commercial waste are the following: the agri-food industry, textile manufacturing, woodworking, the paper and cardboard industry, coking and refining, the pharmaceutical and chemical industry, metallurgy, the manufacture of IT and electronic products, and energy.

The production of this waste and its growth depend on the type and scope of industrial activities. The increase in the relative weight of the service sector, relocations (for the more developed countries), industry efforts to reduce manufacturing residues and the level of economic activity are the principal factors limiting this volume of waste.

The crisis that started in 2008 has undoubtedly had an impact on the volumes of industrial and commercial waste generated in Europe. These volumes have now stabilized and should remain stable or increase moderately, in partial proportion to economic growth.

Building and demolition waste

The production of building and demolition waste totaled nearly 923 million metric tons in 2016 in the European Union and represents 36% of all waste produced in the European Union (*source: Eurostat 2018*). In France, of the 325 million metric tons of waste identified in 2015, the construction industry alone accounted for 70% (*source: ADEME 2018*).

The types of waste included in this category are those that vary the most significantly from one country to another. Moreover, only a small portion of this waste is optimally managed. Most of this waste is treated *via* specific processes and is increasingly recycled or recovered. The Group is relatively underexposed to this type of waste.

Hazardous waste

The production of hazardous waste totaled 100 million metric tons in 2016 in the European Union (*source: Eurostat 2018*). Two main segments account for the generation of 70% of hazardous waste: the mineral and chemical industries (*source: Group data*). The criteria for the hazard level of waste are defined by regulatory classification. Based on these criteria, European regulations have developed a list of types of hazardous waste. Changes in the characteristics of the waste or of the classification may lead to a change in the scope of this source.

Hazardous waste consists primarily of industrial waste. Production of this waste and its growth thus depend on the type and scope of industrial activities in a given region. The location of industries and

(1) It should be noted that an evaluation of waste volumes generated is also difficult, because of the heterogeneous nature of the definitions and the data collection methods at European level, and even more so at global level, particularly with regard to the allocation of waste in each waste segment. Moreover, each type of waste mentioned receives a different, and therefore potentially quite variable, treatment; mix treatment analysis is therefore necessary to complement the volume analysis.
(2) It should be noted that a strict comparison of Eurostat historic data is not possible because Eurostat modifies not only the current data but also the historical data when it updates them.

their efforts to optimize the quantities of materials used in their manufacturing processes, and to reduce residual quantities, are therefore critical factors for this source of waste.

Hazardous waste may be treated for recovery and/or disposal according to three main methods: physical, chemical or biological treatment, thermal treatment (incineration and co-incineration) and landfilling.

C) WASTE TREATMENT METHODS

The level of treatment (number and complexity of stages) applied to waste after collection is an important parameter that is inseparable from the analysis of growth in tonnages.

Waste is collected, sorted and then treated using different methods:

- after collection, the waste is sent to recovery sites (monoflow), either to transfer and sorting platforms, or directly to treatment facilities. The volumes sent directly to final treatment facilities are sharply declining due to measures implemented to achieve regulatory targets for waste recovery as set by domestic or European Union governments (for example, the obligation to exclusively landfill "final" waste, *i.e.* waste that has undergone prior sorting/pretreatment);
- sorting consists of identifying and separating: the portions that can be recovered as a resource for the production of "secondary raw materials" such as metals, plastics, glass, wood, etc.; portions recoverable in the form of energy (production of Refuse-Derived Fuel, or RDF, incineration with energy production); recoverable organic waste in the form of materials and/or energy (composting and methanization), inert portions recoverable in the form of fill material, and finally, the residual portions treated by landfilling;
- landfilling is the oldest disposal technique, but it has been considerably improved and currently requires advanced technical know-how: for example, the installation of sealing membranes, management by compartments (cells) to reduce impacts and decrease the surface area in contact with rainwater, management of leachates, post-closure monitoring (generally 30 years), and proactive management of the decay of organic matter to produce energy (bioreactors);
- energy recovery through incineration allows energy production (electrical or thermal) from waste. This technique is currently widely used in the most developed countries from an environmental standpoint; it often requires significant investment.

D) REGULATORY FRAMEWORK

European waste policy, particularly regarding the treatment of waste, now increasingly focuses on waste recovery. European directives set medium- and long-term targets for the reduction of waste volumes generated and increased recovery rates. The various member states then choose the most appropriate methods to achieve these targets at domestic level by implementing, for example, financial incentive systems for recovery, by imposing pre-required standards (mandatory preliminary sorting, defining maximum thresholds for organic portions or the calorific power of acceptable residues at landfills), by levying taxes on tonnages eliminated, or even by implementing broader manufacturers' liability schemes (for example, in terms of packaging, or for electrical or electronic products at the end of their lives).

The breakdown among the various waste treatment methods used differs considerably from country to country. Accordingly, while the United Kingdom has significantly reduced the amount of waste disposed of in landfills, transitioning from 46% in 2010 to 23.1% in 2014, Spain continues to use the landfill option widely, with 55% recorded in 2014. In France, the regulatory framework has evolved in the recent years, transposing the EU directives through the *Loi pour la Transition Écologique et la Croissance Verte* (Law for Ecological Transition and Green Growth – 2015) and the *Feuille de Route Economie Circulaire* (Circular Economy Roadmap – 2018), aiming at reducing landfilled waste by 50% from 2010 to 2025 (30% in 2020) and therefore increasing drastically the material recycling and recovery rates. The Netherlands and Germany make only marginal use of landfill (approximately 1%), preferring waste recovery methods (*source: Eurostat 2016 - 2014 data*).

E) COST OF TREATMENT

Price ranges vary significantly from one treatment method to another. The average price of landfilling, excluding tax, is historically lower than other treatment methods. This is followed by composting. Incineration, biomechanical treatment and biomethanization are highest in price[1].

Several European countries, however, have implemented tax systems intended to enhance the relative attractiveness of other sectors in the context of regulatory targets limiting volumes sent to landfills. This has been the case in the Netherlands, the United Kingdom and France since January 2009.

In some of these countries, this tax has now reached significant levels, which for end users means a squeeze in the range of prices for available treatment solutions.

According to the Group, in the future the trend should converge toward more elaborate treatment solutions (sorting, recovery and waste-to-energy) under the combined effects of the regulatory targets resulting from the application of European directives and the increase in raw materials and energy prices.

F) INTERVENTION BY PRIVATE OPERATORS

In Europe, the rate of penetration in the waste market by private operators varies significantly from one country to another, both for collection and treatment activities. The gradual transposition of European directives by all EU member states by 2020 should result in significant investments in waste recovery methods and should require the necessary technical expertise for the building and operation of these facilities. Although it is not impossible that we will see some local councils attempt to take over industrial and commercial waste management, these changes should lead local authorities to use private operators more often, and particularly those that are active in all segments and that combine a solid financial position with advanced technical know-how.

(1) It should also be noted that biomechanical treatment and biomethanization are the exceptions, as they are treatment stages rather than methods of recovery or elimination; they therefore do not exclude disposal at landfills, incineration plants and composting sites.

6.4.2 Competition

The Group faces competition from a number of other operators, including:

- public operators that may decide to retain or resume management of their infrastructures after analyzing and comparing the services offered by private operators; they may also offer proposals for markets in other regions or cities;
- large private operators, already well-established in their domestic markets and seeking to expand their activities or services and use their expertise in areas that show strong potential;
- local operators that are adopting aggressive strategies when participating in bidding processes;
- financial players (private equity and infrastructure funds) that are investing in markets through asset and company acquisitions;
- companies involved in related industrial sectors and seeking to expand their offerings to environmental management services, particularly building and public works companies in the waste sector and equipment suppliers in the water sector, by positioning themselves in the "BOT" (Build, Operate, and Transfer) contracts segment, where they can apply their construction expertise, as well as their ability to manage and operate those assets.

Most of these players, however, are not active in a range of segments as broad as the Group, whether in terms of services, technical skills or geographical locations, even though through grouping or diversification strategies, these competing companies are working to expand the scope of their activities to meet customers' expectations. Through its presence in all water and waste cycles, to which it exclusively dedicates itself, the Group believes it holds leading positions across all its business activities.

Consequently, any aggregate data relating to these competitors, especially in the waste sector, is not particularly relevant as it does not reflect the local structure of these various markets.

At a global level, the Group's main private competitor is Veolia. This company provides a combination of services including water and waste, and is also active in the energy sector. Veolia and the Group are the only "global providers" in the environmental management services market on a worldwide scale.

6.4.2.1 Competition in the water sector

In terms of revenues, the Group ranks second in the global market for environmental water-related services, behind Veolia. Other companies active in this market have more local operations and lower revenues.

On national and regional levels, competition often comes from local operators in the building and public works sectors.

In France, Veolia and Saur are the Group's main private competitors. To a lesser extent, smaller entities such as Derichebourg Aqua, Sogedo and Aqualter can occasionally enter into competition with SUEZ, as well as regional actors such as AGUR in Nouvelle Aquitaine (subsidiary of Etchart Group) or SGTS (Sturgo Group) in the Western part of France. Against the *régies* (local publicly controlled entities), which are also a potential public competitor, the balance is positive overall, in favor of private operators.

In Spain, the Group remains the leader in terms of revenues and the size of the population it serves. Aqualia maintains its No. 2 position.

In the rest of Europe, there has not been any notable change overall in the positions of the various private, public or mixed operators. The Group continues to actively monitor the market.

In the United States, American Water Works is the largest company, operating in the US with three lines of business: 1) it is the largest operator on the regulated water market held by private investors; 2) is the largest operator of federal military bases; 3) it is the largest provider of service to homeowners such as specialized water and energy insurance. The growth of American Water Works will take place *via* acquisitions. In 2018, the company signed 20 deals encompassing over 50,000 connections, and also acquired Pivotal Home Services from Southern Co. Gas for USD 365 million, making it the largest provider in this segment. In addition, they entered into an agreement to privatize one large military base. To better focus on these three segments, American Water Works sold a portfolio of 22 O&M and Concession contracts to Veolia.

Another SUEZ competitor in the United States, Aqua America also pursues a dynamic acquisition strategy in the regulated water market. This year, the company made the significant strategic decision to acquire People Gas for around USD 4 billion, a major operator in the gas sector based primarily in Pennsylvania. Aqua America does not operate non-regulated O&M contracts.

In the regulated water market, two competitors are emerging: Eversource and NW Natural. A regional energy company established in the Northeast, Eversource acquired Aquarion's operations and is seeking to expand its water footprint in the region. For its part, NW Natural is a Northwest regional energy producer, with three acquisitions in the water sector in Oregon and Idaho, as well as a multi-utility competitor in the United States.

SUEZ's main competitors in the non-regulated market are still Veolia, Jacobs and InfraMark. In 2018, the non-regulated market changed slowly and SUEZ concentrated on renewing several strategic projects in New Jersey and the development of opportunities with a U.S. regional focus, as well as waste activities in Canada.

In Latin America, the water market is fragmented, mainly as a result of the diverse nature of regulatory frameworks and the level of maturity of individual countries. Spanish private companies are very active here, especially Acciona FCC and Aqualia, along with the French Group Veolia and, to a lesser extent, Brazilian players. The last few years have also seen Japanese competitors vying to increase their market share.

Asia is also an emerging market where demand for drinking water production and wastewater infrastructure is strong. In 1990, China allowed the participation of private players in joint ventures and is now extending the field of action to public-private partnerships. Foreign investors such as Hyflux have shown a growing interest in the Chinese market. Some of these investors are also looking to enter this market by forming joint ventures with local players. For example, the listed Singaporean company Hankore entered into a cooperation agreement with China Everbright International (CEI) to further expand its presence in the Chinese water industry. Meanwhile, in Japan the Sumitomo conglomerate formed an alliance with Beijing Capital Co. Ltd. to capture opportunities in the wastewater market. In addition, the growing domestic demand for investment in water treatment solutions is also generating competition from pension funds, insurance companies and infrastructure funds (such as Macquarie Everbright China Infrastructure Fund). Local Chinese companies continue to grow strongly through new projects in China, as well as by following an international expansion policy with acquisitions elsewhere in Asia, Europe and Australia.

In the Middle East, there is a firming up of the competitive environment with a strong presence of regional groups in the sector like Metito, in addition to Spanish, French and Indian groups like Larsen & Toubro or VA Tech Wabag.

In Africa, the Group is in competition with French water treatment operators like Veolia, Vinci Environnement and Eiffage, as well as Spanish companies such as Acciona, FCC, Aqualia and others.

In India, the competitors are the major historical water treatment players ION Exchange, VA Tech Wabag, and others. Engineering firms such as Larsen & Toubro and SPML have recently targeted this market.

In Australia, the water market remains extremely competitive: with SUEZ leading the O&M municipal market, followed by Veolia, Trility, Valoriza and Acciona who all offer both DB and O&M solutions. Local competition is strong, especially in the DB market. There has been no major industry consolidation in the last twelve months, though Beijing Water's acquisition of Trility in April 2018 highlights increasing interest from foreign operation, particularly from China, in the Australian water market.

SUEZ Water Technologies & Solutions (SWTS), the new entity that now includes all SUEZ's industrial water activities competes with Nalco (Ecolab Group), Veolia, Evoqua, Solenis and several other global and regional players that provide water related technologies and services.

Depending on the geographic region, SWTS may be in competition with local or regional operators as well as with other types of players: producers of chemicals and specialty chemicals, manufacturers of water filtration equipment, producers of water quality equipment, industrial service providers, water treatment companies and EPC (Engineering, Procurement and Construction) companies.

SWTS faces fierce and robust competition in all its activities worldwide. Competitive pressure and the constant need to advance the technologies available requires a sustained investment in research and development. Each target market has a different structure depending on the communities and customers served but also according to the applicable legislation in each country. Competitors' technology portfolios vary between regions depending on the target customers and the profitability of technologies by region.

6.4.2.2 Competition in the waste sector

The Group ranks fourth in terms of revenues in the global market for waste-related environmental services, behind Waste Management, Republic Services and Veolia. Except for Veolia, most of the Group's competitors in the waste sector are national players and/or do not provide all the services offered by the Group.

In Europe, the Group's main competitors are Veolia, Remondis, FCC, Renewi and Urbaser. Over the last few years, the german Group Remondis has become the leader in the german waste sector, with a huge incineration capacity. Remondis is continuing to expand its positions in Germany by acquiring a number of small and medium-sized companies. It is ranked third in Europe in terms of revenues. Remondis is also expanding its presence in Central and Eastern Europe and more recently in Benelux.

The market for solid recovered fuel (SRF) is also growing strongly. These are alternative combustible products that come primarily from waste residue that is treated to certain specifications. SRF is used as a replacement for fossil fuels by cement manufacturers or in general by industries with high fuel consumption levels.

In 2017, Shanks finalized its acquisition of the Van Gansewinkel Group. The combined company now operates under the name Renewi and is the market leader in Belgium and the Netherlands.

In France, the competition is still very active, but with no substantial change in positions or significant consolidation movements.

In the United Kingdom, SUEZ Recycling and Recovery UK produces energy through its waste treatment plants with an annual capacity of more than 2 million metric tons and over 1 million metric tons of fuel per year supplied to third parties in the form of RDF, solid recovered fuel and wood. Every year, SUEZ R&R UK manages over 11 million metric tons of waste and products at its various facilities (including recycled materials and other streams). SUEZ R&R UK is the third or fourth-largest operator on the market based on the indicators taken into account. The market is continuing its transformation with a sharp fall in the number of landfill sites, stable recycling volumes and increased energy recovery from waste. Veolia maintains its position as the market leader while Viridor has continued to develop its energy recovery business with 4 plants under construction in 2018. Biffa, for its part, completed further acquisitions in 2018 and signed a partnership with Covanta for two new energy recovery plants. The number of landfill sites continues to decline, leading to issues related to residual waste in some areas. The landfill ban coming into force in Scotland at the end of 2020 is likely to lead to further stress on English landfill and EFW capacity and RDF exports. In 2021, up to 1 million metric tons per annum of residual waste may need to be moved from Scottish landfills to other treatment facilities In England and overseas.

The landfill tax continues to increase with inflation but the devolved governments in Scotland and Wales are able to set new rates compared to England, which represents 84% of the waste market in terms of population.

The UK signed the EU Circular Economy Package in 2018 and stated its intention to translate the main provisions into UK law through the Brexit process. In December 2018, a Resource and Waste plan for England was published. This ambitious plan includes the near-full recovery of net costs as part of the review of Extended Producer Responsibility in terms of packaging. It intends to review existing schemes for batteries, electronic waste and end-of-life vehicles. It also schedules new mechanisms that cover at least two major waste processes. Further they propose to include a new deposit return scheme, higher recycling targets, a new tax on plastic packaging that contains less than 30% recycled content, actions to reduce food waste and new requirements for data and enforcement. There is an aspiration to seek to have common EPR and DRS systems in the UK which presupposes coordination with the devolved authorities (Scotland, Wales and Northern Ireland). These devolved authorities are empowered to develop their own schemes and manage waste and thus will need to agree to any common UK approach.

In Germany, the Alba Group has signed an agreement with the investment fund managed by the Deng family, the majority shareholder of Techcent, for a joint venture that came into effect on January 1, 2017. The partnership involves certain advanced technologies of the Chinese Group, such as processing waste from electrical and electronic equipment and recovery of light packaging waste.

In Sweden, waste regulation extending producer responsibility has been revised and the conclusions were presented in the summer of 2016. This reform will transfer responsibility for collecting waste to local authorities rather than to producers of waste. However, the Swedish parliament rejected this regulatory revision. The schedule and manner of application of these changes is unknown, and for the moment there is no change in effect. In 2017, the government explored the idea of a tax on waste incineration that would encourage the reduction of CO_2 emissions and an increase in the volumes of recycled waste. The government committee in charge of this review suggested a tax of SEK 100/metric ton (nearly EUR 10/metric ton) for the incineration of non-hazardous waste. This suggestion is currently under discussion in the country, and no action has been taken.

In Poland, the regulatory developments that led to the establishment of a municipal tax in 2013 have created a favorable climate for the development of waste treatment and recovery facilities. Several construction projects for energy recovery units were launched, representing a capacity of 1 million metric tons. Some of these were already operational in 2016. The first public-private partnership (PPP) contract in Poland, for the design, construction, financing and operation of an energy recovery unit in Poznań, was won by SUEZ. The facility is now operational, with a capacity of 210,000 metric tons per year. The Group aims to position itself on future calls for tender for energy recovery projects in the country. Higher sophistication of the Polish market will push the Group to study development projects.

In Australia, the waste market remains highly competitive, with regulatory disparities between the states resulting in cost differences for waste treatment and recovery. The Australian recycling market suffered greatly as a result of China's ban on waste imports known as "National Sword", as Australia exports more than 50% of its plastics to China. Interstate waste transportation to the state of Queensland continues to be a critical issue, although this is expected to change as a new waste disposal levy will be introduced in Queensland in July 2019. SUEZ has progressed in exploring large scale energy from waste projects and continues to be proactive in looking for projects to develop in both the municipal and industrial sectors. A significant change in government policy to end the application of mixed waste organic material to agricultural land and the suspension of its use for mine rehabilitation in New South Wales had a significant impact on the treatment of municipal waste in this state. In May 2018, the market leader, Cleanaway, completed the acquisition of Tox Free Solutions for AUD 831 million (approximately EUR 543 million), thus formalizing the merger of the two largest listed players in Australia. Following this operation, Cleanaway strengthened its presence in the region, expanding its capacity in the hazardous waste and liquid waste sectors. In August 2018, Bingo Industries announced the acquisition of Dial-a-Dump Industries for AUD 578 million (approximately EUR 364 million). The planned acquisition is yet to be approved downstream by the Australian Competition and Consumer Commission (ACCC), with the authority already expressing significant concerns. A decision is expected during the first quarter of 2019. This follows Bingo Industries' acquisition of National Recycling Group which expanded its presence in the state of Victoria. SUEZ is ranked second in the market, followed by Veolia, JJ Richards, Visy, Bingo Industries and Remondis.

In Asia, particularly in China, the waste segment is undergoing robust growth and competition has intensified. The authorities are encouraging sustainable solutions to address the challenges related to waste treatment, and are launching public tenders for projects focused on energy recovery from household and organic waste. The main competitors are public companies and companies supported by the government, such as China Everbright International, CECEP, Shanghai Environmental and Chongqing Sanfeng, which are active at national or provincial levels. Some of them are in partnership with international waste management groups. SUEZ Asia's 2015 investment in Derun Environment, which holds the majority interest in Chongqing Sanfeng, has been a stepping stone for SUEZ in further exploiting these markets. The Chinese authorities are taking significant action to reduce existing pollution problems: the first aim of this is to improve standards to a level similar to that of Europe; the second, equally important, will be to ensure the application of these standards. The result of these measures is an increase in the volumes of waste treated at the appropriate sites.

In Latin America, international competitors who are well established in the main countries, are applying an aggressive external growth strategy, especially in the hazardous waste segment. In 2018, Veolia finalized the acquisition of Colombian company Aseo Urbano which operates in municipal waste collection and treatment (landfills) as well as in industrial waste treatment. In 2017, Séché Environnement had acquired two companies operating in hazardous waste treatment, essentially for mining and energy sector: Soluciones Ambientales del Norte SA (SAN) in Chile and Befesa Peru SA in Peru. As regards the well-established local competitors, they focus on the waste collection and landfill segments.

Finally, we note the confirmed emergence of national competitors in Turkey, UAE (Imdaad), India (Ramky) and Lebanon (Averda – Lavajet) impacting the waste collection markets in the Middle East and the Indian subcontinent, as well as new comers such as Derichebourg in Africa as well as CNIM and Itachi Zosen in the Middle East.

6.5 Description of the Group's main activities

The Group provides services and equipment essential to life and environmental protection in the areas of water and waste: delegated management of drinking water and wastewater services, water treatment engineering, as well as waste collection, recovery, and waste disposal activities both for public authorities and private sector customers.

In 2018, the Group generated revenues of EUR 17.3 billion. Revenues per business activity break down as follows:

- Water Europe, representing 27% of the Group's consolidated revenues in 2018: EUR 4.6 billion;
- Recycling and Recovery Europe, representing 36% of the Group's consolidated revenues in 2018: EUR 6.2 billion;
- International (Treatment Infrastructures and activities outside Europe), representing 23% of the Group's consolidated revenues in 2018: EUR 4 billion;
- the new WTS business unit, representing 14% of the Group's consolidated revenues in 2018: almost EUR 2.4 billion;
- other activities (parent and holding companies and SUEZ Consulting) representing almost 1% of the Group's consolidated revenues.

In the water sector, worldwide:

- in 2018, the Group operated 1,417 drinking water production sites, and produced around 7.6 billion cubic meters of drinking water;
- in 2018, the Group operated 2,701 wastewater treatment sites, and biologically treated over 5.1 billion cubic meters of wastewater.

In the waste sector, worldwide as of December 31, 2018:

- the Group provided collection services for approximately 32.7 million people;
- the Group operated 101 composting platforms, 47 incineration sites (all with energy recovery capacity), 796 sorting, material recovery and transfer stations and 109 landfills and used a fleet of 11,487 heavy vehicles.

6.5.1 Presentation of the Group's activities

6.5.1.1 Water activities

A) COMPLETE MANAGEMENT OF THE WATER CYCLE

Through its subsidiaries, the Group covers the entire water cycle value chain for all its customers (public authorities and private sector customers), including:

- studies and master plans, modeling of networked and natural water flows (groundwater, rivers and coastlines), and engineering of water management infrastructure projects;
- engineering, design and construction of water treatment facilities through the Treatment Infrastructures business line;
- drinking water distribution and wastewater treatment services, which include:
  - drinking water production and distribution services: catchment, treatment and distribution of drinking water,
  - wastewater treatment services (municipal or otherwise): collection, clean-up and disposal of wastewater and rainwater,
  - customer management: relations with end-users and consumers, meter reading and the collection of payments made by end-consumers, and
  - for private sector customers: defining, building and operating tailored and scalable water management solutions and selling high-end water treatment equipment. The Group's private sector customer offering includes the management of water resources, process water, wastewater and effluents, as well as sludge.

The Group offers a broad range of services, from drinking water production to wastewater treatment. It offers services in the following five areas:

- Water pumping and treatment

  Pumping is the operation that extracts water from rivers, groundwater and reservoirs to be piped to treatment plants. Treatment depends on the quality of the raw water and may include many steps: pretreatment (screening), clarification, filtration (elimination of finer particles), refining (elimination of micro-pollutants) and disinfection (elimination of viruses and bacteria).

- Storage and distribution

  Reservoirs provide a safety net in the event of production problems, consumption peaks, or pollution of resources. The underground distribution network is monitored in order to ensure stability of water quality and to prevent leaks.

- Customer service

  Specialized units are responsible for handling relations with consumers, taking into account local realities: contract signings, meter reading, billing and account settlement or administration.

- Wastewater collection and treatment

  Wastewater treatment networks are an essential factor in combating domestic pollution. They must pipe all wastewater to the wastewater treatment plant. Wastewater treatment requires a set of complex physical and biological procedures. Wastewater treatment networks are also used to collect and drain rainwater *via* techniques that make it possible to separate it from wastewater, if needed.

- Sludge

  Treating 1 cubic meter of wastewater produces 350 to 450 grams of raw sludge. Sludge drying and treatment processes reduce its volume. In France, most sludge is recycled in agriculture through spreading, conversion to compost or recovery as energy.

The Group has recently offered its clients new dedicated environmental services (audits and assistance in reducing the environmental footprint of water services in a given territory, quantitative management of resources to counter the impact of climate change and services to improve the water quality of rivers, lakes and swimming areas), and also offers a new range of services for municipal and residential customers to control water consumption (leak alerts, remote meter-reading, leak insurance and assistance).

B) CONTRACTUAL RELATIONS WITH CUSTOMERS IN THE WATER SECTOR

The Group's customers are local public authorities and industry (mainly through its SUEZ Water Technologies & Solutions subsidiary or SUEZ Consulting for studies). However, the Group also serves local industrial and business customers under public service contracts.

Contractual relations with public authorities

In general, local authorities are responsible for organizing both drinking water distribution and wastewater treatment services. They may choose to manage these directly (as a local publicly owned company) or rely on an outside operator, which may be public, private or semi-public.

Contracts entered into by the Group with public authorities are governed by the rules for public contracts and/or specific competitive procedures.

The Group distinguishes between:

- delegation of public service contracts in France, or their equivalent outside France, including leases and concession contracts, and all intermediate contractual forms. Under these contracts, the Group is responsible for all service management (water production and distribution and/or wastewater treatment): it is involved in managing relations with end-users, meter reading, preparing invoices and collecting payments made by end-users. The Group engages in this activity at its own risk, and its compensation derives from billing users; a portion of the sums billed is paid back to the local authorities to finance new investments. Leases differ from concession contracts according to the size of investment for which the private operator is responsible. Most of the Group's contracts in France are leases that are generally long-term, ranging from 10 to 20 years; and
- contracts for services and works, in which case operations and works are billed to the relevant local authority. These are medium- or long-term contracts, generally 5 to 20 years.

In general, public authorities own the assets involved in drinking water distribution and wastewater treatment services. However, in certain countries (notably the United Kingdom and the United States), the Group owns the assets it operates; in this case, there are no contractual relations with public authorities; relations between the private operator, the various customers and other stakeholders are then governed by a regional or national regulator under an operating license issued by the regulator. In addition, in France, for historical reasons, the Group owns certain assets (see chapter 8 of this document).

Contractual relations with industrial customers

The Group is also active in the entire water cycle with industrial customers operating under design and build contracts, service contracts, such as operating and maintenance agreements, and the supply of mobile processing facilities and/or equipment sale agreements. Contracts are then generally agreed upon for shorter terms than is typical for local authority contracts, most often one to five years for a service contract.

As a multi-disciplinary engineering firm, SUEZ Consulting also assists private customers in defining their environmental strategy, integrating their project into the site, water management in the industrial cycle and the preparation of regulatory filings.

6.5.1.2 Waste activities

A) COMPLETE MANAGEMENT OF THE WASTE CYCLE

The Group manages the entire waste cycle by being involved at each stage in waste management, and in almost every type of waste:

- collection of non-hazardous waste from municipalities and companies, sorting, pretreatment, material recycling and recovery, biological recovery (which mainly involves agricultural recovery and the remediation of poor soil), energy recovery (incineration, co-incineration and methanization) and landfilling, including the recovery of biogas;
- hazardous waste management (excluding waste that may be contaminated by radioactive residues from nuclear activities);
- treatment of wastewater and urban cleaning: maintenance of municipal and industrial networks and cleaning of industrial production tools; street washing/sweeping, maintenance of street furniture; beach cleaning and snow clearing;

- soil remediation: treatment of polluted sites, soil, subsoil, and groundwater, dismantling and conversion of buildings; and
- dismantling and disassembly of end-of-life vehicles, aircraft and boats.

The Group offers services in the following areas:

Non-hazardous waste (collection, sorting, recovery and elimination)

In the non-hazardous Waste segment, the Group collects, sorts, recycles, recovers and eliminates waste of municipal or industrial origin.

Collection

Each day the Group collects waste of all kinds from residential customers, companies and public entities: household waste, organic waste, non-hazardous industrial waste, medical waste and liquid and solid waste.

The Group has a fleet of trucks suitable for all types of waste collection: mixed waste collection, selective collection, bulky items, medical waste and industrial waste, in urban and rural environments. Waste from selective collection (plastic, glass, metal, paper, etc.) is sent to sorting sites to be prepared for recycling; residual waste is sent either to transfer/sorting/pretreatment platforms or directly to incineration plants or landfills. Certain waste products may be highly polluting (batteries, aerosol cans, etc.). They are then sent to specialized sites for cleaning and conditioning before treatment or recovery.

Materials recovery

Household and industrial waste from selective collection is sent to one of the 478 sorting and material recovery sites operated by the Group. It is then sorted by type (plastic, glass, paper, cardboard or metal), conditioned and consolidated by recovery process on appropriate platforms. Recoverable materials are then sent to appropriate processing areas and sorted, and (non-recyclable) waste is recovered for energy whenever possible by incineration. Failing this, it is landfilled.

The economics of recycling are intended to afford industrial customers a steady supply of quality recycled materials and provide waste producers with ongoing management of their waste in compliance with applicable regulations. Recycling activities (for example, involving metals and plastics) are also organized around specific collections.

In 2018, the Group managed almost 21 million metric tons of waste for recovery. Of this total, nearly 11.6 million metric tons were processed for material recovery. Furthermore, the Group is bolstering its dismantling and recovery lines for Waste electrical and electronic equipment (WEEE), end-of-life aircraft and vehicles (ELV), including through the opening of a new aircraft dismantling facility in Teruel, Spain.

At its customers' request, the Group is also pursuing the implementation of industrial processing solutions to recover residual waste, such as mechanical and biological sorting (MBS) of waste.

Composting and biological recovery

Composting is a natural process that involves converting organic waste into soil conditioner. Four types of waste are involved: (i) green waste from households and municipal customers, as well as by-products of the wood industry (bark, sawdust, etc.); (ii) the organic portion of household waste, restaurant and supermarket waste; (iii) sludge from wastewater treatment plants; and (iv) sludge and by-products from paper and food producers.

Numerous analyses are performed on organic waste before, during and after its conversion to compost. Air from the composting process is collected and treated to reduce odor pollution.

Sludge management is at the core of the Group's know-how, and the Group assists municipal customers in their sludge recovery and waste composting projects.

Energy recovery

Waste may also be recovered through incineration. Heat treatment of waste has several advantages: it reduces waste mass and volume, it is quick and hygienic and it produces energy (largely renewable) that can be recovered in the form of electricity and/or heat.

Six types of waste may be recovered for energy production: (i) household waste, (ii) industrial waste similar to household waste, (iii) waste from sorting sites, (iv) medical waste, (v) sludge from wastewater treatment plants and (vi) hazardous waste.

In the Group-operated incineration plants, waste is burned at high temperatures in accordance with regulatory requirements. Heat released by the combustion is recovered in steam boilers. This steam is used to generate electricity and also supplies heat networks.

In 2018, the Group's energy recovery units treated approximately 10.1 million metric tons of waste, and produced over 3,784 GWh of electricity, resulting in the sale of more than 2,991 thermal GWh. The gases produced by waste combustion are purified using dedicated treatment systems before being released into the atmosphere. Solid waste essentially consists of bottom ash, which is reused for road beds after undergoing suitable treatment, or disposed of at landfills, as well as purification residue from smoke, which is landfilled after stabilization.

This activity is subject to numerous regulatory and technical constraints designed to reduce impacts (smoke emissions, production of bottom ash and fly ash) and to recover energy produced by waste combustion in the form of heat and/or electricity.

Organic waste may also be recovered for energy recovery through methanization. This process of decomposition of natural organic matter – through microorganisms and in the absence of oxygen – has long been known. Its use on an industrial scale is more recent. Methanization produces a biogas that may be recovered for electrical and/or thermal energy, plus a residue that may be recovered for use as an organic soil conditioner after composting. Biogas can also be injected into the gas distribution network.

Another method used for recovering energy is the production of Solid Recovered Fuel (SRF) from non-hazardous industrial waste and, to a lesser extent, household waste. Mainly used by cement manufacturers, this fuel continues to represent a real opportunity for developing solutions that complement the recycling and disposal sectors. The waste that goes into these SRFs is not easily recyclable under existing technical and economic conditions, so SRFs represent an excellent alternative fuel for cement and lime kilns as well as the heat- and steam-generating units of industries that consume high levels of energy (chemical producers, paper mills, etc.) and are equipped with adequate smoke treatment systems.

Elimination of waste in landfills

Landfilling remains the predominant treatment method in many countries. Upstream, the search for a site must conform to legally mandated specifications and conditions, specifically concerning soil quality, the protection of groundwater and distance from housing. During the operating stage, discharges must be controlled, effluents (biogas and leachates) captured, recovered or treated, and environmental parameters measured regularly. Once closed, sites remain subject to monitoring generally for 30 years (60 years in the United Kingdom).

The Group operates 109 landfills around the world, mainly in Europe. In the course of these activities, the Group develops and operates innovative industrial solutions for the recovery of renewable biogas energy from landfills.

Hazardous waste

Waste representing a danger to humans or the environment requires special precautions when being treated. Once collected, it is analyzed, sorted by type and then gathered. It is then sent to the most appropriate site.

There are several treatment options for such waste, including:

- recovery as a fuel substitute, particularly for cement kilns, after being subjected to any necessary physical pretreatment;
- incineration at high temperatures with energy recovery (as in the case of halogenated, toxic and reactive wastes);
- treatment using physicochemical and biological methods (as in the case of aqueous waste: acids, bases, chromate baths, some contaminated soils etc.);
- treatment, clean-up or solidification before being landfilled at suitable sites. Mineral sludge and ashes, for example, is mixed with reagents to form a concrete that stabilizes pollutants within a mineral matrix before landfilling;
- regeneration for the purposes of materials recycling, *i.e.*, purified for reuse (in particular, this is the case for oils and certain solvents).

SUEZ IWS is an international player in the hazardous waste market. The Group has treatment facilities in France, Europe and China.

The Group may thus offer its customers solutions suitable for all types of hazardous waste (except waste potentially contaminated by radioactive residues from nuclear sites), such as packaging ranging from 100 grams (such as special household or laboratory waste) up to hundreds of metric tons. In 2018, more than 3.6 million metric tons of hazardous waste were treated by the Group: pretreatment on *ad hoc* platforms, stabilization and storage at class I landfills, incineration of waste with high chlorine or sulfur content and co-incineration at cement plants.

Wastewater treatment, maintenance and urban cleaning

The Group provides local authorities, residential and industrial customers with wastewater treatment and industrial cleaning services (particularly during plant shutdowns), collection of hazardous industrial waste, as well as more specific services such as the cleaning of water towers, oil-related work, or monitoring of wastewater treatment networks in nuclear plants.

Urban cleaning is a concern for local authorities and a health requirement. In this regard, the Group offers the following services: mechanized and manual street sweeping, maintenance of street furniture, poster and graffiti removal, snow clearing, beach cleaning, emptying and maintenance of refuse bins and public awareness measures. Depending on the country, additional services may be offered, such as the maintenance of public parks and gardens.

Pollution clean-up and conversion of polluted industrial sites

Soil pollution may be of two kinds: organic and mineral. There are three types of treatment:

- *in situ* treatment, for subterranean clean-up operations of water tables or soils without excavation;
- on-site treatment, whereby the soil is extracted but treated on site; and
- off-site treatment, when the soil must not only be extracted, but also sent to special sites where it undergoes biological, thermal or physicochemical treatment and/or landfilling.

Through its specialized subsidiaries, the Group has been developing innovative solutions for the clean-up and conversion of industrial sites for 25 years.

By way of illustration, following on from its clean-up and remediation of the former Metaleurop Nord foundry site in France, the Group is now conducting clean-up and remediation operations of "The Avenue", an industrial complex in Chesterfield, in the United Kingdom, through its entity SUEZ IWS (formerly Sita Spécialités). This project, carried out in collaboration with Volker Stevin UK and DEME Environmental Contractors (DEC NV), is the largest public project of this type in the United Kingdom, and one of the largest sites for the clean-up of derelict industrial land in Europe.

Since the end of 2016, SUEZ has also been responsible for the clearing and recovery of excavated construction material from the Fort d'Issy-Vanves-Clamart railway station. Some 180,000 metric tons of soil will be analyzed and processed by SUEZ during the various phases of the project, between 2016 and 2021. The Group will accordingly achieve its objective of recovering 70% of the site's excavated material set by the Greater Paris company (Société du Grand Paris).

B) CONTRACTUAL RELATIONS WITH CUSTOMERS IN THE WASTE BUSINESSES

The Group works for two types of customer:

- public authorities (municipal or other authorities): contracts entered into with public authorities are generally medium- or long-term (generally with a term of three to seven years for collection, and up to 20 or even 30 years for treatment in certain cases), and involve locally regulated activities in which public services are major players; and
- industrial operators: contracts with industrial customers are generally short- or medium-term (often one year, renewable, for collection) and involve activities for which industrial customers increasingly outsource all their Waste Services management to subcontractors.

The Group offers energy produced during waste treatment and materials from this treatment and recycling (secondary raw materials) both to public authorities and industrial customers.

6.5.2 Presentation of Water Europe activities

Europe is at the center of the Group's water sector activities. Companies operating in the Group's Water Europe segment contributed EUR 4.6 billion to the Group's 2018 consolidated revenues, primarily through Water France, which generated 44% of consolidated revenues for the Water Europe segment, and Water Spain.

With the intention of giving more weight to the geographic aspect of the structure, beginning from January 1, 2017, the activities of the Group in Latin America were regrouped under a single business unit (SUEZ LatAm), which is included into the Water Europe segment.

6.5.2.1 Water France

Since January 1, 2017, Water France has incorporated the water treatment activities (construction and operation of drinking water plants and treatment plants).

In 2018, Water France generated consolidated revenues of EUR 2 billion and employed 11,274 people.

1) Specific characteristics of the water sector in France

In France, 3.9 billion cubic meters of drinking water were invoiced in 2013 to consumers connected to public water systems. Following a period of 15% negative growth between 2006 and 2009, volumes of water invoiced have remained stable, in spite of demographic growth. Consumers have adopted water-saving practices and the economic slowdown since 2008 has reduced industrial consumption. Water companies distribute over two-thirds of drinking water volumes in France (66% in 2013) and the breakdown between public and private operators has been stable since 2006. Regarding the treatment of wastewater, water companies treated 53% of wastewater volumes collected in France in 2013, and this percentage has been 54% on average since 2006 (*source: 2013 figures from a BIPE/FP2e study, October 2015*).

2) Description of Water France's activities

The Group operates in France with public authorities and companies, primarily through its subsidiary SUEZ Eau France and its subsidiaries. SUEZ Eau France has been involved in the water-related service sector in France since its creation in 1880, and today operates throughout the entire water cycle, from drinking water production to wastewater treatment. More specifically, it provides water pumping and treatment, storage and distribution, customer service, wastewater collection and treatment and sludge treatment services. Water France structures its commercial activities along 3 lines: construction (drinking water and wastewater plants), services (operation of water and wastewater services, treatment plants) and advanced solutions including digital services and diversification.

In 2018, Water France's contribution to the Group's consolidated revenues was EUR 2 billion (41% from drinking water production and distribution under delegation of public service contracts, 29% from wastewater treatment under delegation of public service contracts, 21% from non-public service contracts and diversified services, and 9% from improvements to distribution facilities and networks). Including all subsidiaries, Water France employed 11,274 people as of December 31, 2018.

In 2018, Water France operated over 700 drinking water production sites and delivered over 937 million cubic meters of drinking water to the network.

In 2018, Water France operated 1,674 treatment plants, which treated nearly 1,156 million cubic meters of wastewater.

Water France is the second-largest private operator in France.

3) Water France contracts

In its core business, which still represents 96% of its revenues, three-quarters of its contracts in term of revenues are for water and wastewater treatment under delegation of public service contracts, and one quarter are service or works contracts. Water France had a portfolio of approximately 2,066 public service contracts as of December 31, 2018.

The Group distinguishes between:

- delegation of public service contracts in France, or their equivalent outside France, including leases and concession contracts, and all intermediate contractual forms under the generic term of "delegation of public service". Under such contracts, the Group is responsible for the entire service management (drinking water or wastewater) or partial service management (water production and distribution and/or wastewater collection, transportation or treatment). It is responsible for operating and maintaining works and for restoration work, where applicable, as well as managing relations with end users, meter reading, preparing invoices and collecting payments made by end-users. It ensures the performance of services provided. The Group engages in this activity at its own risk and is compensated by billing users; a portion of the sums billed is paid back to the local authorities to finance new investments. Leases, which relate to the operation of the service, differ from concession contracts under which the private operator is responsible for investments. Most of Water France's contracts are leases, generally for 8 to 12 years; concessions, with longer terms, range from 15 to 20 years;

- public contracts for services or works. Under service contracts, the Group mainly handles the operation and maintenance of service facilities (water or wastewater treatment). Works contracts mainly involve interventions on the networks. With public contracts, services and works are billed to the public authority customer, which remains responsible for billing the end-users. These are short- to long-term contracts, generally lasting from 2 to 10 years.

Contracts are more varied in the diversification portfolio.

Water France, as part of its diversification strategy, serves a wide range of customers, from residential customers that use water services to large institutions. Diversified services also supplement the offering for historical customers and local authorities. Services offered to customers fall into several categories:

- the development of intelligent solutions in the water and environment businesses and technology integration;
- works projects in natural environments lasting from several weeks to several months;
- delegation of public service contracts for public installations (ports, swimming pools, sports and recreational facilities, etc.);
- the sale of insurance services to residential customers.

4) Commercial successes for Water France

a) Core business

In 2018, Water France had many commercial successes, including:

- drinking water services:
  - a 10-year contract to manage the drinking water service for the Grand Avignon (16 municipalities),
  - Paris Saclay: Renewal of the drinking water service of 10 municipalities of the Paris-Saclay Agglomération;
- wastewater treatment:
  - a 12-year contract to manage the wastewater public service of Toulouse metropole's 37 municipalities,
  - a 4-year contract to manage water and wastewater for Brest Métropole;
- smart services:
  - in 2018, SUEZ has reached a total of smart meters sold of 4 million,
  - deployment of 58,000 On'Connect meters for the Durance Ventoux water syndicate (28 municipalities) in the Vaucluse department;
- construction:
  - a contract for the construction of a new wastewater treatment plant in Bourges, with a methanization facility.

Several areas were regained:

- drinking water services:
  - a 10-year contract for the management of the drinking water service for the Durance Ventoux syndicate (Vaucluse);
- wastewater treatment:
  - a 12-year contract for the operation of the wastewater network for the Hauts de Seine Departmental Council (1.6 million inhabitants served),
  - a 5-year contract for the operation of the wastewater treatment plant of the Eurométropole of Strasbourg,
  - a 7-year contract for the operation of the wastewater networks and the wastewater treatment plants for Nantes Métropole,
  - a 8-year contract for the management and operation of La Feyssine wastewater treatment plant for the Lyon City Authority.

b) Diversification

Among the major events of 2018, those of particular note include:

- the City of Dijon contract. Together with Bouygues Energie Services, Citelum and Cap Gemini, the award of a pioneering contract centralizing the management of public spaces;
- a SEMOP contract for the construction and operation of an aquatic center in Rillieux-la-Pape.

6.5.2.2 Water Spain

In 2018, the Water Spain Business Unit's contribution to the Group's consolidated revenues totaled EUR 1.5 billion. Water Spain employs 8,259 people (including employees of Advanced Solutions). Water Spain operates 228 drinking water production sites and 658 wastewater treatment plants.

1) Specific aspects of Spain's water sector

The Group estimates that private operators currently represent approximately 54% of the drinking water production and distribution sector, and 85% of the wastewater treatment sector (*source: internal estimates*).

2) Description of the Water Spain's activities

Water Spain operates throughout the entire water cycle: catchment, transportation, treatment and distribution of drinking water; collection, treatment and reuse of wastewater; recovery of sludge; and customer services. The company's customers primarily consist of local public authorities.

Water Spain is the leading private operator in Spain's water sector.

In 2011, Water Spain launched Aqualogy, a new brand that consolidates the Group's know-how to offer value-added solutions tailored to municipal, industrial and services markets. At present, Aqualogy's business activities are grouped under the SUEZ Advanced Solutions Spain brand. During 2018, Water Spain continued the development of Advanced Solutions in the country, with environmentally responsible activities adapting to customers' needs and with a commitment to value creation. Advanced Solutions Spain focuses on the development of solutions in the areas of water, energy, municipal waste and industry.

During 2018, the Agriculture business line was launched in Spain through the constitution of SUEZ Agriculture and the creation of the SUEZ-Galpagro joint venture, which aims to provide support services in the plantation, irrigation, crop protection, along with pruning and harvesting in the southern area of Spain and Portugal.

6.5.2.3 Latin America

With the intention of giving more weight to the geographic aspect of the organization, on January 1, 2017, the Group's activities in Latin America were combined under a single business unit, SUEZ LatAm, which is part of the Water Europe segment.

1) Specific aspects of the water sector in Latin America

Latin America is replete with many natural resources and is home to almost 30% of the planet's freshwater resources. However, according to the World Bank, 85 million people still do not have access to a wastewater treatment system and 115 million people do not have access to safe water points. Faced with this situation, SUEZ is committed to the conservation of resources and preempts the challenges that lie ahead for the entire region.

2) SUEZ in Latin America

Today, SUEZ LatAm has 4,543 employees. SUEZ generates more than 7% of its revenue in this region, which extends from Tijuana to Ushuaia, encompassing the cities of Panama and Santiago de Chile.

SUEZ's business in Latin America is structured geographically based on five business areas:

- Mexico;
- Central America, the Caribbean, Colombia and Ecuador;
- South Atlantic – Brazil, Uruguay and Argentina;
- South Pacific – Chile, Peru, Bolivia, Paraguay;
- Aguas Andinas.

3) The main geographic locations

SUEZ has been present in Latin America for almost 60 years. In 1957, the Group built water treatment plants in the cities of Lima, Peru and Brasilia, Brazil. Today, SUEZ primarily operates in the following countries: Chile, Mexico, Colombia, Panama, Peru and Brazil. In 2018, SUEZ extended its geographical presence in the region through two new contracts: a technical assistance to improve water management efficiency in the city of Santo Domingo, Ecuador; and a Design & Build contract for the revamping of Las Pavas Water Treatment Plant in Salvador.

a) Brazil

SUEZ is developing its water management businesses with municipal customers such as SABESP in Sao Paulo and CEDAE in Rio de Janeiro, through its entity Restor, a specialist in water distribution network optimization and efficiency. The Group also has extensive experience in the treatment of industrial water, in particular in the oil and gas, paper and cardboard, metallurgy and mining sectors.

b) Chile

The Group is also present in Chile, providing services to a range of municipal and industrial customers. SUEZ's main references in Chile include:

Aguas Andinas: the Group is a shareholder in this company which provides its services throughout the Santiago metropolitan area, as well as to other regions of the country through its entities Aguas Cordillera and Aguas Manquehue.

The Group is supporting circular economy by modernizing the infrastructures of the Mapocho-Trebal and La Farfana wastewater treatment plants. SUEZ is implementing the Biofactorias program of Aguas Andinas that will enable these two plants to become fully energy self-sufficient, to produce gas that can be re-injected into the urban gas network and produce compost for local farmers.

In the mining industry, SUEZ built and maintains the effluent treatment plant at El Teniente mine which is the world's largest underground mine operated by Codelco. The Group also built a desalination plant to ensure continuous water supply for the operations of copper mine Minera Escondida in the Atacama desert, and provides O&M services to various mining actors.

c) Colombia

In Colombia, SUEZ teams provide drinking water production and distribution services to the cities of Palmira and Cartagena, through a joint venture with the local authority. As a result, some 1.6 million inhabitants use the Group's services.

d) Mexico

SUEZ has been present in Mexico for nearly 40 years, particularly in water treatment and infrastructure activities but also in the management of water services (Aguas de Saltillo joint venture).

In 2016, ASIM, held jointly by the SUEZ Group (49%) and GBM (51%) renewed the service contract with Mexico City (management of new connections, land registry management, monitoring of water meters, business relations, customer service). SUEZ acquired GBM's stake in February 2018, becoming the unique shareholder of ASIM.

Moreover, during 2018, SUEZ continued to develop the Rosarito project (a desalination plant in Baja California under a DBOT scheme). Construction is scheduled to begin in 2019.

e) Panama

Since 2008 SUEZ has been present in Panama, where some 1.2 million inhabitants use the Group's services. SUEZ's main references in Panama include:

- Juan Diaz treatment plant: In May 2017, the Ministry of Health of the Republic of Panama (MINSA) awarded SUEZ a contract for the extension and subsequent operation of the Juan Diaz treatment plant. SUEZ completed the first phase of this treatment plant for the capital's wastewater in 2009 and has operated it since 2011. The new contract will double the plant's capacity;
- Ciudad David: In August 2016, SUEZ signed two DBO contracts for the design and construction of wastewater treatment solutions projects in the city of David with the customer IDAAN (Instituto de Acueductos y Alcantarillados Nacionales).
- Colectoras: as part of the Panama Sanitation Program and through the consortium Servicios Operativos de Alcantarillados de Panamá (SOAP), SUEZ has been operating the wastewater networks of Panama City (districts of Panamá and San Miguelito) since 2015.

f) Peru

The SUEZ Group is present in Peru through municipal customers (SEDAPAL) and industrial customers (in particular in the mining industry).

In late 2016, in partnership with Brookfield Infrastructure, SUEZ announced the conclusion of an agreement to acquire two companies – H2Olmos and Concesionaria Trasvase Olmos – that are in charge of the Olmos valley irrigation project. With new infrastructures and specially designed services, they supply the water resources necessary for the valley's agriculture and food industry development. The implementation of this agreement was suspended due to major climatic events that damaged facilities.

4) Development strategy

Combining the activities of various entities under a single leadership structure per country and launching the single brand in 2015 are two of the Group's major strengths to seize the commercial opportunities on offer in this region.

SUEZ's strategy in Latin America is based on three pillars:

- SUEZ aims to strengthen its position in its historical business, the complete management of the water cycle (concession contracts, DBOT schemes, services) with municipal customers through a more integrated offer;
- the Group also aims to develop its activities in new markets such as advanced solutions, the agricultural sector and smart cities;
- finally, SUEZ is targeting growth in the waste sector in Latin America.

It should be noted that the development of activities with industrial customers is mainly being led by Water Technologies & Solutions.

6.5.3 Presentation of the Recycling and Recovery Europe activities

Europe is the heart of the Group's waste sector activities. Companies operating in the Group's Recycling and Recovery Europe segment contributed EUR 6.2 billion to the Group's consolidated revenues in 2018. The Group's Recycling & Recovery Europe business is operated mostly by SUEZ RV France and its specialized subsidiaries, SUEZ R&R Belgium, SUEZ Deutschland, SUEZ Recycling & Recovery Netherlands, SUEZ Recycling and Recovery UK and SUEZ Recycling AB in Sweden. In 2016 SUEZ had created Industrial Waste Specialties (IWS), specializing in the recovery and disposal of hazardous waste in Europe.

SUEZ also owns SUEZ Organique (formerly Terralys), a joint subsidiary of SUEZ RV France and SUEZ Water France, specializing in composting and sludge treatment in France.

Companies in the Recycling and Recovery Europe segment generated 45% of their revenues in France, 14% in the United Kingdom and 41% in the rest of Europe (EU and non-EU).

In Europe, the Group's collection activities served over 23.5 million people and nearly 196,500 industrial and commercial customers in 2018. The Group collected over 19.5 million metric tons and processed nearly 31 million metric tons of household, industrial, and health-care waste.

6.5.3.1 Recycling & Recovery France

The Group is active in France in the waste sector through its R&R France business unit, which operates *via* SUEZ RV France and its subsidiaries.

1) Specific features of the waste sector in France

The French waste sector represents EUR 23.6 billion (*source: Les comptes de l'environnement en 2015, MEDDE, 2018* [1]). Of a total of over 324 million metric tons of waste, 69% is generated by building and demolition activities, 21% by commercial and industrial activities, 9% by municipalities and households, and 1% by wastewater and remediation activities (*source: ADEME 2015*). Regarding household and similar waste, 26% is landfilled, 35% undergoes thermal treatment and 39% is recovered or undergoes biological treatment (*source: Eurostat 2014 data*); the Group believes the recycling portion will grow in the future.

In April 2018, the French Ministry for Ecological and Inclusive Transition published a "Circular Economy" roadmap, in order to firmly establish the circular economy within the real economy. In practice and through 50 actions, this initiative seeks to promote the development of the circular economy in the construction and demolition, bio-waste collection and recycling sectors, and to develop "next generation" sorting centers. The objectives of this initiative are:

1. reduce the consumption of resources: reduce by 30% the GDP portion related to resources consumption by 2030 compared to 2010;
2. reduce by 50% the quantity of non-hazardous waste landfilled by 2025 compared to 2010;
3. target 100% of plastics to be recycled by 2025;
4. reduce greenhouse gas emissions: save up to 8 million metric tons of additional CO_2 emissions through plastic recycling;
5. create up to 300,000 additional jobs including those in newly created occupations.

In 2017, the Chinese "National Sword" program, which places significant restrictions on the export of waste including paper and plastics to China from January 1, 2018, was seen as a real opportunity to develop a plastic pellets processing sector in France, and in Europe as a whole.

The Group is prepared for the changes stemming from these new laws and expects to seize the opportunities for development they provide. As such, the increase in the portion of recovery and recycling, which has been at the core of the Group's strategy for several years, is being confirmed.

(1) Estimated total current national expenditure on waste management.

2) Description of R&R France's activities

R&R France is active throughout the entire waste cycle: collection, sorting, recovery and elimination (material recovery, biological recovery, energy recovery, landfilling), soil remediation, wastewater treatment and industrial maintenance.

SUEZ RV France has been active in France's waste sector since its incorporation in 1919. The Group has substantial treatment capacity, a diversified portfolio of contracts, special expertise in recovery and treatment (sorting, recycling, landfilling, incineration and methanization), solid geographic network coverage in France, and the ability to innovate by offering new treatment and recovery solutions. Today, R&R France, is active in innovative collection solutions, by offering alternative incentive-based local collection methods; in the management and recovery of household, industrial and commercial waste, in the recovery of ferrous and non-ferrous metals, cardboard, wood, plastic and compost from waste; and in the production of energy – heat and electricity – from waste. R&R France serves municipal customers, large companies and small and medium sized businesses.

In 2018, R&R France's contribution to the Group's consolidated revenue amounted to EUR 3.2 billion. At December 31, 2018, R&R France employed 15,836 people.

In 2018, R&R France provided waste collection services to nearly 10.6 million inhabitants and 72,577 industrial and commercial customers; the company treated over 17.3 million metric tons of waste. As of December 31, 2018, R&R France operated 65 composting platforms, 34 incineration sites (34 of which have energy recovery capacity), and 431 sorting and transfer stations.

In 2018, the Group treated 1,678,372 metric tons of ferrous and non-ferrous metals, and expanded its range of services to industrial customers in France and abroad.

► Optimizing waste collection

SUEZ and La Poste launched in 2017 their joint company "Recygo", specialized in the collection and recovery of office waste. Combining the local reach of La Poste and the recycling expertise of SUEZ, the company proposes a unique and innovative solution available to all customers, irrespective of their size and business sector.

In Toulouse, SUEZ is now operating the waste collection centers for 4 years, with an option for a 2-year renewal (starting in November 2018). In Meaux, SUEZ is also operating the waste collection centers, for 7 years (starting in May 2018).

► Urban cleaning

After Marseille in 2017, SUEZ has won two new urban cleaning contracts in 2018 for Bordeaux (September 2018) and Reims (starting in April 2019). SUEZ adopts a new approach to urban cleaning, based on both the perception of citizens and the implementation of innovative resources particularly through the use of digital technologies (example: QR code), to improve the image and the appeal of cities and to meet users' expectations on their urban environment.

In Reims, the Group will develop a green mobility (electric vehicles, bicycles, etc.) and will recover 100% of the bio-waste and cardboard boxes collected on food markets.

In Bordeaux, the Group operates for the city center the door-to-door collection of household waste, the collection from voluntary deposit containers, the collection of bulky waste and neighborhood cleaning services (waste bins, streets, urban furniture, weeding). A system of alerts reports any anomalies observed in the field,

► Energy recovery from waste

A 25-year contract was awarded to SUEZ for the operation and modernization of the Rambervillers waste-to-energy plant in the Vosges department and the powering of a new heat network.

The two waste treatment agencies in Ardèche, SIDOMSA and SICTOBA, awarded to SUEZ a 20-year public service concession for a new waste-to-energy and material recovery facility. This contract includes the design, construction and operation of the future recovery facility, that will come in service in the spring of 2020 to process and recover at 40% the waste produced by the 100,000 inhabitants of the district's 149 municipalities.

After the Saint-Maximin (Hauts-de-France) SUEZ landfill in 2017, the Gueltas (Bretagne) landfill now also produces biomethane thanks to an innovative new biogas and biomethane recovery solution. This innovation, which is based on the WagaBox process, improves the energy efficiency of landfills for non-hazardous waste and reduces greenhouse gas emissions. This biomethane is injected into the natural gas urban distribution network operated by GRDF.

► Materials recovery and recycling

SUEZ has inaugurated in May 2018 a new sorting center in Limeil-Brévannes (Val-de-Marne),which will process 60,000 metric tons of waste each year, through an innovative and highly automated facility, which enables a much better sorting.

► Other services to industrials

SUEZ manages the industrial and the bio-waste for the Rungis international market, under the term of two contracts signed in 2018.

The Group also manages the waste treatment of the Paris Hospitals (100,000 agents providing healthcare to 10 million inhabitants) under a 4-year contract.

► Digital

For the construction sector: in November 2018, SUEZ and Resolving announced the creation of a joint venture to accelerate the development of innovative digital solutions dedicated to renovation and selective deconstruction. SUEZ and Resolving had already launched in March 2018 "Batirim", a digital solution integrating circular economy on construction sites, by enabling construction companies to anticipate their selective deconstruction.

For bio-waste: "Organix", the bio-waste marketplace launched by SUEZ in 2017 went nationwide in March 2018, enabling waste producers to sell bio-waste to methanization facilities.

In the harbor of La Rochelle, SUEZ supplied "ecowood" containers equipped with smart sensors at the collection points for ships and companies operating in the port.

6.5.3.2 R&R UK and Scandinavia

The Group operates in the United Kingdom primarily through its SUEZ Recycling and Recovery UK subsidiary. The Group is also active in waste collection and treatment activities in Sweden. In November 2016, the Group had sold its stake in SUEZ Suomi Oy (Finland).

In 2018, R&R UK and Scandinavia's contribution to the Group's consolidated revenues totaled EUR 1.1 billion; the Business Unit employed 5,930 people as of December 31, 2018.

A) SPECIFIC FEATURES OF THE WASTE SECTOR IN THE UNITED KINGDOM AND SWEDEN

United Kingdom

In the United Kingdom, the household recycling rate is currently around 45% and varies depending on the source and methodology. The European Union has set a target of recycling at least 50% of household waste in the United Kingdom by 2020. In reality, the recycling rate in the United Kingdom has been stagnant for some time but the planned adoption of the recycling targets of the EU Circular Economy Package and the most recent launch of a new English resource and waste plan intends to deliver a move to 65% recycling by 2035 and 75% recycling rate for packaging by 2030. The UK wide introduction of separate food waste collections, of EPR with near by 100% full net cost recovery and more mandatory consistent collection of target materials will be used to move forward the current recycling rate.

The volume of biodegradable municipal waste (BMW) sent to landfill continued to decrease, reaching 7.7 million metric tons in 2016, or 22% of the volume recorded in 1995 (the European Union has set the objective of reducing the proportion of biodegradable municipal waste sent to landfill to 35% by 2020, compared to 1995). The UK predicts that volumes of municipal organic waste sent to landfills will be negligible by 2030, while Scotland will ban landfill altogether from the end of 2020.

The rate of recovery of non-hazardous waste from construction and demolition activities stood at 89.9% in 2014 in the United Kingdom (the European Union has set the UK an objective of recovering at least 70% of this type of waste by 2020).

The volume of commercial and industrial waste (C&I) currently stands at 113 million metric tons in 2016 compared with 102 million in 2014. In 2018 the UK regulator amended the method of calculation of commercial and industrial waste arising due to a joint project undertaken with industry and that increased the estimate of C&I waste.

In total, the United Kingdom generated 277 million metric tons of waste in 2016. More than half of this waste (59.4%) was generated by construction, demolition and excavation activities and 12% was generated by households. Of the 205 million metric tons of waste that entered the final treatment phase in the United Kingdom in 2014, 48.5% was used as backfill, 46.9% was recycled or recovered (recycling included) and 4.6% was used for energy recovery (*source: Defra – December 2018*).

Sweden

The Swedish waste sector represents around 141 million metric tons of waste. In this country of 10 million inhabitants, this figure may be explained by the significant percentage of waste from the mining industry, the paper and cardboard industry and treatment of sludge and dredging. In 2015, Sweden produced 4.7 million metric tons of household waste. This volume represented a 4% increase compared to 2014. Only 0.7% of household waste was landfilled, 35% was recycled, 16% was treated biologically and the remainder was incinerated, producing hot water for urban heating systems as well as electricity (48%). In 2015, each Swedish inhabitant produced 478 kg of municipal waste (+4% *versus* 2014). Furthermore, the government's will is to increase the recycling of organic waste from households. The number of biogas reactors increased to 282 with a production capacity of 1.9 TWh of biogas in 2015 (*source: Swedish Waste Management Report 2015, Biogasportalen.se*).

B) DESCRIPTION OF SUEZ R&R UK AND SCANDINAVIA'S BUSINESS ACTIVITIES

R&R UK

R&R UK employs more than 4,880 people. Since its creation in the United Kingdom in 1988, R&R UK has developed innovative and environmentally friendly solutions for household and industrial waste. In 2018, R&R UK managed over 5.2 million metric tons of waste and served 1.8 million inhabitants and around 26,000 industrial and commercial customers. Its various activities are guided by a single vision: creating a waste-free society. By recycling and attempting to extract value from waste, SUEZ aims to reduce its environmental impact. The goal is to help create a circular economy in which nearly all waste will have a second life and will be reused, recycled or recovered for its energy content. This approach gives SUEZ a major role to play in the debate on the challenges ahead for the waste management industry by seeking to anticipate future developments and attempting to influence domestic policies, for a Resource Revolution.

R&R UK is active across the entire waste cycle. The company is backed by SUEZ's experience, which allows it to participate in all tenders in this sector, and its extensive expertise in the provision of waste management services to local authorities through private finance initiatives (PFI) and public-private partnerships (PPP).

SUEZ Communities Trust has distributed over GBP 100 million since it began funding community projects and environmental initiatives in 1997. Funding is allocated by the government fund for community landfills to SUEZ Communities Trust through which a portion of the landfill tax collected by R&R UK can be redistributed to SUEZ Communities Trust to finance projects of public interest.

R&R UK has also demonstrated its capacity to renew its contracts and to further its development through complementary activities:

- Solid Recovered Fuel (SRF): R&R UK is now one of the leading producers of SRF, which is generated from the treatment of commercial waste;
- Refuse-Derived Fuel (RDF): data published by the Environment Agency in 2015 shows R&R UK to be one of the largest producers and exporters of RDF in the United Kingdom, with around 240,000 metric tons exported yearly. RDF is used as a raw material in continental European power plants, which are currently underutilized;

- wood chips: R&R UK is one of the largest wood recovery operators in the United Kingdom. A significant amount of wood that cannot be recycled is used as fuel (power and heat) at an energy recovery (biomass) plant operated by RWE in Scotland;
- Climafuel: R&R UK supplies Cemex UK, a leading English cement producer with Climafuel, an alternative fuel made from commercial and industrial waste. R&R UK currently supplies Cemex from one production plant located in Birmingham, and from a second production site opened in Rugby (Warwickshire) in 2015. The two sites enable to supply up to 250,000 metric tons of Climafuel to the Cemex works. The sites are authorized to use this fuel for 65% of their needs;
- in 2018 SUEZ completed the incorporation of Neales Waste management into the UK business and extended the Bracknell municipal contract;
- in 2018 SUEZ won a number of large commercial contracts including Sodexo (GBP 3 million) and a number of other smaller including contracts with Northumbria police and East Lancashire NHS.

The Group estimates that R&R UK is the fourth-largest private operator in the United Kingdom in terms of revenues (internal estimates).

R&R Sweden

SUEZ Recycling AB, a wholly owned subsidiary of the Group, is active across the entire waste cycle, including waste sorting at customers' premises, collection, pretreatment, recycling and treatment of all types of waste, excluding potentially radioactive residues from nuclear processes, incineration plants and the treatment of electrical and electronic waste.

In 2018, R&R Sweden served almost 1.8 million people and around 24,000 industrial and commercial customers through its waste collection activities. It processed over 1.5 million metric tons of waste. SUEZ's Swedish activities have grown organically to a certain extent in recent years by offering basic recycling solutions to industrial and business customers, as well as by offering more specific and customized solutions. It has also grown through strategic acquisitions. R&R Sweden has expanded its presence in the various regions of the country as well as in recycling and hazardous waste management, which are significant segments in Swedish industrial production.

Highlights of 2018:

- signing of several new commercial and industrial contracts with the major players in the manufacturing, steel, construction, retailing and paper industries;
- signing of new significant contracts with municipalities, such as Malmö, Växjö, Eslöv, Hörby, Hör and Värmdö for a total value of over EUR 90 million over the contracts duration;
- extension of numerous existing contracts with local, national and regional customers;
- continued expansion of the Group in the area of soil remediation, leading to an increase in tonnage of polluted soils with the signing of the first contracts for the area of Östergötland and with new extended permits at both R&R Sweden owned treatment site and at joint venture owned sites both in the Stockholm area;
- successful integration of Cadex activities in the north of Stockholm, acquired in January 2018, specializing in waste recycling at regional level;

Competition in the Swedish market should increase following the acquisition of RenoNorden by Urbaser in March 2018, AdInfinitum by Remondis in September 2017, IL Recycling by Stena Recycling in March 2017 and the acquisition of Hans Andersson Recycling by Veolia in August 2017. The private waste sector in Sweden is driven by a common interest and focus in recycling and material recovery (metals, plastics, wood and organic waste), as well as energy recovery, which should increase over the coming years with the circular economy project proposed by the European Union. Competition in the household waste collection segment is very real and is intense in some regions, primarily because of the high number of competitors (Urbaser, Nordisk Återvinning, Ragn Sells, Ohlssons i Landskrona, Allmiljö, etc.) and new market entrants (NorRen and NT Entreprenad).

6.5.3.3 R&R Germany and Benelux

The Group operates in Belgium, Germany, Luxembourg and the Netherlands through its subsidiaries SUEZ R&R Belgium, SUEZ Deutschland, Lamesch (Luxembourg) and SUEZ Recycling & Recovery Netherlands. Although they operate independently in their own markets, these various subsidiaries form a joint business unit, R&R Benelux and Germany. This gives them added value through various shared operations, particularly in terms of methodologies and standardization, primarily in waste treatment and energy management and consolidation of collected volumes. As a consequence, R&R Germany and Benelux can operate on more favorable terms on the secondary raw materials market. The organization can also provide centralized coordination and sharing of good practices in areas such as finance, Human Resources, Asset Management, purchasing, information and communication technologies (ICT), Health and Safety, communications and legal affairs.

In 2018, R&R Germany and Benelux's contribution to the Group's consolidated revenues totaled EUR 1.5 billion. The R&R Germany and Benelux business unit employed 6,297 people as of December 31, 2018.

A) SPECIFIC FEATURES OF THE WASTE SECTOR IN BENELUX AND GERMANY

Germany, the Netherlands, Luxembourg and Belgium are European leaders in waste management and recycling, and their regulatory frameworks are far ahead of the European average. In this region, less than 1% of total municipal solid waste is sent to landfill. Most municipal solid waste is recycled (on average 60%) or put through an energy recovery process (on average 40%).

With a very high population density and situated in a delta, the Netherlands had to deal with environmental problems very early on. Today, over 80% of waste in the Netherlands is recycled, and 16% is put through an energy recovery process (the remainder is sent to landfill). The government recently announced the target of achieving a "100% circular" economy by 2050. For 2030, the goal is to reduce the use of raw materials such as minerals, fossil fuels and metals by 50%. The volume of residual municipal waste should be reduced to 100 kg per person by 2020, which means that 75% of municipal waste should be collected, sorted and treated separately.

The Dutch government is promoting circular economy and tries to find a workable balance between the recycling of materials and product legislation, such as REACH, to make it possible to recycle as much materials as possible. The significance of waste as a secondary resource becomes clear when looking at the increasing global dependence on raw materials. The German government has formed a Raw Materials Agency due to resource scarcity in its economy. The Dutch government intends to make its industries more competitive by focusing on savings and sustainability. It is exploring solutions to make the country a hub of secondary resources. It is also promoting Dutch expertise in waste management and recycling technologies in the US. On December 28, 2017, the new national waste management plan (LAP3) entered into force in the Netherlands. The LAP defines the policy framework for waste management, with objectives, and the minimum standards for waste processing. The government has to check compliance of the permits to the LAP within 1 year. Some of our permits have been changed, with limited impact. The first, limited change of LAP3 is foreseen for 2019.

In Belgium, new sorting legislation entered into effect in all of the country's regions. This new law has led to diminished residual household waste volumes amounting to 146 kg per year per person. It stipulates that industries, businesses and SMEs must now sort waste into 18 different streams in Flanders and 14 in Wallonia. One underlying trend in Belgium is the success of the social/circular economy of secondhand stores, repair cafés and lending or sharing platforms like Peerby, Wejdelen, etc.

In such an environment, the trend is for more sorting at source and recycling, with producers assuming more responsibility, as well as partnerships between waste management players and industry to work together in a closed loop. It also becomes a real innovation challenge, requiring greater transparency in supporting sustainable development claims, and will demand more awareness on the part of citizens regarding their consumption and attitudes toward waste. It is not improbable that the trends observed in SUEZ R&R's markets in Benelux and Germany are but a glimpse of what lies in store for the rest of Europe. Recently, several initiatives on the circular economy have emerged. Their goal is to promote awareness of resource scarcity and create strong examples of closed-loop recycling.

Germany

The incineration market in Germany was reasonably balanced on account of a favorable economic environment in the country and imports from the United Kingdom. Incineration facilities have reached their maximum processing capacity due to changes in the business. This situation will probably continue in upcoming years. With the recent legislation passed in Germany, including on packaging and commercial waste, the government is clearly encouraging the development of recycling activities.

Benelux

Of a total of 141 million metric tons of waste generated in the Netherlands, 70% is from building and demolition activities, 20% from commercial and industrial activities, 6% from municipalities and households and 4% from agriculture. Of this total, 4% is hazardous waste (*Eurostat 2018 - 2016 data*). Regarding household waste, 48% is incinerated, 51% recovered and the remainder landfilled (*source: Eurostat 2017 - 2014 data*). Discussions concerning deposits on plastic bottles resulted in a decision to maintain the current system that targets bottles containing more than one liter of liquid. In addition, deposits on bottles are currently being discussed for small plastic bottles and cans.

In Belgium, discussions concerning the imposition of a deposit did not lead to the proposed scheme being adopted by any of the country's regions.

Of a total of 63 million metric tons of waste generated in Belgium, 31% is generated by building and demolition activities, 61% by commercial and industrial activities 8% by municipalities and households and 0.4% from agriculture (*Eurostat 2018 - 2016 data*). Of this total, 6% is hazardous waste (*Eurostat 2018 - 2015 data*). Regarding household waste, 1% is landfilled, 44% is incinerated and 55% is recycled or recovered (*source: Eurostat 2016 - 2014 data*).

B) DESCRIPTION OF R&R GERMANY & BENELUX'S ACTIVITIES

Germany

SUEZ Deutschland provided waste collection services to some 5.1 million people and nearly 22,400 industrial and commercial customers in 2018, and treated almost 900,000 million metric tons of waste. The Group believes that it is the fourth-largest private operator in Germany for Recycling and Recovery activities.

The Group's presence is concentrated in western and southern Germany, particularly in commercial and industrial waste collection and selective collection. It also has a solid position in the incineration segment through its Zorbau site in the Leipzig region as well as in the sorting of household packaging through its site in Ochtenburg, and a new sorting plant in Oelbronn which is going to start production in April 2019.

The wide range of services offered such as SUEZ.scope®, SUEZ.drive®, SUEZ.circpack, su.re and the e-commerce sector (B2C Shop, B2B Portal) contributed to the Group's success in 2018:

- SUEZ.scope® supports customers in streamlining their waste management processes. Analyses provided include internal management of waste and consequently all cost factors in the value chain. Solutions coming out of these analyses range from simple changes in the structure of internal collection processes to innovative recovery technologies. SUEZ.scope® has brought in a significant number of key commercial and industrial customers representing potential total sales of several million euros;
- SUEZ.drive® includes different resources for managing installations, such as managing waste collection points, managing calls for tenders, accounts management, etc. The range of services had gradually been extended and certain major commercial agreements had been signed, like the extension of the contract with BP and the signing of a new contract with Daimler.

In 2018, SUEZ Deutschland's contribution to the Group's consolidated revenues totaled EUR 496 million. SUEZ Deutschland has 1,726 full-time equivalent (FTE) employees and covers approximately 18% of Germany through its waste activities. Through SUEZ.connect, SUEZ Deutschland has access to a domestic network of recycling and waste management networks that cover all of Germany. SUEZ.connect centrally manages over 450 partners and subcontractors serving domestic customers.

The Netherlands

SUEZ Recycling and Recovery Netherlands is committed to the Resource Revolution: recycling waste as much as possible into new materials in order to preserve and conserve valuable raw materials for the earth. By helping organizations with the smart and sustainable management of their waste, SUEZ creates value from waste and uses raw materials again and again in new products and materials. As part of a joint creation with various partners, SUEZ makes park benches from ketchup bottles, toilet paper from milk cartons and watering cans from detergent bottles.

As the second-largest private operator in terms of revenues in the Netherlands (according to in-house estimates), SUEZ Recycling & Recovery Netherlands operates across the full waste cycle. In 2018, SUEZ Recycling & Recovery Netherlands served around 1.1 million people through its collection activities, and 72,100 commercial and industrial customers, processing over 635,000 metric tons of waste.

Highlights of 2018:

- signing of new contracts with major companies, such as Tata Steel, Tesla, Sanquin and Apollo Vredestein;
- signing of a new contract with the municipalities around Utrecht for the collection and recycling of domestic waste;
- extension of numerous existing contracts with local, national and regional customers;
- introduction of several innovative collaborations:
  - recycling the blades of wind turbines into tiles (Extreme Eco Solutions)
  - recycling bottom ashes into a drainage layer for sport grounds (DrainMix)
  - launch of SK Polymers, a joint venture between SUEZ and Kempenaars for recycling hard plastic
  - collaboration with HVC and Midwaste in order to recycle household packaging waste

SUEZ Recycling and Recovery Netherlands also provides the means to its customers to better manage the overall cost of waste and actively supports them in creating resources over the entire value chain.

Belgium

The Group estimates that R&R Belgium is one of the leading operator in the Belgian waste sector due to its very solid position in collection and treatment operations, primarily for industrial and commercial waste activities. Changing the company's name to SUEZ has been an important step in bringing specific solutions to customers to address the new issues facing resource management through the circular economy model. In 2018, SUEZ R&R Belgium served some 3 million inhabitants and 49,000 industrial and commercial customers.

With growing numbers of sales channels, interactions with customers are progressively more frequent, especially through blogs, surveys, Group discussions, etc. In 2018 SUEZ R&R Belgium focussed on client interactions *via* Easy Waste, an application developed for clients to manage their service agreement with SUEZ.

The Belgian market is influenced by several changes: large industrial companies are shifting focus back to economic growth, trading companies are seeking solutions to comply with stricter new regulations on sorting waste, and the public sector is outsourcing waste management services less and less. As in previous years, the influence of the broader responsibility of producers is also growing steadily.

The Belgian market has had to face some challenges *i.e.* shortage of outlet possibilities and excessive amounts of various waste streams, the China ban for paper, cardboard and plastic streams and the difficulty to find other outlets in Europe or intercontinentally, transport fees that have been under pressure and the continuous increase of fuel prices. The legislation (VLAREMA, in the Flemish part of the country) imposes strict rules and regulations as to sorting waste streams at the source.

To reinforce its position within the industry, it is important to propose many hazardous waste solutions (waste water treatment, organic waste treatment and blending of solvents). SUEZ took the decision to sell some non-core businesses (demolition activities in Tienen).

Online development of SUEZ Recycling and Recovery in Benelux & Germany

All SUEZ Recycling and Recovery activities in the Netherlands and Belgium have integrated SAP as their ERP system since 2015. In addition, the use of e-business tools will develop further in upcoming years. Local online stores have varying degrees of maturity, but all are developing rapidly and are systematically bolstered by other online activities such as blogs, etc.

- www.SUEZ-containerdienst.de: offer of waste management services for residential customers; service launched in 2012. Performance in 2018: 101,751 visitors/1,998 orders compared with 90,400 visitors/1,650 orders in 2017. Customers are satisfied with this service, awarding the site a rating of 4.78/5. Efforts have been made to increase the conversion rate through further improvements (payment available *via* PayPal and credit card);
- www.SUEZ.recircle.de: a B2B portal launched in November 2015 with the objective of reaching professional customers through the publication of content focused on recycling and recovery. The target for 2018 is to revamp the current B2B portal in order to attract more potential customers to the site through quality content and to generate sales contacts;
- SUEZ.nl Webshop, www.bouwbakkie.nl and rolbakkie.nl, belonging to SUEZ R&R Netherlands, increased revenues by 24% in 2018. Industrial customers in Belgium can now access their customer portal online.

Within the framework of the "Easy Rider" project, SUEZ Deutschland has developed three new features for embedded computer systems, namely the camera function, the tracking of containers *via* QR codes and the on-board weighing system, leading to an even more digitized operating process.

SUEZ Deutschland is currently studying Rubicon's solutions for municipal vehicle tracking.

In Germany, Belgium and the Netherlands, an online portal for B2B customers is currently under development. Customers will be able to manage their accounts online at any time and on any device. This portal is intended to improve the customer experience, strengthen the position of the SUEZ brand on the market and provide a basis for future digital innovation as well as an online sales capacity.

In Belgium, the focus in 2018 was the development of a customer portal intended for all customer segments. The so-called Easy Waste application allows each customer to encode his orders regardless of the type of flow or packaging, modify his collection schedule, consult all his documents (bills, certificates, attestations, etc.) but also to contact SUEZ (for complaint, request for additional products, etc.). This portal is intended to improve the customer experience and strengthen the position of the SUEZ brand on the market. It is now fully operational and some 10,000 customers already wish to access it. The decision has been taken to change the webshop in order to offer by simplifying the approach with the closure of the online store for residential customers (Container4home) in favor of a single webshop (SUEZ webshop) for all customers.

The standardization process initiated in 2017 was also at the heart of the priorities. The goal is both to standardize (simplify) the product offering and the administration of the contracts. This approach will be pursued in 2019 with the aim of further developing the bid and contract generator tool (SEA) and developing an interface facilitating the management of contracts.

6.5.3.4 IWS

The Group is active in the hazardous waste market through its various sites throughout Europe. All of SUEZ's hazardous waste treatment assets in Europe (Netherlands, Belgium, Germany, France, Italy, Spain) and the management of hazardous waste streams have been grouped together in a single business unit, Industrial Waste Specialties (IWS), within the Recycling & Recovery Europe division since 2016. IWS consolidates all activities related to hazardous waste for the Group in Europe. The dedicated sales team at IWS is continuously developing its expertise so that the economic and environmental demands of key industrial customers can be met. From general services to specialized services in the area of waste recovery, SUEZ meets the European integration and traceability requirements typically requested by the major operators in the different European industrial sectors.

IWS was created as a response to various objectives of the SUEZ Group. Firstly, IWS makes it possible to better serve industrial customers, primarily those operating at European level, and to construct an ambitious and global development strategy in this segment. This focus on the hazardous waste industry also enables greater synergies at the Group's treatment sites throughout Europe and contributes to the creation of value by optimal use of available capacity on a European scale, with waste able to cross borders for the purposes of its recovery.

Industrial production in Europe is currently in a recovery phase and, as such, IWS will play a major role in SUEZ's strong ambitions for the industrial segment. In 2018, SUEZ IWS's contribution to the Group's consolidated revenues totaled EUR 450 million. IWS employed 1,505 people as of December 31, 2018.

A) SPECIFIC FEATURES OF THE HAZARDOUS WASTE SECTOR IN EUROPE

The global hazardous waste market represents around 50 million metric tons (excluding mining waste) and EUR 2.6 billion of revenues in a variety of customer segments (chemicals, mining, pharmaceuticals, energy, construction, petrochemicals, metallurgy, etc.). The market in general is in a situation of under capacity leading to an increase in treatment prices. This situation is expected to continue in the future due to the lack of new incineration capacities and/or storage capacities, the trend toward closing internal units in certain companies and the absence of major developments anticipated for alternative treatment methods (co-incineration, etc.). The market has been broadly stable in terms of volumes for the past 5 years.

The hazardous waste market is based on international regulations that apply strict rules and substantially limit exports of hazardous waste outside of Europe (Basel Convention, etc.). The European area is therefore the relevant area of operation, as waste may travel within this area, namely for the purposes of its recovery (Waste Framework Directive, etc.). National regulations also affect activities related to hazardous waste. Overall, legislation is moving toward a tightening of controls and restrictions. Regulations are also increasingly geared towards increasing waste recovery to develop the circular economy.

With the proliferation of urban sites (reclamation of derelict industrial and urban land, major transport infrastructure, etc.), volumes of excavated soil are increasing significantly (+10 million metric tons of soil from boring machines in the Greater Paris area). At the same time, the regulations in France require the future recovery of 70% of these volumes. This requires in-depth soil expertise and a variety of local treatment and recovery equipment.

Germany

An open and relatively stable market in the industrial sector with a network of treatment facilities in a situation of under-capacity. Major German operators, including those with in-house systems, industrial operators on industrial parks and public operators. It is in this context that SUEZ has identified establishing hazardous waste treatment facilities in Germany as a priority.

Denmark/Scandinavia

A generally closed market, dominated by a single operator.

Belgium & the Netherlands

Markets that place importance on treating waste locally, without being completely closed to export. They are open to import and competition is solid.

United Kingdom and Ireland

An under-capacity market in terms of waste treatment and one that remains in transition, dominated by the uncertainties surrounding Brexit.

Italy

The third-largest hazardous waste market in Europe is dominated by the north of the country (Lombardy, in particular) and Sicily. Italy is geared toward export (approximately 15%) due to a poor energy recovery capacity linked to unfavorable legislation and major regional political/public bottlenecks (NIMBY phenomenon).

Spain

Renewed economic momentum in Spain is conducive to market growth. Regulations have evolved with increasing recovery (influence of the Circular Economy) and the ongoing consolidation of a fragmented market.

France

The second-largest European market, structured around three well-established major players whose economic fundamentals remain healthy. As a result, this market has not experienced significant consolidation. It has relative overcapacity in terms of treatment due to the decline of the industrial base, which has favored imports of hazardous waste from neighboring countries or further afield.

B) DESCRIPTION OF RECYCLING AND RECOVERY ACTIVITIES WITHIN INDUSTRIAL WASTE SPECIALTIES (IWS)

40% of the hazardous waste treated outside production sites is managed by 6 major operators. IWS is the third-largest operator in the hazardous waste sector in Europe but one of the few to have such an industrial and commercial scope at European level.

The market increasingly represents a collection of disparate segments due to the diversity of waste-producing sectors and, consequently, the waste produced. IWS meets this challenge by having a wide range of treatment facilities. IWS has more than 60 different tools that it uses to collect, sort, group, transfer, prepare, recycle, recover or store all types of hazardous waste (with the exception of radioactive waste). A distinctive feature of the activities of IWS is fuel preparation for cement manufacturers. In Europe, its recovery and elimination capacity for all hazardous industrial waste combined is almost 3 million metric tons per year. IWS also operates outside the European Union through remediation activities for polluted soil and sites and the importing of specific types of waste for treatment in Europe.

This diversity also allows it to respond to increasing customer demands for waste recovery. In this way, with regard to soil excavation, as a result of the remediation expertise gained over the years throughout Europe, the development of tools such as Neoter adapted to new land market conditions and waste flow expertise for alternatives, IWS enables the Group to expand in this high-growth sector (Qatar, Amsterdam…).

2018 highlights:

- **Sustaining and securing the capacity of its strategic hazardous waste landfill infrastructures (*Installations de Stockages de Déchets Dangereux* – ISDD) in France thanks to permit extensions**

  IWS has extended the permits of key infrastructures for the final and safe disposal of hazardous waste in France. Its hazardous waste landfills (*Installations de Stockage de Déchets Dangereux*) in Jeandelaincourt and Drambon saw their permits extended by a minimum of 20 years with additional capacities. The new permit for Drambon for example ensures 24 additional years of operation with an increased storage capacity of 2.4 million cubic meters. Thanks to these extensions, SUEZ will continue to treat non-recoverable hazardous waste in a sound manner in terms of environmental protection and health regulations.

  The Drambon site was also delivered a new permit for the treatment and recovery of contaminated soils for 90,000 metric tons per year on its site. This new infrastructure extends the trademark SUEZ NEOTER platform network that is growing across France and is being developed and managed by IWS. SUEZ also opened a new platform in Belgium, in Huys, further extending its European footprint of pre-existing identical infrastructures. The 150,000-metric ton annual capacity asset will increase the recovery of cleaned soil with its reuse in landscaping or civil works projects. Recovery, including of soil, is a key market in view of changing legislation and numerous important civil works projects across Europe.

- **Developing strong partnerships in the Italian industrial network through multiple contracts with ENI**

  SUEZ develops closer ties with ENI in Italy. Initial cooperation and an initial contract allowed the development of closer ties with this key customer in Italy. IWS notably won a EUR 4.5 million contract to treat cutting sludge waste as well as Acrylonitrile with Toluene regeneration for EUR 3 million. Acrylonitrile is in fact sent to the SUEZ IWS Schkopau site near Leipzig in Germany, which was purchased by SUEZ from DOW Chemicals last year.

- **Sobegy (Total) recognized the added-value of the integrated SUEZ offer thanks to synergies between SUEZ IWS and SUEZ WTS with a 5-year contract**

  The Lacq and Mourenx industrial platforms (in the Pyrénées-Atlantiques department in France), owned and operated by Sobegi (Total), have entrusted SUEZ with operating the Waste Water Treatment Plant (WWTP) and all the industrial waste produced by the industrial actors on the platforms for the next 5 years. SUEZ will also conduct industrial cleaning operations. The contract has a total worth of approximately EUR 13 million.

  Synergies between IWS and WTS have made it possible to put forward an integrated and ultimately successful bid. Thanks to the expertise of SUEZ, the WWTP and waste transfer and regrouping platforms will be open to external actors to generate extra value for our industrial partner Sobegi. Recovery of the waste generated will be a priority.

  In the same region, IWS continued its development in the field of soil remediation with a EUR 8.1 million contract for Retia (Total).

- **Key commercial successes**

  - **Merck** (France) – global waste management – Meyzieu – 3 years contract – EUR 1.05 million/year
  - **ADEME Prolifer** (France) – cooperation with R&R – EUR 2.1 million
  - **Merck** (Germany) – Lindane treatment in Schkopau – EUR 1.1 million
  - **ENI Syndial** (Italy) – Disposal of cutting sludges – EUR 4.5 million
  - **Chevron** (Belgium) – new flows contracted for 3 years to be treated in Schkopau and Roussillon – EUR 2.3 million
  - **Chemelot** (Netherlands) – polluted waters to be treated in Roussillon – 1 year contract – EUR 1.2 million
  - **Rotterdam RWS** (Netherlands) – 23.4 cubic kilometers acid tars to be remediated – EUR 11.6 million
  - **Total Retia** (France) – A new remediation project in Lacq – EUR 8.1 million
  - **ENGIE Storengy** (France) – TWM 70% of French sites – cooperation with WTS & R&R France – EUR 2 million/year
  - **TOTAL Retia** (France) – remediation Lacq and surroundings – EUR 10 million
  - **OTA Amsterdam** (Netherlands) – EUR 2.8 million

- **ACR – ENI Casagrande** (Italy) – EUR 1.8 million
- **Udden Hovmantorp** (Sweden) – contaminated soils remediation – EUR 1.5 million
- **ENI (Syndial)** (Italy) – Acrylonitrile for Schkopau/Toluene regeneration – EUR 3 million
- **Total Sobegi** (France) – Global call for tender – cooperation with WTS – EUR 1.2 million/year over 5 years
- **Eiffage Aulnay** (France) – contaminated soils with asbestos – EUR 1.5 million

6.5.4 Presentation of the Group's international activities

In addition to Europe, the Group operates in the water and waste sectors in more than 15 countries. As a result of selective growth abroad, this position is based primarily on a strong presence in five regions:

- North America;
- Asia-Pacific;
- Africa, Middle East and India;
- Australia;
- Italy, Central and Eastern Europe.

A joint organizational structure in water and waste activities has generated synergies in operating expenses and combined product offers. In addition, depending on the country, the Group has been able to rely on its commercial growth already achieved by each of the businesses as a basis for further development, as in China and Australia, for example.

As of January 1, 2015, SUEZ reorganized its International division to boost commercial momentum and accelerate its continued international expansion across all Group businesses.

The International division is now organized around five geographical Business Units: North America, Asia, AMEI (Africa, Middle East, India), Australia, and ICEE (Italy, Central and Eastern Europe) to enhance trade efficiency and proximity with local customers. It also includes four businesses: Water Services, Waste Services, DBO (design, build, operate: the design, construction and operation of water treatment plants), and Industrial Solutions to capitalize on all of the Group's expertise. Each business unit and its multidisciplinary teams are responsible for managing and developing all the Group's business activities for municipal and industrial customers in their assigned area.

This new organization aims to create and develop dynamic growth and achieve the Group's strategic priorities internationally by reinforcing activities in the countries where the Group is present, establishing a presence in new areas with high potential, and operating our businesses closer to our customers.

Since January 1, 2017, the Group's business activities in Latin America were combined under a single business unit reporting to Water Europe.

6.5.4.1 The Group's activities in North America

A) UNITED STATES (WATER)

The Group is active in the management of water and wastewater services in the United States through SUEZ North America and its subsidiaries, SUEZ Water Inc. and SUEZ Water Advanced Solutions (formerly USG).

SUEZ Water Inc. (formerly United Water) is present in 17 states, mainly in the Midwest and Northeast of the country, and is active in two types of business activity:

- "regulated activities" (primarily in the field of drinking water services): the water production/treatment assets are operator-owned; this sector is characterized by its high capital intensity and lower financial risk, since rates are fixed by the regulators (Public Utility Commissions) of the 50 states, partly based on the investment required;
- service contracts (primarily in the field of water and wastewater treatment and network management services): operators enter into Operations and Maintenance contracts with municipalities relating to processing sites or other assets that continue to be city property; this sector is characterized among other things by low capital intensity and lower margins. These contracts are generally for between 3 and 20 years, although contracts have also been signed for a longer term. SUEZ Water Inc recently participated in the conclusion of 40-50-year concession contracts (Bayonne, New Jersey and Middletown, Pennsylvania), for which it signed a partnership agreement with financial Group Kohlberg Kravis Roberts & Co (KKR) and took a 10% share in the concession. SUEZ Water Inc. became the concession's operator, managing and setting up the long-term improvement investments financed by KKR. In 2017, KKR sold its shares to Argo Infrastructure and SUEZ Water Inc. also sold the majority of its shares; it now holds a 1% stake in the concession. This business model is generating a growing interest among municipalities.

In 2018, an agreement was signed with PGGM, a leading Dutch pension fund manager, for the sale of 20% of the capital of SUEZ Water Resources Inc., the parent company for all regulated water activities in the U.S, for a cash consideration of USD 601 million. In this new long-term partnership, the Group and PGGM agree on an ambitious asset base growth plan. This transaction was completed on March 1, 2019.

In 2018, these activities contributed EUR 917 million to the Group's consolidated revenues, with 52% from regulated activities, 25% from service contracts, 13% from Advanced Solutions and 10% from water treatment solutions. These activities employed approximately 2,791 people as of December 31, 2018. This business unit has developed a balanced portfolio between these two key activities which are considered complementary by the Group.

SUEZ North America continues to hold an 8% market share of the private sector involved in producing and distributing drinking water and providing wastewater treatment services in the United States (in terms of revenues). In 2018, SUEZ Water Inc. had a portfolio of 15 "regulated" activities in six different states. Non-regulated activities concerned 69 service contracts extending up to 20 years of operations.

The Group estimates that it is the second-largest private operator[1] in the water sector in the United States in terms of total revenues in the two primary fields of activity ("regulated activities" and service contracts). The Group believes that private operators represent about 8% of the operating activities sector. This sector is characterized by long-term stability and increasingly high quality and service expectations. It is a very fragmented market (with some 52,000 water supply systems and approximately 17,000 wastewater treatment systems), but one that offers major opportunities for consolidation.

B) CANADA (WASTE)

In 2014, the Group acquired the remaining 40% interest in Aecom Technology, after holding a 60% interest since 2008. This company has significant management contracts in Alberta, operating the compost site in Edmonton and the toxic waste incinerator in Swan Hill. The Edmonton contract was renewed for another five-year term and a new contract was awarded by the city in early 2014 to operate its materials recovery site. In the last few years, SUEZ North America participated in calls for tenders for new integrated services projects in Canada, including DBO projects for new source-separated organic waste treatment plants, with partners specializing in engineering, construction and technology. SUEZ is still actively working with its partners to win these projects.

6.5.4.2 The Group's activities in Asia

In 2018, the contribution of the Asia business unit to the Group's consolidated revenues totaled EUR 461 million. As of December 31, 2018, the Group employed 2,980 people in this region.

Water

The Group has a presence in China through its water management concession in Macau and its 36 subsidiaries established through partnerships with local authorities for drinking water production and distribution, wastewater and sludge treatment. It operates under several types of contracts, such as BOT contracts for building and renovating water treatment plants, Operations and Maintenance (O&M) and concession contracts.

The Group has one concession contract awarded by the Government of the Macau Special Administrative Region to provide water services. This contract started in 1985 for a period of 25 years and was renewed in November 2009 for a further 20 years.

The Group is active in the Chinese water sector primarily through jointly-owned Sino French Holdings, which was incorporated in 1985 and has been owned since 1998 by SUEZ and Lyonnaise Asia Water Limited and by Beauty Ocean Limited, whose obligations are guaranteed by New World Infrastructure Limited. This structure was modified in early 2017 as described in section 6.3.2.2 (B). Following the creation of SUEZ NWS in January 2017, Sino French Holdings and all the other operating entities were incorporated into the new organization, with SUEZ as the majority shareholder owning 58%.

The Group is continuing to strengthen its presence in China through a policy of entering into partnerships and by securing major contracts with municipal and industrial customers:

- the Group commissioned an industrial water production plant, a wastewater treatment plant, and an incinerator for hazardous waste in the Shanghai Chemical Industry Park (SCIP), the largest petrochemical industrial site in Asia. In 2006, it also witnessed the inauguration of the first Research and Development Center dedicated to industrial wastewater and hazardous waste by the Shanghai city authorities. These events demonstrate the determination to explore new paths for industrial cooperation and improved quality of service;
- in 2008, the Group and its partner New World strengthened their relationship with their local partner in Chongqing through the acquisition of a 15% interest in Chongqing Water Group. This equity interest decreased to 13.4% after Chongqing Water Group was listed on the Shanghai stock exchange in 2010. In December 2015, the stake in Chongqing Water Group was transferred to Derun Environment, which now owns 50.1% of the capital of Chongqing Water Group and 57.1% of the capital of Chongqing Sanfeng. SUEZ and NWS own 25.1% of Derun Environment *via* Suyu. The collaboration with Chongqing Water Group was expanded in 2010 and 2011 through (i) an extension of the joint venture for water distribution, construction and commissioning of the new Yuelai treatment plant (400,000 cubic meters/day in the first and second phases); (ii) the creation of a joint venture for the resumption and expansion of drinking water treatment and wastewater treatment services at the Changshou Chemical Industrial Park, a major industrial development in the municipality of Chongqing. In 2012, assets jointly held by Sino-French and Chongqing Water Group were restructured and regrouped within a single, jointly held (50/50) holding structure, called Chongqing Sino French Investment Vehicle.

Over recent years, Sino-French has maintained stable growth and has been awarded new contracts:

- in 2011, Sino-French had begun a new collaboration with the Wuhan Chemical Industrial Park, Degrémont and the Shanghai Chemical Industry Park for the development, construction and 30-year operation of the wastewater treatment plant to treat all industrial effluents from the park, with a capacity of 10,000 cubic meters/day and an ultimate capacity of 60,000 cubic meters/day.
- in 2012, Sino-French had acquired 65% of Dayi Shangliu, a private company with a portfolio of BOT and O&M contracts for wastewater treatment in Sichuan province, in the fast-growing region of Chengdu. This acquisition gave Sino-French an operating platform capable of supporting more developments in this dynamic region of western China through various business models including joint ventures and BOT and O&M contracts.
- in 2013, the joint venture was extended to include the purchase and operation of a new treatment site, Chongzhou, also in the city of Chengdu. In addition, SUEZ, Sino-French Water and Chongqing Water Group had created a new joint venture called "Chongqing Sino-French Environmental Excellence Research & Development Centre Company Limited", which provides applied research services, expertise and technical support to partners and third-party managers of water and environmental engineering in China.
- in October 2016, Sino-French set up a joint venture in Jiaxing, in Zhejiang province, to own and operate several wastewater treatment plants processing industrial effluents from a large number of textile factories in the Jiaxing region;
- furthermore, with regard to industrial parks, Sino-French finalized several agreements to supply demineralized water and treatment of effluents to several industrial facilities, including

(1) Estimate based on the information available when drafting this document.

BASF, Bayer, and Sinopec in the Shanghai Chemical Industry Park (SCIP). In 2017, its supply of demineralized water has increased by around 1 million cubic meters to meet the expansion demand;

- in 2017, SUEZ was awarded two new contracts in the industrial sector. The first contract was won in Xian through the creation of a joint venture with an industrial aviation park for the construction and management of a wastewater treatment plant over 30 years. The second contract is a joint venture with CNOOC (China National Offshore Oil Company), which will utilize the existing wastewater treatment plant for one of its refineries on the island of Hainan. This joint venture will aim to build and operate a new treatment plant that complies with the standard discharge levels required of industrial companies in China.
- in 2018 further contracts were added in Zhuhai, Guangdong where the construction and operation over 30 years of the industrial effluent treatment plant at Gaolan Industrial Park was started.

Also in 2018, the contract was won to rehabilitate the sewage treatment plant on the Macau peninsula. This will also include the management of the facility for 5 years after completion. The revenue derived will be EUR 30 million.

The Group also operates in China through its Treatment Infrastructures business line, especially in the industrial sector. At present, the Group has completed over 220 design-build contracts in China. In early 2016, Treatment Infrastructures took on the design, construction and extension of the San Wai wastewater treatment plant in Hong Kong, as well as operation of the facility for 10 years. When construction is complete at the end of 2020, the San Wai facility will have a treatment capacity of up to 500,000 cubic meters per day.

The Group feels that the water and wastewater treatment sector in China will grow significantly with the steady participation of private operators because of the combined impact of heavy urbanization, growing industrialization, an increase in the population's standard of living and increasing tensions surrounding the availability of water resources and an increase in regulations for protecting the environment and controlling pollution levels. China's 13th five-year plan drawn up by the Central Committee for National Economic and Social Development focuses specifically on infrastructures, primary public services, new urbanization, environmental governance and ecological protection. This ambitious plan promotes a type of development that is, more than ever, innovative, green and open to foreign investment. The Group believes that it is one of the most dynamic sectors in the world.

In all, the Group provides drinking water services to 20 million inhabitants in China. It is one of the five largest private operators in drinking water and wastewater treatment services in China.

Waste

The Group has been operating in Hong Kong since 1998 in the waste sector through Sita Waste Services, which is now part of SUEZ NWS. Sita Waste Services operates seven municipal waste transfer stations and two out of the three strategic landfills (with close to 4.8 million metric tons of waste landfilled per year in those two facilities). The Group collects nearly 644,000 metric tons of household, commercial, industrial, agricultural and hospital waste in Hong Kong and Macau every year.

In 2013, Sita Waste Services further expanded its activities with the award by Hong Kong's Department of Drainage Services of a contract to transfer sludge from the recently commissioned waste treatment plant to a transfer site located in the north of Lantau Island.

In 2014, SUEZ was awarded the operation of the first Hong Kong organic waste treatment plant, Siu Ho Wan in North Lantau, with a capacity of 200 metric tons/day. This site will process food waste separated at source from the industrial and commercial sectors and transform this waste into biogas and compost. The site officially became operational in July 2018. The biogas produced will generate an electricity surplus of 14 million kWh per year which can be injected into the grid.

In Macau, directly or through its subsidiary, SUEZ offers collection and cleaning services for the entire city, and operating services for the landfill specialized in residues from the purification of fly-ashes from household waste (RPIFHW) from the local incinerator.

The Group has also grown in mainland China through joint ventures with local partners. For instance, it designed, oversaw the building of, and now operates an incineration plant for hazardous industrial waste with an annual capacity of 60,000 metric tons at the Shanghai Chemical Industry Park (SCIP). With the completion of work on the extension of this facility in November 2016, the site's capacity has doubled to an annual volume of 120,000 metric tons. This unit is the largest of its kind in China.

China's waste sector is still young, and characterized by a gradual opening up to professional and international operators and by strong growth in volumes and urbanization. The Group therefore expects the volume of household waste to increase considerably. China's 13th five-year plan also calls for a significant increase in solid municipal waste treatment solutions, mainly by developing energy-from-waste plants. China also produces very large amounts of hazardous waste, which currently do not undergo any effective, professional treatment. All the conditions for growth in this sector now seem to be in place, particularly with the adoption of more rigorous environmental regulations and the establishment of regulatory bodies.

In 2013, in collaboration with the Shanghai Chemical Industry Park Development Company Limited and the Nantong Economic Technology and Development Area (NETDA), SUEZ created a new joint venture to build an integrated hazardous waste treatment plant in Nantong (capacity to incinerate 30,000 metric tons of hazardous waste and 3,300 metric tons of medical waste per year). This plant will be the only one in NETDA compliant with European standards of design and construction. Its advanced technologies are also in line with environmental and engineering requirements at both the local and national levels, with strict emissions controls. Site construction work started in July 2014 and the facility was brought into service in July 2016.

In 2013, SCIP Sita also signed a service agreement with the Spanish company Cepsa, which manufactures phenol, to treat the 8,000 to 10,000 metric tons per year of hazardous waste it generates, and to build storage reservoirs for waste prior to treatment. This project increases the incineration capacity of SCIP Sita.

In August 2014, the Group signed a cooperative LOI: "Cooperation Agreement for the management of hazardous waste landfills" with the solid and chemical waste management authority, which is an arm of the Ministry of Environmental Protection (MEP) to jointly develop a training center for the efficient and secure management of hazardous waste. In 2016, the Group expanded its activity in China with the construction of a hazardous waste treatment site with a 30,000-metric ton per year capacity in Changzhou, in the province of Jiangsu, and the signing of two joint ventures for the construction and operation of two hazardous waste treatment sites in Qidong and Taixing, also in the province of Jiangsu. Changzhou and Qidong entered into service in the first quarter of 2018 and Taixing will become operational in mid-2019.

In November 2016, SUEZ won the contract for the construction and operation of a waste incinerator in Chonburi, Thailand, with beginning of works mid-2017. This project is being undertaken with the ENGIE subsidiary Glow and a Thai industrial company, Hemaraj.

In 2017 and 2018 the Group has secured, constructed and started the operation of an additional 4 Hazardous Waste incineration facilities, namely:

1. Changzhou – a 30,000 tons per year project.
2. Qidong – a 30,000 tons per year project
3. Taiwan Dafa – a 65,000 tons per year facility.
4. Taixing – a 30,000 tons per year facility.

Finally, In Taiwan, the Group operates a non-hazardous waste incineration plant with energy recovery with a capacity of 450,000 metric tons of municipal and industrial waste per year. In recent years, the demand for industrial waste treatment has risen steadily. This stems from both the poor performance of some of the other incinerators in Taiwan and the influence of government control of industrial waste treatment.

6.5.4.3 The Group's activities in Africa, the Middle East and India

In 2018, companies in the Africa, Middle East and India region contributed EUR 1 billion to the Group's consolidated revenues. As of December 31, 2018, the Business Unit employed 7,547 people.

A) AFRICA

Water

In Morocco, the Group is active in the water sector through Lydec, in which it has a 51% stake, with the remaining 49% owned 34.75% by Fipar Holding and RMA Wataniya, and the remainder traded on the Casablanca stock exchange since 2005. Lydec is in charge of water distribution, wastewater treatment and the electricity supply for 4.2 million inhabitants in Greater Casablanca, on the basis of a 30-year contract signed in 1997. In 2018, Lydec contributed EUR 648 million to the Group's consolidated revenues, broken down into activities related to electricity (70%), and drinking water distribution and wastewater treatment (30%).

As of December 31, 2018, Lydec employed 3,351 people.

Lydec's main objectives for growth are the safety and quality of the drinking water supply and management of the distribution network, development of wastewater treatment infrastructures (particularly flood prevention) and, in terms of electricity, the development of infrastructures and improvements in the electricity distribution network.

In Algeria, the Group has been present since 2006, with a management contract to which it contributes its expertise and provides experts to the Société des Eaux et d'Assainissement d'Alger (SEAAL) in order to help improve drinking water distribution and wastewater services for the cities of Algiers and Tipasa. A dedicated program for professional and managerial knowledge transfer is being implemented by SUEZ. In addition, Agbar has been providing technical assistance services to SEOR (Société de l'Eau et de l'Assainissement d'Oran), a water and wastewater company, since April 2008.

Present in Egypt for several decades, SUEZ currently operates two water treatment plants, one in Alexandria and one in Cairo. In addition, SUEZ since November 2018 has started to build an extension to the current water treatment plant in Alexandria for which a financing agreement was signed in 2017 between the Egyptian government and the French Development Agency.

In sub-Saharan Africa, SUEZ remains very active through its drinking water production and wastewater treatment plant construction business activities, including in Burkina Faso, Mali, Kenya, Angola, Senegal, Uganda and Cameroon, in response to continued high demand due to population growth and increased urbanization in the region.

The Group is also present in many african towns and cities of all sizes through its UCD activities, setting up compact water treatment units that are specially adapted for urgent demand and specific local conditions in an extremely short time frame. In particular, UCD activity maintains its position in the Ivory Coast with three new contracts for the cities of Bouna, Khorogo and Abidjan (Saint Viateur). The Bonoua plant (80,000 cubic meters/day) for the city of Abidjan entered into service in 2017.

Waste

In Morocco, the Group is present in the waste sector through R&R Maroc, responsible for urban cleaning, household waste collection, transport to treatment facilities in major cities such as Tangier, Oujda and Tetouan, as well as industrial waste management for local and international customers.

Following the completion of the rehabilitation of the unauthorized dump site at Meknes in 2015, the Group began landfill and recovery operations. SUEZ set up a cooperative to integrate the rag and bone workers present on the site. Since 2009, R&R Maroc has been managing waste from the Renault factory in Casablanca, and the new plant in Tangier since 2012.

In 2016, SUEZ and the Renault Group strengthened their industrial partnership by renewing the overall waste management contract for waste emitted by the French manufacturer's two production facilities in Morocco for a three-year period.

SUEZ has also launched a contract with Danone to manage part of its waste within its factories. SUEZ launched a waste management contract with OCP in 2018.

B) MIDDLE EAST

Water

The Group has a historic presence in the Middle East. It built the first desalination site using the reverse osmosis technique in Saudi Arabia in 1975; entered into 20 design, build and operate (DBO) contracts in this country between 1975 and 1986; built the world's largest hybrid desalination site in the United Arab Emirates in 2003, in 2005 won the DBO contract for the largest wastewater purification plant in Qatar, intended for the reuse of treated water, and opened the largest purification station in the Middle East with the As Samra plant in Jordan in late 2014.

SUEZ was awarded the Mirfa project, which is comprised of a contract worth over EUR 100 million for the design and construction of a seawater desalination plant through reverse osmosis with a capacity of 140,000 cubic meters per day, which will be followed by a second operation and maintenance contract for the plant for seven years. Oman Power and Water Procurement (OPWP), the Oman water authority, selected the Barka Desalination Company, a consortium set up by SUEZ and its partners to finance, build and operate a new seawater desalination plant at Barka. This Build-Own-Operate (BOO) public-private partnership has built and since June 2018 has started to operate this unit with a capacity of 281,000 cubic meters per day, the largest reverse osmosis desalination plant in the Sultanate of Oman. SUEZ will manage operations of the facility for a period of 20 years. The construction phase represented a total investment of EUR 276 million. This is the second desalination plant built by SUEZ in the Sultanate of Oman after Barka II, producing 120,000 cubic meters of water per day.

SUEZ is supporting Qatar in the rehabilitation of the Al Karaana lagoons, where almost 4,000 cubic meters of untreated municipal and industrial wastewater from Doha's industrial zone was released into the lagoon every day since 2006. Between now and mid-2020, SUEZ will be responsible for the decontamination of the site with a "thermal desorption" unit enabling treatment of the most polluted sediment. The contract also includes the management of the site's municipal and industrial wastewater. State-of-the art technologies will control odors and process sewage sludge and sediment. The Group will also build new evaporation ponds that can be used by Ashghal, the Qatari public infrastructure authority, as an emergency industrial effluent disposal system. SUEZ will take control of the site's ecosystem to ensure sustainable land redevelopment: three 70-hectare lagoons will be created in order to contribute to the conservation and restoration of biodiversity.

Waste

The Group is present in the waste sector in the Middle East in:

- the United Arab Emirates through its subsidiary SUEZ Middle East Recycling (SMER, formerly Trashco UAE), mainly positioned in the collection of waste generated by industrial and commercial activities in the Emirates of Dubai, Abu Dhabi, Sharjah and Ajman;
- Oman, through SUEZ Al Basheer, 60% owned with Omani partners. Under this joint venture, the Group signed a contract in 2005 to operate a landfill in Muscat. In 2016, SUEZ Al Basheer completed the design and construction of the Al-Amerat landfill extension, which it operates. This project is part of the continuation of an initial landfill cell with an annual capacity of 250,000 metric tons of waste operated, since 2010, by SUEZ Al Basheer. It will increase the capacity of the landfill to 400,000 metric tons of waste per year. In 2018 Be'ah has awarded SUEZ a contract regarding the Operation & Maintenance of the industrial waste landfill in North Al-Batina, Oman. The contract will last for three-and-a-half years. SUEZ will be in charge of the reception, storage and landfilling of 42,000 tons of industrial hazardous waste annually.

The Group is also attentive to development opportunities, particularly in Turkey, Bahrain, Kuwait, Qatar and Saudi Arabia.

C) THE INDIAN SUB-CONTINENT (WATER)

Since 2009, SUEZ has actively followed developments in the Indian water sector, particularly the emergence, supported by plans and policies at the federal and national level, of projects in the form of public-private partnerships that are aimed at improving and expanding the water supply and the distribution infrastructure and services in Indian cities. Water is a fundamental concern of the central Indian government, which in 2015 launched a five-year plan entitled AMRUT to develop essential infrastructure including access to water and wastewater systems. With consumption of water in India expected to double between now and 2050, the country is expressing its determination to treat wastewater and to protect rivers and underground reservoirs, the primary source of drinking water for millions of inhabitants. SUEZ believes that in the water services sector, India is a promising market in which its know-how and expertise in the field of water management and improvement services can be deployed on a large scale through long-term contracts.

In order to accelerate its growth on the industrial wastewater treatment market, SUEZ acquired a majority stake in the Indian company Driplex, one of the leading players on the industrial market in India. Driplex was established in 1974 and specializes in the engineering, design, construction and commissioning of process water production and effluent treatment plants for industrial sectors such as energy, oil & gas (refineries), through which it has acquired a solid reputation both in India and abroad. This investment in Driplex is part of SUEZ's development strategy for growing its business activities with industrial operators and abroad, especially in booming markets like India, where the Group already provides water distribution services for the cities of Mumbai, New Delhi and Bangalore and has built over 200 water treatment plants throughout the country.

In 2017, the Bangalore Water Supply & Sewerage Board selected SUEZ to assist in the improvement of its wastewater treatment infrastructures for the 2 million inhabitants of the Vrishabhavathi Valley area. The Group will be responsible for the construction of a new treatment plant (150,000 cubic meters/day), the renovation of an existing plant (150,000 cubic meters/day) and the construction of a treatment and recovery plant for the sludge generated by these two plants. The construction contract will be followed by a 10-year operating period for total revenues of EUR 82 million.

In November 2017, the city of Coimbatore appointed SUEZ to manage and operate the drinking water distribution system for the whole of the city to ensure a constant 24/7 water supply to its 1.6 million inhabitants. The 26-year contract, signed in January 2018 worth EUR 400 million, is the largest drinking water services contract won by SUEZ in India.

In Davangere, in March 2018, SUEZ signed a contract for the rehabilitation and operation of the drinking water system of the city. The 12-year project will ensure a constant, 24/7 supply of drinking water to the city's 500,000 inhabitants. The works, which will last four years, cover an area of 75 km², including 92,000 buildings (80,000 residential and 12,000 commercial or industrial buildings) and a water distribution network of 1,200km in length. This works phase will be followed by an eight-year period of operation and maintenance of the water production plants and of the drinking water system to ensure constant access to drinking water for a population which is currently only supplied once every three to four days. The contract also sets objectives to improve the network's performance, water quality and customer service by setting up a call center and customer agencies to provide a personal service and efficient resolution of requests and complaints.

In Udupi and Puttur, SUEZ has won two contracts in water distribution and network management, in these towns in the South East Indian state of Karnataka, impacting a total of 0.2 million inhabitants. The aim of these projects is to design and build a network to ensure that the current constant, 24/7 supply becomes continuous and that customer service is improved.These projects will be undertaken with the joint venture partner, DRS Infratech.The total revenues of these contracts stands at EUR 36 million.

In Udupi, under this new project, several initiatives will be taken to improve the water supply, including rehabilitation of the old water treatment plant, building of a new plant of 34 million litres per day to meet the current needs, upgrading and rehabilitation of distribution lines and residential connections, as well as system management through SCADA etc. among many other activities. In the O&M phase, the company will ensure the customers get 24/7 water supply and better services. The duration of this project is 12 years including 8 years of O&M.

In Puttur, in order to improve water supply, SUEZ will support the local authorities for over a period of 12 years in two phases: an initial three-year period covering the design and construction (rehabilitation and construction of water treatment plant, pump station, clear water transmission main pipe, OHT and reservoirs, network, house service connections, SCADA, meters, valves, etc.). It will be followed by 8 years of Operation and Management (distribution system, non-revenue water, water quality, Customer Relation Management, etc.).

SUEZ also operates in Sri Lanka:

- the Sri Lankan national agency for water management, NWSDB, awarded SUEZ the design and construction of the Kelani Right Bank drinking water facility, near the capital city of Colombo. The entire contract represents a total amount of EUR 168 million;
- SUEZ's Consulting business was awarded two contracts for rehabilitation and improvement of the performance of the drinking water systems in Sri Lanka.

The Group is also attentive to opportunities in the waste segment.

6.5.4.4 The Group's activities in Oceania

In 2018, the contribution of the Australia business unit to the Group's consolidated revenues totaled EUR 1.2 billion. As of December 31, 2018, the Group employed 2,278 people in this region.

Water

The Group believes that the Australian water sector suffers from acute problems linked to water resources due to recurring, long-lasting droughts and from the impact of global warming. This sector offers significant growth opportunities due to the increased use of desalination and reuse of post-treatment wastewater.

In 2018, SUEZ Australia's activities contributed EUR 160.9 million to the Group's consolidated revenues. SUEZ is the largest private O&M contractor in the municipal sector, supplying drinking water to 7 million people and wastewater treatment services to 3.5 million people. SUEZ services to municipal and industrial customers include the treatment of drinking water, desalination, wastewater treatment, reuse of water and bio-solids management.

Resource recovery is progressing rapidly in the water sector, in particular nutrient and energy recovery from wastewater activities. In addition, the sector is currently moving towards adopting smart solutions to achieve reductions in cost and improvements in operational efficiency. In 2018, SUEZ won the contract for the upgrade to the South East Water Boneo Recycling Plant in Victoria, a joint venture with John Holland and Beca. This project will incorporate low-energy nutrient removal and energy recovery processes to help South East Water achieve its emissions reductions target of 45 per cent by 2025, with the potential for the plant to become carbon positive.

In 2018, SUEZ designed and constructed a new water treatment plant in the remote town of Borroloola in the Northern Territory, working jointly with Power and Water. The water treatment plant was delivered through an innovative container-based solution. It will secure Borroloola's water supply system for the next 30 years. SUEZ continues to work with Sydney Water to undertake the Prospect Water Reliability Upgrade project, whose the major works scheduled to start in 2019.

Waste

Australia's waste sector is worth an estimated AUD 13.5 billion (EUR 8.5 billion) in revenues in 2017-2018 (*source: IBISWorld*), with significant potential for further growth due to a population increasing at a rate of 1.7% per year. The generation of waste per capita has decreased since 2012, reflecting moderate economic growth and the demographic changes of an aging population. In recent years, most governments have set targets to reduce the amount of waste sent to landfills and increased landfill site duties (imposed and regulated by each state) intended to reduce the amount of waste generated and to promote recycling and recovery. In 2018, the Queensland Government announced the introduction of a waste disposal levy on landfill of waste per July 2019 to take account of the volume of waste sent from neighboring states such as New South Wales. In this context, the demand for waste recycling and recovery technologies involving sorting, composting and alternative fuel production continues to grow.

The Group is present in the waste sector in Australia through SUEZ Recycling & Recovery Pty Ltd, which contributed EUR 887 million to the Group's 2018 consolidated revenues. The Group is the second-largest operator in the solid waste and recycling segment in Australia (internal estimates). Through its collection services, SUEZ now serves more than 57,000 industrial and commercial customers and around 5.3 million inhabitants.

SUEZ continues to be Australia's market leader in recovery with services including the recycling of household, commercial and industrial waste; the treatment of organic waste through composting; the treatment and recycling of medical waste; Advanced Resource Recovery Technology (ARRT) facilities; secure product destruction, and latest-generation technology waste landfills (Smart cells®).

The government has announced a significant policy change to stop the disposal of land-based organic waste on agricultural land, and the suspension of its use in mine redevelopment in New South Wales. This measure has had a considerable impact on the treatment of municipal waste in the state. This decision and its immediate execution have impacted SUEZ's ability to meet a number of contractual obligations, in particular the reduction of volumes sent to landfill. SUEZ has communicated with its customers about this decision and the potential impact on providing services. At present, SUEZ NSW facilities continue to process mixed waste organic material and SUEZ is working with the relevant authorities as well as conducting its own independent reviews to understand and assess the impact of this government decision.

In the state of Victoria, SUEZ is working together with Australian Paper to develop an Energy from Waste facility in the Latrobe Valley. Significant progress was made in November 2018 with the receipt of EPA works approval. SUEZ and Australian Paper will draft a response to a call for tenders to secure the supply of the energy recovery plant (650,000 metric tons per year) thanks to municipal waste from Melbourne's municipalities. This project is accompanied by a long-term disposal solution to replace SUEZ's Hallam Road Landfill, which is due to reach capacity in 2024. A transfer station would be built to enable SUEZ to continue to receive waste and extend SUEZ's presence in the South East Melbourne region. Meanwhile SUEZ also won a tender with an industrial manufacturer in Sydney to develop a co-gen plant to process up to 250,000 metric tons per annum of alternative fuel for a period of up to 30 years. The feasibility stage of the project will conclude in 2019.

In 2018, SUEZ completed an Environmental Impact Assessment and undertook community engagement at Kemps Creek, New South Wales to support its project to expand the Elizabeth Drive landfill site. The height of the landfill would increase by up to 15 meters, with a capacity increase of approximately 5 million cubic meters to extend the life of the landfill by approximately 6 years. The site should then be able to meet the forecast increase in waste generation from Sydney's growing population and the construction and demolition waste from several large nearby infrastructure projects. The project is expected to receive approval in mid-2019.

In 2018, SUEZ opened the new SUEZ Ventia Soil Processing Facility at SUEZ's Taylors Road Landfill in Victoria. The soil processing facility using direct thermal desorption treatment and stabilization technologies to treat a range of contaminated soil to minimize its environmental impact and where possible, create the potential for re-use.

In 2018, SUEZ won contracts to provide comprehensive waste management services for major customers at a national level, specifically Westfield.SUEZ has focused on food and beverage and mining as key markets. The Group has identified five major tenders to target over the next three years. SUEZ currently has 45 National Key Accounts of which seven account for 50% of revenue, with an anticipated growth of 6% per annum to reach AUD 100 million revenues in 2020.

6.5.4.5 The Group's activities in Italy, Central and Eastern Europe (ICEE)

Through the ICEE business unit, the Group is present:

A) IN ITALY

Through its subsidiary SUEZ Italia based in Milan, the Group holds equity interests in five water and wastewater treatment companies in Tuscany (Arezzo, Florence, Pisa, Sienna and Montecatini Terme). SUEZ also owns an interest in Acea that rose from 12.48% at the end of 2014 to 23.33% in September 2016, a company listed on the Milan Stock Exchange that is active in integrated water management, energy sales and distribution, public lighting and, to a lesser extent, waste treatment. Based in Rome, Acea is the main water and wastewater treatment operator in Italy.

B) IN GREECE

Through a 5.46% equity interest in Eyath, a company listed on the Athens stock exchange, which manages the Thessaloniki water service. In 2018, SUEZ won its first operational contract with the wastewater management for the Athens airport.

C) IN CENTRAL EUROPE AND COMMONWEALTH OF INDEPENDENT STATES (CIS)

The Group has been active in the water sector for many years in several European Union member states. The Group manages, alone or through partnerships:

- drinking water and wastewater treatment services in several cities in Czech Republic, where it has been present since 1993, and is also active in the collection, recovery and treatment of municipal and industrial waste. The Group estimates that it is the fourth-largest private operator in the waste sector in this country;
- in Poland, through its subsidiary SUEZ Polska, the Group is active in the collection, recycling and recovery of municipal and industrial waste, as well as in urban street cleaning. In 2018, SUEZ Polska was the second market leader in the waste sector in Poland. The success of the first PPP contract in Poland for the construction and operation over 25 years beginning in December 2016, of an energy recovery unit with a capacity of 210,000 metric tons per year in Poznan consolidates this position. The Group is also present in the water sector with the 33-year Mława public-private partnership;
- in Slovenia, with the operation of the wastewater treatment plant it built in Maribor;
- in Croatia, SUEZ won three contracts between 2014 and 2015 for the cities of Porec, Osijek and Dubrovnik. Porec and Dubrovnik contracts are still in development, while Osijek contract has been stopped;
- in Serbia, the consortium formed of SUEZ and ITOCHU was joined by Marguerite, an alternative investments fund manager, to develop in the city of Belgrade a 25-year public-private partnership for a new system to treat municipal waste. This

project will permit the closure and remediation of one of the largest landfill still active in Europe, and will generate over 80 MW of renewable heat and electricity through an energy recovery unit with an annual capacity of 340,000 metric tons. As a consequence, the capital of Serbia will meet European waste management standards;

- in Azerbaijan, SUEZ continues its implementation through the Boyuk Shore polluted soil treatment project, and a new training contract with Azersu, the public operator in charge of water and wastewater services (EUR 22 million, starting in July 2018 for 6 years).In this context, in July 2018, on the occasion of the State visit and in the presence of Presidents Macron and Aliyev, Jean-Louis Chaussade, CEO of SUEZ, has signed a letter of intention with Gorkhmaz Huseynov, CEO of Azersu. It will deal with the modernization and management of Sumqayit water.

SUEZ is also continuing its development in Eastern Europe after winning, in 2017, in a consortium with FCC – Aqualia, a contract for the city of Bucharest, Romania consisting of the modernization of the wastewater treatment plant in Glina and the construction of a treatment plant for the recovery of energy from sludge.

In this region, SUEZ wants also to develop its expertise in new circular economy project. Thus, at the Moscow Urban Forum in 2018, SUEZ and Mosinzhproekt (MIP) joined forces to address the issues of urban transformation and the circular economy in the Russian megalopolis. Working within the framework of a memorandum of understanding, the Group will contribute to the strategy to manage 50 million cubic meters of waste produced by urban transport projects in Greater Moscow while calling on digital solutions.

6.5.5 Presentation of WTS (Water Technologies & Solutions) activities

SUEZ established a new Business Unit WTS, following completion of the acquisition of GE Water on September 29, 2017. This new entity is a unique platform in a booming industrial water market. It represents a strategic shift for SUEZ that will lead to an acceleration of its profitable growth: by doubling revenues from industrial customers and consolidating key account relationships. WTS improves the contribution of industrial customers, which now represent 40% of the Group's revenues. Finally, WTS provides SUEZ with greater balance in terms of its geographic presence, with approximately 40% of revenues generated outside Europe.

This new Business Unit offers shareholders a unique value proposition since it comprises commercial, operational and technical synergies with historical SUEZ activities. The WTS team aims to achieve EUR 200 million in synergies by 2022. Most of these are related to joint tenders, cross-selling and internalization. In 2018, SUEZ booked more than USD 100 million in synergies in terms of orders placed, ahead of schedule.

In 2018, WTS contributed EUR 2,396 million to the Group's consolidated revenues. WTS business unit has 10,000 employees serving 50,000 customers in 130 countries and is backed by a global presence throughout the entire water treatment solutions and facilities value chain.

Approximately 56% of WTS' revenues is recurring income, with a balanced distribution between its two complementary divisions:

- the Chemical & Monitoring Solutions (CMS) division provides integrated chemical treatment solutions for industrial water and process infrastructures;
- the Engineering Systems (ES) division is a major supplier of technological solutions and equipment used in water and wastewater treatment, water reuse and service outsourcing.

WTS' profitable growth strategy is based on five "differentiating factors":

- a strong global presence: WTS focuses on product design and management on a global scale. It takes advantage of its international presence and a network of 45 service and production centers around the world, where 10,000 employees meet the needs of 50,000 customers in all the key regions;
- a major presence throughout the entire value chain: the business unit provides a unique range of services throughout the entire value chain with state-of-the-art technologies, equipment, solutions and services that meet all the needs of industrial customers in the water sector;
- a global business network: the entity provides high value-added services to first-rate customers in all market segments and employs 3,000 sales staff to look after these key accounts;
- R&D and innovation on a global scale: WTS has a significant technological presence and R&D centers on four continents, where 400 scientists and engineers develop state-of-the-art technologies;
- a leading digital platform that creates customer loyalty: WTS' digital solutions provide customers with high value-added services, including real-time monitoring and predictive maintenance. They also contribute to internal efficiency gains and provide relevant data analysis.

Major contracts in 2018

- **Statoil selects seawater sulfate removal system designed by SUEZ and Halvorsen TEC for the Johan Castberg Project in Norway**

  SUEZ will supply with its seawater sulfate-reducing nanofiltration membranes and ZeeWeed[1] 700B horizontal ultrafiltration system the Johan Castberg (formerly Skrugard) project located about 100 kilometers north of the Snøhvit field in the Barents Sea. The equipment is expected to be delivered in the beginning of 2020, while the first oil is expected to be

(1) Trademark of SUEZ; may be registered in one or more countries.

produced in 2022. The sulfate removal unit (SRU) will allow Statoil to inject seawater at less than 20 ppm of sulfate content and less than 20 ppm of oxygen. The SRU's injection capacity will be 1,188 cubic meters per hour.

- **Pennsylvania coal plant saves on upgrades and operating costs with SUEZ mobile water**

  Seeking to reduce its operating costs and environmental footprint, the Conemaugh Generating Station in New Florence, Pennsylvania, utilizes SUEZ's mobile solutions to produce boiler feedwater. By using mobile demineralization units combined with the InSight[1] system, the coal-fired power plant will help make savings of USD 220,000 per year in operating costs, reduce chemical consumption and optimize water consumption, thus reducing the amount of wastewater discharged into the Conemaugh River.

- **SUEZ to operate and maintain wastewater treatment plant for Litehouse Inc., a salad dressing manufacturer**

  SUEZ received a multi-year Operations and Maintenance contract of a new wastewater treatment plant at Litehouse Inc. in Lowell, Michigan. SUEZ will provide an on-site operator, wastewater treatment chemicals and a 24/7 technical support, and will also employ its InSight[1] asset performance management (APM) system to ensure that the plant operates at the highest levels of reliability, efficiency and output. Litehouse Inc's new wastewater plant will treat 74,000 gallons of wastewater per day using a primary treatment, an equalization (EQ) tank and dissolved air flotation system. Once treated, the wastewater will be discharged at the Lowell wastewater treatment plant, a facility that is also operated by SUEZ.

- **MODEC selects SUEZ's seawater sulfate reducing nanofiltration membranes for offshore oil project in Brazil**

  When faced with the need to eliminate sulfate from injection water for offshore oil production, MODEC turned to SUEZ for a full replacement of existing membranes on a Floating Production Storage and Offloading (FPSO) vessel in Brazil. For the project, SUEZ will provide 1,000 seawater sulfate removal (SWSR) nanofiltration membranes for MODEC's FPSO vessels MV22 and MV24 deployed in the Santos Basin. Specifically, SUEZ will supply MODEC with SWSR-440 membranes that remove sulfate to drastically reduce scale and corrosion in the injection well, which reduces the efficiency of oil extraction by blocking wells. Based in the huge pre-salt region of the Santos Basin, the MV22 and MV24 FPSO vessels are able to respectively process 100,000 and 150,000 barrels of oil per day.

- **City of Barrie, Ontario, selects SUEZ Technology to meet wastewater effluent limits for phosphorous**

  Faced with the challenge of meeting recent stringent total phosphorus effluent limits, the city of Barrie, Ontario, needed to upgrade its wastewater treatment facility. In connection with an open call for tender, SUEZ was selected to supply the membrane bio-reactor (MBR) system. This plant will be one of the largest MBR plants in Canada. SUEZ will provide its ZeeWeed[1] 500D MBR technology, along with engineering design support and on-site commissioning, to help the city of Barrie protect the environment and Lake Simcoe, where the plant discharges its treated effluent.

- **SUEZ furthers its development in Taiwan with new industrial water contract**

  SUEZ signed a 12-year service contract with Forest Water Environmental Engineering Co. Ltd. for industrial wastewater membranes to increase the operational efficiency of the plant and improve wastewater quality. Both parties have also signed a memorandum of understanding to jointly pursue business opportunities in Taiwan in a bid to relieve pressure on Taiwan's natural water sources and to encourage a sustainable approach to water use. This long-term service contract on membrane bio-reactors (MBR) for industrial wastewater treatment, the Group's largest in Asia, aims to optimize the efficiency and results of the plant's treatment. With a comprehensive performance protection system and the InSight[1] platform, the contract will help to further reduce operational risks and improve the plan operating efficiency while ensuring the quality of discharged water after treatment.

6.5.6 Presentation of the Group's other activities

SUEZ Consulting

SUEZ Consulting, through the wholly owned consulting subsidiary of SUEZ, Safège, provides engineering services to municipal customers, public authorities, international financial institutions, public service agents, and private and industrial customers. In 2018, SUEZ Consulting contributed EUR 106.5 million to the Group's consolidated revenues.

A major operator in sustainable development businesses for towns and urban areas, SUEZ Consulting supports its customers in France and abroad in making municipal planning decisions and jointly designing their infrastructure at all levels of the project: assistance with project management, design, general contracting, operational support, training and audits.

SUEZ Consulting employs 765 staff and has customers in over 100 countries.

Once again in 2018, SUEZ Consulting confirmed its sales momentum with record orders. Among the flagship successes from the new contracts signed in 2018 were:

- the 2018-2022 European Union Framework Contract to provide technical assistance, in particular in Infrastructure, Sustainable Growth and Employment;
- in Myanmar, SUEZ Consulting is supervising the improvement of urban services in Yangon, financed by the Asian Development Bank;
- in Cambodia, SUEZ Consulting has won its first wastewater treatment contract to manage the development of the wastewater network in Siem Reap, with funding from the Asian Development Bank;

(1) Trademark of SUEZ; may be registered in one or more countries.

- in Sri Lanka, SUEZ Consulting is conducting studies on the Ambathale pumping station;
- in Burkina Faso, SUEZ Consulting is providing technical assistance to the Ministry for Water and Wastewater Treatment to set up a sector policy for water, with funding from the European Union;
- in Poland, SUEZ Consulting has won major transportation contracts-one to supervise the construction of the Szczecin metro line for Polish National Railways, and another to design/supervise several intersections on the S19 Expressway road route;
- SUEZ Consulting is continuing to grow in the energy and climate sectors by researching strategies on how to reduce the vulnerability of Cape Town, South Africa to climate change (Cities and Climate change in Sub-Saharan Africa Initiative, CICLIA Framework Contract), but also by winning two new Framework Contracts by the French Development Agency-the ADAPT'ACTION program, which aims to support mainland African countries and island states in adapting to climate change by implementing the Paris Climate Agreement, as well as by supporting energy transition policies for the 120 countries covered by the agency; a blueprint for street lights in Kampala in Uganda; the overall energy strategy for the Greater Strasbourg region; the energy performance plan for the future Toulouse Euro Southwest hub (future Toulouse train station) for Europolia (Efficacity project);
- SUEZ Consulting is consolidating its position as the market leader in rolling out digital facilities and ultra-fast broadband in France, contributing an essential structural capital investment in the country's regions, by renewing its long-standing contract in the Doubs area;
- SUEZ Consulting has won contracts to provide new research and management services to historical semi-public customers with: assistance in managing the construction of the future maintenance workshop for Paris metro line 11 trains, Hydraulic and Environmental Framework Contracts for three Paris airports: Roissy-Charles de Gaulle, Orly and Le Bourget; SUEZ Consulting is developing its demolition expertise in Ile-de-France by acting as central coordinator of the demolition of six buildings at the former Saint Vincent de Paul Hospital for the company Paris Batignolles Aménagement;
- in terms of private customers, SUEZ Consulting is working with Disneyland Paris to manage the road and utilities networks for their theme park expansion project, with Vinci Autoroutes to handle the environmental management of the A9 highway widening project in Perpignan, and with ENGIE to design, build and commission heat production and distribution facilities for the city of Tours;
- in the planning and transportation sector: the port of Saint Leu in Réunion island; conducting urban integration research for a line 2 Tramway in Tours, extending the Tramway in Bordeaux, and developing inter-modal trade hubs in Marmande and Le Teich;
- SUEZ Consulting is continuing the expansion of its historical businesses of water and the environment where it occupies the position of market leader through the following projects:
  - major engineering and/or construction management framework agreements; in particular, with the city of Beauvais, the urban community of Pays de Lérins, the urban community of Greater Reims, and the Haute-Garonne water and wastewater treatment utility,
  - several development plans, including development plans for Paris Terre d'Envol, La Rochelle, Grand Paris Seine & Oise, and Saint-Martin (as part of post-IRMA emergency procedures) wastewater treatment facilities; drinking water development plans for the West Essonne and Provinois urban community Drinking Water Utility; and a rainwater development plan for Hyères,
  - the renewal of the contract purchase order with the Monts du Lyonnais and Lower Gier Valley water and wastewater utility,
  - environmental management of the expansion work at the port of Port-la-Nouvelle.

Lastly, in 2018, and in collaboration with SUEZ, SUEZ Consulting has developed several innovative solutions with high-profile partners:

- an intrapreneurship project with Origins.earth which offers a solution for cities to track their CO_2 emissions and access carbon financing. Presented at COP24, this project was developed in partnership with the World Meteorological Organization and is supported by the European accelerator EIT Climate-KIC. The project will be implemented in Paris in 2019;
- a "Safe City" pilot project in the Paris Region, based on "City Information Modeling", as part of a partnership with the General Management of the French National Gendarmerie.

6.6 Dependence factors

Information on dependence factors can be found in chapter 4 of this document.

6.7 Legal and regulatory framework

The Group's regulatory framework derives both from interdisciplinary regulations and regulations specifically related to the business lines.

The Group's activities in Europe are governed by European legislation (European regulations, which apply directly and uniformly to all Member States, or European Directives that must be translated into domestic law) and by legislative provisions specific to each country.

The Group's activities outside Europe are also subject to regulations on the environment, health and safety, among other things.

A general presentation of the most significant applicable regulations is set out below.

6.7.1 Interdisciplinary regulations

6.7.1.1 Regulations on the awarding of public contracts

Generally, methods for awarding contracts vary depending on the nature of the public-private partnership (long-term concession of public services, PFI in the United Kingdom, BOT, or short-term provision of service) or the method of regulation. A clear definition of the regulatory framework is of the utmost importance for growth of the Group's activities.

A) EUROPEAN REGULATIONS

In the European Union, contracts signed by the Group with local public authorities are classified as either public works or services contracts, or concession contracts. In contrast to a public contract, a concession is defined as a right to operate a public service, with transfer of a portion of the risks borne by the delegating authority to the delegated agent.

On February 26, 2014, the European Council and Parliament adopted the Directives 2014/24/EU and 2014/25/EU on the coordination of public procurement procedures in connection to the award of contracts for public works, supplies and services, particularly in the water, energy transportation and postal services sectors.

These Directives aim to harmonize the procedures for awarding public works, supply and services contracts beyond certain thresholds, and to make procurement procedures more flexible. They regulate the tendering process governing the technical specifications, award criteria, procurement procedures and advertising rules. They apply to the majority of contracts between SUEZ and public authorities.

In addition to these two Directives on public contracts, the EU has also adopted a Directive on the award of concession contracts (2014/23/EU) to define the rules governing the signing of concession contracts between a private economic operator and a public entity (contracting authority and/or contracting entity). Among other things, the Directive regulates the application threshold, the duration of contracts, the award criteria and the relationship between the public authorities and co-contractors over which they exercise similar controls to those that govern their own departments, called "in-house" relationships. It should be noted that the water sector (drinking water and wastewater treatment) is excluded from the scope of application of this Directive.

Member States had until April 2016 to translate these three Directives into law. However, some states have only recently translated these Directives (Spain, Slovenia, Austria). The Commission is now conducting a dialogue with some 15 Member States to check the conformity of their national law with these Directives.

The Commission is expected to review the initial effects of these three Directives, and particularly the exclusion of the water sector from the Concessions Directive in a report to the European Parliament and Council over the course of 2019. A second progress report on the application of the Concessions Directive will take place in 2021.

B) FRENCH REGULATIONS

French regulations in the area of public contracts have been revised as part of the translation effort for the European directives mentioned above. The new legislation that came into effect on April 1, 2016 includes:

- Ordinance 2015-899 of July 23, 2015 relating to public contracts and Decree 2016-360 of March 25, 2016 relating to public contracts are the transpositions of European Directives relating to public contracts;
- Ordinance 2016-65 of January 29, 2016 relating to concession contracts and Decree 2016-86 of February 1, 2016 relating to concession contracts transposed Directive 2014/23/EU relating to the award of concession contracts. The procedure to be used in awarding these contracts is a negotiated procedure. These contracts are used particularly in the water sector; local authorities (municipalities or groupings of municipalities) have the choice between direct control, the public services market, or delegation of public service (DPS). In the case of DPS contracts, the delegated management contract defines the respective obligations of the delegated agent and the delegating party, as well as the pricing policy; there is no transfer of ownership of public works to the delegated agent (which is only the operator); the latter is required to provide an annual technical and financial report to the contracting authority;
- Decree 2017-516 of April 10, 2017 relating to various provisions for public procurement amends Decree 2016-360 of March 25, 2016 pertaining to public contracts, called the "Public Contracts" Decree, particularly in the following areas:

- new obligation for all purchasers subject to the French "MOP Law" to organize bidding contests for awarding their project management public contracts,
- elimination of the obligation to produce a criminal record check at the time of application. Now a simple sworn statement is sufficient,
- elimination of the obligation to make essential data about the contract available electronically for contracts under EUR 25,000,
- elimination of local authority's obligation to conduct a comparative assessment of how a project will be completed for projects over EUR 100 million,
- clarification as to the possibility to organize a bidding process with competitive negotiation or dialog when only irregular or unacceptable offers are presented after an initial call for tenders;

► The Decree of May 5, 2017 defines the content of project management assignments for comprehensive public contracts. This legislation is enacted in accordance with Law 2016-925 of July 7, 2016 relating to creative freedom, architecture and cultural heritage. The following types of comprehensive public contracts fall under the purview of this decree: design-build public contracts; comprehensive public performance contracts; industry-specific comprehensive public contracts when they include design components and relate to construction work. This decree requires applicants bidding on a comprehensive public contract to identify a project management team. In addition, Law 2014-744 of July 1, 2014 established a new mechanism for institutional partnership between the public sector and private operators, called a Unified Public Private Partnership (in France, a *Société d'économie mixte à opération unique*, or "Semop"). Using a Semop allows local authorities, *via* a single tendering procedure, to select a private shareholder to form a limited company, which will be directly awarded a contract to carry out a specific operation.

C) SPANISH REGULATIONS

In Spain, the award of public contracts is governed by Royal Decree-Law 3/2011 of November 14, 2011 reforming Law 30/2007 of October 30, 2007 on public sector contracts, which transposes EU Directive 2004/18.

This Decree-Law governs the more traditional methods of delegated management (concessions, semi-public entities, regulated and collective management) and requires them to comply with the same public information and competition standards as procurement for public works, services and supply contracts.

It defines the contractual arrangements of the public-private collaboration contract (similar to the French public-private partnership contract). It is intended to meet complex public sector needs, which are not satisfied by traditional contractual agreements, and consists of awarding a company overall responsibility for construction, management, maintenance and replacement, as well as contributing to financing the project.

In addition to Royal Decree-Law 3/2011, Law 31/2007 of October 30, 2007 transposes European Directive 2004/17 which governs the procurement procedures of entities operating in the water, energy, transportation and postal services. This law defines the procedures to be applied by the entities operating in these sectors for public works services and supply contracts.

Following Spain's failure to transpose the public contract directives, they took effect directly beginning on April 18, 2016 to the extent that their terms are directly applicable and clear.

On November 28, 2016, the Spanish Council of Ministers pre-approved a draft text transposing these directives, which triggered a parliamentary process that could complete the transposition.

D) UNITED STATES REGULATIONS

In the United States, the federal government plays a role in the water sector, but the individual states retain authority in the areas of resource management, regulation of services and investment planning. There are two broad, coexisting contract methods: a regulated method, comparable to the UK system, in which the assets belong to the operator, and a non-regulated mode, in which the local authority entrusts the management of its assets to an operator following competitive bidding. In regulated activities, each state has a Public Utility Commission that sets prices (for water and wastewater treatment services), service standards, and the return on shareholders' equity allowed per company operating in the regulated sector. For public-private partnership agreements in the non-regulated sector, the rules for allocation of projects and operating conditions vary for each municipality. As a general rule, operators are selected *via* calls for tenders.

E) CHINESE REGULATIONS

There are two laws that currently govern public contracting in China: the law on awarding public contracts and the law on submitting public tenders. While the law on awarding public contracts concerns the purchase of goods and services by national and local government agencies, the law on submitting public tenders controls construction projects financed by the State. These may be large-scale infrastructure projects as well as state-owned company tenders. Putting out calls for tenders is effectively mandatory for certain contracts in the construction sector. The breadth and thresholds of this type of project are determined by the National Development and Reform Commission and by government ministries.

In 2014, the concept of a public-private partnership was expressly recognized in Chinese legislation. The National Development and Reform Commission has since encouraged the formation of public-private partnerships in the areas of energy, transportation, water, conservation, environmental protection, forestry management and urban planning.

In spite of several market access offers and amendments to the law on awarding public contracts in 2014, China has not been able to become part of the World Trade Organization's (WTO) multilateral agreement on public contracts. Negotiations on China's access to this agreement began in 2007. If China is to become party to the WTO agreement, it will have to align its legislation to the agreement, modifying in particular certain provisions of the law awarding public contracts.

6.7.1.2 General environmental regulations

A) EUROPEAN REGULATIONS

Environmental liability

Directive 2004/35/EC on environmental liability with regard to preventing and remedying environmental damage (transposed in France as Law 2008-757 of August 1, 2008) establishes a legal framework for environmental liability founded on the "polluter pays" principle, with a view to preventing and remedying damage to protected species, natural habitats, water resources and land.

Damage may be recognized (by administrative bodies) without any evidenced fault, even if the facility that is the source of the damage is compliant with applicable licenses and authorizations. According to the Environmental Liability Directive, the operator is the first party to incur liability. The text of the law does however stipulates non-retroactivity, and will therefore only apply to damage for which the triggering event occurred after April 30, 2007 (the deadline for transposition by Member States).

Particular vigilance is now required with regard to areas in which exceptional habitats and environments are protected: the "ecoregions" identified at world level, the "Natura 2000" sites in Europe and-specific to France-sensitive rivers and corridors or reservoirs of biodiversity defined in the "Grenelle" laws.

In terms of criminal liability, in accordance with Directive 2008/99/EC on the protection of the environment through criminal law, Member States must establish criminal sanctions that are effective, proportionate and dissuasive for serious violations of the provisions of EU law relating to the protection of the environment. This EU law relates in particular to the release of substances or ionizing radiation into air, soil or water, the treatment and transfer of waste, the destruction or capture of specimens of protected species of wild fauna and flora, and the marketing of substances that will weaken the ozone layer.

European pollutant release and transfer register

Regulation 166/2006/EC established a European Pollutant Release and Transfer Register (known as the E-PRTR Register) to monitor the release of pollutants into water, air and soil at EU level (replacing the European Pollutant Emission Register (EPER)). This register, which is an electronic database that has been accessible to the public since November 9, 2009, is aimed at facilitating access to information concerning pollutant emissions. The vast majority of waste and some wastewater treatment activities are affected by this Regulation (although certain thresholds do exist) and, consequently, the operators concerned must provide precise data on their emissions every year (the initial year of reference was 2007).

Seveso III

The Seveso Directive on the control of major accident hazards involving dangerous substances requires Member States to ensure that all operators concerned by the Directive have implemented a policy for the prevention of major accidents. Operators who handle hazardous substances above certain thresholds are required to regularly inform the public likely to be affected by the consequences of an accident, by establishing safety reports, a safety management system and an internal emergency plan. Directive 2012/18/EU of July 4, 2012, known as "Seveso III" amends and, as from June 1, 2015, replaces the previous Regulation (Directive 96/82/EC of December 9, 1996, known as "Seveso II"). Among other things, it harmonizes the list of chemicals with that of the new classification system for hazardous substances of the CLP Regulation (1272/2008/EC).

REACH

The Reference, Evaluation, Authorization and Restriction of Chemical substances (REACH) Regulation has been in force since June 1, 2007. In order to offer better protection of human and environmental health against risks that may derive from chemical substances, the REACH regulation makes industry responsible for evaluating and managing the risks of the said substances and for providing adequate safety information to users.

REACH involves specific communication throughout the life cycle of substances so as to guarantee regulatory compliance and to ensure that the planned uses (including at end-of-life) are taken into account. Accordingly, the Group-like all those in the industry-must check with its suppliers that the substances it uses in the context of its activities are indeed REACH-compliant.

Since December 1, 2010, companies must also have registered all substances produced above the threshold of 1,000 metric tons per year and per legal entity with the European Chemicals Agency (ECHA), unless the product in question is exempt. The Group's activities are affected by this registration obligation when selling recycled substances (secondary raw materials) that have a product status, as well as for certain substances produced *in situ*. However, the number of substances registered is very low, as the majority of recycled substances sold on the market are exempt due to their similarity with existing substances.

In 2018, the European Commission conducted a second assessment of the implementation of the REACH Regulation. It also launched a public consultation on the links between the legislation on chemical products and waste to prepare for potential new regulations.

The Climate and Energy Package

On December 17, 2008, the European Parliament adopted several proposals aimed at both fighting climate change and guaranteeing the European Union a safer and more sustainable energy supply.

The "Climate and Energy Package", as it is commonly known, brings together:

- a Directive that modifies and extends the greenhouse gas emissions trading scheme, from which Group facilities in the water and waste sectors are currently excluded;
- a decision relating to the distribution of effort among Member States in domains that are not covered by this scheme, such as transport, construction or environmental services;
- a Directive intended to promote renewable energies, such as biogas and energy produced from waste biomass and wastewater treatment byproducts;
- a Directive on the geological storage of CO_2;
- new guidelines concerning state aid for the conservation of the environment, published April 1, 2008 and aimed at supporting the investment effort necessary to achieve these objectives as set forth in the aforementioned laws.

This initiative is part of the ambitious "climate" action plan, adopted by the European Council in March 2007, whose main recommendations are a European Union commitment to reduce its greenhouse gas emissions by at least 20% between now and 2020, a compulsory objective of 20% of renewable energy in energy consumption within the same time frame, and lastly an increase of 20% in energy effectiveness (program known as "3x20").

On October 23 and 24, 2014, the European Council agreed to reform the package; consequently, it is now known as the "2030 Climate and Energy Package". This agreement is intended to enhance the three targets adopted in 2008 by reducing greenhouse gas emissions by at least 40% (compared to 1990 levels), increasing the percentage of renewable energies to at least 27% and improving energy efficiency by at least 27%.

As part of this Package, in July 2015, the Commission published a proposal for revising the European Emissions Trading Scheme for the 2021 to 2030 period. The main goal is to prompt carbon prices per metric ton to rise by expanding the sectors covered as well as reducing the overall number of quotas, and especially free quotas. This amendment was adopted in February 2018 and came into effect in April 2018. Member States must transpose this into law before October 9, 2019.

In November 2016, a proposal to adopt a "clean energy" package was added to the "2030 Climate and Energy Package". The "Energy Performance of Buildings" Directive was adopted in May 2018. In early December 2018, Directives were adopted on Energy efficiency (with a goal of improving energy efficiency by 32.5% by 2030), renewable energy (with a goal of obtaining 32% renewable energy in the European energy mix by 2030), and governance.

All of these goals are part of the more long-term strategy for a competitive, low-carbon economy by 2050, published by the Commission on November 28, 2018.

B) FRENCH REGULATIONS

Law to re-establish biodiversity, nature and landscapes

Law 2016-1087 of August 8, 2016, the so-called biodiversity law, introduces several new items:

- the recognition of ecological damage;
- the principle of ecological solidarity;
- the non-regression of environmental law;
- the mitigation of environmental damages.

The biodiversity law highlights the transition from a fixed vision to a full and dynamic vision of biodiversity. Biodiversity is effectively considered as a source of innovation and knowledge of it is inscribed in law as a fundamental objective. According to the law, ecological continuity contributes to sustainable development of regions and consequently must be protected. The sequence "avoid, reduce, mitigate" is reaffirmed regarding regional development projects. In addition, the law addresses agricultural mitigation.

Lastly, the law clarifies roles by designating the region as the level responsible for managing biodiversity.

Act ratifying the ordinance relating to amending the rules applicable to environmental assessment of projects, plans and programs and the ordinance reforming procedures intended to ensure public information and participation in making decisions likely to have an impact on the environment

Ordinance 2016-1058 of August 3, 2016 ratified in March 2018 and Decree 2016-1110 of August 11, 2016 reform environmental assessment. These acts are intended to bolster effectiveness of the participation of the public in decisions that could have an impact on the environment and to modernize consultation procedures. Their purpose is to "ensure that the project preparation process is more transparent and that there is better participation by the public in this process". This is to address inadequacies in the transposition of Directive 2014/52/EU relating to the environmental evaluation of projects, raised by a reasoned opinion of the European Commission in March 2015.

Accordingly, a distinction is now drawn between projects systematically subject to environmental evaluations and projects subject to these evaluations on a case-by-case basis. It should be noted that innovative projects will be systematically subject to a case-by-case review procedure.

Clarifications are provided with regard to impact studies, which should include a description of the vulnerability of a project to climate change and present a "benchmark scenario," and especially a view of probable changes in the environment should the project not be implemented. Details of mitigation measures are also set out.

These actions also confirm the "by project" approach, as opposed to a "by procedure" method. The project concept is defined without resorting to the concept of "work program". Furthermore, shared or coordinated environmental evaluation procedures are set up between projects, or between projects and planning documents.

Decree 2017-626 of April 25, 2017 amends procedures intended to ensure information and public participation in making certain decisions likely to have an impact on the environment, in accordance with Ordinance 2016-1060 dated August 3, 2016 relating to reforming procedures intended to ensure information and public participation in making certain decisions likely to have an impact on the environment.

In particular, the decree provides for setting up public debates on national plans and programs that are subject to environmental assessment.

The decree details arbitration procedures in the event of a dispute between the project owner and one or more approved associations. Implementation of the right to a citizen's initiative to request prior consultation from the prefect is also detailed. The decree calls for the widespread rollout of a digital public consultation process.

Energy Transition for Green Growth Law

Law 2015-992 of August 17, 2015 and the action plans accompanying it are intended to help France make an effective contribution in the fight against climate change and to bolster its energy independence by better balancing its various sources of supply.

Among the drivers of this growth, the circular economy is at the center of the Law. Title IV of the Law to "control waste and promote the circular economy" contains measures that are aimed at:

- determining a national transition strategy toward the circular economy that includes a "plan for scheduling the necessary resources for the primary sectors of economic activity that identify potential for preventing the use of primary and secondary raw materials";
- improving recovery of waste by prohibiting discrimination against materials originating from recovered waste and by promoting the production of energy stemming from waste recovery where it is not recyclable;
- setting specific targets for waste prevention and waste management for 2020 and 2025:
  - reducing waste at source by a 30% reduction in the quantities of non-hazardous, non-inert waste admitted to landfills in 2020 compared with 2010, and by 50% in 2025,
  - banning the single use of plastic bags beginning on July 1, 2016, in accordance with the decree of March 30, 2016,
  - banning the use of disposable plastic cups and plates beginning on January 1, 2020, except for those that can be composted domestically and that are made up entirely or partially of bio-based materials,
  - more precisely defining the "proximity principle" in the prevention and the management of waste, provided by the Framework Directive on Waste (Framework Directive 2008/98/EC),

– increasing the amount of waste to be recovered in material form, notably organic waste, by steering 55% by 2020, then 65% by 2025, of non-hazardous, non-inert waste, measured by mass toward these recovery methods. The public service managing these waste flows breaks down these objectives locally to reduce quantities of residual household waste after recovery. To this end, it progresses toward sorting of organic waste at source, arriving at a point where by 2025 all waste producers are using this method,
– reaching 153 zero waste and zero wastage regions to support exemplary local communities in their waste reduction and recycling processes,
– reducing the production of household and similar waste by 10% by 2020,
– achieving a rate of 65% of waste recycled in 2025,
– putting half as much waste in landfills in 2025 compared to 2010,
– creating 10,000 lasting jobs in operating new waste processing installations and avoiding releasing 3.4 million metric tons of CO_2 equivalent annually between now and 2025,
– progressively implementing incentive-based pricing, where each person pays to eliminate their waste based on quantities produced, as introduced in the amending finance law dated December 29, 2015,
– experimenting with sorting recommendations for all plastic waste and extending these sorting instructions nationwide by 2022,
– streamlining the flow of resources used and produced on a relevant regional scale under cooperation, pooling and substitution actions for these flows, thus limiting environmental impacts and improving economic competitiveness and the attractiveness of regions.

"Grenelle" laws

In order to implement the commitments made in 2007 within the context of France's Grenelle Environment Forum (*Grenelle de l'environnement*), legislative proposals were adopted in 2009 and 2010 including:

- framework Law 2009-967, relating to the implementation of the Grenelle Environment Forum, known as the Grenelle I Law, defined the main guidelines: it translated the Grenelle commitments into legal terms;
- law 2010-788 for a national environmental commitment, known as the Grenelle II Law, set out the conditions for implementing the commitments made in 2007.

The "Grenelle" laws and the regulatory provisions supplementing them, represented both new obligations and new opportunities for the environmental sector.

In the water sector, the Grenelle II Law introduced a large-scale program for regaining water quality by making the various economic players accountable: local authorities must meet wastewater standards, farmers must reduce their use of pesticides, and manufacturers whose activities pollute must fulfill new obligations.

C) SPANISH REGULATIONS

In order to implement the European Directives, several laws regulating environmental protection have been adopted, such as Law 26/2007 of October 23, 2007, on environmental liability, transposing Directive 2004/35/EC; Organic Law 5/2010 of June 22, 2010, which amended the Criminal Code to transpose Directive 2008/99/EC; and Royal Decree-Law 1254/1999 of July 16, 1999, which transposes Directive 96/82/EC. It is noteworthy that following the last environmental review of Spain carried out by the OECD in 2015, Spanish laws on biodiversity are among the most ambitious of the entire OECD area and that the ecological footprint of the country's industrial sector remains relatively indistinct. However, efforts must be made with regard to coordinating the various autonomous communities of the country with regard to the numerous requirements contained in environmental regulations.

D) CHINESE REGULATIONS

The Commission for Reform and National Development published a "Plan for the Promotion of the Circular Economy" in April 2015, in which it enumerated actions to be implemented in industry, agriculture and cities. The Law for the Promotion of the Circular Economy took effect in 2009.

The draft for the 13th five-year plan covering the period of 2016 to 2020 calls for ambitious initiatives in the environmental area.

In 2014, the Ministry of Environmental Protection issued transparency rules that require environmental authorities to make public all non-confidential information contained in environmental impact studies.

Regulations on the protection of the environment strengthened pollution control requirements. The more extensive criminal liability introduced by this reform is an important change because this principle authorizes the Bureau of Environmental Protection to subject violators to combined fines without upper limits. The revised law makes it possible for certain environmental groups to file legal proceedings.

On December 25, 2016, the Permanent Committee of the National People's Congress (NPC) of China adopted the environmental protection law. When it took effect on January 1, 2018, the environmental protection tax replaced the pollution emission fee system that has been in effect for over 40 years. This tax is meant to be an economic tool that regulates corporate environmental pollution by targeting companies that directly emit a taxable pollutant. Taxable pollutants include air and water, solid waste and noise pollution. Companies that emit taxable pollutants in centralized and official wastewater and household waste treatment facilities are exempt from the tax on indirect emissions.

On June 27, 2017, the Permanent Committee of the NPC decided to amend the Chinese Code of Civil Procedure and the Administrative Procedure Law, formally authorizing Chinese public prosecutors (typically criminal public prosecutors) to file lawsuits in the public interest against acts that compromise the public's rights and interests in matters related to environmental protection and natural resources.

E) AUSTRALIAN REGULATIONS

Environmental matters in Australia traditionally fall within the jurisdiction of state governments rather than the federal government, which has no special jurisdiction to legislate in that domain. However, during the 1970s, there is an observable trend toward granting the federal government greater power in environmental matters.

At the state level, environmental assessment is integrated into the decision-making process in the form of planning schemes and licenses. Environmental protection requires that activities that could have a negative impact on the environment be licensed before they are carried out. In addition, it is mandatory that work carried out by entities holding such licenses comply with the terms thereof. Industrial activities, such as chemical production, waste treatment, mining operations and intensive agriculture are affected by these rules. States may also implement legislative measures autonomously with regard to the protection of endangered species, preservation of indigenous flora, creation of national parks and water treatment and use.

Through the Environment Protection and Biodiversity Conservation Act 1999, activities that could have a considerable environmental impact at national level must be approved by a federal minister as well as each federal state concerned. However, the Abbott and Turnbull governments concluded bilateral agreements between the federal and state governments in order to accredit certain approval processes by the States and to ensure that these actions do not require separate federal approval.

Australia has taken various measures to address the energy question with a view to reducing greenhouse gas emissions at both the federal and state levels. At the federal level, the Renewable Energy Target (RET) has two components: the Large-Scale Renewable Energy Target and, for homes and communities, the Small-Scale Renewable Energy Scheme. The Large-Scale Renewable Energy Target presents a legislative target of 33,000 GWh of electricity generation from renewable sources by 2020.

The 2007 National Greenhouse and Energy Reporting Act (NGER Act) established a national framework for businesses to disclose their greenhouse gas emissions, energy consumption and energy production.

The Abbott and Turnbull governments maintained the Kyoto objectives set by the preceding Labor government, which required a 5% reduction in carbon emissions (compared to 2000 levels) for Australia by 2020. Australia ratified the Paris Agreement shortly after it took effect in November 2016. Australia's contribution, which was submitted upstream of COP21, requires an emissions reduction level of 26% to 28% between now and 2030, in relation to 2005 levels.

The Direct Action plan designated as the cornerstone of the Abbott and Turnbull governments' environmental policy may be divided into two parts: The Emissions Reduction Fund and the Safeguard Mechanism.

The Emissions Reduction Fund allows some sectors in the economy to generate carbon credits for reducing emissions or capturing carbon, with a credit granted for each metric ton of emissions saved or captured. Credits may be purchased through reverse auctions by the Clean Energy Regulator, by means of an AUD 2.55 billion fund for the period 2015 to 2020. To date, nearly 189 million of credits have been purchased, at an average price of AUD 11.83.

The Safeguard Mechanism, which took effect on July 1, 2016, establishes a ceiling of authorized emissions for high CO_2 emissions infrastructures, with the goal that the emissions reductions related to purchase by the Emissions Reduction Fund not be transferred elsewhere in the country's economy. This scheme uses the framework established by the National Greenhouse and Energy Reporting Act.

In 2017, the Australian government reviewed its policy on climate change to ensure that it meets the emission reduction targets set for 2030 and complies with the commitments made by Australia under the Paris Agreement.

This review was conducted by the Department of the Environment and Energy. A final report published on December 19, 2017 recognized the need for improved environmental policies. Several changes are expected to be introduced soon:

- annual updates of the emission reduction targets under the Paris Agreement;
- review and analysis of the production of electricity;
- review and analysis of the transportation sector;
- creation of a long-term strategy on climate change.

6.7.1.3 Regulation related to the protection of computer data

The new European Regulation on the protection of personal data, the GDPR (General Data Protection Regulation), was ratified on April 27, 2016, and published on May 4, 2016 in the Official Journal of the European Union (OJEU). The GDPR is based on the right to privacy and the protection of personal data, which are fundamental to each citizen. This new legal framework will be common to all Member States and harmonized between them.

It pertains to any company which collects, manages or stores data. In response, SUEZ implemented a comprehensive action plan for cybersecurity to prepare for the application of the regulation on May 25, 2018.

The GDPR includes in particular the obligation to provide a clear, written explanation of the data security policy for persons whose data is stored. The companies must be capable of providing them with all of the stored data pertaining to them, in a simple format that can be provided to them *via* the internet. The GDPR also mentions the "right to be forgotten", which provides for the rapid deletion of any personal data requested.

Finally, the GDPR requires the nomination of a Data Protection Officer (DPO), who shall be responsible for questions relating to the protection of personal data and the regulatory oversight of these matters.

6.7.2 Regulations related to business activities

6.7.2.1 Water

A) EUROPEAN REGULATIONS

Framework for EU policy on the water sector

Directive 2000/60/EC establishing a framework for the European Union's water sector policy, as revised in 2008, was aimed at restoring the quality of groundwater and surface water by 2015.

In addition to this outcome objective, it sets forth requirements with regard to the methods to be implemented: reducing the release of "priority" substances, which are considered to be most harmful for the environment and human health, drafting and implementing master plans and action plans, monitoring the results of the actions aimed at restoring the quality of environments and reporting on this to the European Commission.

The Directive recommends that water usage and its impact be analyzed on an economic basis, and provides for increased public participation and consultation. It sets the objective of full recovery of service costs and establishes the "polluter pays" principle.

The Directive also sets forth a strengthened legal and institutional framework for the water resource management policy, which is very similar to the French system of management through large river basins.

Three European Commission progress reports on implementing the Directive, published on March 22, 2007, April 1, 2009 and November 14, 2012 set out this approach by recommending the establishment of river basin management plans combined with the setting up of programs of measures that are now operational in almost all EU Member States. The third progress report indicated that the Directive's environmental objectives would not be achieved across Europe by 2015. Meanwhile, an action plan to safeguard Europe's water resources was published on November 14, 2012 to provide Member States with tools to help achieve these goals. The plan urged better implementation of the Water Framework Directive of 2000 but did not impose additional obligations on Member States. It also proposed the issuance, by 2015, of a new EU regulation to make the best use of water reuse techniques.

A roadmap for the "maximizing of reuse of water within the EU" initiative was published in September 2015, emphasizing the need to establish European standards with regard to the reuse of water for irrigation or industrial use. Reuse of water that is better supervised on a legislative level would result in important savings in water consumption, a lowering of the water stress experienced in certain European regions, an increase in the recycling capacity of nutrients contained in wastewater, and could ultimately contribute to growth and job creation in Europe. In May 2018, a draft Regulation on minimum quality standards for the reuse of wastewater for agricultural irrigation was published by the European Commission with two main objectives: leading this practice at European level to encourage its development and raising public awareness of its economic and environmental interest. Currently being discussed at the European Parliament and Council, advancement of this draft Regulation will likely be dealt a serious blow due to several institutional changes in Brussels in 2019, and particularly the European Parliament elections in May 2019.

Directive 2000/60/EC is separated into two implementation Directives (known as individual directives) which specify the "good condition" to be reached for groundwater and surface water in 2015.

Directive 2013/39/EU, published on August 12, 2013 and amending Directive 2008/105/EC relating to environmental quality standards applicable to surface water, sets concentration thresholds for 45 chemical substances or groups of chemical substances identified as a priority because of the significant risk they present to the environment and/or to human health *via* the aquatic environment. A total of 21 of these substances have been classified as hazardous; emissions of these substances into surface water must cease by 2021. The other substances are subject to national reduction targets, to be defined by the Member States. Three pharmaceutical substances were placed on a watch list.

The goals of Directive 2006/118/EC on the protection of groundwater against pollution and deterioration are primarily the proper chemical condition of water and the prevention or limitation of the introduction of pollutants into groundwater. In France, the Directive was transposed as part of the Water and Aquatic Environments Law (LEMA 2006-1772 of December 30, 2006) and the corresponding regulatory acts amending the Environmental Code.

A revision of framework Directive 2000/60/EC will be under discussion at the end of 2019 and includes a revision of two individual Directives, 2013/39/EU and 2006/118/EC.

Directive on drinking water

Directive 98/83/EC on the quality of water intended for human consumption has raised requirements involving several parameters (turbidity, chlorites, arsenic, volatile organohalogenates, nickel), and in particular concerning lead (25 µg/l at end 2003 and 10 µg/l at end 2013), meaning that eventually no contact will be authorized between drinking water and lead pipes, which is the reason for replacing all existing lead pipes and for the work required on private and public properties to achieve this goal. It also raised requirements regarding public information on the quality of water distributed. After consulting the stakeholders concerned in 2003 and 2008, the Commission decided in 2011 not to revise this Directive, and to restrict itself to amending the details in various appendices.

After having led a public consultation in 2014 and following a "Right2Water" citizens' initiative that collected 1.8 million signatures, the European Commission published a proposal to revise Directive 98/83/EC on February 1, 2018. This revision is part of a risk-based approach and also focuses on materials in contact with water. Moreover, technical appendices II and III of the Directive have been changed by Directive 2015/1787 of the Commission to adapt them to technical and scientific progress. The monitoring of various water surfaces could now be based on a risk-based approach if the Member States so decide, in an effort to reduce superficial analyses as much as possible, using the World Health Organization model as a guideline. While these new appendices provide Member States with the option of adapting their monitoring programs to requirements and what they consider most revelant, this decision is left to their discretion. The Commission's draft project also aims to provide more transparency to the public by delivering key information on the functioning and administration of water services as well as on performance.

Currently being discussed at the European Parliament and Council, advancement of this Directive revision on drinking water will likely be dealt a serious blow due to several institutional changes in Brussels in 2019, and particularly the European Parliament elections in May 2019.

Directives relating to wastewater treatment activities.

Directive 91/271/EEC concerning urban wastewater treatment introduced several major categories of obligations, including:

- efficiently collecting wastewater and making provisions for its secondary treatment in urban areas with over 2,000 "inhabitant equivalents";
- defining "sensitive areas" at a national level, where treatment of nitrogen and/or phosphorus is required;
- requiring a high degree of reliability of wastewater treatment systems and the obligation to monitor these systems; and
- pursuing the option of using non-collective wastewater treatment "when the organization of a collection system is not justified, whether because it is not in the best interests of the environment or because the cost would be excessive", provided that the system provides "an identical level of environmental protection".

Directive 91/676/EEC concerning the protection of water against pollution caused by nitrates from agricultural sources is intended to protect water resources, and requires the definition of "vulnerable areas" where codes of best agricultural practice must be established.

Directive 2006/07/EC concerns surface waters that could serve as bathing waters. Member States must provide for the supervision and assessment of their bathing waters. Information regarding the classification, description of bathing waters and potential water pollution must be easily accessible to the public and provided close to the area concerned.

Both Directive 2006/44/EC on the quality of fish farming waters, and Directive 2006/113/EC on the quality required for shellfish farming waters, apply to waters that require protection or quality improvement to be fit for raising fish and shellfish respectively.

All of these Directives could be subject to a revision proposal in 2019 with the framework Directive on water.

B) FRENCH REGULATIONS

In France, a number of laws regulate the protection of water quality and numerous public authorities are in charge of implementing them. Withdrawals and discharges that potentially have a negative impact on the quality of surface water or groundwater are subject to authorization or declaration. Public authorities must therefore authorize any installation of a pumping system for groundwater that exceeds predetermined volumes and the law forbids, or limits, the release of various substances into water. Violation of these laws is subject to civil and criminal sanctions, and the company may itself be held criminally liable.

Law 2006-1772 on water and aquatic environments, dated December 30, 2006, is intended to modernize the legal framework for water management and improve water quality in order to achieve the objectives of good ecological and chemical status set forth in Directive 2000/60/EC by 2015. It is also intended to improve public water and wastewater treatment services (access to water and transparency).

The delays observed in the application of the Directive on urban wastewater treatment (91/271/EEC) have required the government to step in where local authorities have been slow to comply. A schedule of measures and dedicated financing has been implemented within the context of the "Borloo plan to standardize the treatment of wastewater from French urban areas" to meet the goal of 100% compliance by all wastewater treatment plants before the end of 2011, as defined in the Grenelle I Law. The targets were essentially met by the end of 2011, although work continues at some sites. A July 21, 2015 decree that took effect on January 1, 2016 heightens project owners' obligations with regard to spillage from sewage systems during periods of heavy rain and compliance of collection systems with standards. Furthermore, continuous monitoring requirements on networks have been increased. Finally, a certain number of requirements concerning wastewater treatment plants were defined.

Transfer of "water" and "wastewater" treatment competence

The mandatory transfer of "water" and "wastewater treatment" competence to communities of municipalities and to township committees starting from January 1, 2020 resulted from the adoption of the NOTRe law in 2015. The parliamentary bill relating to the implementation of the transfer of competence regarding water and wastewater treatment to communities of municipalities and to township committees was adopted by the French parliament in July 2018. The law:

- makes it possible for municipalities that are members of communities of municipalities to postpone the transfer of "water" and "wastewater treatment" competence to January 1, 2026 provided that at least 25% of the members of communities of municipalities (representing at least 20% of the population) have consented to this no later than July 1, 2019 and assuming they have not already transferred this competence;
- includes rainwater and storm water management in urban areas in the definition of "wastewater treatment" competence for communities of municipalities (optional) and township committees;
- makes the representation/substitution rules more flexible: like communities of municipalities, township communities can stand in for their member municipalities within a syndicate, even if these syndicates cover two public bodies for intermunicipal cooperation (*établissement public de coopération intercommunale* – EPCI) with separate tax status (rather than at least three EPCIs);
- allows the establishment of incorporated and financially independent separate public agencies to manage wastewater treatment or to manage rainwater, provided that the budgets corresponding to each of these public services remain strictly separate (additional budget rule preserved).

ReUse

With the Decree of June 25, 2014 amending the Decree of August 2, 2010 on the use of treated urban residual water for irrigation of crops or green spaces, the government has established new technical requirements applicable to owners and operators of wastewater treatment plants and irrigation systems.

This decree includes new provisions:

- it authorizes sprinkling irrigation and watering systems: it terminates the experimental application file, sets specific technical requirements, and supplements the information to be provided on the irrigation program;

- it specifies the technical requirements for the design and management of the distribution network, for the storage of treated wastewater, and for maintenance of the irrigation or watering equipment;
- as part of the quality monitoring program for treated wastewater, it modifies the frequency of the periodic monitoring of the sanitary quality levels of treated wastewater;
- it includes a specific rule on sanitary quality levels of treated wastewater aimed at wastewater treatment plants with a low raw water load level;
- it specifies the procedure to follow in case of changes to key elements of the authorization file: "Any changes that might cause a noticeable change in key elements of the permit, and described in Appendix IV must be disclosed to the prefectural authority by the permit holder before its implementation".

Biomethane tariffs

Several decrees of June 24, 2014 authorized and set the feed-in tariffs for biomethane derived from sludge and wastewater:

- the first decree amends the type of inputs in the production of biomethane to include "materials, such as sludge, grease, or fluids, resulting from the treatment of wastewater in a digester";
- a second decree amends the minimum purchase tariff, established by the Decree of November 23, 2011, benefiting wastewater treatment plants producing biomethane with the introduction of a new "input" premium and specific tariff adjustments. The decree therefore provides for a third category of inputs: waste from wastewater treatment plants and similar, which are eligible for a "PI3" premium of between 0.1 and 3.9 euro cents per kWh gross calorific value.

C) SPANISH REGULATIONS

In Spain, private contract law governing water, dating from 1879, was entirely superseded in 1985 by public regulation provisions under which all surface water and groundwater was considered as belonging to the public domain. The private use of such water requires a concession or administrative license. The Water Law of 1985 transposed all EU requirements contained in previously adopted European Directives.

Current water law (Royal Decree 1/2001, of July 20, 2001 transposing Directive 2000/60/EC) also imposes processes for water desalination and reuse, presented as solutions for increasing the availability of water resources. As for water savings, the provisions introduce the general obligation to measure water consumption *via* standardized metering systems, or, for irrigation purposes, to administratively define a usage benchmark.

To guarantee the proper ecological status of water, operating permits impose strict limits on authorized ecological flows and discharges.

Other significant water laws supplementing Royal Decree 1/2001 are: Royal Decree 849/1986 of April 11, 1986 approving the Public Water Act, which was amended by Royal Decree 9/2008 of January 11, 2008, to conform to Directive 2000/60/EC and to incorporate some of the requirements of Directive 2007/60/EC. In addition, Royal Decree 140/2003 of February 7, 2003 on health criteria for the quality of water intended for human consumption transposed Directive 98/83/EC. Finally, Directive 91/271/EEC was transposed through Royal Decree 11/1995 of December 28, 1995, on the rules of wastewater treatment in urban areas and by Royal Decree 509/1996 of March 15, 1996.

Meanwhile, EU Directives 91/676 and 2006/07 were transposed, respectively, by Royal Decree 261/1996 of February 16, 1996 and Royal Decree 1341/2007 of October 11, 2007.

D) UNITED STATES REGULATIONS

In the United States, the primary federal laws regarding water distribution and wastewater treatment services are the Clean Water Act of 1972, the Safe Drinking Water Act of 1974 and regulations issued to implement these laws by the Environmental Protection Agency (EPA). Each state has the right to impose higher standards and stricter criteria than those established by the EPA, and several states have done so.

The main regulatory changes of the past few years are as follows:

In the drinking water sector, in 2002 the EPA adopted the Interim Enhanced Surface Water Treatment Rule for systems with more than 10,000 inhabitant equivalents and the Long-Term 1 Enhanced Surface Water Treatment Rule for systems with less than 10,000 inhabitant equivalents. The purpose of these regulations was to improve turbidity controls in surface water in treatment plants and to thus reinforce checks of cryptosporidium content in this water.

In 2006, the latter rule was updated in the form of the Long-Term 2 Enhanced Surface Water Treatment Rule to strengthen protective measures on contaminants that are required for high-risk public water systems. The EPA also strengthened the regulations on disinfection byproducts (Stage 2 Disinfectants and Disinfection Byproducts Rule). Finally, the Ground Water Rule establishes multiple restrictions designed to prevent drinking water from being contaminated by bacteria or viruses. The proposed revisions to the standards relating to coliform bacteria (Total Coliform Rule) should prompt those systems that are vulnerable to microbiological contamination to adopt more effective operating practices.

Since 2010, the EPA has developed a new strategy to protect public health against contaminants which promotes a "grouping" approach to contaminants, stimulates technological innovation and strengthens the implementation of existing legislation, such as the Toxic Substances Control Act (TSCA). In wastewater treatment, many facilities are now required to add a third treatment stage to remove phosphorus and eliminate nutrients in order to preserve fragile environments. Many of these are also now required to control their toxic emissions and comply with quality standards aimed at restoring favorable conditions for bathing and fishing in the receiving environment. As part of the national emissions licensing system, the EPA uses a method that analyzes total effluent toxicity. Under the provisions of the Clean Water Act, municipalities also have to invest in the renovation of their wastewater ttreatment infrastructures as well as in the reduction of flows at source, in order to improve control of discharges, particularly of rainwater and wastewater from sewers, into the natural environment.

A new law, the Clean Water Rule, aiming to extend federal protection of river networks and water supply systems by specifying zones falling under the Clean Water Act took effect on June 28, 2015 despite the firm opposition of many players in the US economy.

E) CHINESE REGULATIONS

The decree signed in 2014 by the Chinese Premier on wastewater treatment networks and facilities now mandates cities to plan their wastewater treatment systems according to the climate and local geography, as well as their economic and social development. For example, under the new regulations, storm water drainage systems and sewers will be separated in new construction areas. Companies in the food processing, pharmaceutical and construction industries must now apply for wastewater discharge permits.

On April 16, 2015, the State Council issued a "Plan of Actions for the Prevention and Control of Water Pollution" known as the "Ten-Point Water plan" (which is actually 26 detailed requirements and 238 measures). The plan aims to control pollution discharges, to promote economic and industrial transformation, to save and recycle resources, to promote the progress of science and technology, to use market mechanisms and to enforce the law and regulations, strengthen management and ensure the safety of the aquatic environment, clarify responsibilities, and encourage public participation. It sets targets for 2020, putting in place stricter controls on polluting companies with emission limits and providing for stricter supervision by the authorities and the public. In addition, the plan also covers the control of pollution, sustainable water use in agriculture, the use of municipal water, coastal water management and overall protection of the ecological environment. The plan aims to gradually improve the groundwater and surface water situation (Blue River, Yellow River and the Song Hua, Huai Hai and Liao Rivers) by 2020. One of the main actions is to clean heavily polluted water (called "dark and smelly" in big cities).

F) AUSTRALIAN REGULATIONS

In Australia, the laws of the States and Territories grants the right to control the allocation and use of water to the Crown, thus abolishing the prior Common Law rules. The extraction and use of water and the construction of infrastructure (dams, irrigation systems) usually require approval.

In 2004, the Council of Australian Governments adopted the National Water Initiative, which sets the guidelines for a comprehensive reform of the national water management system in all areas: accounting for water resources, water storage capacities and awareness, water access rights and planning framework, water markets and marketing, water pricing, integrated management, reform of urban water management, community partnerships and adjustments. This reform has had the effect of splitting the rights to water from the land and allowing water to be exchanged as a valuable asset, either temporarily or permanently.

The current reforms have also led to more bids for construction and operation from private operators in terms of water infrastructure, such as wastewater treatment plants. For example, in New South Wales, the Water Industry Competition Act 2006 requires the construction and operation of such infrastructures and their links with the relevant water networks to be subject to licenses whose terms must be strictly adhered to by operators.

6.7.2.2 Waste

In many countries, recovery and waste treatment sites are subject to laws that require industrial companies to obtain authorizations from public authorities to be able to operate their sites. Obtaining these authorizations requires, in particular, specific environmental and health impact studies to be submitted together with a risk assessment for the facility concerned. For instance, operators of landfills must provide specific financial guarantees (often in the form of bank guarantees) that cover the restoration of the site and monitoring after the closing of the site (for a 30-year period in most countries). Operators must also observe specific standards with respect to discharges and emissions arising from processes; incineration plants, for example, are subject to regulations intended to limit emissions of pollutants and to encourage energy recovery. Waste flows are also subject to specific regulations, depending on their type.

A) EUROPEAN REGULATIONS

Circular Economy Package

Following the work of the Commission in 2014 and the withdrawal of the Circular Economy Package proposed on July 2, 2014, the new Commission announced the publication of a new and more ambitious package incorporating a more efficient management of natural resources, in addition to better waste management. The Circular Economy Package published on December 2, 2015 aims to achieve better management of resources at European level through binding recycling targets for different material flows and establishes the general framework of operation for the waste sector through 2030. It requires the revision of six Directives on waste (called the Waste Package): the Waste Framework Directive (2008/98/EC), the Packaging and Packaging Waste Directive (94/62/EC), the Landfill of Waste Directive (1999/31/EC), the End-of-Life Vehicles Directive (2000/53/EC), the Waste Batteries and Accumulators Directive (2006/66/EC) and the Waste electrical and electronic equipment Directive (2012/19/EU). The Waste Package was adopted in May and published in June 2018 in the OJEU. The time frame to transpose it into national law is set for July 2020.

► **Waste Framework Directive**

The first Waste Framework Directive (2008/98/EC) was published in the OJEU on November 22, 2008. This directive simplifies existing legislation by repealing the former directive on waste, the directive on hazardous waste and part of the directive on the disposal of used oils.

By establishing a new framework for waste management services in Europe, European authorities wish to encourage national waste prevention programs and to promote recycling and recovery.

The Directive thus reinforces the principle of hierarchy in waste treatment methods, encouraging Member States to employ, in order of priority, prevention, reuse, recycling, energy recovery and finally, as a last resort, landfill. An analysis based on the "life-cycle" approach will, however, allow certain adjustments to be made within this hierarchy. At the same time, Member States have been setting recycling targets: 50% of municipal waste and 70% of non-hazardous construction and demolition waste by 2020.

The Directive clarifies the definitions of recycling and recovery and recognizes incineration with energy recovery, if certain efficiency criteria are met, as a recovery operation. It also introduces two new concepts: that of the byproduct and that of "end of waste status". Once the directives have been adopted, criteria for end of waste status will be clarified through the comitology process. This same process was also used in 2011 to define a method for measuring waste recovery efficiency against targets.

Under the Circular Economy Package, a revision of the Directive was formally adopted in May 2018 (the Directive was published in the OJEU on May 30, 2018).

The new Directive revises recycling ambitions upwards. After having defined municipal waste, it aims for 55% recycling or reuse of this waste by 2025, 60% by 2030 and 65% by 2035. Regarding food waste, the Directive provides for putting in place a methodology by the end of 2019 as well as indicative targets to reduce this waste 30% by 2025 and by 50% by 2030.

It defines a calculation method with two measurement points as well as the adoption of a delegated act on the average loss rates of sorting centers.

► Landfill of Waste Directive

Directive 1999/31/EC on landfilling waste sets the technical and operational requirements applicable to both landfills and the waste deposited. It aims to prevent or reduce the environmental impact of the landfilling of waste, in particular on surface water, groundwater, soil, air and human health. It defines the various categories of waste (municipal, hazardous, non-hazardous and inert) and distinguishes between three types of facilities: landfills for hazardous waste (known in France as *installation de stockage de déchets dangereux* – ISDD), landfills for non-hazardous waste (known in France as *installation de stockage de déchets non dangereux* – ISDND), and landfills for inert waste (known in France as *installation de stockage de déchets inertes* – ISDI).

A revised version of the Directive (Directive 2018/850) was adopted on May 30, 2018 as part of the Circular Economy Package. It sets new goals, and in particular a goal to reduce municipal landfilled waste by 10% by 2035 (and by 2040 for countries that landfilled more than 60% of their waste in 2013) was also adopted.

► Directives relating to specific waste

Directive 94/62/EC aims to reduce the environmental impact of packaging and packaging waste. This Directive established quantified targets for the recycling and recovery of packaging used in the European market.

The Directive was revised in 2004 to clarify the definition of the term "packaging," then again in 2005 to allow new Member States extra time for implementation.

The Directive was also revised under the Circular Economy Package in 2018. As a result, the key objectives were revised:

- 65% of packaging waste recycled in 2025 and 70% in 2030;
- the following objectives must be met for materials contained in packaging waste: by 2030, 55% for plastic, 30% for wood, 80% for ferrous metals, 60% for aluminum, 75% for glass and 85% for paper and cardboard.

Directive 2002/96/EC on Waste electrical and electronic equipment (WEEE) imposes measures concerning product design, the establishment of collection, treatment and especially recovery systems, and manufacturers' participation in these measures in such a way as to encourage them to integrate recycling measures into the design stage. The Directive introduces the principle of Extended Producer Responsibility, making it mandatory for them to fund collection from the drop-off sites and treatment, recovery and disposal of WEEE (for both households and businesses). These obligations are accompanied by quantified targets for selective collection, recovery and reuse. This Directive was revised in 2018 under the Circular Economy Package.

Directive 2012/19/EU entered into force on August 13, 2012, amending the previous Directive. Accordingly, the objectives regarding collection rates were increased: in 2016, the rate was to amount to 45% of average electrical and electronic equipment from household and professional sources marketed during the three preceding years, and attain 65% by 2019. In addition, recycling and recovery targets, currently set by equipment category at between 50% and 75% for reuse and recycling and between 70% and 80% for recovery, should be raised by 5% by 2018. Finally, the scope has been expanded to include, in principle, all electrical and electronic equipment (with the exception of a few equipment categories that are specifically excluded).

Similarly, Directive 2011/65/EU on the Restriction of Hazardous Substances (RoHS) in electrical and electronic equipment was published in the OJEU on July 1, 2011. The Directive was amended in 2015 to add four substances.

Directive 2006/66/EC lays down the rules for the collection, recycling, treatment and disposal of batteries and accumulators. It prohibits the sale of certain batteries containing mercury or cadmium in a proportion greater than a preset threshold, and sets two collection targets (25% minimum by September 26, 2012 and 45% minimum by September 26, 2016). This Directive was amended by Directive 2008/12/EC, which came into force on March 30, 2008, and which specifically introduced changes in the implementing powers of the European Commission. This Directive was revised in May 2018, still under the Circular Economy Package.

Directive 2000/53/EC on End-of-Life Vehicles (ELVs) requires owners of ELVs to return them to an authorized operator for destruction, on penalty of being unable to de-register their vehicle. Destruction involves extracting all materials and optimizing their reuse, recycling, or recovering what can be recovered. The recycling rate must reach 80% and the recovery rate 85% as from 2006, and 85% and 95% respectively by 2015. This Directive was revised in May 2018.

Directive 86/278/EEC on the protection of the environment, and in particular of the soil, regulates the use of wastewater sludge in agriculture, so as to avoid harmful effects on soil, plants, animals and humans. Thus, in order for sludge from wastewater treatment plants to be recovered for agricultural purposes, it must comply with traceability requirements regarding organic components and the various metallic trace elements that it may contain (heavy metals such as cadmium, mercury and lead). French standard NFU 44-095, drafted in 2002, goes further, defining a strict framework for recovery of substances after treatment of wastewater or from the organic portion of household waste after composting.

In March 2016, the Commission proposed revising the regulations on fertilizers. The primary objective is to ensure cycling of nutrients. European institutions reached a tentative agreement in December 2018.

Regulations relating to cross-border waste shipment

Regulation 1013/2006/EC governs cross-border shipments of waste, the objective being to provide ecologically sound management. The regulation establishes a system based on two procedures:

- information procedure: a simple procedure consisting of inserting an informational document with shipments of waste. All non-hazardous waste intended for recovery within the European Union must be transferred by means of this procedure;
- notification and prior consent procedure: a cumbersome procedure that requires prior consent from the relevant authorities and the establishment of financial guarantees. All hazardous waste intended for recovery within the European Union must be transferred by means of this procedure.

Regarding waste to be eliminated:

- within the EU, these cross-border shipments are subject to a prior notification and consent procedure;
- such shipments to non-EU members states are in principle prohibited.

This Regulation also incorporates Basel Convention provisions on the control of cross-border hazardous waste movements and disposal.

The Regulation provides for more rigorous performance measures. It requires Member States to carry out inspections and spot checks. It also authorizes physical controls of transferred waste, in particular the opening of containers, and requires Member States to notify the European Commission of their domestic legislation on illegal transfers and corresponding sanctions. A revision of the regulation was published in the form of Regulation 660/2014 in the OJEU on June 27, 2014 to mitigate the divergences and gaps identified in applying the regulation and inspections in Member States. This involves establishing inspection plans that are regularly and consistently planned to eliminate illicit waste shipments.

The European Commission issued in 2016 a report on the effective functioning of the waste market in the Union. The report outlines areas for operational improvement in cross-border transfers of waste in the perspective of modifying its legal framework by 2020. The Commission therefore recommends the development of a "Schengen waste area" and the strengthening of the prior consent system for recovery facilities, which allow a faster procedure for the transport of waste.

In 2017, the European Commission published a roadmap on the regulations related to waste shipments. An assessment will be conducted which aims to evaluate if Regulation (EC) 1013/2006 relating to waste shipments (WSR) meets its objectives and is in line with EU domestic market environmental policy. The assessment should be completed in 2019.

Industrial Emissions Directive

Directive 2010/75/EU on industrial emissions, published in the OJEU on December 17, 2010 (the deadline for its transposition was January 7, 2013), incorporates Directive 96/61/EC on Integrated Pollution Prevention and Control (IPPC) along with six sector-based Directives, including the Directive on incineration (2000/76/EC) and the Directive on limiting emissions of certain pollutants into the air from large combustion plants (2001/80/EC). Following a two-year deadline for transposition, the Directive was supposed to come into effect in early 2014, or early 2016 for existing facilities.

Up to now, as a complement to the environmental thresholds put in place by the directive on the incineration and co-incineration of waste, Directive 96/61/EC called the "IPPC" Directive, which provides that certain industrial and agricultural activities, one of which is waste services management, must be subject to a prior authorization, requiring certain environmental conditions to be met. Companies are responsible for preventing and reducing pollution that they might cause, through the adoption of specific measures (for example: recycling, accident prevention and treatment of sites at end-of-life), and through meeting operating requirements (for example, limits to the emission of polluting substances and monitoring of discharges). The new directive introduces more stringent BREFs (best available techniques reference documents), modifies emissions limit values and broadens the scope of application to new types of facilities, including recycling facilities.

A proposal to revise the BREF on waste incineration was released on May 24, 2017. The document and related BAT (best available techniques) are in the final stage of adoption, which should take place during the second half of 2019.

The BREF on waste treatment has been under revision since 2013. It applies to all treatment facilities for non-hazardous waste excluding incineration. Its scope of application covers the functioning of incineration plants (including emissions to air and water from such plants). The Commission's implementing decision 2018/1147 of August 10, 2018 setting forth the conclusions regarding the best available techniques for treating waste under Directive 2010/75/EU from the European Parliament and Council was published in the OJEU on August 17, 2018. The facilities covered by these BAT have four years from the publication date to implement the BAT.

Plastics strategy

Following the Union's Strategy on plastic materials, in May 2018, the Commission proposed a Directive on reducing the environmental impact of certain plastic products. This Directive targets the products that are the most prevalent in the seas and on the beaches of Europe. An interinstitutional agreement was reached in December 2018 and contains positive items that strongly impact the Group's R&R activity in Europe. In fact, the legislation of this future Directive provides for:

- a binding collection target of 90% of plastic bottles in 2029, with an intermediary step of 77% in 2025;

- 25% of mandatory recycled content for bottles made with PET in 2025;
- 30% of mandatory recycled content for all plastic bottles in 2030.

It should be definitively adopted during the first quarter of 2019 for publication in the OJEU in summer of 2019.

B) FRENCH REGULATIONS

In France, ministry and prefecture decrees and orders define the rules governing the treatment of waste, in accordance with Articles L. 511-1 *et seq.* of the ICPE (Environmental Code regarding facilities classified for the protection of the environment). They specifically regulate the design, building, operation and monitoring after closure of these facilities. Energy recovery units are subject to numerous restrictions, including limitations on emissions of pollutants. A third ICPE system that complements the reporting and authorization systems, known as the registration system, was introduced in 2009. It helps speed up the licensing process by replacing the public inquiry procedure with a public information process. Waste is categorized according to hazard level. A distinction is drawn between inert, non-hazardous and hazardous waste. Hazardous waste is subject to strict tracking obligations throughout the entire treatment chain.

Traceability of hazardous waste is provided by a waste tracking form (BSD).

Furthermore, operators of companies producing or shipping waste, collection operators, transporters, traders and operators of centers for the transport, transfer or treatment of waste must keep an updated chronological register of the production, shipment, reception or treatment of said waste (R. 541-43 of the Environmental Code).

The Circular Economy Roadmap

On April 23, 2018, the Prime Minister, Edouard Philippe, presented the Circular Economy Roadmap which highlights the necessity to stop planned obsolescence, better sort our waste to recycle more and make every consumer an active participant in the circular economy. A dialog began on October 24, 2018 which resulted in the creation of 50 measures to achieve a fully circular economy. Out of the 50 measures announced, 37 directly target companies.

The five objectives of the Circular Economy Roadmap are as follows:

- reduce by 50% waste to be landfilled;
- 100% of plastics recycled;
- -30% of resource consumption;
- save 8 million metric tons of additional CO_2 every year through plastic recycling;
- create 300,000 additional jobs.

Measures proposed are based on four focus areas:

- produce better (7 proposals);
- consume better (9 proposals);
- manage our waste better (24 proposals);
- get everyone involved (10 proposals).

Beyond several measures relating to the EPR sector, one of the Circular Economy Roadmap's main measures is providing incentives to incorporate recycled plastic into products. Measures also concern the introduction of guidelines or the recovery of construction waste (overhauling waste diagnosis, in particular).

Taxes on waste are also involved, with the proposal of a new general tax on polluting activities (TGAP) for waste (landfill and incineration) and an overhaul of the Tax Collection on Household Waste (TEOM) so communities can more easily put tax incentives in place.

Certain provisions of the Circular Economy Roadmap will be reflected in a government bill on the Circular Economy in 2019. This draft legislation will also aim to transpose the European Directives on waste that have just been revised into French law.

NOTRe Law

Law 2015-991 of August 7, 2015 concerning the new territorial organization of the French Republic modifies the level of competence with relation to the drafting of waste management plans. Waste management plans will from now on be drawn up at the regional level, not at the departmental level. Regional prevention and waste management plans must be approved within a period of eighteen months following the enactment of the law. The NOTRe Law also strengthens the inter-community aspects and changes rules relating to regional planning by introducing a regional planning and sustainable development scheme for territories, the STRADETT, a merger of several existing schemes. Since March 1, 2017, public decisions made regarding waste, environmental authorizations or facilities classified for the protection of the environment must be compatible with waste prevention and management plans.

Cross-Border Shipments of Waste (CBSW)

For CBSW leaving France, the French Environmental Code requires that the organizers or entity providing notice of shipments be headquartered in France (L. 541-40 of the French Environmental Code).

As from publication of Decree 2015-1396 of November 3, 2015, the authority with CBSW jurisdiction is no longer a French administrative department center (DREAL), but rather a national one (PNTTD). Consequently, all CBSW notification documents must be forwarded to that center.

Decree 2016-288 of March 10, 2016, relating to various provisions for adaptation and simplification in the area of waste prevention and management, modifies regulatory provisions of the circular economy and those relating to the prevention and management of waste. It modifies the rules applicable to the collection of household waste by the public waste management service. It inserts new measures for sorting and separate collection by producers or entities holding paper, metal, plastic, glass or wood waste. It adapts the provisions of the Environmental Code relating to the management of Waste electrical and electronic equipment (WEEE).

It determines the manner of applying Article L. 541-10-9 of the Environmental Code concerning distributors of construction materials, products and equipment for professionals to organize systems for taking back waste from materials, products and equipment of the same types that they sell.

It also provides several simplifications to waste prevention and management measures so as to accelerate the transition to the circular economy.

The notice to operators of waste processing facilities and operators of production facilities that use waste in place of raw materials dated January 13, 2016 states the legal status of what is produced by an installation for which the inputs have partial or full status as waste. Waste is defined in Article L. 541-1-1 of the Environmental Code as "any substance or object which a holder discards or intends or is required to discard."

C) CHINESE REGULATIONS

The 13th five-year plan for 2016-2020 continues to promote the adoption and stricter application of waste removal and treatment policies in the interest of environmental protection.

In early 2015, the Chinese Ministry of the Environment published temporary guidelines for screening risks concerning soil contamination in country planning. This document supplements the standard techniques for managing contaminated sites, including technical recommendations for soil remediation that were published by the Ministry of the Environment in 2014. These recommendations are consistent with the decontamination requirements of similar programs in countries with more developed environmental regulations.

In September 2014, the National Development and Reform Commission (NDRC), the Ministry of Finance, and the Ministry of Environmental Protection jointly issued rules on the nationwide implementation of differentiated tariff policies targeting pollutants discharged by industrial companies. The measure will raise the taxes collected for pollutant discharges by national and local authorities in order to reallocate these sums to fund environmental protection measures and policies.

On July 27, 2017, the Chinese Council of State published a plan to ban foreign waste from entering the country as well as a reform of the solid waste import administrative system (Plan). The Plan announced that at the end of 2017, solid waste presenting a serious threat to the environment and generating wide-ranging public concern will not be allowed to enter the country. Import licenses for solid waste will be canceled. The ban includes eight types of plastic, paper, textile waste and vanadium slag.

D) AUSTRALIAN REGULATIONS

Each Australian state and territory has a different approach to waste legislation. Some, like New South Wales and Victoria, have comprehensive schemes for classifying waste. Others, such as Tasmania, pay particular attention to the most dangerous types of waste. Some states legislate at all levels, from waste generation to elimination, while others only regulate the elimination of waste.

In general, licenses are required for waste treatment, recovery and elimination. The terms of a given license generally stipulate the type of waste that a center may receive. Violations often occur when waste is eliminated in a plant other than the one for which the permit was obtained and that is authorized for a given operation. Transporters of certain types of waste must also hold permits that may be obtained in accordance with the various environmental regulations of the different states and territories.

Some waste must be tracked as it crosses Australia. Each state has different legislation with regard to the type of waste that must be monitored. Authorizations to transport waste from one state or territory to another must be obtained prior to shipment from the jurisdiction where the shipment is being sent.

The Hazardous Waste Regulation of Exports and Imports Act of 1989 requires obtaining a permit for hazardous waste to be imported to or exported out of Australia. Some of this waste must then be tracked during movement in Australia.

The fragmentation of the Australian market results in different frameworks for markets between the states and the territories and incurs added costs, more complex exchanges of information and in some case even adverse effects.

The National Waste Policy approved in 2009 sets regulations in the area of waste management and resource recovery by 2020 in six key areas and identifies 16 strategic priority actions that will feature a national and cohesive approach. These strategies will take the form of actions on the national level that will be carried out in close collaboration and under the authority of one or more jurisdictions.

6.8 Non-Financial Performance Statement – Group environmental, corporate and social responsibility policy

A modified regulatory framework based on the significance of non-financial information:

Since the 2001 NRE (New Economic Regulations) law, French listed companies must report on their environmental and social impact in their Management Report. The Grenelle II Law (Article 225) reinforced these obligations by specifying the type of information that companies must report in three areas:

- environmental information;
- social information;
- corporate social commitments to promote sustainable development.

Furthermore, the decree dated August 19, 2016 pursuant to the Law of August 17, 2015 on Energy Transition for Green Growth added the following information, inter alia, from 2016:

- measures for prevention, recycling, reuse, other ways of recovery and elimination of waste;
- actions for fighting against food waste and the significant greenhouse gas emissions items caused by the activities of the Company, especially through the use of goods and services it produces.

With Ordinance 2017-1280 of July 19, 2017 and Decree 2017-1265 of August 9, 2017 amending Articles R. 225-104 through R. 225-105-2 of the French Commercial Code, France has transposed European Directive 2014/95/EU relating to the publication of non-financial information, which requires French listed companies to publish and declare non-financial information for fiscal years starting on or after September 1, 2017. This transposition was completed in November 2018 by amending Article L. 225-102-1 of the French Commercial Code.

This new system, which replaces the system put in place by the Grenelle II Law, prioritizes "significance" and the gathering of more relevant and useful information for the companies and their stakeholders by emphasizing relevant social, environmental and societal information (and for listed companies, information on anti-corruption and respecting human rights) in terms of the main risks and challenges identified by the Company. It also enables the Company to include legal requirements regarding the "duty of vigilance" law and the Sapin II law in their non-financial reporting while still reporting on requirements related to the Energy Transition for Green Growth Law.

6.8.1 Group business model

Faced with a rapidly changing environmental market regarding both demographic and climate changes, new expectations from these customers in terms of overall performance and societal demands as citizens and companies alike grow more assertive, SUEZ is stepping up its strategy to make the Company the leader in sustainable resource management. Its business model falls steadfastly within the principles of the circular economy. The Group now operates throughout the entire resource value chain, from designing, building and operating facilities for water or for the collection, sorting and recovery of waste to supplying integrated solutions for the circular economy and environmental services.

The value creation chain related to the Group's business activities is presented in chapter 6.2. Its strategy and growth outlook are presented in chapter 6.3, and its market and competitive positioning in chapter 6.4.

SUEZ's position as leader in environmental activities as well as its ambition for growth and for transforming its business activities against a backdrop of both growing needs in new environmental services and a shaky macroeconomic environment led the Group to apply an integrated management approach for identifying its main risks (chapter 4.2) and its opportunities (chapters 6.2 to 6.4). This management approach is described in the action plans applied within different levels of the Group.

6.8.2 Main non-financial challenges related to the Group's business activities

In 2015, SUEZ conducted a large consultation with internal and external stakeholders to complete a materiality study with nearly 5,000 people in 49 countries. In line with the integrated risk management system (chapter 4.2), this study prioritized the Group's non-financial risks, and particularly:

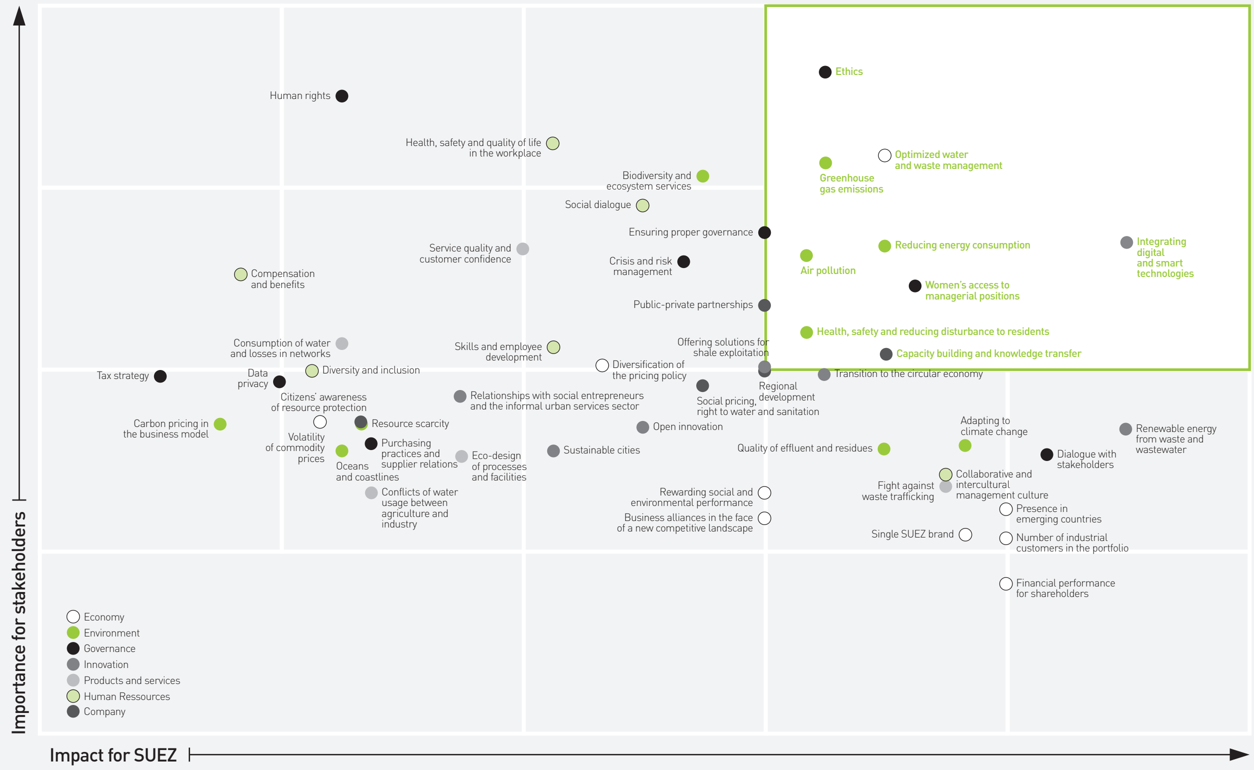
- four priority macro-challenges: be a collaborative, open and responsible company; be the leader in the low-carbon and circular economy; support customers' environmental transition with concrete solutions; contribute to the common good;
- 17 key commitments to assist in these macro-challenges.

These commitments constitute the backbone of the 2017-2021 Sustainable Development Roadmap. Replacing the commitments from 2008-2012 and 2012-2016, this Roadmap fulfills two functions:

- to act as a lever for the Group's transformation and as a tool for management control: the 17 measurable commitments with specific deadlines contain action plans to reach the objectives by 2021;
- to contribute to the Sustainable Development Goals (SDG) as defined by the United Nations in 2015. Representing a common language with its customers and all stakeholders, the UN agenda is a valuable framework for SUEZ in developing and managing its strategy.

SUEZ 2015 materiality matrix

4,913 respondents in 49 countries | **7** categories of stakeholders (a) | **16** issues submitted for public consultation (b) | **3** geographical areas (c) | **9** priority issues identified

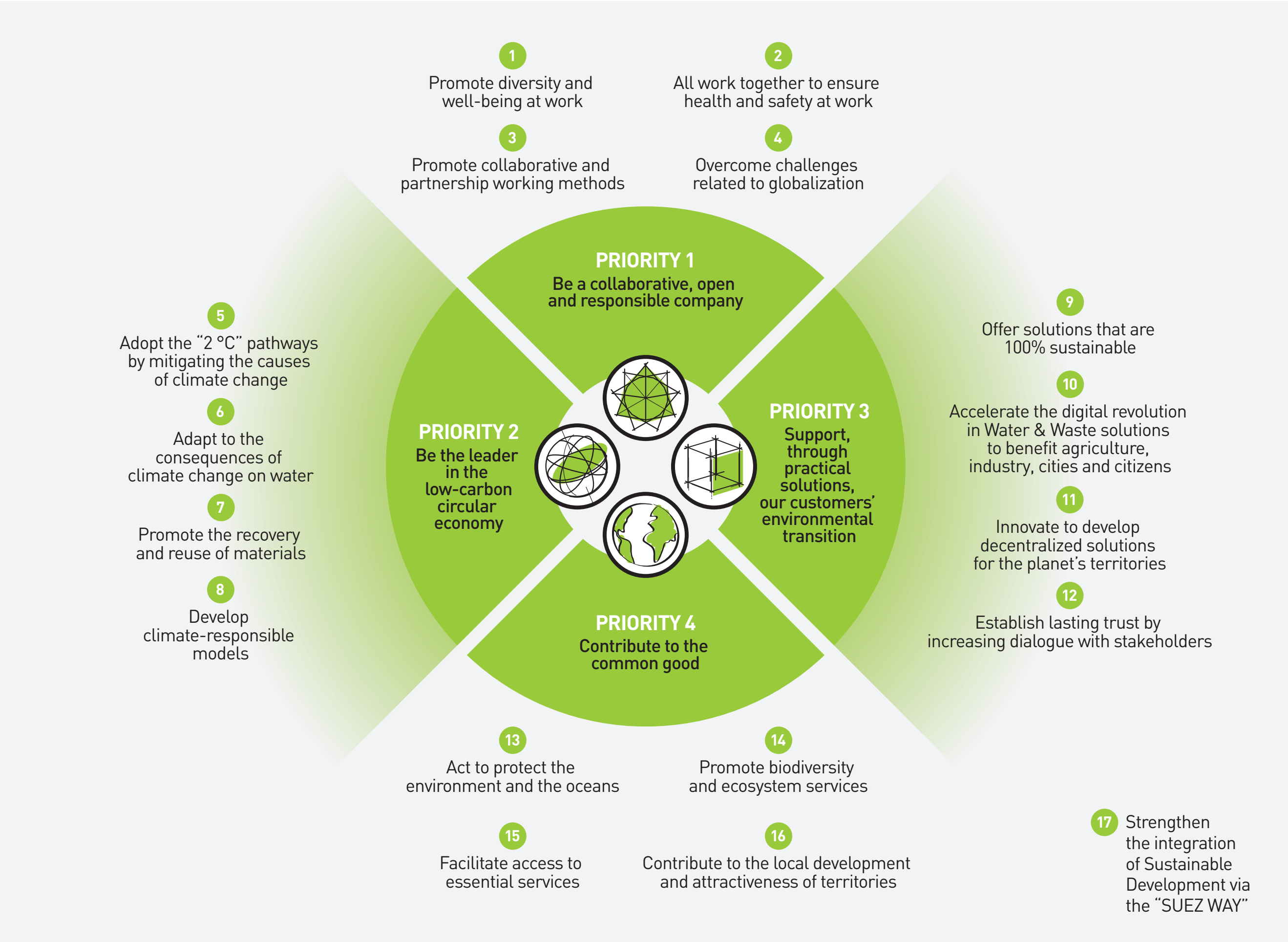


(a) Employees, investors and shareholders, public sector, private sector, civil society, research and education, media.
(b) In France, the United Kingdom, Spain and Morocco.
(c) France, rest of Europe and rest of the world.

GRI DISCLOSURE LABELS
G4-19, G4-24, G4-25, G4-27

The 2017-2021 Sustainable Development Roadmap was approved by the SUEZ Management Committee in December 2016, reviewed by the Ethics and Sustainable Development Committee meeting held on February 23, 2017, presented in full to the Board of Directors on February 28, 2017, then at the Group Shareholders' Meeting held on May 10, 2017, and finally at the Board of Directors' Strategy Seminar held on November 2 and 3, 2017. The Roadmap has also been presented and was specifically discussed with staff representative bodies within the Secretariat of the European Works Council. Rolled out in all the Group's Business Units, it involves all of its business activities around the world and supports the Resource Revolution.

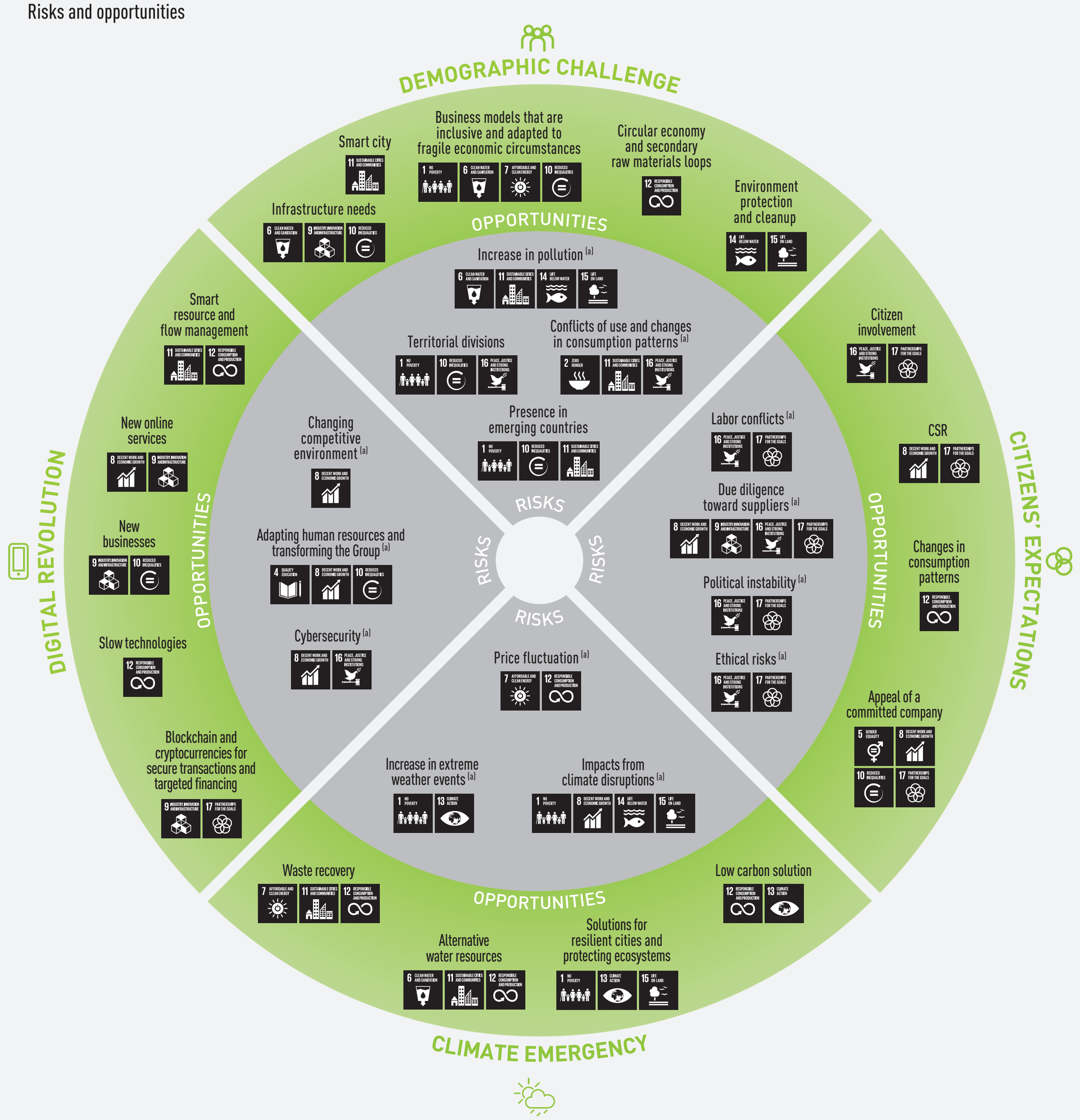
As with the previous Roadmaps, the commitments contain key results or progress indicators. A report on their progress is published annually in the Group's Integrated Report, verified by an independent third party and presented annually to the Board of Directors Ethics and Sustainable Development Committee.



In order to reach the objectives set for 2021, managing the Roadmap also relies on:

- **Monitoring long-term trends and resultant risks and opportunities:** SUEZ has identified four major modern world challenges that impact its business activities and priority challenges: the demographic challenge, the climate emergency, the digital switchover and changes in citizen demands. Risks and opportunities have been identified and then analyzed for each of these megatrends, and they are managed as part of the Group's main processes, especially with regards to risk management (section 4.2.1), ethics and compliance (section 4.2.6), Human Resources (chapter 17.1) and purchasing (section 6.8.2.2.6). Following the application of the law on the duty of vigilance and the Sapin II law, the corporate social responsibility aspect of these processes has been strengthened and is driven by the Sustainable Development Department and its specialists in the subsidiaries (section 6.8.2.2.6).

Risks and opportunities



Risks marked (a) are described in chapter 4.1 of the Reference Document [1].

(1) Increase in pollution: see 4.1.2 "Risks related to facilities management"; Conflicts of use and changes in consumption patterns: see 4.1.1 "Group exposure to changes in consumption trends" and "Operational risks"; Presence in emerging countries: see 4.1.2 "Risks related to a presence in a certain number of countries"; Social conflicts: see 4.1.2 "Risks of labor conflicts"; Political instability: see 4.1.1 "Some Group activities require administrative authorizations that can be difficult to obtain or renew" and 4.1.2 "Risks of unilateral cancelation, non-renewal or amendment of contracts with public authorities" and "risks tied to operating in some countries"; Duty of care toward suppliers: see 4.1.2 "Risks of civil and environmental liability", "Risks related to facilities management", and "Health, security and safety risks"; Ethical risks: see 4.1.2 "Risks related to ethics breaches"; Impacts from climate disruptions: see section 4.1.1 "Impact of weather conditions on earnings from Group water operations" and "Risks related to climate disruptions"; Increase in extreme weather events: see 4.1.2 "Risks related to natural disasters"; Price fluctuation: see 4.1.3 "Risks linked to price fluctuations of certain commodities and energy"; Changing competitive environment: see 4.1.1; Adapting Human Resources and transforming the Group: see 4.1.2 "Risks related to Human Resources Management" and "Risk related to the Group's transformation"; Cybersecurity: see 4.1.2 "Information System risks".

- **Updating the significance of the challenges**: In order to guide the progress of the roadmap as close as possible to societal expectations, SUEZ regularly measures its reputation among the general public and stakeholders, and periodically reviews its materiality analysis. In 2018, SUEZ tested out the importance of its various commitments with both its public and private customers and potential customers, its employees and citizens in its primary markets by surveying nearly 2,000 people. The study shows that citizenship and governance are vital markers of the reputation of SUEZ, which is overall better perceived than the average utility company, according to Reputation Institute's international benchmark. Commitments deemed a priority under the 2017-2021 Roadmap pertain to employee Health and Safety, the circular economy, developing 100% sustainable solutions, protecting the health of the environment and oceans, and adapting to the consequences of climate change on water.
- **Observing dilemmas and controversies**: the monitoring of issues arising in society in the regions where the Group operates is included in the report on the vigilance plan (section 6.8.2.2.7). Aware that its reputation is a valuable asset, for more than ten years, SUEZ has maintained a voluntary open dialog policy at all relevant levels in order to drive its overall performance. Convinced that this dialog is crucial in a time of not only environmental transition, but demographic and digital transition as well, SUEZ is spearheading shared standards such as OECD principles for water governance or Committee 21 principles for constructive corporate dialog with stakeholders. SUEZ consults with experts and stakeholders on a yearly basis under the aegis of a third party guarantor to handle dilemmas encountered together.

A summary of these studies and discussions with stakeholders has led to keeping the following challenges seen as the most prominent for the Group's Non-Financial Performance Statement:

- **Environmental challenges**
  - environmental management, including environmental and industrial risk management, reduction of environmental pollution and protection of biodiversity,
  - making water supplies safer when confronting risks linked to climate disruptions,
  - fighting climate change by continuously improving the Group's carbon profile,
  - optimized water and waste management using a circular economy approach.
- **Social and societal challenges**
  - social and societal contributions of the Group's business activities: promoting diversity, engaging in social dialog and cooperation, optimizing the Group's socio-economic footprint and developing customized solutions to meet all regions' needs,
  - promoting human rights throughout the Group's entire value chain, including protecting personal data and managing Health and Safety risk,
  - fighting corruption.

6.8.2.1 Description of main challenges identified

6.8.2.1.1 ENVIRONMENTAL MANAGEMENT

Management of environmental and industrial risks

SUEZ has to take extreme care in monitoring environmental and industrial risks. SUEZ's environmental management is reviewed annually by the Board of Directors' Ethics and Sustainable Development Committee. In 2014, the Environmental Risks Management Policy was expanded to include Industrial Risks and approved by General Management.

In 2016, this policy was clarified to include management of the cybersecurity risk of Industrial Control Systems, consistent with the Information Systems Security Policy.

This policy applies to all Business Units and to central services.

It addresses risks which may be of accidental or natural origin. They may be due to human or organizational factors, equipment breakdowns or malicious acts, including:

- all types of pollution (air, soil, aquatic environments) or environmental nuisance (noise, vibration, odor, visual discomfort, etc.);
- environmental damage as well as property damage and personal injury caused by fire, explosion, machine breakage, natural disasters, collapse of structures, etc.

This policy is consistent with the Global Risk Management and the Occupational Health and Safety Risks policies.

It clarifies the scope, policies and resources to be implemented and the respective roles of the Business Units and headquarters. It also aims to define the Group's management rules and to specify the environmental and industrial standards that are to be applied worldwide.

Where risks are identified, action plans to minimize the potential impact of a near-miss or environmental accident are implemented and monitored until their conclusion.

Section 4.2.2 of this Reference Document describes the management mechanisms for reducing industrial and environmental risks.

Protection of biodiversity and ecosystems

For SUEZ, biodiversity is:

- a natural asset upstream in the Group's value chain;
- a resource impacted by the infrastructures it manages (networks, plants, landfills, etc.);
- a resource preserved through the Group's business activities contributing to protecting natural assets (reservoirs of biodiversity, ecological corridors, wastewater treatment, artificial wetlands, etc.).

This heavy dependence between the Group's business activities and biodiversity requires first and foremost measuring and reducing potential impacts from the business on the ecosystems. Preserving the quality of water resources linked to eliminating impacts for soil from landfill activities or to improving wastewater treatment processes ensures a sustainable supply of sufficient drinking water of good quality at a reasonable cost to municipal customers and consumers, and maintains a good capacity for the downstream treatment of ecosystems. In addition, limiting the impacts of ocean dumping from desalination plants is one of the priority topics discussed at the plant design phase.

Beyond this operating performance goal, SUEZ aims to contribute, as a regional player, to the protection and restoration of terrestrial, aquatic, marine and coastal biodiversity by launching action plans to transform sites the Group manages for municipal and industrial customers into biodiversity reservoirs, but more generally by offering them customized solutions to meet their own commitments in this area. As a result, the Group offers its customers nature-based solutions, such as artificial wetlands, which contribute to an ecosystem's functioning while also helping eliminate micropollutants, biodiversity strategy decision-making tools or dedicated action plans such as plans to fight invasive exotic species.

Moreover, the Group's business activities do not require specific additional measures to ensure animal welfare is respected, as described previously.

6.8.2.1.2 MAKING THE WATER SUPPLY SAFER

Population growth, changing eating habits and the resulting agricultural demand for water, and the inadequacy of cleanup systems have resulted in growing pressure on water resources. In addition, climate change is introducing the risk of increased tension in a growing number of regions, particularly through increasing incidences of drought.

Water is a very unevenly distributed resource that must be protected. Some countries have already experienced water stress situations, which are harder to manage when the country is at a low level of economic development. By 2025, two thirds of the world's population could be living in regions affected by strains in the water supply, particularly the Middle East and certain regions of Africa, Asia and Latin America.

The Group's Sustainable Development Department supervises the identification and assessment of risks related to climate disruptions, including long-term risks (over five years) by using tools to detect physical risks (such as Aqueduct, Water Risk Filter) as well as regulatory oversight intended to assess the impact of climate regulations on the Group's business activities. When a risk is identified, the Risk and Investments Department is notified, which makes sure it is included in the annual risk review (section 4.2.1). Note that the Sustainable Development Department is also responsible for identifying and assessing market trends and needs related to climate change and submitting them to the appropriate Group department when it represents a business development opportunity.

6.8.2.1.3 FIGHTING CLIMATE CHANGE

In recent years, there has been a significant increase in regulations to reduce greenhouse gas emissions globally, and in the European Union in particular.

The institutional framework regulating carbon constraints is the result of the United Nations Framework Convention on Climate Change dated May 9, 1992, the Kyoto Protocol of December 11, 1997 and, in Europe, Directive 2003/87/EC of the European Parliament and of the Council of October 13, 2003 relating to the European Union Emissions Trading System (EU ETS).

In Europe, the 2020 Climate and Energy Package adopted by the European Union in 2008 aims to reduce greenhouse gas emissions by 20% compared to 1990 levels, to achieve a 20% share of renewable energy in overall energy consumption in the EU, and to improve energy efficiency by 20%. The Climate and Energy Package and the European climate and energy framework adopted by the European Council on October 23, 2014 set European climate objectives up to 2030 that include a 40% reduction of greenhouse gas emissions, a 27% increase in energy efficiency and the achievement of a 27% share of renewable energy in the European Union energy mix.

Ahead of the trajectory initially set, the EU adopted the "Clean Energy Package" in October 2018, which aims to achieve 32% renewable energy mix in the EU by 2030 and increase energy efficiency by 32.5%. Increasing these targets should reduce emissions even further than initially forecast: around 45% by 2030 from 1990 figures instead of 40%. In March 2018, the EU adopted the revised version of the ETS (Emissions Trading Scheme) Directive, which will apply for the 2021-2030 period, to meet the greenhouse gas emissions reduction target. The industries covered under the ETS must reduce their emissions by 43% compared to 2005 levels. On November 28, 2018, the European Commission published a draft long-term climate-energy strategy for Europe, calling for carbon neutrality by 2050.

In France, the Energy Transition for Green Growth law of August 17, 2015 includes new commitments for 2030 in line with the objectives of the European Climate and Energy Package: a 40% reduction in greenhouse gas emissions *versus* 1990 emissions levels and an increase in the share of renewable energy in the French energy mix to 32% of the country's final energy consumption. The law also stipulates the publication of information by companies regarding financial risks linked to climate change and the measures that individual companies are taking to reduce them by implementing a low carbon strategy in all aspects of their activities. In addition, the Climate Plan presented by the Minister for Ecological and Inclusive Transition on July 6, 2017 consists of a series of measures aimed at better seizing the opportunities related to climate action in terms of innovation, investment and job creation, and to accelerate the environmental transition of the main greenhouse gas-producing industries.

In accordance with the Energy Transition Law, in November 2018, the President of the Republic presented the National Low Carbon Strategy (NLCS) as well as the Multiannual Energy Program (MEP).

The NLCS defines objectives to reduce greenhouse gas emissions over the short and the medium terms and will serve as a Roadmap for France to drive policy on easing the effects of climate change by aiming to achieve carbon neutrality by 2050. The MEP sets priority initiatives in the field of energy for the next ten years, particularly in the areas of securing the supply and ensuring its safety, reducing fossil fuel consumption, diversifying the energy mix, developing networks in a balanced way, preserving consumer purchasing power and company competitiveness, and assessing professional skills in the area of energy and customized training.

Decree No. 2011-829 (Article 75 of the Grenelle II Law) of July 11, 2011, together with the law of December 24, 2015 relating to greenhouse gas (GHG) emissions and the EU Climate and Energy Package (CEP), requires companies with more than 500 employees to produce a greenhouse gas emissions report every four years. This decree sets the framework of legal obligations and defines the content of the report and how it must be made available.

Article 173-IV of the Energy Transition for Green Growth law of August 17, 2015 increased reporting obligations in the French Commercial Code related to the impact of business on climate change. Article L. 225-102-1 of the French Commercial Code, as amended by Article 173-IV, states that any company falling within the scope of that Article must include information on the impact of its activity and of the use of goods and services that it produces on climate change in its non-financial reporting.

Decree 2016-1138 of August 19, 2016 implementing Article 173-IV of the Energy Transition for Green Growth law amends Article R. 225-105-1 of the French Commercial Code. It establishes that the corporate social responsibility (CSR) report, which has since become the Non-Financial Performance Statement, appended to the annual Management Report must account for "the significant greenhouse gas emissions items caused by the activities of the Company, especially through the use of goods and services it produces". This obligation concerns companies with more than 500 employees and with revenues or a balance sheet total of over EUR 100 million, as from the fiscal year ended December 31, 2016.

In several other countries where the Group operates, national regulations are being created to transpose objectives contained in the Paris Agreement, particularly in Spain where a law on climate change should take shape in 2019.

The Paris Agreement, adopted unanimously by the 196 parties present on December 12, 2015 at the end of the 21st Conference of the Parties (COP21), of the UN Framework Convention on Climate Change, which entered into force in November 2016, confirms the objective to limit the increase in temperatures by the end of the century to less than 2 °C compared to pre-industrial times. This agreement represents a major milestone in international negotiations on climate change because, for the first time, all countries are committing to reducing their greenhouse gas emissions in accordance with their national circumstances, through communication to the United Nations of their Intended Nationally Determined Contributions (INDC). These commitments should lead to the multiplication of public climate policies and stimulate the creation of innovative carbon pricing mechanisms, to which the Paris Agreement also refers. The text also recognizes the key role of non-state organizations, including companies and cities in the deployment of solutions and commitments necessary for the effective reduction of greenhouse gas emissions and adaptation to the consequences of climate change. It also encourages the creation of voluntary coalitions on thematic topics identified as priorities, such as the Business Alliance for Water and Climate mentioned earlier (section 6.8.2.2.2).

The publication of the IPCC's special report on the impacts of global warming in November 2018 right before the COP24 highlighted the urgent need for state and non-state actors to act quickly to rectify the situation. The report showed that 2 °C warming would entail a significantly higher increase in climate risks than an average 1.5 °C temperature increase, and specifically an up to 50% greater increase in water stress (from 184 to 270 million additional people affected).

In December 2018, the COP24 in Poland led to the publication of the "Katowice Climate Package", a set of rules for applying the Paris Agreement. However, it failed to embed an upward adjustment of countries' commitments; taken together, these are currently set to lead to temperatures increasing by over 3 °C by the end of the century, according to the international scientific community. Discussions on the level of ambition as well as negotiating certain key aspects of the Paris Agreement, such as the role of the emissions market will once again be on the agenda during the next COP which will take place in Chile in November 2019.

Lastly, during the COP24, the World Bank announced USD 200 billion in investments between 2021 and 2025 to help developing countries confronting climate change.

In order to meet these changing regulations on fighting climate change and mitigating risks related to increasing carbon prices in the different countries where it operates, in 2015, the Group set targeted and time-dated objectives for reducing its greenhouse gas emissions. These objectives are applied in all Group Business Units as part of the rollout of the Sustainable Development Roadmap.

Furthermore, regulatory changes represent a source of opportunities for developing solutions within the circular economy, such as recovering energy and materials from waste and wastewater or optimizing facility energy performance. The objectives set by states as part of their Intended Nationally Determined Contributions under the Paris Agreement-commitments respectively made by 9,378 cities and 2,431 companies according to the UN's NAZCA platform-enable the Group to identify business development opportunities for its low-carbon solutions. In emerging countries, greenhouse gas emission reduction targets mean the Group can promote the transformation of waste management from an elimination to a recovery model. These new treatment methods clearly align with the priorities announced by the governments and generate numerous related benefits such as improving hygiene and quality of life in cities.

6.8.2.1.4 OPTIMIZED WATER AND WASTE MANAGEMENT

Waste and wastewater management is central to SUEZ's business model. The regulatory framework for these business activities is currently undergoing rapid change in the main countries where the Group operates (section 6.7.1.2). In Europe, states are gradually adopting regulations for the circular economy aiming to reduce, reuse and recycle waste under the European Commission's Circular Economy Package. In addition, the international recycling market is undergoing serious changes due to the gradual ban on certain types of packaging such as single-use plastic, changing prices in secondary raw materials or China's decision to stop importing waste. These regulatory and geopolitical changes represent an opportunity for SUEZ to leave its traditional waste and wastewater management methods for circular economy solutions such as recycling and materials recovery, in addition to energy and biological matter recovery from all types of waste, with the objectives of creating new resources, producing renewable energy and reducing the greenhouse gas emissions of the Group's customers. These activities contribute to decorrelating economic growth from the consumption of raw materials and thus to generating cascading reductions in greenhouse gas emissions linked to production and consumption patterns.

The Group thus operates several types of facilities, such as:

- voluntary drop-off centers/household waste recycling centers;
- sorting and recycling centers;
- production facilities for Solid Recovered Fuel (SRF);
- disassembly and dismantling facilities: waste from electrical and electronic equipment, end-of-life vehicles, bulky waste, furniture, etc.;
- facilities for reprocessing of specific, pre-sorted recyclable materials: transformation into secondary raw materials.

Biological treatment also represents opportunities for recovery:

- composting platforms: household waste, urban and industrial sludge, green waste, livestock sludge, grease, etc.;
- mechanical and biological treatment.

The circular economy model is more commonly associated with materials, and yet it also aims to optimize and diversify the use of water throughout its life cycle.

Saving water, either at the consumer's home or in the networks, is the first step: smart technologies now make it easier to manage and to better link Environmental and Economic Performance by, for example, measuring and then fitting production and consumption levels to energy tariff bands, for example.

The second step is overhauling wastewater treatment plants: by nature a part of the "extended water cycle", they now participate in the "small cycle" of local circular economy loops. As a result, the West Basin County Station near Los Angeles produces a "hydraulic mix" of several types of water for different uses (industrial water, process water for refineries, municipal uses, agriculture and groundwater recharge).

The third step will be changing the wastewater treatment stations into resource-plants capable of reusing 100% of the wastewater treated, but also recovering 100% of the byproducts from the wastewater treatment process: recovering energy from biowaste, transforming sludge into compost and even extracting phosphorus.

6.8.2.1.5 SOCIAL AND SOCIETAL CONTRIBUTION OF THE GROUP'S ACTIVITY

As a global environmental service company, SUEZ develops and distributes technological and social solutions for regional development. To be both satisfactory and high-performing, these solutions must take into account the specific needs of the regions they address but also the interests of all stakeholders. In a time of demographic, environmental and digital change, characterized by social tension throughout the world, SUEZ believes the company's societal contribution is a priority issue. Internal and external surveys show that citizenship is a key criteria, both to attract and retain talents and satisfy public and industrial customers' expectations. In this dimension as well as overall, the 2018 study from the Reputation Institute shows that the worldwide public has a better opinion of SUEZ than of the utilities sector in general.

Accordingly, SUEZ intends to:

- hold up a mirror to society and to promote diversity, social dialog and cooperation;
- invent solutions for all regions and their inhabitants, in line with the United Nations Sustainable Development Goals;
- protect the value that it creates with regional players, notably through its purchasing policy and its sponsorship efforts.

6.8.2.1.6 PROMOTION OF HUMAN RIGHTS AND DUTY OF VIGILANCE

Because it manages community assets in sometimes tense political and economic situations, relying on more than 126,500 suppliers worldwide, SUEZ is regularly confronted with situations that put human rights at stake. As a large company that operates around the world, SUEZ is vigilant about respecting human rights, through its employees and its business partners.

Taking into account the implementation of the Vigilance Plan in 2018 mentioned in section 6.8.2.2.6, under Law 2017-399 of March 27, 2017 pertaining to the duty of vigilance of parent companies and contractors, for 2018, SUEZ focused on two prominent challenges within the meaning of the Non-Financial Performance Statement: protecting personal data and managing Health and Safety risk, especially the risk of traffic accidents and pedestrian-vehicle collision, for the Group's employees and its subcontractors.

6.8.2.1.7 FIGHTING CORRUPTION

SUEZ has made ethics an indispensable element of its global performance improvement based on fundamental principles: compliance with laws and regulations, integrity, loyalty and honesty, and respect for others. Adherence to these principles is essential in all the Group's activities, both in internal relationships between employees as well as in relationships with customers, suppliers and all external stakeholders. SUEZ expects its employees as well as all of the players operating in its sphere to operate in accordance with these ethics principles in all circumstances and regardless of their job, their country of operation, their level of responsibility or their contacts.

The Group applies a zero tolerance principle, which is listed in the Ethics Charter, for any act that could be interpreted as attempted active or passive corruption in its sales relationships. These acts are prohibited in all relationships with customers and technical consultants as well as with competitors, partners, suppliers and subcontractors.

6.8.2.2 Policies and action plans related to challenges identified

6.8.2.2.1 ENVIRONMENTAL MANAGEMENT: AIMING FOR OPERATIONAL EXCELLENCE

SUEZ is applying an approach that aims to improve the operational management of its facilities and minimize the impact of the Group's business activities on natural environments. Furthermore, complying with local, regional and national regulations as well as provisions set forth in the Group's Vigilance Plan remains a constant objective:

- the Group develops innovative solutions in order to offer customers, whether municipalities or businesses, solutions that will deal with their environmental issues efficiently and at the lowest possible cost, and help them better assume the water and waste management responsibilities entrusted to them by legislative authorities;
- the Group constantly monitors the adequacy of all the plants and services it provides or manages to ensure that they meet the growing demands of environmental regulations. It also anticipates new legislation in order to be in the optimal position to meet the expectations of its customers and all of its stakeholders;
- it encourages its subsidiaries to implement their own environmental policies in line with the shared principles defined for the entire Group based on their activities, local economic conditions, and the needs of their industrial and municipal customers;
- it guarantees the health and safety of its employees and subcontractors at its facilities;
- it pays close attention to the quality of drinking water produced and distributed to its end customers to avoid any risk of contamination.

Environmental Management Systems certification

The Group encourages the organizations in charge of the services it offers to obtain ISO 14001 certification or equivalent, according to international standards. Environmental Management Systems certification is especially advanced in the waste businesses. In the water businesses, Business Units may prefer to implement other certifications, such as those related to quality management (ISO 9001), which has been obtained by the main Business Units of the Group, health and safety (OHSAS 18001), food safety (ISO 22000), energy management (ISO 50001), or even Asset Management (ISO 55000).

Organization and operational and environmental performance measurement and control systems

Since 2003, SUEZ has employed a special reporting system to manage the rollout of its environmental and industrial actions, to control environmental and industrial risks, to ensure the Vigilance Plan is implemented, and to keep stakeholders informed about its environmental performance and operating results. This system was developed on the basis of recommendations arising from the work performed at international discussion forums like the Global Reporting Initiative (GRI) or the World Business Council for Sustainable Development (WBCSD). It meets the requirements of the NRE law and covers the information required by Article 225 of the French Grenelle II Law of July 12, 2010, in accordance with Ordinance 2017-1280 of July 19, 2017, which transposes European Directive 2014/95/EU, and Decree 2017-1265 of August 9, 2017.

Indicators for measuring and improving environmental and operating performance are reported by the BUs and consolidated at headquarters, and the results are relayed *via* business intelligence applications. The indicators show the progress made and provide an overall view as well as specific views of each of the Business Units with comparable activities within the Group (benchmarking-type analysis).

In an annual Environmental and Industrial Compliance letter, the CEOs of SUEZ Business Units and subsidiaries express their commitment to the following:

- the data conveyed through the reporting process has been audited and is deemed fair and consistent;
- the Group's Environmental and Industrial Risk Management Policy is applied. Significant risks are identified and appropriate action plans are established, quantified and monitored.

Information regarding the Group's environmental and operational performance is communicated in the SUEZ Integrated Report, as well as through reports published by its Business Units.

Headed up by its network of Environmental and Industrial Risks Officers and its annual technical and performance reports, SUEZ monitors its subsidiaries' environmental activities and ensures that best practices are shared.

Since 2003, SUEZ has also been continuing its efforts to increase the reliability of its environmental data, which is audited by third parties. The aim is to make this non-financial reporting process an increasingly effective guidance tool for supporting the aims of the Group's Sustainable Development Roadmap, as well as a tool used in dialog regarding the ongoing improvement of its non-financial performance.

The reporting exercise carried out in 2018 again contributed to a process of continuous improvement of procedures for gathering and disseminating information relating to the environment, including in particular a review of the definition of the indicators collected in order to align them with the process of monitoring the commitments established in the new Roadmap.

Waste: monitoring polluting emissions into the atmosphere

In the waste segment, polluting atmospheric emissions are due mainly to the incineration of hazardous and non-hazardous waste. They are monitored constantly in accordance with local, regional and/or national regulations. NO_X, SO_X, mercury and dust/particle emissions are monitored locally and are included in the data collected in the Group's annual environmental reports.

In order to meet expectations of local residents near sites in terms of air quality, the Group has committed to "Continuously maintain emissions into the air below the thresholds established by local regulations" as part of its 2017-2021 Roadmap. This performance above the thresholds established by local regulations applies in particular to the 47 ERUs (Energy Recovery Units) managed by SUEZ around the world.

In 2018, average NO_X and SO_X emission rates per metric ton of non-hazardous incinerated waste were 660 g/t and 51 g/t, respectively.

Water and Waste: limiting noise, odor and visual pollution

SUEZ has developed a service called "NOSE", which objectively evaluates and models the impact of the olfactory footprint of wastewater collection and treatment activities or sites, sludge recovery or waste management on local residents.

This service enables the Group to suggest solutions for controlling the olfactory footprint, by keeping it below the level of two units of odor per cubic meter (UO.m³) and thus meeting regulatory requirements (footprint below the threshold of five units of odor per cubic meter) when they exist.

Specific measures to prevent or treat odors can thus be planned from the design phase of the facilities.

For existing facilities, preventive and corrective measures are implemented to limit olfactory, noise and visual nuisances. The following examples illustrate these actions:

- sizing and installation of dedicated treatment units;
- installation of biogas capture and processing systems;
- operational practices to minimize the generation and dispersion of odors;
- application of masking agents (*e.g.*, in the working areas of landfills in operation);
- measurement and verification of compliance with regulatory thresholds for day/night noise levels;
- soundproofing of technical facilities and noisy machines;
- use of hybrid or all-electric waste collection vehicles.

Protection of biodiversity and ecosystems: developing nature-based solutions

Since 2008, the Group's commitment to protecting and promoting biodiversity has been part of its Sustainable Development Roadmap, which applies to all its activities around the world. Commitment No. 14 of the Group's 2017-2021 Sustainable Development Roadmap, "Promote biodiversity and ecosystem services", is therefore split into two objectives: "Implement a biodiversity strategy within all the Group's Business Units" and "Establish biodiversity action plans at 50% of the priority sites managed by the Group". This approach has allowed the Group, with the support of a network of internal experts, to initiate biodiversity action plans in all countries in which it operates; these plans aim to prevent or reduce the impact of the Group's activities on biodiversity and to promote it.

In France, SUEZ's commitment plans for the National Biodiversity Strategy (NBS) were acknowledged by the French Ministry of Ecology, Sustainable Development and Energy in October 2014.

In July 2018, the Group reaffirmed and extended its commitments by joining the Act4Nature initiative, which brings together 65 major French companies associated with business networks (*Entreprises pour l'Environnement*, AFEP, MEDEF, C3D, etc.), scientific partnerships (*Agence Française pour la Biodiversité*, MNHN, OREE, etc.) and environmental NGOs.

The main commitments made by SUEZ in this area are as follows:

- **Measuring the impacts of the Group's business and promoting biodiversity**

  To achieve this, SUEZ relies on numerous expert partnerships with organizations specializing in the protection of nature; in France, this includes such bodies as the *Muséum national d'histoire naturelle* (MNHN – National Museum of Natural History), the *Ligue de Protection des Oiseaux* (LPO – French League for the Protection of Birds), and so on. In 2017, SUEZ renewed its study and research partnership with the MNHN for four years, with the primary aim of further investigating the challenges of biodiversity on the sites managed by SUEZ in France, improving the integration of these sites into ecological networks, providing information to contribute to the national inventory of natural heritage, and promoting the international use of the Ecological Quality Indicator, developed by the Museum in partnership with SUEZ and already in use on some sixty sites in France.

  In 2018, 34% of priority sites managed by the Group around the world were covered under a biodiversity action plan.

- **Promote circular economy solutions that boost biodiversity**

  SUEZ is committed to providing its expertise to regions to help them apply new integrated water and waste management approaches that limit flows of macro- and microplastics dumped into watercourses and coastal areas.

- **Integrate biodiversity in research and innovation programs**

  SUEZ is involved in partnerships with the Intergovernmental Oceanographic Commission of UNESCO and NGOs specialized in marine biodiversity and has launched an internal R&D program on the subject.

- **Share knowledge and contribute to public awareness campaigns.**

  In addition to its partnership with the MNHN, SUEZ is involved in a program to support CIFRE (Industrial Research Training Convention) theses on biodiversity. After having coauthored a doctorate thesis on integrating biodiversity in environmental accounting, the Group is supporting a thesis led by OREE on the role of ecosystem services in adding value to real estate. An e-learning module to raise awareness of biodiversity was also rolled out in 2018 throughout all the Group's Business Units.

Lastly, in November 2018, SUEZ's Water Spain subsidiary won a European Commission European Business Award for the Environment for its BiObserva program, which got its employees involved in protecting biodiversity.

Employee training and information on environmental protection

The Group informs its employees about its positioning, performance, actions and best practices to promote environmental protection by means of its intranet system, its Integrated Report and dedicated events on the subject. In 2015, SUEZ committed to a voluntary Integrated Report process, inspired by the reference framework published in December 2013 by the International Integrated Reporting Council (IIRC). The Integrated Report replaced the Group's sustainable development Report in 2015 and the Group's Annual Activity Report in 2016. Its purpose is to illustrate the reconciliation of the Group's financial and non-financial performance and it aims to provide better comprehension of the ecosystem in which the Company operates in order to accordingly strengthen the quality of dialog with stakeholders.

Training in the area of environmental protection also continued. Specifically, the Group has launched "Ambassador", its first "Serious Game", the purpose of which is to help all employees, particularly new recruits, to understand the Group's businesses and challenges, especially those involving sustainable development. In an urban environment, "Ambassador" simulates relationships between water and waste, the environment and society. The employee plays the central role, aiming to achieve and maintain a high level of customer satisfaction by resolving various problems. This scheme was overhauled during the first half of 2018 in order to launch a new campaign in June 2018.

To support the dissemination of the environmental and industrial risks management policy and its operational rules, a set of distance training modules was developed and distributed within the Business Units.

At the subsidiary level, training and information activities tailored to the local context are also organized. For more information regarding the training policy in the Group, see section 17.1.3 of this Reference Document.

The employee representative bodies of the Group and its main subsidiaries are also regularly informed of the progress achieved by the Group in the areas of sustainable development and environmental protection.

Expenditure related to the protection of the environment

By the very nature of its businesses, the Group has a direct impact on the environment. It is therefore not relevant to distinguish between spending that impacts the environment directly and spending that impacts it indirectly. In accordance with European regulations, the Group records provisions intended to cover the expenses of the long-term monitoring of landfills after their closure. Other provisions are also recorded to deal with potential environmental risks.

Indicators *(in millions of euros)*	2018 data
Provision for current and non-current site restoration	535.4
Provisions for environmental risks	17.3
Provisions for the dismantling of non-nuclear facilities	11.6

6.8.2.2.2 MAKING THE WATER SUPPLY SAFE AND SECURE: GUARANTEEING AVAILABILITY AND QUALITY OF HYDRAULIC RESOURCES AND DISTRIBUTED WATER

Adapting to the consequences of climate change regarding water resource availability

As climate change is rapidly accelerating, conserving water resources is a major priority for SUEZ. For this reason, in line with its commitments for the climate adopted in August 2015, and as part of its 2017-2021 Sustainable Development Roadmap, the Group has committed to:

- **"Save the equivalent of the water consumption of a city of 2 million inhabitants".**

  Reduction of water usage has received particular attention throughout the world, through demand management programs. These include infrastructure measures (reducing leaks) and other measures targeting user behavior: putting in place tariff structures to encourage water saving, awareness campaigns to combat waste. In addition, the objectives of such programs increasingly exceed the mere optimization of economic efficiency (reducing costs of consumable materials), and include careful management of the resource as an end in itself.

  The Group contributes to optimizing existing water resources either *via* close status monitoring, ongoing precautionary sampling over the long term or encouraging users to consume water intelligently by carrying out awareness actions for the benefit of users. The Group innovates constantly to limit water waste, since the resource is scarce and increasingly costly to produce, particularly in regions of high water stress, by offering geo-filtration techniques that consist of injecting purified surface water into underwater reservoirs and accelerating the rollout of "smart" solutions. Smart metering solutions provide a means of optimal water resource management, especially through improved consumption forecasts, online calculations of water network yields and the precise location of leaks. Smart meters are also a way for users to control their water consumption: by the end of 2018, 4.1 million smart meters had been installed at the premises of SUEZ's water business customers; an increase of 5% compared to 2017. Furthermore, Aquadvanced Water Networks, the flagship product of the new Advanced Solutions line, is a tool for improving monitoring of drinking water systems through the analysis of numerous data provided by sensors measuring flow, pressure and rate. As part of its 2017-2021 Roadmap, SUEZ supports its objectives in the area of optimized resource management by committing to "Accelerate the digital revolution in water and waste solutions to benefit agriculture, industry, cities and citizens" through a 20% increase in the number of connected objects by 2021 (Commitment 10).

- **"Systematically suggest to our customers resilience plans for addressing the impact of climate change"**

  Prevention is just as important as adaptation: SUEZ is developing predictive tools for preventing flood risk for municipal customers, regardless of their size.

  In some regions, the Group must adapt to the impacts of climate change on the operations of its facilities. In Chile, an increase in elevation of the 0 °C isotherm in the Andes causes an increase in frequency and intensity of turbidity episodes in the Mapocho river, which can alter drinking water production capacity in Santiago. In order to confront these extreme climate events, the Group is investing in infrastructures that increase facility autonomy by up to 48 hours and ensure service continuity.

  In countries that are more vulnerable to climate change (particularly in Southern Europe, the Middle East or in Australia), the Group offers its customers seawater desalination solutions to ensure drinking water availability in areas that do not have sufficient quantities or that have repeated drought episodes. To keep up with growing demand from these countries, the Group has set a goal of tripling the availability of alternative water by 2030, which includes the ability to produce drinking water using seawater (section 6.8.2.2.4).

  Even though water consumption in the Group's industrial processes is very low in contrast to the volumes managed by the drinking water production business, this use is still subject to local streamlining actions. SUEZ contributed to the establishment in December 2015 of the Business Alliance for Water and Climate, in partnership with CDP, the World Business Council for sustainable development and the CEO Water Mandate of the United Nations Global Compact, whose purpose is to gather industrial players together to commit to assessing and reducing their water footprints. Now acknowledged by the Secretariat of the United Nations Framework Convention on Climate Change (UNFCCC) as one of the alliances of the "water" theme of the International Climate Agenda, the Business Alliance is a group currently comprising 51 companies on five continents that have total revenues of USD 860 billion.

Distributed water: the need for quality to protect end customers

Concern for consumers' health is the reason for implementing major control mechanisms within the Group, as well as for the use of methods and tools to prevent a potential health crisis. Self-monitoring programs for water quality in the system are, in general, superior to regulatory requirements and the Group's sites are equipped with remote surveillance systems or 24-hour operational alert systems. Service continuity is ensured by organizing work and especially through on-call systems.

The Group consolidates information on how its water production quality and water distribution contracts are performing on a yearly basis in its Water Quality Report, which enables the Group to follow up on the action plans, led jointly by the Water Technology Department and Business Units, that aim to totally eliminate risks of non-compliance or exceeding quality thresholds.

SUEZ assesses the quality of drinking water produced and/or distributed by its entities according to 21 bacteriological and physicochemical parameters from European Directive 98/83/EC of November 3, 1998 regarding water intended for human consumption. In accordance with the principles of this Directive, exceeding quality limits is deemed non-compliant if this pertains to sanitary parameters, or simple overstepping where parameters are just quality references measuring an operating performance level. Non-compliance analysis is consolidated based on populations served by taking into account, for a case of non-compliance, the entire population of a distribution unit, which represents an upper bound with respect to the population actually concerned.

On this basis, the Group's compliance for water produced and distributed was 99.7% in 2017.

In addition to this prevention policy, the Group has developed crisis management procedures in liaison with local authorities in the event of an accidental deterioration of water quality.

Regulations concerning distributed water quality parameters are constantly changing in line with the emergence of new risks. Aside from bacteriological and physicochemical criteria, certain "emerging" pollutants (pharmaceutical products, endocrine disruptors, etc.) are of particular concern to experts and operators in the water and environment sector. The Group has put in place specific research programs in this area so as to be better able to understand, analyze, monitor and handle such new molecules, while participating in public debate on the subject. In May 2016, SUEZ and its Swiss partner Techfina were selected by the city of Lausanne to build and operate the Vidy wastewater treatment plant, with the objective of neutralizing 80% of micropollutants that come into the facility, thus better protecting the valuable Lake of Geneva resource.

The Group is also committed to developing partnerships with local authorities, industrial players and farmers to ensure the qualitative protection of water resources in river basins.

Furthermore, treating wastewater in facilities managed by the Group contributes more generally to significantly reducing the content of polluting substances (organic matter, nitrogen, phosphorus, etc.) discharged into the environment and that could reduce the quality of water resources.

Acting to protect the oceans

SUEZ is working hard to protect the oceans by reducing land-based pollution primarily caused by plastic. The challenge is as behavioral as it is technological: the Group is working in partnership with NGOs, employees and citizens to avoid and reduce the amount of plastic dumped in oceans and is offering more solutions to treat microplastics in wastewater.

In 2017, General Management participated in the United Nations' first Ocean Conference in New York. On that day, the Group launched a global campaign called #SUEZ4ocean to rally employees to organize events to pick up plastic waste on coastal areas and catchment areas. This campaign includes an interactive map that shows all the local initiatives led to reduce pollution in coastal and marine areas upstream.

In 2019, the Group joined forces with the WBCSD's Alliance to End Plastic Waste to bolster its commitment to fighting marine pollution alongside industrial chemical and retail companies (section 6.8.2.2.4).

6.8.2.2.3 COMBATING CLIMATE CHANGE: REDUCING GREENHOUSE GAS EMISSIONS

Group commitments

The Roadmap commitments for the climate, combined under the principal aim to "Be the leader in the low-carbon economy", use the commitments already adopted by the General Management of SUEZ in August 2015, in line with the "2 degrees Celsius" objective from the COP21 conference, and contributing to the Sustainable Development Goals adopted by the United Nations in September 2015.

They aim to continue efforts to reduce the Group's carbon footprint and promote the circular economy in a way that structurally reduces greenhouse gas emissions and protects resources. According to a *Material Economics* study, recovering the four most carbon-intensive materials (metal, plastic, aluminium and cement) could reduce global greenhouse gas emissions by 3.6 billion metric tons by 2050.

SUEZ's climate goals consist of reducing greenhouse gas emissions related to the Group's operating activities as well as the activities of its municipal and industrial customers. They are as follows:

► "Reduce GHG emissions over the entire scope of activities by more than 30% by 2030"

The target to reduce greenhouse gas emissions by 30% by 2030 is aligned with the objective set by the IPCC of keeping the increase in global average temperature to below 2 °C by the end of the century. This step was validated by the Science Based Targets international initiative in December 2017. SUEZ was the first environmental services business in the world to receive this recognition. SUEZ is also committed to making what it has learned from its process available to its stakeholders using an open source logic, so all those who wish to may benefit from this feedback. These shared best practices will contribute to implementing new climate-responsible alliances. The Group also aims to reduce its greenhouse gas emissions by 10% over the short term (2021), and progress has exceeded 50% since 2017.

In order to reduce its greenhouse gas emissions, the Group has identified several initiatives depending on the type of activity and the country where the Group is operating:

- **Energy management: energy efficiency, low-carbon transportation and purchasing green energy**
  Use of electricity by the Group's water business and consumption of fuel for its collection vehicles are the two items representing the bulk of the Group's energy use.

  As part of its 2017-2021 Sustainable Development Roadmap and in line with its commitments for the climate adopted in August 2015, the Group made increases in the energy performance of all of the sites it manages, together with streamlining waste collection logistics and bolstering its "clean vehicles" policy, three fundamental levers of its commitment to reduce GHG emissions by 30% across its operations by 2030.

  It should, nonetheless, be noted that the sites managed by SUEZ are occasionally obliged to increase their energy consumption to improve services rendered, *e.g.*, treating pollution more effectively or increasing proportions of waste recovered, or due to heightened regulatory obligations related to environmental protection. Improving the energy efficiency of its processes is therefore a challenge.

  The Group strives to improve the energy efficiency of all processes it manages. It is especially seeking to reduce consumption of energy related to its collection activities, transportation of waste and urban cleaning carried out with a fleet of over 11,487 heavy vehicles. It strives to reduce fuel consumption by optimizing collection rounds (frequency and distance traveled, for example) and by introducing new engines and alternative fuels, as well as by training drivers to drive more economically.

  In waste treatment facilities, examples of actions implemented include purchasing green energy, implementing new technologies, installing variable speed mechanisms, controlling consumption through metering, correcting the power factor and using new lighting systems (solar, LED, etc.).

  In the water sector, context-specific action plans have also been put in place: purchasing green energy, like the Water Spain subsidiary, which committed to reducing its greenhouse gas emissions by 90% by 2021, renovating facilities and introducing more efficient equipment, implementing variable-speed pump systems; installing systems to modulate pressure in drinking water supply networks, establishing automated tools for checking treatment processes, and creating inspection plans to identify potential energy savings.

  The Group monitors changes in energy regulations at the European level (EU Energy Efficiency Directive, the Climate and Energy Package, etc.) and at the national level, in France, such as the Energy Transition for Green Growth Law of August 17, 2015. Its subsidiary Water France has already achieved ISO 50001, certification for 100% of its energy invoicing, to address the new regulatory framework in France regarding the obligation of companies to carry out energy audits. Today, all actions taken by the Group in this area are in line with these regulations.

- **Production and internal consumption of renewable energy**
  As part of its 2017-2021 Sustainable Development Roadmap, and in line with its commitments for the climate adopted in August 2015, SUEZ has committed to increase the Group's renewable energy production by 10% by 2021, in conjunction with local policies of transitioning from landfills to recovery and through a substantial increase in its production of biogas.

  A key priority for SUEZ, the renewable energy produced from incineration plants, anaerobic digestion plants and biogas recovery from landfills and wastewater treatment plants has increased continuously in recent years to reach 7.7 TWh in 2018. A portion of this energy is dedicated to internal consumption and thus helps reduce the Group's greenhouse gas emissions.

  The two indicators "Useful energy production of Group Recycling and Recovery activities" and "Useful energy production of Group Water activities", consolidated and audited annually, enable follow-up and monitoring of this energy performance (section 6.8.3.).

- **Digitizing Waste activities**
  As with the Water business and as set out in Commitment 10 of its 2017-2021 Roadmap, "Accelerate the digital revolution in Water and Waste solutions to benefit agriculture, industry, cities and citizens", SUEZ is committed to the digitization of its Waste activities, which will improve management and optimize environmental impacts, and especially greenhouse gas emissions. In this way, smart waste covers the entire waste value chain: at the collection stage, geo-tracking trucks streamlines movements; in the sorting sites, robotized arms improve recycling rates; lastly, end users benefit from new services, such as SITA.scope, SITA.connect and e-commerce.

- **Capture and recovery of biogas**
  In the waste sector, a change in treatment methods from elimination to recovery of materials and energy should lead to a gradual reduction in greenhouse gas emissions related to landfilling waste, namely methane, which contributes to global warming 28 times more than CO_2. For existing landfills, SUEZ offers its customers the most high-performance solutions possible from an environmental standpoint, particularly capturing biogas and turning it into renewable energy. Often used for facility internal consumption, this technology reduces the direct and indirect greenhouse gas emissions of landfills.

► **"Enable our customers to avoid emitting 60 million metric tons of GHG"**

Emissions avoided by SUEZ customers are part of emissions linked to the "use of goods and services that the Group produces", in the meaning of information obligations related to Article L. 225-102-1 of the French Commercial Code, which relate to materials and energy recovery activities. Accordingly, because of the multitude of sources available, the Group decided to base its calculations of avoided emissions on public data issued by Prognos on the Europe-27 scope, as 72% of waste processed by the Group is in Europe. As calculating avoided emissions is very sensitive to the choice of emission factors used, the Group has used the same source of information since 2012 to ensure comparability of data. Uncertainty about calculated data remains high due to the wide variability of emission factors that may be used.

The sources of emissions avoided are:

- materials recovery by means of:
  - waste recovery, sorting and recycling,
  - composting,
  - recovery of residual waste from incineration of non-hazardous waste,
  - production of solid recovered fuel;
- energy recovery by means of:
  - incineration of municipal or industrial waste,
  - burning of biogas recovered from landfills,
  - energy recovery from biogas produced from wastewater.

To meet this goal, the Group set additional targets aiming to increase emissions avoided through material and energy recovery, respectively: "Double the volume of recycled plastic" and "Increase the production of renewable energy by more than 10%", a portion of which is resold to Group customers (section 6.8.2.2.4 on the Circular Economy).

Group Scope 3-greenhouse gas emissions

The other items falling under emissions produced by the Group and related to the use of its goods and services ("Scope 3 downstream", pursuant to the GHG Protocol) are stated annually in SUEZ's published response to CDP, as are other items related to the "Scope 3 upstream" classification. The most significant item of "Scope 3 downstream" is related to end users' domestic water use, involving clean hot water production, cooking and other activities. It amounts to around 19 million tCO2-eq. per year, according to a calculation carried out in part through expert assessments. SUEZ has relatively limited power to act on this item, but it can contribute to reducing it by recommending solutions to control consumption, such as remote meter reading, and conducting public awareness campaigns about saving water.

The other relevant "Scope 3 downstream" items of the Group's activities are less significant. These are GHG emissions related to GHG emissions from sludge when agricultural recovery is carried out by outsourced contractors, and primarily N_2O emissions related to self-purification of residual pollutants in effluents discharged into the environment of around 534,000 tCO2-eq. per year (calculation carried out in part through expert assessments).

Committing responsibly to climate policies

Throughout 2018, SUEZ continued its commitment toward collective projects to accelerate the involvement of non-state actors in climate action, be it in terms of contributing to the circular economy, reducing greenhouse gas emissions or implementing solutions aimed at protecting water resources when faced with the consequences of climate change. In particular, the Group helped publish the United Nations Climate Action Platform report from the Global Compact entitled Ambition Loop: How business and governments can advance policies that fast track zero carbon economic growth.

The Group's General Management participated in the United Nations General Assembly and the Global Compact during Climate Week in New York as well as the Global Climate Action Summit in San Francisco in September 2018. On that occasion, the Group emphasized how urgent it is to start implementing solutions to adapt to climate change now and that these solutions need to be compatible with a global warming trajectory of less than 2 degrees Celsius, such as seawater desalination combined with renewable energy, the reuse of wastewater in areas affected by water stress, or the construction of hydraulic infrastructures to confront risks of drought and flood in the regions most vulnerable to climate disruptions.

During the COP24 in Katowice in December 2018, SUEZ participated in a high-level United Nations Global Compact meeting, in the Marrakech Partnership for Global Climate Action Water and Industry themed days and in the Talanoa Dialogue Platform. At the event, the Group also defended the circular economy as a low-carbon and inclusive development model that preserves natural and water resources. During the COP24, Aguas Andinas, a Group subsidiary in Chile, received the Momentum for Change award from the UNFCCC in the Planetary Health category for its project to transform wastewater treatment plants into biofactories, resource-plants that aim to be carbon-neutral by 2022 by recovering biogas from wastewater for their internal use.

Furthermore, SUEZ is a partner of several research centers or organizations that contribute to stepping up the fight against climate change, such as the Ellen MacArthur Foundation, the National Institute of the Circular Economy, the Climate Chance association, the Elsa-Pact research chair on life cycle analysis, and the French Meteorological Society (Météo et Climat – SMF). Finally, in October 2017, SUEZ signed a partnership with WWF France to promote the creation of local circular economy loops to support climate change commitments in French towns.

The Group's responsible commitment was recognized in September 2018 by Jean-Louis Chaussade being presented with the SDG Pioneer Award from the United Nations Global Compact for his role in combating climate change through sustainable resource management. In addition, in 2018, SUEZ became the first French company in the Utilities sector to join the elite circle of "Lead" companies in the Global Compact, which joins together 34 of the most highly engaged companies in sustainable development from around the world.

The Group's carbon profile

SUEZ emissions in 2018 (in tCO2-eq.)		Emissions avoided by SUEZ customers in 2018 (in tCO2-eq.)	
Waste	6,702,570	Waste	9,675,369
Water	2,463,201	Water	360,574
Industry	102,551	Industry	286
Total	**9,268,322**	**Total**	**10,036,229**

The Group's emissions may be broken down as follows:

- in its waste business: 6,702,570 metric tons of CO_2-equivalent, *i.e.* 72.3% of total Group emissions. Up to 97% of these emissions are direct, resulting from fugitive methane emissions released when waste is landfilled or from greenhouse gases produced through incineration or emissions from waste collection vehicles. These also include emissions from the vehicles of subcontractors transporting incoming waste and the secondary raw materials leaving facilities managed by the Group (177,086 tCO_2-eq. in 2018);
- in its water and wastewater business: 2,463,201 metric tons of CO_2-equivalent, *i.e.* 26.6% of total Group emissions. These emissions are primarily indirect (90%): they result essentially from the use of electricity in water treatment processes.

Emissions avoided by Group customers break down as follows:

- in its waste business: 9,675,369 metric tons of CO_2-equivalent, *i.e.* 96.4% of total Group emissions avoided. Emissions avoided correspond to reductions in emissions for Group customers, classified as scope 1 (by using solid recovered fuels), scope 2 (by using energy from waste or wastewater), or scope 3 (by using secondary raw materials);
- in its water and wastewater business: 360,574 metric tons of CO_2-equivalent, *i.e.* 3.6% of total Group emissions avoided. The emissions avoided correspond to scope 2 emission reductions for Group customers (by using energy produced from the digestion of sludge from wastewater treatment plants (biogas transformed into biomethane or into natural gas).

Each year, SUEZ reports to the rating agency CDP (formerly Carbon Disclosure Project), which evaluates the performance of companies' climate strategies. In 2018, the CDP confirmed the inclusion of SUEZ in its "Climate A list". SUEZ is the only French environmental services company to appear on the list in 2018.

6.8.2.2.4 OPTIMIZED WASTE AND WASTEWATER MANAGEMENT: STEPPING UP THE TRANSITION TOWARD THE CIRCULAR ECONOMY

In accordance with the objectives of the Group's 2017-2021 Sustainable Development Roadmap, SUEZ has set itself the target of increasing the amount of secondary raw materials it produces by 20% by 2021 (with related goals of doubling sorted and recycled plastic volumes and reaching a global ratio of 2 metric tons of material recovered per metric ton intended for landfill by 2021), increasing energy production from waste and wastewater by 10%, and tripling its alternative water production capacity by 2030.

SUEZ is also a founding member of the AFEP Circular Economy group (French private enterprise association) and contributed to the publication on October 25, 2018 of the document entitled *Circular Economy Trajectories: 1 Year of Corporate Engagement*.

In order to enable the implementation of its objectives in terms of recovery and acquiring new reserves, the Group is increasing the number of projects and initiatives in the following areas:

- **"Increase the production of secondary raw materials by 20%"**
  - recycling plastic:
    - in November 2017, SUEZ partnered with chemical company LyondellBasell to create a joint venture dedicated to producing high-quality recycled polymers. Under this agreement, the QCP plant, located near Maastricht in the Netherlands, is set to increase production capacity to 50,000 metric tons before 2020. Under the new agreement, LyondellBasell will sell raw material manufactured by QCP, and SUEZ will supply the plant with post-consumption plastic waste,
    - in January 2019, SUEZ partnered with more than 25 international companies within the Alliance to End Plastic Waste, which aims to invest USD 1.5 billion over the next five years in innovation programs, awareness-raising campaigns, cleaning, and building waste treatment and recovery facilities;
  - recycling electrical and electronic waste: In 2017, SUEZ supported Bouygues Telecom and its partners, WWF France, Samsung and Recommerce, in a nationwide project aimed at raising public awareness of recycling and the reuse of mobile phones. Collections were organized at Bouygues Telecom stores across France, with SUEZ then recycling the used phones, primarily at its Feyzin plant,
  - recycling non-ferrous waste (aluminium, copper):
    - in 2018, SUEZ extended its partnership with Nexans for three years through its joint venture with RecyCâbles to increase its site's treatment capacity from 30,000 to 36,000 metric tons of cables recovered per year. Products resulting from recovery (copper, aluminium, polymer granules, etc.) are then sent to specialized companies like Nexans to be manufactured into new cables,
    - SUEZ has also continued developing a segment for non-ferrous waste recovery from bottom ash (residue from combustion and from the recovery of energy from waste) *via* the Valomet process, which can be used to improve roads and runways or to manufacture stackable mixed cement blocks for building. In 2018, SUEZ began construction of a new industrial unit in the Ghent port area to process 12,000 metric tons of bottom ash in 2019. This plant will extract fine metal particles such as copper, lead and zinc to reintroduce them into the manufacturing chain *via* foundries and metal refineries,
  - environmental facility management for a more integrated and circular vision of waste management: with PSA, SUEZ is active at the heart of the Metz and Polaris factory production lines in order to optimize collection, improve waste recovery

and the related logistics management, and create short recycling loops,

- SUEZ is continuing to develop solutions for eliminating non-recoverable residual waste, *i.e.*, which cannot be transformed into new resources, in ways that respect the environment and are affordable.

Because its business is the treatment, recovery and elimination of solid waste, the volume of waste produced by the Group's water and waste activities and its consumption of raw materials are very limited in relative terms. Specific action plans aimed at reducing waste have nevertheless been implemented in the various subsidiaries. These different plans at the local, regional and national levels reflect the local characteristics of the various contracts.

The Group places particular emphasis on reducing the volumes of sludge from the treatment plants it manages that are not recovered by sustained materials recovery methods like composting or spreading "clean" sludge as a soil enriching agent in agriculture, or energy recovery, *via* the production of biogas, incineration or co-incineration.

► **"Increase the production of renewable energy by more than 10%"**

In order to enable the implementation of its renewable energy production objectives, the Group is multiplying its projects and initiatives, such as:

- improved biogas recovery from non-hazardous waste landfills with WagaBox®: The SUEZ non-hazardous waste landfill in Saint-Maximin (Oise, France) now produces biomethane thanks to an innovative new biogas and biomethane recovery solution. This innovation, which is based on the WagaBox® solution, improves the energy efficiency of non-hazardous waste landfills by 38% for electrical recovery to reach 85%, and reduces greenhouse gas emissions. This biomethane is injected into the natural gas urban distribution network operated by GRDF,
- local short-loop energy for growing vegetables: The Econôtre eco-hub near Toulouse (Haute-Garonne, France), has introduced a new heat network that enables the waste-to-energy recovery unit (ERU) to heat vegetable greenhouses built around the site. Indeed, the implementation of cogeneration at the site (electrical and thermal energy) enables Econôtre to achieve an energy performance of 86%,
- production of green energy using wastewater: SUEZ is investing in reconfiguring certain sludge treatment units to complete projects on biomethane production. In Strasbourg, the Biovalsan project produces enough energy to meet the needs of around 5,000 low-consumption homes. In Marseilles, as of January 1, 2019, the Geolide wastewater treatment plant produces the equivalent of the consumption of 2,500 homes' worth of biomethane. In addition, this biomethane-in compressed form-can also eventually serve as a biofuel to supply gas-powered public transportation (NGV).

► **"Promote different uses of water that triple alternative water availability by 2030"**

The use of "non-conventional" water resources is expected to grow significantly. In particular, the reuse of wastewater for agricultural and industrial purposes or the upkeep of public parks, the desalination of seawater and the replenishment of groundwater reserves, is likely to increase significantly in the years to come. The Group offers these activities to customers in compliance with the most stringent health standards in situations where they are relevant.

In Chile, SUEZ set a goal of transforming the city of Santiago's wastewater treatment plants into biofactories by 2022. The project involves reusing 100% of the sludge produced by the facilities as compost for agriculture or in the form of energy for internal use in order to attain carbon neutrality by 2022. It also aims to treat 100% of the wastewater for agricultural use after it is released into the environment, to set up biodiversity rehabilitation projects around the facilities, to reduce impacts related to air pollution and odours and to work with industrial companies, researchers and local residents to equally share the value created by these circular economy loops in the region.

Combating food waste

As with action plans aimed at reducing waste production in the Recycling and Recovery business, SUEZ is investing in food waste reduction at its premises and at those of its customers.

According to the French Ministry of Agriculture, over 10 million metric tons of food waste were produced in France in 2015, of which 1.5 million metric tons occurred in institutional and commercial catering. The Food Wastage Footprint study: *The Impact on Natural Resources* study, published by the FAO (Food and Agricultural Organization of the United Nations) in 2013, reports that food waste generated by the planet in 2005 was the third largest source of GHG emissions, amounting to 3.5 Gt CO_2-eq., with an emissions level barely under that of the regional emissions of China and the United States. The same study indicated that food waste is more than the regional water footprint of India or China (250 km^3 of water on average from 1995 to 2005).

Awareness of these circumstances is reflected in progressive reinforcement of the regulatory environment. On January 19, 2012, the European Parliament adopted a resolution intended to halve food waste in Europe by 2025, an objective that France reaffirmed in its National Pact for Combating Food Waste. In 2016, the fight against food waste became a restrictive legal reality in France, with Law No. 2016-138 on the fight against food waste, which introduced the following constraints: food retailers must use up unsold inventory by means of donations, animal feed, composting or energy recovery. In addition, the country has made food waste a part of corporate social and environmental responsibility.

In November 2016, SUEZ published an open source collaboration guide, in French and English, on reducing food waste in company cafeterias, which combined research, interviews and shared experience of various stakeholders, internal players, experts on the subject, social and environmental entrepreneurs and associations. The guide offers methodologies, solutions and contact information of key persons. Following publication of the guide, SUEZ conducted an internal audit at its headquarters in order to assess and identify the causes of food waste and to implement *ad hoc* solutions. As a result, smaller portion sizes were proposed and employee awareness-raising campaigns were undertaken. A partnership was also signed with the association Le Chaînon Manquant ("The Missing Link"), which collects surplus food from company cafeterias at the Tour CB21 building (SUEZ headquarters) and redistributes it to charities around the La Défense district.

In addition, SUEZ signed a partnership with a start-up to develop an application designed to reduce food waste at company cafeterias. Tested in spring 2018 by SUEZ employees eating lunch at the restaurants in the Group's headquarters in the La Défense district, the application will raise awareness among restaurant users and improve understanding of their consumption habits in order to adjust portion sizes and services, thereby limiting food waste.

Finally, in June 2017, SUEZ and Paris la Défense (developer of the La Défense district) launched a working group comprising numerous associations, municipal customers and companies headquartered in the La Défense district. Its purpose is to discuss collective local solutions that could be applied to the issue of food waste within companies. A draft quantitative and qualitative analysis of food waste within corporate catering establishments in the La Défense district has been drawn up. It will enable SUEZ to establish the current state of play, develop an action plan and measure the impact within the business district, as well as propose solutions that can be rolled out in other districts around Europe. In order to finance this analysis at five La Défense office tower blocks, an association under the Law of 1901 was established comprising SUEZ, Allianz, Mazars, Arpège and COMPASS Group, supported by Paris la Défense, EPT Paris-Ouest La Défense and by the associations La Maison de l'Amitié and Le Chaînon Manquant. In December 2017, this association responded to the call for proposals launched by the national food program of the DRIAAF, co-funded by ADEME and DGCS.

Regeneration of polluted soil

The Group's range of services includes the remediation of polluted soils, with solutions for regenerating soils on site or in a cleanup center. This both limits the use of space by requalifying former derelict land for urban or industrial development operations, and makes recycled land available to land developers in place of surrounding contributed conservation land and particularly topsoil.

This treatment is performed under close environmental supervision and ensures traceability, which makes all parties in the chain more accountable.

6.8.2.2.5 SOCIAL AND SOCIETAL CONTRIBUTION OF THE GROUP'S ACTIVITY

Promoting diversity, social dialog and cooperation

Since 2010, SUEZ has devised a policy and joint initiatives with all the Business Units to promote diversity and Equal Opportunities (see section 17.1.4). As part of its Sustainable Development Roadmap, SUEZ is making it a priority to foster gender diversity within the Group. In order to attain 33% women in management for the entire Group by 2021, the gender diversity Roadmap relies on various levers such as hiring, reducing wage gaps, promoting women internally, the working environment or the corporate culture. SUEZ encourages cultural diversity and takes tough action against all forms of discrimination, such as discrimination linked to sexual orientation and religious affiliation. The Group is also rolling out an ambitious policy to integrate disabled people into the workplace.

SUEZ strives to organize and boost social dialog measures and sign collective bargaining agreements, either directly within employee legal entity connections or at a more global level (see section 17.1.3). The goal is for 95% of employees to be covered under social dialog systems by 2021. SUEZ is also committing to continue its now standard system for internal engagement surveys to reach a 100% coverage rate (cumulative over the past three years) and a 60% participation rate in these surveys (see section 17.1.3). Based on their results, the Group puts in place the necessary improvement plans.

SUEZ is fostering a culture of cooperation and undertaking to encourage new collaborative practices by increasing the coverage rate of tools such as Skype, Yammer, OneDrive, Sharepoint, Groups, etc., so employees can build internal relationship systems using internet communities. The Group is prioritizing the digital transformation for training (see section 17.1.3) and bolstering its cybersecurity and personal data protection action plans (see section 6.8.2.2.6). With its customers, the Group is promoting contractual models and shared management principles (industrial framework agreements, semi-public companies, joint ventures) to promote efficiency and performance for industrial companies and local authorities. Lastly, SUEZ is committing to develop partnerships with entrepreneurs, associations and players in the field of research using an Open Innovation approach (see chapter 11.1 and the paragraph on "developing solutions for all regions and their inhabitants" below).

Optimizing the Group's socio-economic footprint

Every year SUEZ publishes a chart showing the redistribution of cash flows generated by its business activities to the various stakeholders (suppliers and service providers, employees, states and municipalities, shareholders, financial institutions, NGOs and communities). In addition, SUEZ carries out a socio-economic footprint study every year to find out the direct and indirect impacts in terms of jobs generated by the Group throughout the different sectors of the global economy. The LOCAL FOOTPRINT® method makes it possible to estimate how the effects of business activity are propagated along the entire supply chain. In 2017, the Group supported nearly 200,000 jobs around the world, almost 2.5 times the number of direct jobs provided by the Group's direct subsidiaries. Additionally, the Group's policy promotes adherence to and compliance with local and applicable tax legislation and regulations in each of the States where Group companies operate as well as compliance with international tax rules and standards.

The Human Resources social innovation department's goal is to "make employment and the circular economy come together" in the regions where SUEZ operates, by supporting the needs of the subsidiaries as much as possible (integration clauses in procurement, employee social commitment, etc.) and by increasing collaboration with local players. Social innovation takes place on a local level through the *Maison pour Rebondir* (the Bounce-back House) program in France. Backed by its experience from the SUEZ social innovation laboratory created in Bordeaux seven years ago, the *Maison pour Rebondir* has started expanding into other regions (in the Paris region, in departments 78, 91, 92 and 94), and is becoming the operational mechanism for implementing the Group's social innovation measures. *Maison pour Rebondir* schemes serve as an internal and external "SUEZ one-stop shop" in the areas where they are located for questions related to integration through employment and through the social and circular economy (see section 17.1.4).

With EUR 7.3 billion in purchases from 126,500 suppliers in 2018, SUEZ has rolled out a responsible purchasing policy that binds subcontractors and suppliers to its sustainable development requirements, contributes to the progress of the sector as a whole and encourages the emergence of eco-industries. SUEZ is committed to behaving toward suppliers with fairness, transparency and impartiality, in accordance with regulations and according to the rules and principles of its Ethics Charter (see section 4.2.6) and its Vigilance Plan (section 6.8.2.2.6).

Approved by the Group Management Committee in 2016 and distributed to all subsidiaries, the Group's procurement policy aims specifically to:

- innovate in partnership with suppliers by contributing to their integration into new services and into the circular economy;
- develop competitiveness by optimizing resources and implementing win-win supplier relationships and partnerships;
- contribute to the development of regions by fostering support for SMEs and the promotion of diversity among suppliers in the social and solidarity economy, economic inclusion, and disabled workers (sheltered employment in France) sectors.

The ethics and sustainable development clauses are specified in SUEZ's General Conditions of Purchase and standard contracts. In 2018, 55% of the Group's supplier contracts (excluding WTS) contained a CSR clause.

SUEZ has been a signatory to the Responsible Supplier Relations Charter (formerly known as the Intercompany Relations Charter) in France since 2012 and the SME Pact since 2013, and has set up a mediation process to address any difficulties SMEs may have in making themselves heard as part of their relations with the Group. SUEZ is developing a supplier relationship barometer alongside a panel of very small enterprises/SMEs/intermediate-sized enterprises in order to measure the quality of the business relationship and the impact of actions implemented with its suppliers. SUEZ then establishes an SME Pact action plan aimed at developing business relationships and partnerships that promote innovation. SUEZ also participates in competitiveness clusters related to its businesses and is involved in the work of COSEI (Strategic Orientation Committee of Eco-Industry Sectors).

Developing customized solutions for all regions and their residents

SUEZ provides customized and adjustable solutions according to the specific needs and challenges of each region, the size of local authorities, the limitations of farmers, and/or the location of industrial companies. Whether it is mobile water treatment units to help some areas of the world that lack adequate access to water, mobile desalination units or mobile wastewater treatment units, SUEZ is committed to developing them. Sales of these modular units increased in 2018, with 40 units sold in Ivory Coast, and should remain solid in 2019 with the acquisition of GE Water.

The Group encourages the use of innovative partnerships allowing players in the region to work together to build solutions that are adapted to the challenges and problems they face. With this in mind, since July 2016, the "SUEZ Collaborative Tour" has been setting up meetings between SUEZ employees and social and environmental entrepreneurs of a territory who are innovating in connection with our businesses. SUEZ seeks to co-construct innovative offers with these entrepreneurs through this tour, which create value in a region and beyond it. In the area of waste, in 2014, SUEZ created the Future of Waste (FoW) program in partnership with Makesense, a pioneer in citizen engagement. Following on from the SDG 17, this program offers a space to citizens, entrepreneurs and experts on waste to meet up and work together to speed up the transition to more circular and solidarity economies. Today this community has 1,400 active members and has already organized more than 430 meetings, workshops and events in over 45 cities around the world. After spending 2017 dedicated to the construction sector (ArchiWaste campaign), FoW is focusing 2018 on waste management in the tourism and events sector. Thanks to the Wasteless Journey campaign, FoW has continued its awareness-raising and innovation objectives in a collaborative environment: workshops with multiple players on resolving challenges have been organized in Caen and at the Stade de France; conferences and a MOOC made in partnership with sector players have been offered to the general public; and an online toolbox has been built collaboratively.

Since 1990, SUEZ's activities in developing countries have provided drinking water to 19.5 million people and wastewater systems to 9.2 million people. Having officially committed itself to implementing the right to water and wastewater services since the United Nations recognized this right in 2010, SUEZ intends to contribute to the achievement of SDG 6 in accordance with Commitment No. 15 of its 2017-2021 Sustainable Development Roadmap, based on three additional objectives:

- to develop sustainable access to essential services within the framework of our contracts;
- to allocate EUR 4 million per year to the SUEZ Foundation and support 30 projects per year to promote access to essential services in the countries with the greatest need;
- to share our know-how in order to accelerate access to services by supporting training and making our expertise available.

The expertise developed by the Group, which has been consolidated under the "Services for All" program since 1999 and rolled out on five continents, now puts SUEZ in a position to address the issue of access to essential services in both developed and developing countries.

- In developed countries, SUEZ offers to assist its customers in the determination and establishment of social water policies that aim to guarantee access to services for persons in economic difficulty. All programs are defined in concert with local actors, whether they involve implementing a mediation and social assistance program, setting up special pricing or creating subsidy mechanisms, in order to address the specific challenges of the region in the best manner possible. Since its establishment in 2013, the solidarity fund set up by the Group and its association partners in Barcelona has awarded over 55,000 grants, delivered exclusively to households in precarious circumstances to help them pay their water bills.
- In order to address the major issues facing cities in developing countries regarding access to services, the Group has made the expertise and experience it has acquired available to customers to improve and extend services in disadvantaged neighborhoods with no services. The Group's know-how on the subject was especially of use in Argentina, South Africa and Algeria, and more recently in India, where it combined knowledge of water businesses with mastery of social engineering practices to ensure good understanding in a local context, involvement of communities throughout the project and establishment of technical and sales solutions appropriate to the circumstances. In this way, the INMAE program, which has been developed as

part of the National Initiative for Human Development (INDH) since 2005, has already connected 92,400 homes in the informal settlements of Greater Casablanca to drinking water, wastewater systems and electricity. Work and studies are underway to connect an additional 26,000 additional homes.

- SUEZ is therefore extending its "Services for All" expertise to waste treatment and recovery activities by developing know-how based on the creation of partnerships with waste collectors who operate informally on landfill sites in emerging and developing countries. To allow them to keep the revenue generated by their activities while also improving their living and working conditions, SUEZ is offering a solution to its municipal customers that is based on the creation of a formal recycling cooperative. Consisting of a comprehensive program that combines social mediation, training (accounting, legal, technical, etc.), the provision of equipment and administrative support, this solution is in place most notably in Meknes, Morocco, where a cooperative of 150 sorters has been active since 2014 and is an integral part of the SUEZ Advanced Solutions waste recovery program.

Generally speaking, SUEZ works hard to take the UN's Sustainable Development Goals into account in its investment strategies, in order to provide its expertise to regions where needs are greatest, by taking into account the region's economic, legal or technical realities. SUEZ has also developed a specific software program as well as dedicated training in order to support its managers in defining their priorities in terms of dialog and initiatives to optimize societal contributions to the regions. In accordance with the commitment made in its 2017-2021 Roadmap, SUEZ has systematically rolled out this methodology for its critical projects.

Increasing our impact through sponsorship

SUEZ intends to combine its expertise and the energy of its employees with that of civil society. This social commitment addresses a very strong ambition of Group employees that was expressed in the internal surveys.

In 1994, SUEZ employees founded the Aquassistance association. This 800-member network makes its volunteers' expertise and equipment available to support projects around the world. Aquassistance provides water, wastewater treatment and waste management assistance to vulnerable populations and provides support on development aid projects as well as in emergency situations and after emergencies.

Each year, for two weeks, the "Solidarity Together" program sees employees from all the Group's subsidiaries rally around community actions: in 2018, SUEZ employees joined forces to fight food waste in India and in Spain and cleaned up natural areas in the United States and in Australia, where 90 people picked up 240 liters of waste on Coogee Beach. Throughout the Group, employees can organize their own waste collection event at a coastal area by going to the site #suez4ocean.

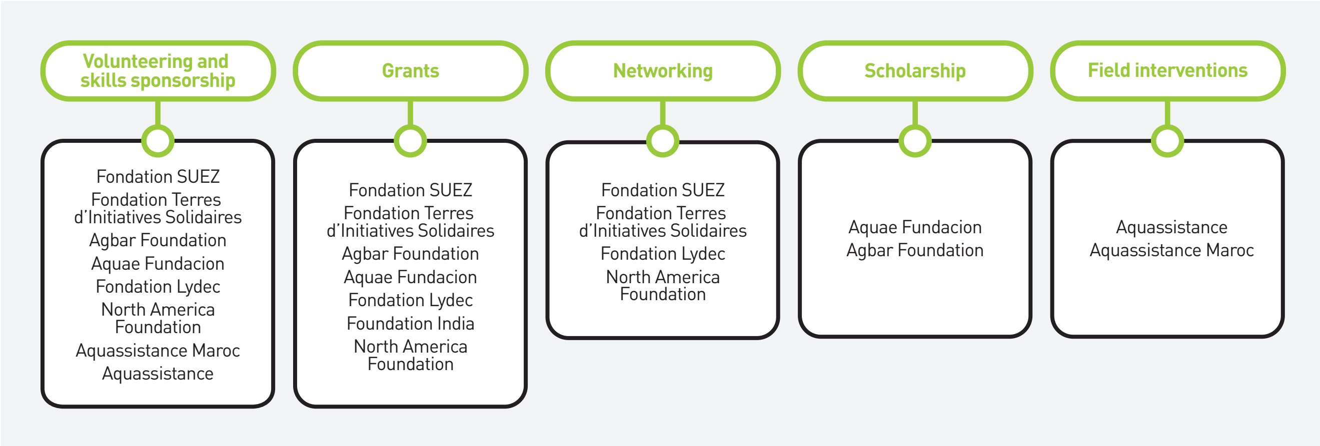
SUEZ focuses its sponsorship efforts on areas and populations that need them most and tries to distinguish them clearly from its contributions that fall under its commercial activities. As part of its public service contracts, SUEZ promotes and applies contractual solidarity mechanisms and decentralized cooperation initiatives when regulations and contract specifications allow. In terms of sponsorship, The Group has seven foundations and four associations spread out over four continents with a total budget of more than EUR 10 million. Nearly 300 projects are underway within these foundations and around 200 projects were accepted in 2018, taking into account the United Nations Sustainable Development Goals.

Access to drinking water
- Aquassistance Maroc
- Aquassistance
- Iberaquassistance
- Fondation SUEZ
- North America Foundation

Wastewater services
- Aquassistance
- Iberaquassistance
- Fondation SUEZ
- North America Foundation

Waste management
- Aquassistance
- Fondation SUEZ

Entrepreneurship
- Agbar Foundation
- Fundacion Aquae
- Fondation SUEZ



Backed by a EUR 4 million budget in 2018 and falling under the Group Roadmap, the SUEZ Foundation (which succeeded Fonds SUEZ initiatives in November 2017) is managed by a Board of Directors that has 13 Directors, including one Group employee representative and five experts in the areas in which the foundation operates. With regard to access to essential services, the Foundation acts by supporting partner associations, and Aquassistance in particular, by boosting innovation with "SUEZ Initiatives Award at the *Institut de France*", or by training water and wastewater service operators in developing countries through the AgroParisTech Chair "SUEZ- General Management of urban water and wastewater services". Since its creation in 2009, this chair has trained nearly 150 people from four continents. The Foundation also takes action in France in the area of integration by supporting the employment and training of the most vulnerable people, and in the area of social cohesion, through education, culture and sports for young people in priority education zones. The Board of Directors approved 30 projects in 2018. In 2018, the Foundation devoted special efforts to projects that focused on refugees. Placing its initiatives under the UN's Sustainable Development Goals, the Foundation works with its partners to ensure that conditions exist for lasting improvements to the living standards of populations concerned by the projects, and that the results are sustainable.

Responsible lobbying

SUEZ maintains regular dialog with public institutions at the local, national, European and international levels. As part of its lobbying activities, the Group regularly communicates with French, European and International institutions, in particular through position statements, direct contact and participation in professional bodies, think tanks and events. The main issues addressed include such general-interest subjects as combating climate change, the efficient management of natural resources, and sustainable production and consumption. They also deal with subjects that have a more direct link to the day-to-day activities of the Group, such as management procedures and public procurement, legislation related to recycling and to waste recovery or drinking water and wastewater treatment.

The Group is registered as an official lobbyist with European institutions. It publishes the following information each year on the European Commission's website: the Group's centers of interest, its membership of associations linked with the European Union, the amounts and sources of finances received from institutions of the European Union, and the costs of activities for representing interests to European institutions (personnel and travel costs, memberships of professional associations, and external consultants). These costs amounted to between EUR 800,000 and EUR 899,000 in 2017.

Furthermore, in France, in accordance with the Sapin II law of December 9, 2016, the Group has been registered with the French High Authority for Transparency in Public Life (HATVP). Since April 2018, SUEZ has created an Annual Report of all its activities in representing interests to public institutions and of the related costs.

A portion of the expenses related to these activities comes from SUEZ's memberships of associations and national federations. As a result, for the July-December 2017 period, the Group declared between EUR 100,000 and EUR 200,000 in expenditure for representation of interests.

Lastly, the Group recently updated its Charter on Ethical and Responsible Lobbying, in line with its Ethics Charter. This Charter, which contains nine sections and commitments for each employee or consultant involved in lobbying activities on the Group's behalf, is implemented as part of the Ethics Program described in section 4.2.6 of this document.

6.8.2.2.6 PROMOTING HUMAN RIGHTS ON THE VALUE CHAIN AND IN THE VIGILANCE PLAN

Having been committed for many years to human rights and respect of human dignity, SUEZ explicitly incorporates this challenge into Commitment No. 4 of its 2017-2021 Sustainable Development Roadmap. SUEZ's action principles in this regard are in line with international standards, in particular:

- the Universal Declaration of Human Rights and additional pacts;
- the International Labor Organization (ILO) conventions;
- the Charter of Fundamental Rights of the European Union;
- Organization for Economic Co-operation and Development (OECD) Guidelines for Multinational companies;
- the United Nations Convention against Corruption.

SUEZ also participates in voluntary initiatives or working groups such as the Global Compact on Human Rights and is part of the *Entreprises pour les Droits de l'Homme* (EDH – Businesses for Human Rights) association.

Employees are asked to consider the impact of their actions and decisions on any person, to ensure that the integrity or dignity of said person is not compromised by a Group entity or one of its employees. The Group also strives to consistently defend human rights in sensitive situations, for example, by upholding the rules on protection of property in sensitive regions of the world. In this respect, all SUEZ employees must ensure that their words and actions are non-discriminatory, particularly in terms of age, gender, ethnic, social or cultural origin, religion, political or union affiliation, lifestyle choices, physical characteristics or disability.

Under the leadership of an internal "Vigilance and Human Rights" committee specifically established for this purpose, the Group adopted a human rights policy. This policy has been formalized by a policy statement outlining the conditions for implementing SUEZ's commitment. These principles have been discussed with stakeholders as part of an annual consultation in 2018 and with staff representatives within the European Works Council.

Based on the United Nations Guiding Principles on Business and Human Rights, SUEZ's human rights approach is fully incorporated into its compliance management and ethical procedures. An assessment of the negative impacts on human rights that may be linked to the Group's activities has been carried out in connection with the drafting of its vigilance plan published in 2018 (see below). Identified in the first instance thanks to the development of an overall matrix of potential impacts linking the specific rights in question with the type of activity, the type of stakeholder affected and the level in the relevant supply chain, the impacts assessed cover both rights related to compliance with working conditions (non-discrimination, promotion of diversity, health and safety, social dialog) and ILO conventions (forced and illegal labor, child labor, etc.) as well as more specific issues, such as:

- the right to water and wastewater treatment: for several years, SUEZ has promoted the right to have access to water and wastewater treatment and has developed specific expertise to accomplish this in several parts of the world. Accordingly, SUEZ pays close attention to the most vulnerable people, especially in accordance with OECD principles on water governance;
- the protection of personal data: launched at the end of 2016, SUEZ's compliance program for the new European Regulation 2016/679 pertaining to the protection of personal data that entered into force on May 25, 2018 (GDPR) fully meets the Group's commitments, especially those included in its Roadmap and concerning respect for Human Rights and adopting higher standards of protection, particularly regarding the handling of employees' and end customers' personal data.

An action plan aiming to strengthen the existing measures to mitigate and prevent the risk of human rights infringements that could occur in connection with the Group's activities and supply chain, has been established and was implemented in 2018. This plan is based on two pillars:

- informing and training staff in best practices to adopt in the event of a risk of human rights violation. For instance: factsheets providing information on the main points of vigilance to observe concerning human rights in certain countries are sent to the managers of teams operating in these countries; internal events are organized to raise awareness in this area among staff, with partners specializing in the field, such as Vigeo and EDH and other business partners. Inspired by the collaborative work of EDH member companies, an e-learning module for employees was tailored to SUEZ's businesses, its areas of operation and the main risks identified;
- strengthening of qualification, control and support processes for suppliers and subcontractors based on supplier-specific risk mapping by the Procurement Department, which coordinates relations and negotiations with the Group's strategic suppliers and which specifically ensures that they undertake to respect the principles of sustainable development and human rights and to comply with SUEZ's ethical rules.

Vigilance Plan

SUEZ is convinced that the businesses can count themselves as real contributors to the development and transformation of our societies, and has always conducted its business activities with a view to increasing its contribution to the common good, thereby seeking to maximize the economic, social and environmental benefits generated by its presence in different regions. Building on the Group's long-standing actions and commitments to promote human rights, the health and safety of individuals and the protection of the environment, in 2017, SUEZ drafted and published its Vigilance Plan in accordance with the provisions of Law 2017-399 of March 27, 2017 relating to the duty of vigilance of parent companies and contractors. The goals of this plan are twofold: to provide a broader understanding of the impacts generated by the Group's activities, and to implement the most appropriate means to allow it to maximize its positive impacts, while also preventing and mitigating its negative impacts.

The Vigilance Plan was subject to consultation by external experts and stakeholders and was discussed by staff representative bodies within the European Works Council.

1) Scope and composition of the plan

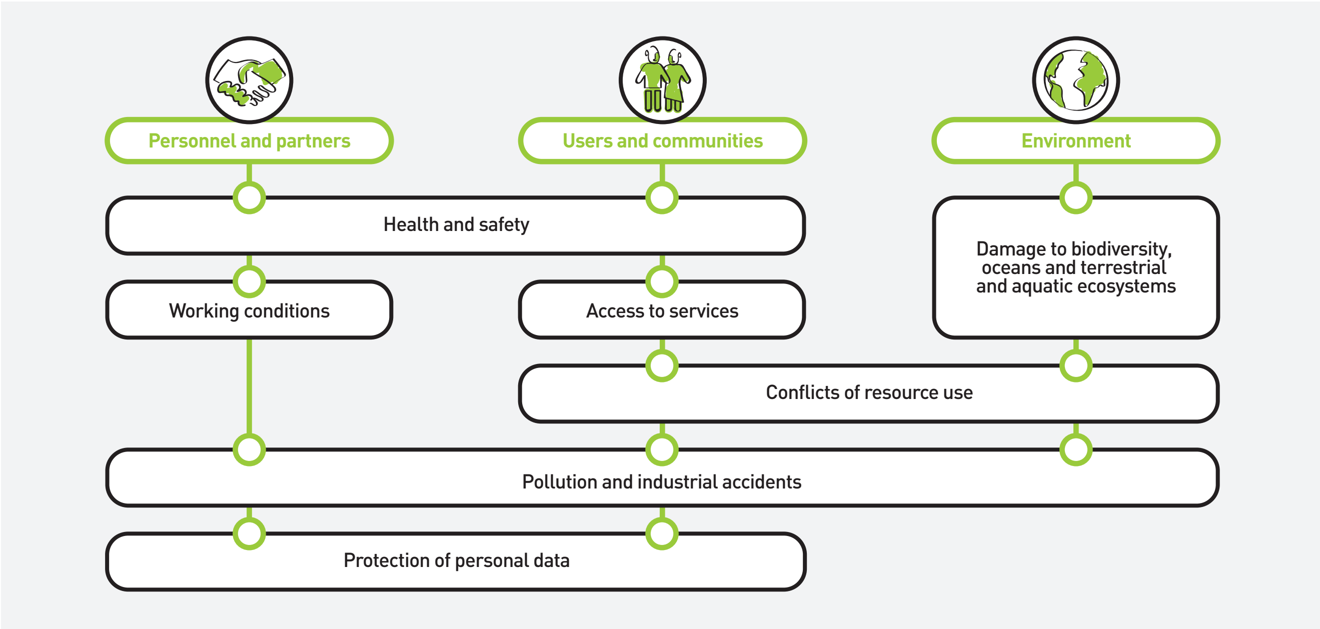
This vigilance plan is intended to identify and prevent the risk of serious harm to the environment, human rights and fundamental freedoms as well to the health and safety of individuals arising from the Group's activities or those of subcontractors and suppliers when they are linked to the Group's activities.

In line with the United Nations Guiding Principles on Business and Human Rights, this plan covers:

- a mapping of the risks identified, analyzed and prioritized and the methodology used;
- the procedures for regularly evaluating these risks;
- the actions taken by the Group to prevent and mitigate these risks;
- the alert and report collection mechanism for the existence or development of risks;
- the arrangements for steering and monitoring the plan and the measures implemented.

2) Risk mapping

By mapping the risks of serious violations of human rights and fundamental freedoms, environment, health and safety, the Group takes into account two main factors, represented by the risks inherent in the nature of its activities, and the risks inherent to the countries in which it operates. Additional work to identify and map the risks related to suppliers' and subcontractors' activities, taking the same factors into account, back up this mapping. Work to identify and classify risks was done jointly by the Sustainable Development, Human Resources, Health and Safety, and Risk & Investments Departments, under the control of the "Internal Steering Committee on Human Rights and Duty of Vigilance". On the basis of interviews conducted with managers, risks were subject to an internal assessment aimed at describing their critical nature across the scope of the Group's activities, and then prioritized, culminating in the following mapping.



3) Risk monitoring and assessment

The procedures for monitoring and assessing the risks to human rights and fundamental freedoms, health, safety, and the environment are developed and updated in line with the Company's integrated risk policy. Under the supervision of the Chief Risk Officer, these risks are assessed each year by the Risk Officers who, at the level of the various subsidiaries, are in charge of rolling out the assessment methods for said risks, in coordination with the relevant operational departments, specifically Human Resources, Health and Safety, Sustainable Development, Innovation and Industrial Performance and Procurement. Said risks are also incorporated by the Internal Audit, Risks and Investments Department in the development of its annual audit plan.

4) Risk management, prevention and mitigation plans

The risks faced by Group entities depend directly on the nature of their activities and the geographical, political and legal context in which they are performed. Each of them, taking into account the Group's internal policies, sets out the measures which seem to it to be the most suited to the challenges it faces and is supported in this task by the operational departments. Two cross-departmental policies form the foundation of the plans for managing, preventing and mitigating the risks of violations of human rights and fundamental freedoms and of damage to health, safety and the environment:

- the Group's Ethics policy, which sets out the fundamental principles and ethical values upheld by SUEZ and frames the rollout of measures that make it possible to ensure that those principles and values are observed in all its activities. Further information on the Group's Ethics policy and the Group's Ethics and Sustainable Development Committee can be found in section 4.2.6 "Ethics Program" and in chapter 16.4 "Conditions for the preparation and organization of the work of the Board of Directors and the Specialized Committees";
- the Group's Responsible Procurement policy, the main elements of which are described in detail below.

The Responsible Procurement policy

The Group believes that supporting its business partners in including more Corporate Social Responsibility challenges constitutes a major lever in its overall performance. As a result, the Responsible Procurement policy delivers on this willingness to extend the Group's ethics culture to all the stakeholders in the procurement value chain. As a framework for action that is common to all Group entities, this policy is based on complementary tools and procedures with a single objective: to create environmental, social and economic value through business relationships. Managed by the Group's Procurement Department and Sustainable Development Department, this policy is rolled out within the subsidiaries by a network of Responsible Procurement Officers. The procedure for monitoring and supporting the Group's suppliers is based on a number of complementary measures:

- a supplier qualification process incorporating criteria relating to the promotion of human rights and the respect of fundamental freedoms, the prevention of health and safety risks, and the management of environmental risks,
- the inclusion of CSR clauses in contracts with suppliers, whereby those suppliers undertake to respect the Ethics Charter and the ethical, social and environmental principles upheld by the Group,

– support measures to help the Group's suppliers to improve their CSR practices, such as providing access to the SUEZ Ethics practical guide,
– the implementation of measures for supervising and auditing suppliers with a deemed high level of risk.

As part of the formalization of the Group's Vigilance Plan, the Sustainable Development Department and the Procurement Department have jointly developed a risk mapping system relating specifically to the purchasing process in order to reinforce the mechanisms for managing the existing risks with regard to human rights, health and safety, and the environment. Based on the major purchasing categories and the primary risks identified when drawing up the vigilance plan, this mapping system has been drawn up on the basis of links between the criteria associated with the purchasing sectors (conditions of production or for executing a delivery or a service, risks associated with the delivery or inherent in its use) and the country of origin of the delivery or of provision of the service, using the mapping of risks by country as a basis. This framework for assessing the gross risk of suppliers helps the Group define the appropriate level of supervision and support by establishing priorities and pooling these efforts with other companies or organizations when it is worthwhile and possible.

Sector-based action plans and policies

In addition to these cross-disciplinary policies, the Group's operational departments have developed sector-based policies and action plans to mitigate and prevent the risks that may arise in the course of the Group's business activities or those of its business partners. The following table lists these risks and indicates the relevant sections of this Reference Document.

Subject/disclosure	Corresponding chapter(s) and section(s)
Health and Safety	
► Health and Safety conditions	► 17.1.5 and 17.2.2, paragraph on "Workplace safety"
► Review of agreements with trade unions or employee representatives on Health and Safety in the workplace	► 17.1.5 and 17.2.2, paragraph on "Workplace safety"
► Accidents in the workplace, including their frequency and severity, as well as occupational illnesses	► 17.2.2, paragraph on "Workplace safety"
Management of industrial and environmental risks	► 4.2.2
Protection of biodiversity and ecosystems	► 6.8.2.2.1
Protection of personal data	► 4.2.3 and 6.8
Compliance with regard to working conditions and the combating of discrimination	
► Organization of working time	► 17.2.2, paragraph on "Working time"
► Organization of social dialog and review of collective bargaining agreements	► 17.1.3 and 17.2.4
► Non-discrimination	► 17.1.3, 17.1.4, 17.2.1 paragraphs on "Gender breakdown" and "Compensation" and 17.2.3
Promotion of human rights and respect for fundamental freedoms	► 6.8.2.2.6
Conflicts of resource usage	► 4.1.1, paragraph on "Operational risks"
Access to services	► 6.8.2.2.5, paragraph on "Developing customized solutions"

5) Alert escalation systems

In accordance with legal provisions on the duty of vigilance and the requirements of Decree 2017-564 of April 19, 2017 made in accordance with Article 8 of the Sapin II law applicable since January 1, 2018, SUEZ has two types of complementary systems for alert escalation and report collection that cover all non-compliance risks with respect to violations of human rights and fundamental freedoms and damage to Health and Safety and the environment.

- Firstly, the email address ethics@SUEZ.com, which can be found in the Ethics section of the SUEZ website, allows any question, request for information or alert to be escalated directly to the Group's Ethics Officer and the Ethics and Compliance Director, who will analyze the information once it has been received and process it by implementing the most appropriate internal procedures.
- Secondly, if they become aware of a potential breach of the ethical principles, the Group's employees are encouraged to discuss it with their line manager, other appropriate managers (Human Resources, Safety, Legal, etc.), an employee representative, the Ethics Officer of their entity, or the Group's Ethics Officer. Any discussions in this context will remain confidential and no penalty may be applied to any employees who, in good faith, takes the initiative to share their concerns on matters of ethics or compliance.

This system was subject to a specific internal communication as part of the implementation of the Vigilance plan for fiscal year 2018 (see the paragraph on "plan implementation for fiscal year 2018" below).

SUEZ and a significant number of its subsidiaries have set up ethics-related email addresses or telephone hotlines so that employees and third parties can easily seek the support of Ethics Officers.

Lastly, to help manage its reputation risk, SUEZ monitors the media to manage and prevent controversies related to its businesses or its operations around the world. A "controversies" committee includes the Sustainable Development Department, the Communications Department, the Institutional Relations Department, the Ethics and Compliance Department and the Internal Audit, Risks and Investment Department. It meets every quarter to monitor ongoing controversies and to prevent future controversies by monitoring the faintest of signals in the media, on social networks or within the ecosystems in which the Group operates.

6) Steering and governance of the plan

The steering of this vigilance plan is carried out by the General Secretary of the Group, in coordination with the following operational departments:

- Human Resources;
- Health and Safety;
- Sustainable Development;
- Innovation and Industrial Performance;
- Procurement;
- Risk and Investments;
- Internal Audit and Transformation;
- Ethics and Compliance;
- Security.

The measures derived from this plan are implemented by the Business Units of the Group with the support of their operational departments. Each year, the results of implementing the actions in this plan are presented to the Ethics and Sustainable Development Committee of the SUEZ Board of Directors.

7) Reporting

Every year, SUEZ reports on the monitoring and implementation of the plan in its Reference Document. The risk mapping is similarly republished each year, taking into account any changes. Many monitoring indicators for the sector-based action plans are in force within the Group, particularly with respect to employee relations, Health and Safety, and the management of environmental and industrial risks (see sections 17.2.2, 17.2.4, 6.8.2.2.1 and 6.8.3). The Group publishes a special report on the implementation of its vigilance plan every year in its Reference Document (see the "Plan implementation for 2018" section below). It includes:

- raising awareness and training employees on respecting human rights and fundamental freedoms;
- an in-depth look at and update of the risk mapping, taking into account alerts received and controversies identified;
- improvement plans that result from them and their impacts.

8) Plan implementation for fiscal year 2018

In March 2018, the vigilance plan was subject to a consultation with external experts and stakeholders. Discussions focused on ways to audit and monitor the progress of suppliers and have led SUEZ to assess opportunities to pool efforts with other companies and organizations located near one another. In addition to mandatory dialog on the ethics whistle-blowing system, the vigilance plan was also presented to staff representative bodies within the European Works Council during a meeting of its Secretariat in Paris in March 2018 and its plenary meeting on July 5, 2018 in Budapest.

In order to strengthen its monitoring system, SUEZ set up an internal "controversies" committee (see section on "Alert escalation systems" presented below). A summary of how the controversies are monitored, carried out by the Sustainable Development Department based on information from the non-financial ratings agency Vigeo-Eiris, was analyzed in a meeting of this committee in June 2018 in order to draw lessons on reputation risk management.

The risk mapping has been further developed, especially for procurement, specifying priority areas and risks for 2018:

- at Group level, these risks are traffic accidents and protection of personal data in the event of a cyber-attack;
- for procurement, the categories most at risk are chemical products, construction, and managing sludge. For chemical products, the Group gets most of its supplies from international market leaders, and SUEZ analyzes their due diligence process. Other suppliers from this sector will be reviewed as a priority depending on country risk;
- from an operational standpoint, SUEZ Africa, Middle East, India Business Unit is more specifically exposed to discrimination risk and freedom of assembly risk and it has bolstered its vigilance in the area of Health and Safety and living standards of subcontractors on its work sites.

In terms of training, SUEZ prioritized training for the Group's Managers and the heads of the subsidiaries' procurement departments in risk mapping and developing priority monitoring plans. The Water salesforce of SUEZ Africa, Middle East, India Business Unit has been specially trained on promoting human rights.

In order to prevent and reduce risks identified as priority risks for 2018 as regards implementation of the vigilance plan, the following plans have been rolled out:

- risk of traffic accidents: fatal accidents in 2018 were primarily collisions between collection trucks and pedestrians. Managing this collision risk remains a priority for SUEZ in 2019 with a focus on human and organizational factors in waste collection operations, road safety training for truck drivers, and installing digital tools to help drivers better manage road risks and avoid fatal accidents (see section 17.1.5);
- worker living conditions on SUEZ Africa, Middle East, India Business Unit work sites: the inspection checklist has been reviewed, strengthening criteria on respecting dignity and human rights, and all site accommodation at the worksites in the area has been inspected;
- protection of personal data: In May 2018, SUEZ adopted a Personal Data Protection Policy[1] and specific governance which rounds out the Policy through the adoption of the SUEZ GDPR reference framework. This GDPR reference framework, inspired by best practices (CNIL IT governance and liberty label)[2], is broken down into eight measures:
  - formation of the Data Protection Committee,
  - appointment of a DPO and representative (GDPR Coordinators) network,
  - implementation of processing records and action plans,
  - adoption of procedures to analyze GDPR compliance or analyze the impact of protecting personal data (PIA) in projects (methods for identifying, preventing and mitigating risks to guarantee respect for people's rights, setting up more

(1) See SUEZ's institutional site.
(2) Ruling 2017-219 of July 13, 2017 relating to amending the reference framework for issuing labels on governance procedures to ensure data protection.

stringent security measures in the event of residual risks). Accordingly, a PIA was carried out as part of the deployment of an HR solution (hiring, Core HR, talent management, mobility, training) at Group level,
– supervision of contractual relationships with subcontractors that process personal data on the Group's behalf,
– adoption of instructions pertaining to the exercise of people's rights and instructions relating to managing data violations (contributing to strengthening cyber risk prevention).

These measures fully meet the new regulations set out by GDPR and by Ordinance 2018-1125 of December 12, 2018 amending Law 78-17 of January 6, 1978 pertaining to IT, data files and civil liberties: mandatory accountability for compliance in a responsible way over the long term.

SUEZ has ensured compliance with GDPR by setting up a GDPR structure defined by Governance. This structure is based on a Data Protection Committee at the SUEZ Group level and a DPO network that includes around a dozen DPOs. In order to effectively roll out the compliance program related to the new regulation, a similar structure has been consistently applied throughout all the Business Units taking into account each location's specific circumstances. Resources are directly allocated to the program. In order to measure the effectiveness of the program, the Group DPO has defined a reference framework of key indicators for 2019 that are included in the Group's internal control processes (among which is the number of data violations that required notification of a control authority). In addition to an internal cyber security audit conducted in 2018, the Group will roll out several internal audit campaigns on GDPR compliance campaigns in 2019.

At subsidiary level, SUEZ Eau France, which manages more than 4 million public water and wastewater service customer users *via* approximately 2,066 public service contracts and 2,484 service provision contracts, has made personal data protection a key component of its business model. Other Group entities are pursuing similar objectives. As a result, in October 2018, R&R France launched a national action plan dedicated to improving data quality, managed by its "Digital & Customer Experience" Business Line. This action plan, which aims to "better collect, process and use the data" throughout its life cycle, includes the protection of personal data and thereby ensures the Group complies with its regulatory obligations.

As regards suppliers, in 2018, SUEZ signed a contract with Bitsight to assess the security level of its main suppliers' information systems. The Procurement Department has integrated cyber security assessment into its supplier qualification process and a specific audit is provided for in the contract models.

6.8.2.2.7 FIGHTING CORRUPTION

As part of the Ethics Program set up by the Group described in section 4.2.6 of the Reference Document, specific anti-corruption rules are set forth in the Ethics Guide for business relationships which can be consulted by all employees and is available on the Group website. Specific procedures are applicable to the entire Group for concluding sponsorship or philanthropic contracts, or institutional or business contracts with consultants.

Under the responsibility of the Group Ethics Officer and their network of Ethics Officers (18 Ethics Officers in "first tier" entities), in-person training and e-learning modules aimed at preventing ethics risks include preventing corruption risks by taking into account local situations and are based on a risk mapping conducted in 2017 at the Group and Business Unit level in accordance with the provisions of the Sapin II law. As a result, in 2018, nearly 12,000 employees took training courses on ethics, and around 3,300 of them received specific training on anti-corruption rules.

6.8.3 Key performance indicators associated with the main challenges identified as part of the Non-Financial Performance Statement

Stakeholder/ Challenge *(2018 values, unless otherwise specified)*	Municipal and industrial customers	Employees	Regions	Consumers	Environmental health
Environmental challenges					
Making the water supply safer	22.8% of wastewater reused		9% of drinking water production sites and wastewater treatment plants located in water risk areas [1]		
Fighting climate change	Emissions avoided by SUEZ customers: 10,036 kteqCO2 [2]		Production of renewable energy (XXX): 7,603 GWh		Direct GHG emissions (XXX): 6,789 kteqCO2 [2] Indirect GHG emissions (XXX): 2,479 kteqCO2 [2] Consumption of primary and secondary energy (XXX): 15,199,224 MWh
Optimized water and waste management	53.8% of waste recovered [3] Recycled plastic production: 524,838 metric tons % bottom ash recovered: 77.54%			Technical performance from drinking water distribution networks (XXX): 79.7%	Energy produced/ energy consumption ratio (primary and secondary sources) from Water activities (XXX): 9.51%
Social and societal challenges					
Social and societal contribution of the Group's activity		% of women in management (XXX): 27.6% including WTS 29.4% excluding WTS % of employees covered under a social dialog system 86.7% including WTS 91.3% excluding WTS	Ratio number of indirect jobs created regionally/number of direct jobs – 2017 figure: 2.46 [4]		
Promotion of Human Rights		Number of fatal accidents involving employees (XXX): 4 Frequency rate of workplace accidents – water/waste (XXX): 4.53/12.38	% of supplier contracts that include CSR clauses: 55 (excluding WTS)		
Fighting corruption		Number of employees trained in anti-corruption rules [5]: about 3,300			

(XXX) Indicator verified with reasonable assurance (see sections 6.8.4.2. and 6.8.7).

(1) Calculation made using the World Resources Institute Aqueduct tool that identifies water risk sites using several criteria (water stress, existence of reservoirs/upstream dams, condition of groundwater, interannual and seasonal variability, frequency of floods, severity of drought episodes). This result was obtained by filtering high-risk or extremely high-risk facilities using the overall risk indicator (consolidating the different risk criteria). The analysis was conducted on a total of 1,996 sites, including 1,060 wastewater treatment sites and 936 drinking water and desalination production sites. A total of 649 facilities were excluded from the analysis due to GPS coordinate data being temporarily unavailable for some sites or due to certain characteristics being unavailable for some regions in the Aqueduct tool.
(2) In 2018, SUEZ emitted 9.3 million tCO_2-eq through its activities, which themselves contributed to the avoidance of 10 million tCO_2-eq of greenhouse gas emissions for its customers. Since 2017, the calculation of greenhouse gas emissions is based on the recommendations contained in the fifth IPCC Report, specifically a global warming potential of 28 for methane.
(3) Formula used to calculate the indicator: quantity of waste recovered (in the form of matter of energy, excluding inert waste and biogas recovery on waste storage facilities)/sum of waste recovered and disposed waste - Value of 69.0% on the European scope.
(4) Calculation made using the Local Footprint® methodology. This indicator will be verified for fiscal year 2019.
(5) The "Proportion of employees who received training" indicator was verified with reasonable assurance. This specific indicator will be verified for fiscal year 2019.

6.8.4 Annual reporting methodology

6.8.4.1 General principles

In order to control the rollout of its sustainable development commitments, manage related risks and encourage communication with stakeholders, SUEZ developed a specific reporting system for these areas in 2003. This system was developed on the basis of recommendations arising from the work performed at international discussion bodies like the Global Reporting Initiative (GRI) or the World Business Council for Sustainable development (WBCSD). It covers all information required, including publication in the Management Report required by Article 225 of the Grenelle II Law and by Decrees dated April 24, 2012 and August 19, 2016 as well as by Ordinance 2017-1280 of July 19, 2017 and Decree 2017-1265 of August 9, 2017.

Through its subsidiaries, SUEZ conducts very different types of business in the water and waste industries and has many different types of contracts, as shown by the wide variety of operational methods implemented at several thousand sites across the world. This wide array of situations in addition to constant change in the Group's operational scope make it particularly difficult to harmonize the definitions of relevant indicators as well as to calculate and collect statistical data. As a result, SUEZ is continuing its efforts to have data audited by third parties, a key to increased reliability. The aim is to make the non-financial reporting process an increasingly effective guidance tool for supporting the goals of the Group's Sustainable Development and Corporate Social Responsibility Roadmap, as well as a tool used in dialog regarding the ongoing improvement of its overall performance.

6.8.4.2 External audits and verifications

Until 2017, external audit work entrusted by the Group to an independent third party organization fell under the obligations of Article 225 of the Grenelle II Law, enabling it to obtain:

- a declaration stating that all information required by Article R. 225-102-1 of the French Commercial Code and Decrees dated April 24, 2012 and August 19, 2016 was contained in the Management Report and the Reference Document;
- a reasoned opinion on the fairness of the information published in the Management Report and the Reference Document, with a limited assurance conclusion that the information is presented fairly in all material aspects.

For the 2018 fiscal year, the work that the Group requested a third party to perform now falls under the new obligations under Ordinance 2017-1280 of July 19, 2017 and Decree 2017-1265 of August 9, 2017, which transposes into French law European Directive 2014/95/EU pertaining to the publication of non-financial information, namely producing a reasoned opinion on the statement of non-financial information expressing a limited assurance conclusion on:

- the statement complying with the provisions set forth in Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with paragraph 3 of Article R. 225-105-I and II of the French Commercial Code, namely action plans and results of policies, including key performance indicators related to the main challenges identified.

However, for the sake of maintaining continuity with previous years, this assignment has been expanded to producing a limited reasoned opinion on all the environmental and social indicators published during previous years and in the Management Report and Reference Document under the previous obligations of Article 225 of the Grenelle II Law, and which remain published for 2018 in chapters 6.8 and 17.2.

In addition, beyond these regulatory obligations and to maintain continuity with previous years, the Group also entrusted its Statutory Auditors with specialized services for 2018:

- an assignment to verify 6 calculated environmental indicators based on 124 primary environmental indicators with reasonable assurance;
- an assignment to verify 10 calculated social indicators based on 32 primary social indicators with reasonable assurance;
- an assignment to verify 2 societal indicators with reasonable assurance.

The indicators verified with reasonable assurance are indicated by special characters (XXX) in sections 6.8.2., 6.8.3 and chapter 17.2.

6.8.4.3 Methodological aspects of the environmental report

SCOPE

The figures published in the Reference Document relate exclusively to fully consolidated companies whose operations are controlled by SUEZ. When a company becomes fully consolidated, 100% of its environmental data is incorporated, irrespective of the percentage held by the Group in its capital. The scope of consolidation is set on June 30 of each year. For disposals occurring after that date, the entity is expected to fill in the environmental questionnaire with the data available up until the date of disposal. Acquisitions completed after June 30 are not taken into account. The WTS BU (resulting from the acquisition of the activities of GE Water in September 2017) has therefore been included within the scope of reporting for 2018. Legal entities included within the scope of environmental reporting are those whose activity is relevant in terms of environmental impact (therefore excluding financial, construction and engineering activities). Only entities that have industrial operations and on which SUEZ has a determining technical and operational influence are included within the scope of reporting. Comparisons between reporting periods are made on a like-for-like basis. Scope limitations may be applied to certain published variables. These are indicated in each case.

- **Waste businesses**

  Waste management includes collection, sorting and recycling, material, biological or energy recovery, incineration, landfilling, and the treatment of hazardous waste, including soil remediation. Closed landfills are not included in the published indicators.

- **Water businesses**

  Water management covers all the activities of the water cycle, including the treatment and distribution of drinking water, the collection and treatment of wastewater, the reuse of treated wastewater, the desalination of seawater, as well as sludge treatment and recovery.

REPORTING TOOL

Since 2003, SUEZ has been using an online computer-based environmental reporting system. This software facilitates the management and documentation of the environmental reporting scope, the input, control and consolidation of indicators, the publication of reports, and finally, provision of the documentation needed to collect data and monitor the reporting process.

PROCEDURES

For its environmental reporting, SUEZ makes the procedures, tools and supporting documents available online to contributors. Depending on the organization and distribution of current responsibilities, SUEZ's procedures and IT tools are directly deployed through the central management of the Business Units. The process for the reporting and validation of information at lower levels (subsidiaries, regional offices and operational sites) is organized in accordance with internal procedures and checks put in place by each Business Unit. Internal procedures and IT tools tailored to each local organization are used at these levels.

A Group-wide network of Environmental and Industrial Risk Officers formally appointed by each reporting entity is responsible for applying all of the procedures and instructions. The working procedures and instructions at Group level provide a detailed description of the various phases for gathering, checking, consolidating, validating and communicating environmental data to the corporate department responsible for organizing the process. They are supported by technical documents laying down methodological guidelines for calculating certain indicators.

6.8.4.4 Methodological aspects of the Social Report

Methodological aspects of the Social Report are presented in section 17.2.6.

6.8.5 SUEZ's contribution to Sustainable Development Goals

The Sustainable Development Goals (SDGs) were adopted by 193 Member States of the UN in September 2015 and pertain to the 2015-2030 period. There are 17 SDGs, each one broken down into some dozen targets. They may be viewed at https://sustainabledevelopment.un.org/sdgs: (1) no poverty; (2) zero hunger; (3) good health and well-being; (4) quality education; (5) gender equality; (6) clean water and wastewater; (7) affordable and clean energy; (8) decent work and economic growth; (9) industry, innovation and infrastructure; (10) reduced inequality; (11) sustainable cities and communities; (12) responsible consumption and production; (13) climate action; (14) life below water; (15) life on land; (16) peace, justice and efficient institutions; (17) partnerships to achieve the Goals. Aware of how necessary it is for private companies to adopt SDGs, SUEZ believes these cross-cutting challenges are a valuable framework for the Group's strategy. All of the 169 "targets" and the 244 progress indicators used by the UN have been reviewed to that end. SUEZ distinguishes the targets in line with its core business activities for which it wants to be a driving force, targets that present opportunities in terms of social innovation or developing new services, and targets that require the Group to remain vigilant throughout its entire value chain. The table below shows SUEZ's contribution to these goals and the associated targets with regard to the various information present in this chapter. SUEZ has made a particular contribution to SDGs 6, 8, 12 and 13.

Main challenges identified in the Non-Financial Performance Statement		SDG and target								
6.8.2.1.1	Environmental management	6.3	9.4	12.4	12.6	12.8	13.3			
6.8.2.1.2	Making the water supply safer	6.3	9b	9.4	9.5					
6.8.2.1.3	Fighting climate change	7.2	7.3	9.4	11.6	12.6	12.8	17.16	17.17	
6.8.2.1.4	Optimized water and waste management	6.3	7.2	11.6	12.4	12.5				
6.8.2.1.5	Social and societal contribution of the Group's business activities	1.4 5.5 10.4 16.10	3.3 8.3 14.1 17.3	3.9 8.5 14a 17.9	4.2 8.6 15.1 17.17	4.4 8.8 15.5	4.5 8.10 16.1	5.1 9.3 16.5	5.2 10.2 16.6	5.4 10.3 16.7
6.8.2.1.6	Promotion of human rights and duty of vigilance	5.1	5.5	6.1	6.2	8.7	8.8	16.7	16.10	
6.8.2.1.7	Fighting corruption	16.5	16.6							

6.8.6 Independent third party's report on the consolidated non-financial performance statement presented in the Management Report

This is a free translation into English of the original report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the General Assembly,

In our quality as an independent third party, accredited by the COFRAC under number n° 3-1050 (whose scope is available at www.cofrac.fr), and as a member of the network of one of the Statutory Auditors of your entity SUEZ (hereafter "entity"), we hereby report to you on the consolidated non-financial statement for the year ended on the 31 December 2018 (hereinafter the "Statement"), included in the Management Report pursuant to the legal and regulatory provisions of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code *(Code de commerce)*.

Responsibility of the entity

Pursuant to legal and regulatory requirements, the Board of Directors is responsible for preparing the Statement including a presentation of the business model, a description of the principal non-financial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Criteria"), the main elements of which are presented in the Statement (or which are available online or on request from the entity's head office).

Independence and quality control

Our independence is defined by the provisions of Article L. 822-11-3 of the French Commercial Code and the Code of Ethics *(Code de déontologie)* of our profession. In addition, we have implemented a quality control system, including documented policies and procedures regarding compliance with the ethical requirements, professional guidance and applicable legal and regulatory requirements.

Responsibility of the independent third party

On the basis of our work, our responsibility is to provide an opinion expressing a limited assurance conclusion on:

- the compliance of the Statement with the provisions of Article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with Article R. 225-105-I and II, 3° of the French Commercial Code, *i.e.*, the outcomes, including key performance indicators, and the measures implemented considering the principal risks, hereinafter the "Information".

However, it is not our responsibility to comment on:

- the entity's compliance with other applicable legal and regulatory provisions, particularly the French duty of care law and anti-corruption and tax evasion legislation;
- the compliance of products and services with the applicable regulations.

1 – OPINION ON THE COMPLIANCE AND THE FAIRNESS OF THE STATEMENT

Nature and scope of the work

Our work described below has been performed in accordance with the provisions of Articles A. 225-1 *et seq.* of the French Commercial Code determining the conditions in which the independent third party performs its engagement and with the professional guidance applicable in France to such engagements, as well as to the international ISAE standard 3000 – *Assurance engagements other than audits or reviews of historical financial information*.

The work that we conducted allows us to assess the compliance of the Statement with regulatory provisions and the fairness of the Information:

- We obtained an understanding of the entity's activities and of all the companies included in the scope of consolidation, the statement of the main social and environmental risks related to this activity, and, where applicable, the impact of this activity on compliance with human rights and anti-corruption and tax evasion legislation, as well as the resulting policies and their outcomes;
- We assessed the suitability of the Criteria with respect to their relevance, completeness, reliability, neutrality and understandability with due consideration of industry best practices, where appropriate;
- We verified that the Statement includes each category of social and environmental information set out in Article L. 225-102-1 III of the French Commercial Code, as well as information regarding human rights and the anti-corruption and tax evasion legislation;
- We verified that the Statement includes an explanation for the absence of the information required by the 2nd paragraph of III of Article L. 225-102-1 of the French Commercial Code;
- We verified that the Statement presents the business model and the principal risks associated with the activity of all the entities included in the scope of consolidation; including where relevant and proportionate, the risks associated with their business relationships, their products or services, as well as their policies, measures and outcomes, including key performance indicators;
- We verified, where relevant with respect to the principal risks or the policies presented, that the Statement provides the information required under Article R. 225-105 II of the French Commercial Code;

- We assessed the process used to select and validate the principal risks;
- We asked about the existence of internal control and risk management procedures the entity has put in place;
- We assessed the consistency of the outcomes and the key performance indicators with respect to the principal risks and policies presented;
- We verified that the Statement covers the consolidated scope, *i.e.* all the companies included in the scope of consolidation in accordance with Article L. 233-16 of the French Commercial Code, within limitations set out in the Statement;
- We assessed the data collection process implemented by the entity to ensure the completeness and fairness of the Information;
- For the key performance indicators and other quantitative outcomes that we considered to be the most important presented in Appendix 1, we implemented:
  - analytical procedures to verify the proper consolidation of the data collected and the consistency of their trends,
  - substantive tests using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities listed hereinafter:
    - for environmental information: SUEZ Eau France (France), SUEZ Spain (Spain), SUEZ Recycling and Recovery Pty Ltd (Australia), Sita Waste Services (Hong Kong), SUEZ Využití zdrojů a.s (Czech Republic),
    - for social information: SUEZ Eau France (France), SUEZ Spain (Spain), Aguas Andinas (Chile), Sita Waste Services (Hong Kong), SUEZ Využití zdrojů a.s (Czech Republic), Sita El Beida, Sita Boughaz (Morocco).

  The selected entities cover between 21% and 43% of the consolidated data relating to these tests (25% of employees, 35% of energy consumption, 21% of GHG emissions, 43% of supplied water and 46% of the eliminated waste);
- We consulted documentary sources and conducted interviews to corroborate the qualitative information (measures and outcomes) that we considered the most important presented in Appendix 1;
- We assessed the overall consistency of the Statement based on our knowledge of the entities included in the scope of consolidation;
- We believe that the work carried out, based on our professional judgement, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry more extensive procedures.

Means and resources

Our verification work mobilized the skills of eight people and took place between October 2018 and March 2019 on a total duration of intervention of about 22 weeks.

We conducted a dozen interviews with the persons responsible for the preparation of the Statement including, in particular, the Sustainable Development, Ethics and Compliance, Health and Safety, Social Relations, Performance and Industrial Risks, Learning and Diversity, Purchasing and Legal Departments.

Conclusion

Based on our work, we have not identified any significant misstatement that causes us not to believe that the non-financial statement complies with the applicable regulatory provisions and that the Information, taken together, is fairly presented, in compliance with the Criteria.

2 – LIMITED ASSURANCE REPORT ON THE SELECTED INFORMATION

Nature and scope of the work

Concerning the Information Selected by the entity, identified in Appendix 2, we conducted work of the same nature as described in paragraph 1.

The selection of contributing entities covers between 12% and 33% of the social information presented and between 6% and 23% of the environmental information presented.

We believe that the work carried out is sufficient to provide a basis for our limited assurance on the Selected Information.

Conclusion

Based on our work, we have not identified any significant misstatement that causes us to believe that the Selected Information, taken together, has not been fairly prepared in compliance with the Criteria.

Paris-La Défense, the 6th of March 2019

Independent third party
French original signed by

ERNST & YOUNG ET ASSOCIÉS

Alexis Gazzo Partner, sustainable development	Jean-François Belorgey Partner

Appendix 1
Information considered as the most important

SOCIAL INFORMATION

Quantitative Information (including key performance indicators)	Qualitative Information (actions or results)
► Share of women in management *(%)* ► Share of employees covered under a social dialog system *(%)* ► Number of fatal accidents involving employees ► Frequency rate of workplace accidents	► Equal treatment (promotion of diversity) ► Social relations (social dialog) ► Health and Safety (prevention actions)

6

ENVIRONMENTAL INFORMATION

Quantitative Information (including key performance indicators)	Qualitative Information (actions or results)
► Share of drinking water production sites and wastewater treatment plants located in water risk areas *(%)* ► Share of wastewater reused *(%)* ► Emissions avoided by SUEZ customers ► Production of renewable energy ► Direct GHG emissions ► Indirect GHG emissions ► Consumption of primary and secondary energy ► Share of waste recovery *(%)* ► Recycled plastic production ► Share of bottom ash recovered *(%)* ► Technical yield from drinking water distribution networks ► Energy produced/Energy consumption ratio (primary and secondary sources from Water activities)	► Environmental management (protection of biodiversity) ► Making the water supply safer ► Fighting climate change ► Circular economy (optimized water and waste management)

SOCIETAL INFORMATION

Quantitative Information (including key performance indicators)	Qualitative Information (actions or results)
► Share of supplier contracts that include CSR clauses *(%)*	► Protecting human rights ► Fighting corruption ► Region's development

Appendix 2
Additional selected information verified in moderate insurance

SOCIAL INFORMATION

- The age pyramid
- The turnover rate (resignations and dismissals)
- The hiring rate (permanent and fixed-term contracts)
- The number of annual training hours per employee
- Gross salaries
- The number of newly recognized occupational diseases

ENVIRONMENTAL INFORMATION

- The amount of recycled paper produced
- The amount of recycled steel/iron/aluminum produced
- The quantity of recycled aggregates produced
- The capacity to produce alternative water
- The average NO_x and SO_x emission rate

6.8.7 Reasonable assurance report by the Statutory Auditors on a selection of consolidated information included in the Management Report

To the shareholders,

In our capacity as SUEZ's Statutory Auditors, we hereby report to you our reasonable assurance report on the information selected by SUEZ, presented in Annex 1, and identified by the XXX sign in chapters 6.8 and 17.2 of the Reference document (hereinafter named "the Information"), for the financial year ended December 31st, 2018.

I – COMPANY'S RESPONSIBILITY

The Information was prepared, under the responsibility of the Board of Directors, in accordance with the HR, Health & Safety, and Environment reporting protocols used by the Company (hereinafter the "Criteria"), summarized in chapters 6.8 and 17.2 of the Reference document and available on request from the Human Resources Performance Department, the Health and Safety Direction, and the Innovation and Industrial Performance Department.

II – INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by the requirements of Article L. 822-11-3 of the French Commercial Code and the French Code of Ethics *(Code de déontologie)* of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, professional standards and applicable legal and regulatory requirements.

III – STATUTORY AUDITORS' RESPONSIBILITY

On the basis of our work, our responsibility is to provide, at the request of the Company, a reasonable assurance as to whether the Information identified by the symbol XXX in Chapters 6.8 and 17.2 of the Reference document was prepared, in all material respects, in accordance with the adopted Criteria. Conclusions hereinafter expressed relate to these information only, and not on the whole of the Reference document's chapters 6.8 and 17.2.

We performed the work described below in accordance with the professional guidance of the French Institute of Statutory Auditors ("CNCC") applicable to such engagements and with the ISAE 3000[1] international norm.

IV – NATURE AND SCOPE OF OUR WORK

- We conducted interviews with the persons responsible for preparing the Information, the departments in charge of collecting the information and, where appropriate, responsible for internal control and risk management procedures.
- We assessed the suitability of the Criteria in terms of relevance, completeness, neutrality, clarity and reliability, by taking into consideration, when relevant, the sector's best practices.
- We verified the set-up within the Group of a process to collect, compile, process and check the Information with regard to its completeness and consistency. We familiarized ourselves with the internal control and risk management procedures relating to the compilation of the Information.
- We performed analytical procedures on the information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the Management Report.
- We performed detailed tests, using sampling techniques, on a representative sample of entities[2] that we selected based on their activity, their contribution to consolidated indicators, their localization and a risk analysis, consisting in verifying the calculations made and reconciling the data with supporting documents.

The selected sample thus represents 47% of the total headcount and between 57% and 84%[3] of the quantitative environmental information.

We believe that the sampling methods and sample sizes we have used, based on our professional judgement, allow us to express a reasonable assurance on the Information. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the information cannot be totally eliminated.

V – CONCLUSION

In our opinion, the Information identified by the XXX symbol was prepared, in all material respects, in accordance with the Criteria.

Courbevoie and Paris-La Défense, March 6th, 2019

The Statutory Auditors

MAZARS	ERNST & YOUNG ET AUTRES
Achour MESSAS	Stéphane PEDRON

(1) ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

(2) **Human Resources information:** SUEZ Recycling and Recovery UK, Sita El Beida, Sita Boughaz, Sita Waste Services (Hong Kong), SUEZ Využití zdrojů a.s (Czech Republic), SUEZ Recycling AB (Sweden), SUEZ RV France (Centre Est), SUEZ Eau France, SUEZ Spain, Aguas Andinas, Lydec, SUEZ North America, SUEZ Water Technologies and Solutions.
Environmental information: SUEZ Recycling and Recovery UK, Sita Waste Services (Hong Kong), SUEZ Využití zdrojů a.s (Czech Republic), SUEZ Recycling and Recovery Pty Ltd (Australia), SUEZ RV France, SUEZ Eau France, SUEZ Spain, Lydec, SUEZ North America, SUEZ Water Technologies and Solutions; and in follow-up audit for GHG emissions: SUEZ Recycling & Recovery Deutschland and IWS Rekem Roussillon and Rekem Pont de Claix sites.

(3) Of which 72% of the Group's direct and indirect greenhouse gas (GHG) emissions.

Annex 1
Information selected by SUEZ verified in reasonable assurance

HUMAN RESOURCES INFORMATION

- Total headcount;
- Distribution of the headcount between managers and non-managers;
- Proportion of women in total headcount;
- Proportion of women amongst managers;
- Voluntary turnover;
- Lost-time accidents frequency rate;
- Severity rate;
- Number of fatal accidents (employees);
- Proportion of employees who benefitted from training.

ENVIRONMENTAL INFORMATION

- Renewable energy production and energy consumption of the Group's Water activities;
- Renewable energy production and energy consumption of the Group's Recycling and Recovery activities;
- Renewable energy production and energy consumption of the Group's Industry activities;
- Direct greenhouse gas (GHG) emissions from processes or equipment owned or controlled by SUEZ, and indirect emissions associated with the consumption of electricity and heat;
- Technical yield of the networks of the Group's Water activities.

SOCIAL INFORMATION

- Annual dotation amount of the Fondation SUEZ;
- Number of trained professionals from water/sanitation services in developing countries.

7 organizational chart

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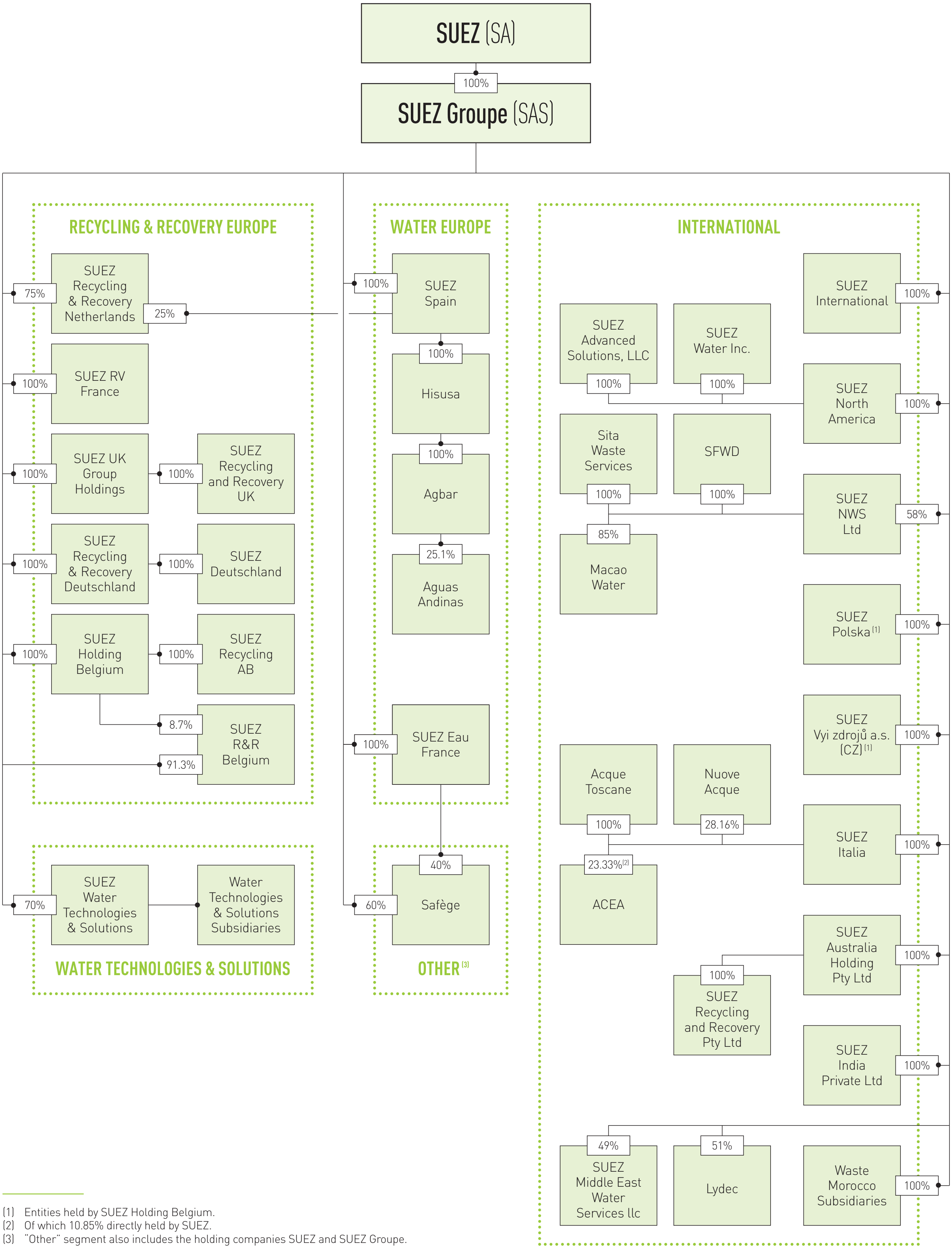
7.1 Simplified Group organization as of December 31, 2018



(1) Entities held by SUEZ Holding Belgium.
(2) Of which 10.85% directly held by SUEZ.
(3) "Other" segment also includes the holding companies SUEZ and SUEZ Groupe.

7.2 Presentation of the Group's main subsidiaries

The presentation of the activities of the Group's main subsidiaries is found in chapter 6 of this document. Note 26 to the Consolidated Financial Statements in chapter 20.1 gives the list of the main Group's companies.

7.3 Relations with subsidiaries

SUEZ is a holding company. As of December 31, 2018, it owns, 100% of the share capital of SUEZ Groupe SAS and 10.85% of Acea SpA share capital. It carries the majority of the Group's bond debt (see chapter 10.3 of this Reference Document).

On January 1, 2008, a tax consolidation group was created in France between the Company and the subsidiaries in which it holds at least 95% of the capital. As a result of this tax group, SUEZ and each of the tax group member companies have entered into tax consolidation agreements. Every year, subsidiaries might leave or enter the consolidated SUEZ tax group. When subsidiaries enter the tax group, new agreements are concluded between SUEZ and each subsidiary entering the group.

The Group has established a centralized cash management system for its main French and international subsidiaries, which optimizes net cash positions at the SUEZ Groupe SAS level.

Other cash flows within the Group consist primarily of loans granted by SUEZ Groupe SAS to some of its subsidiaries.

In addition to cash flows related to cash management and financing, SUEZ Groupe SAS receives dividends from its subsidiaries; for fiscal year 2017, these dividends totaled EUR 342.6 million, and were almost fully paid out in 2018.

Moreover, SUEZ Groupe SAS provides different types of services to other subsidiaries of the Group. In 2018, the total amount billed by SUEZ Groupe SAS for these services amounted to EUR 224.1 million.

8 real estate and equipment

8.1	Group real estate and equipment	142
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8.1 Group real estate and equipment

The Group operates several drinking water production plants, wastewater treatment plants and water distribution and wastewater collection networks.

The Group also operates a number of waste treatment plants: incineration plants, sorting plants, landfills, composting platforms, hazardous waste treatment plants, etc.

Finally, the Group operates manufacturing sites for water treatment equipment or reagents used in water treatment.

Information on some of the facilities and plants operated by the Group as of December 31, 2018, is provided in the table below:

Sector	Country	City/Area/State	Activity	Capacity
WATER	Algeria	Hamma	Desalination plant	200,000 m^3/day
	Australia	Anstey Hill	Production of drinking water	313,000 m^3/day
		Happy Valley	Production of drinking water	850,000 m^3/day
		Hope Valley	Production of drinking water	273,000 m^3/day
		Perth	Desalination plant	155,000 m^3/day
		Melbourne	Desalination plant	444,000 m^3/day
		Sydney	Production of drinking water	3,000,000 m^3/day
	Chile	Santiago	Production of drinking water	2,900,000 m^3/day
		Santiago	Wastewater treatment	1,340,000 m^3/day
	China	Baoding	Production of drinking water	260,000 m^3/day
		Changshu	Production of drinking water	875,000 m^3/day
		Chongqing	Production of drinking water	876,000 m^3/day
		Chongqing Tangjiatuo	Wastewater treatment	400,000 m^3/day
		Macao	Production of drinking water	330,000 m^3/day
		Qingdao	Production of drinking water	726,000 m^3/day
		Sanya	Production of drinking water	245,000 m^3/day
		Shanghai SCIP	Production of industrial water	200,000 m^3/day
		Tanggu	Production of drinking water	280,000 m^3/day
		Tanzhou	Production of drinking water	150,000 m^3/day
		Tianjin	Production of drinking water	500,000 m^3/day
		Zhengzhou	Production of drinking water	300,000 m^3/day
		Zhongshan	Production of drinking water	1,000,000 m^3/day
	Colombia	Cartagena	Production of drinking water	270,000 m^3/day
	Czech Republic	Brno	Production of drinking water	193,000 m^3/day
	Egypt	Gabal El Asfar	Wastewater treatment	625,000 m^3/day
		Alexandria	Wastewater treatment	819,000 m^3/day
	France	Aubergenville	Production of drinking water	132,000 m^3/day
		Dijon	Production of drinking water	125,000 m^3/day
		Dijon	Wastewater treatment	84,000 m^3/day
		Grimonpont	Wastewater treatment	285,000 m^3/day
		La Feyssine	Wastewater treatment	91,000 m^3/day
		Le Pecq-Croissy	Production of drinking water	160,000 m^3/day
		Marseille (SERAM)	Wastewater treatment	325,000 m^3/day
		Mont Valérien	Production of drinking water	108,000 m^3/day
		Morsang	Production of drinking water	225,000 m^3/day
		Mougins Sicasil	Production of drinking water	242,000 m^3/day
		Nantes (Tougas)	Wastewater treatment	111,500 m^3/day
		Nice (Haliotis)	Wastewater treatment	220,000 m^3/day
		Strasbourg	Wastewater treatment	242,000 m^3/day
		Viry-Châtillon	Production of drinking water	120,000 m^3/day
	India	Bandhup	Production of drinking water	990,000 m^3/day
		Chembarambakkam	Production of drinking water	530,000 m^3/day
		Okhla	Wastewater treatment	136,000 m^3/day
		Rhitala	Wastewater treatment	182,000 m^3/day
		Sonia Vihar	Production of drinking water	635,000 m^3/day
		TK-Hali	Production of drinking water	950,000 m^3/day
	Jordan	As Samra	Wastewater treatment	365,000 m^3/day
		Amman	Production of drinking water	310,000 m^3/day
	Morocco	Casablanca	Production of drinking water	165,000 m^3/day
		Casablanca	Wastewater treatment	950,000 m^3/day
	Mexico	Ciudad Juarez Norte	Wastewater treatment	140,000 m^3/day
		Ciudad Juarez Sur	Wastewater treatment	170,000 m^3/day
	Panama	Panama	Wastewater treatment	238,000 m^3/day

Sector	Country	City/Area/State	Activity	Capacity
WATER	Qatar	Doha West	Wastewater treatment	175,000 m³/day
	Spain	Alicante	Wastewater treatment	135,000 m³/day
		Barcelona	Production of drinking water	900,000 m³/day
		Barcelona	Wastewater treatment	525,000 m³/day
		El Prat	Wastewater treatment	315,000 m³/day
		Granada	Production of drinking water	286,000 m³/day
		Murcia-ESTE	Wastewater treatment	121,000 m³/day
		Santander	Wastewater treatment	159,000 m³/day
		Valladolid	Wastewater treatment	214,000 m³/day
	Taiwan	Kaohsiung	Production of drinking water	450,000 m³/day
	USA	Bay Park	Wastewater treatment	125,000 m³/day
		Delaware	Production of drinking water	136,000 m³/day
		New Jersey	Production of drinking water	610,000 m³/day
		Idaho	Production of drinking water	356,000 m³/day
		Jersey City	Production of drinking water	303,000 m³/day
		New Rochelle	Production of drinking water	340,000 m³/day
		New York	Production of drinking water	219,000 m³/day
		South Huron Valley	Wastewater treatment	70,000 m³/day
		Springfield	Wastewater treatment	254,000 m³/day
INDUSTRIAL WATER	Belgium	Herentals	Manufacture of reagents for water treatment	
	Brazil	Sorocaba	Manufacture of reagents for water treatment	
	Canada	Edmonton	Manufacture of reagents for water treatment	
	China	Wuxi	Manufacture of equipment and reagents for water treatment	
	France	Crissey	Manufacture of reagents for water treatment	
	Hungary	Oroszlany	Manufacture of equipment	
	United Kingdom	Peterborough	Manufacture and maintenance of mobile stations	
	USA	Bakersfield	Manufacture of reagents for water treatment	
		Beaumont	Manufacture of reagents for water treatment	
		New Philadelphia	Manufacture of reagents for water treatment	
		Norfolk	Manufacture and maintenance of mobile stations	
		Trevose	Laboratory and equipment manufacturing	
		West Orange	Manufacture of reagents for water treatment	
RECYCLING AND RECOVERY	Australia	Cairns	Composting center	125,000 t/year
		Eastern Creek	Non-hazardous waste landfill	550,000 t/year
		Epping	Composting center	65,000 t/year
		Kemps Creek	Sorting/recycling center	135,000 t/year
		Lucas Heights	Non-hazardous waste landfill	575,000 t/year
		Mindarie	Mechanical and biological treatment	100,000 t/year
		Newline Road	Non-hazardous waste landfill	200,000 t/year
		Raymond Terrace	Sorting/recycling center	40,000 t/year
		Wingfield	Sorting/recycling center	150,000 t/year
	Belgium	Bruges	Non-hazardous waste sorting and transfer station	84,000 t/year
		Brussels	Energy recovery from waste	450,000 t/year
		Grimbergen	Treatment of bottom ash	120,000 t/year
		Maasmechelen	Sorting center	82,000 t/year
		Sleco – Beveren	Energy recovery from waste	466,000 t/year
	Canada	Edmonton	Composting center	300,000 t/year
	China	Hong Kong – NENT	Non-hazardous waste landfill	810,000 t/year
		Hong Kong – WENT	Non-hazardous waste landfill	2,300,000 t/year
		Hong Kong – West Kowloon	Waste transfer station	990,000 t/year
		Shanghai SCIP	Hazardous industrial waste incineration	60,000 t/year
	Czech Republic	Spovo	Hazardous waste incineration	18,500 t/year
		Nemcice	Hazardous and non-hazardous waste landfill	55,000 t/year
	France	Argenteuil	Energy recovery from waste	185,000 t/year
		Bègles	Energy recovery from waste	252,000 t/year
		Bessières	Energy recovery from waste	170,000 t/year
		Carrières-sur-Seine	Energy recovery from waste	140,000 t/year
		Créteil	Energy recovery from waste	235,000 t/year
		Gennevilliers	Pre-treatment of household waste	190,000 t/year
		Hersin-Coupigny	Non-hazardous waste landfill	600,000 t/year
		La Roche-Molière	Non-hazardous waste landfill	500,000 t/year
		Lagny	Energy recovery from waste	150,000 t/year

Sector	Country	City/Area/State	Activity	Capacity
RECYCLING AND RECOVERY	France	Les Aucrais	Non-hazardous waste landfill	300,000 t/year
		Lyon	Energy recovery from waste	165,000 t/year
		Pont-de-Claix	Hazardous industrial waste incineration	80,000 t/year
		Roussillon	Hazardous industrial waste incineration	115,000 t/year
		Satolas	Non-hazardous waste landfill	300,000 t/year
		Vedène	Energy recovery from waste	180,000 t/year
		Villeparisis	Hazardous waste landfill	250,000 t/year
		Villeparisis	Treatment of polluted soil	60,000 t/year
		Villers-Saint-Paul	Energy recovery from waste	156,000 t/year
		Ivry-sur-Seine	Energy recovery from waste	680,000 t/year
	Germany	Neuwied	Sorting and composting center	150,000 t/year
		Zorbau	Energy recovery from waste	300,000 t/year
	Morocco	Meknès	Waste recovery center and landfill	300,000 t/year
	The Netherlands	Roosendaal	Energy recovery from waste	260,000 t/year
		Amsterdam	Non-hazardous waste transfer station	52,000 t/year
	Poland	Radom	Pre-treatment of industrial waste	95,000 t/year
		Ryman	Non-hazardous waste landfill	220,000 t/year
		Starol – Chorzow	Production of RDF	250,000 t/year
	Sultanate of Oman	Muscat	Non-hazardous waste landfill	700,000 t/year
	Taiwan	Ren Wu	Energy recovery from waste	400,000 t/year
	United Kingdom	Billingham-Teesside	Energy recovery from waste	390,000 t/year
		Cleveland	Energy recovery from waste	756,000 t/year
		Clifton Marsh	Non-hazardous waste landfill	525,000 t/year
		Fareham	Pre-treatment of non-hazardous waste	300,000 t/year
		Kirklees (Huddersfield)	Energy recovery from waste	136,000 t/year
		Path Head	Non-hazardous waste landfill	220,000 t/year
		Sidegate Lane	Non-hazardous waste landfill	400,000 t/year
		Stoneyhill	Non-hazardous waste landfill	100,000 t/year
		Whinney Hill	Non-hazardous waste landfill	700,000 t/year

At the beginning of a project, the client awards the Group the right to use preexisting buildings and facilities, which are made available for the duration of the contract. For the duration of the contract, and depending upon the legal systems involved, the Group may or may not be the legal owner, but it almost always controls the assets needed for the operations and provides for their maintenance and renewal, as necessary.

8.2 Environmental constraints that may affect the Group's use of its fixed assets

Environmental issues that may affect the use of the various facilities fully owned or operated by the Group are described in section 6.8.1 of this Reference Document.

9 financial review

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9.1 General information

9.1.1 Introduction

In 2018, SUEZ posted a +9.8% increase in **revenues** due to a full year contribution from GE Water Group (consolidated during the fourth quarter of 2017) and to an increase in all divisions.

Current operating income rose +14.2% and EBITDA grew by +7.4% (see section 9.2.2 for a description of these variations).

Net income Group share totaled EUR 335 million, up EUR 39 million compared to 2017.

Free cash flow[1] before disposals and development capital expenditure amounted to EUR 1,023 million, up +1.9% compared to 2017.

Net debt amounted to EUR 8,954 million as of December 31, 2018, up +5.7% compared to December 31, 2017. Net debt accounted for 99.6% of total shareholders' equity at the end of 2018, *versus* 93.9% at the end of 2017. The net debt/EBITDA ratio was 3.2 at year-end 2018, stable compared to the end of 2017.

A dividend of EUR 0.65 per share, for a total amount of EUR 401.6 million[2], will be proposed to the SUEZ Shareholders' Meeting to be convened on May 14, 2019 to approve the financial statements for the fiscal year ended December 31, 2018.

The table below shows the key figures of the statement of financial position for fiscal years 2018 and 2017:

(in millions of euros)	2018	2017 restated
Non-current assets	22,680.9	22,516.8
Current assets	10,872.0	10,314.1
Total assets	**33,552.9**	**32,830.9**
Shareholders' equity, Group share	6,391.8	6,510.4
Non-controlling interests	2,600.8	2,511.4
Other liabilities	24,560.3	23,809.1
Total liabilities	**33,552.9**	**32,830.9**

9.1.2 Significant events in the period

Purchase Price Allocation following GE Water acquisition

On September 29, 2017, SUEZ finalized the acquisition of GE Water through SUEZ Water Technologies and Solutions ("SWTS"), a company held at 70% by SUEZ and 30% by CDPQ (Caisse de Dépôt et Placement du Québec).

The cash transaction included a purchase price of EUR 2.903 million. GE Water's cash in hand on the acquisition date amounted to EUR 204 million, generating a cash outflow of EUR 2.699 million, which is reflected in the 2017 cash flow statement. As of December 31, 2017, provisional goodwill generated at the time of the acquisition totaled EUR 2,171 million (at the exchange rate USD/EUR as of December 31, 2017).

The acquisition agreement included purchase price adjustment procedures based on GE Water's financial statements prepared in accordance with US GAAP as of September 29, 2017. During the second half of 2018, the purchase price adjustment procedure led to a price reduction of USD 20 million (approximately EUR 17 million).

PURCHASE PRICE ALLOCATION

During 2018, the Group performed the purchase price allocation in accordance with IFRS 3 revised – "business combinations". This purchase price allocation was finalized on September 29, 2018.

An independent advisor determined the fair value of identifiable assets and assumed liabilities acquired on the transaction date.

(1) The Group uses the free cash flow indicator to measure cash generated from existing operations before development capex. The reconciliation of cash generated from operations before net financial expenses and income tax to free cash flow is presented in section 9.3.1 of this document.
(2) Based on the number of shares as of December 31, 2018, excluding treasury shares.

(in millions of euros)	Fair value of identifiable assets acquired and liabilities assumed at the acquisition date
Non-current assets	
Net intangible assets	886
Net property, plant and equipment	567
Investments in joint ventures	24
Deferred tax assets	62
Current assets	
Other assets	716
Cash and cash equivalents	349
Non-current liabilities	
Other liabilities	79
Deferred tax liabilities	320
Current liabilities	
Other liabilities	1,033
Total Net Assets (100%)	**1,172**
Consideration transferred for the aquisition of GE Water	2,886
Non-controlling interests	39
Goodwill	**1,753**

Intangible assets

The fair value of intangible assets amounted to EUR 886 million and mainly includes customer relationships and technologies. Intangible assets were remeasured using the income approach (discounted value of future cash flows) or based on the royalty method.

Property, plant and equipment

The fair value of property, plant and equipment amounted to EUR 567 million. Property, plant and equipment are remeasured using a combination of three approaches:

- market approach: price comparisons with similar assets;
- income approach: discounted value of future cash flows;
- cost approach: value of replacement cost.

Inventories

The fair value of inventories totaled EUR 198 million. They were remeasured at their sales price less costs of completion and marketing costs.

Provisions

In accordance with IFRS 3 revised, estimated provisions were adjusted to take into account provisions for contingent liabilities mainly due to ongoing litigation as of the acquisition date. These provisions are classified as "other current liabilities".

Deferred taxes

Deferred tax assets and liabilities are calculated based on temporary differences between the IFRS book values after the purchase price allocation and tax values of the assets acquired and liabilities assumed. Recognized net deferred taxes amounted to EUR 258 million.

Non-controlling interests

The Group decided to measure non-controlling interests using the full goodwill method.

Goodwill

At the transaction date and after the purchase price allocation, residual goodwill amounted to EUR 1,753 million and corresponds not only to the ability to develop new assets in the future (technologies, customer relationships) but also to the level of synergies expected by the Group.

The principal impact of the allocation of the purchase price on the 2017 financial and income statements are presented in Note 2.1 of the Consolidated Financial Statements in chapter 20.1 of this Reference Document.

In 2018, the net impact in EBIT was -EUR 32 million and included the additional annual depreciation charge related to these various remeasurements, as well as the consumption of deferred charges and deferred income.

SUEZ Spain transformation plan

In late 2017, SUEZ Spain implemented a restructuring plan. This voluntary redundancy scheme resulted in the recognition of around EUR 20 million of restructuring costs in 2018.

Sale of Infectious Medical Waste (IMW) activities

On February 28, 2018, SUEZ sold its IMW business activities to MNH Group for EUR 16 million. These business activities accounted for EUR 47 million in revenues as of December 31, 2017.

As of December 31, 2018, this transaction generated a EUR 12 million gross disposal gain.

New non-controlling interests in the regulated water activity of SUEZ Water Inc.

In July 2018, an agreement was signed with Dutch fund manager PGGM for the sale of 20% of the regulated water activity of SUEZ Water Inc. for USD 601 million.

The finalization of this operation is scheduled during the first half of 2019.

Sale of 6.5% of Inversiones Aguas Metropolitanas (IAM) by SUEZ Inversiones Aguas del Gran Santiago Limited

In August 2018, SUEZ Inversiones Aguas del Gran Santiago Limited sold 6.5% of IAM for EUR 87 million.

This operation was considered as a transaction between shareholders and did not generate any capital gain considering the Group has maintained control over IAM.

New bond issue

On September 17, 2018, SUEZ placed a new bond for EUR 500 million maturing on September 17, 2030, bearing a 1.625% fixed annual coupon.

Sale of nuclear waste treatment activities

On December 31, 2018, SUEZ RV Osis Sud Est sold its nuclear waste treatment activity for approximately EUR 39 million to Endel, an ENGIE subsidiary.

This transaction generated a EUR 27 million gross disposal gain.

9.2 Analysis of income statements

9.2.1 Explanations on main income statement items

Revenues

Revenues generated by water supply are based on volumes delivered to customers that are either individually metered and invoiced or estimated based on the output of the supply networks.

The price for wastewater services and wastewater treatment is either included in the water distribution bill, or is billed separately to the local authority or industrial customer.

Revenues arising from waste collection are generally based on the tonnage collected and the service provided by the operator.

Revenues from other forms of waste treatment (primarily sorting and incineration) are based on volumes processed and services rendered by the operator, plus the additional revenues from recovery operations, such as the sale of raw materials for sorting centers (paper, cardboard, glass, metals, plastics, etc.) and the sale of energy (electricity or heat) for incinerators.

Revenues from engineering, construction and service contracts are determined using the percentage of completion method. Depending on the contract concerned, the stage of completion may be determined either based on the proportion that costs incurred to date bear to the estimated total costs of the contract, or on the physical progress of the contract based on factors such as contractually defined stages.

Purchases

Purchases primarily include purchases of unpurified water intended for treatment prior to delivery to customers, as well as purchases of equipment, parts, energy, fuel and recyclable materials.

Other operating income and expenses

Other operating income includes re-invoicing direct charges and overheads.

Other operating expenses mainly include costs relating to subcontracting and other external services, maintenance and repair costs for waste collection and treatment equipment, production costs, waste and water treatment costs, and administrative costs. This item also includes other routine operating expenses such as rental expenses, external personnel costs, commissions and fees to intermediaries, and taxes other than corporate income tax.

Current operating income

Current operating income is an indicator used to present a certain level of operating performance. It is a subtotal that facilitates interpretation of the Group's performance by excluding elements which, in the Group's view, are insufficiently predictable due to their unusual, irregular or non-recurring nature. These elements relate to asset impairments, disposals, scope effects, restructuring costs and Mark-to-Market of trading instruments.

EBITDA

The Group uses EBITDA to measure its operating performance and its ability to generate operating cash flows.

EBITDA is not defined in IFRS and does not appear directly in the Group's consolidated income statement. Current operating income can be reconciled with EBITDA as follows:

Current operating income
– Net depreciation, amortization and provisions
– Share-based payments (IFRS 2) [a]
– Net disbursements under concession contracts [b]
+ Share in net income of equity-accounted companies considered as the Group's core business
EBITDA

a) This item includes the allocation of stock options, free bonus shares and payments made by the Group in relation to Company savings plans (including employer's matching contributions or matching shares).
b) This item corresponds to the sum of the renewal expenditure relating to concessions and to changes in assets and liabilities for concession renewals.

The reconciliation of current operating income to EBITDA for 2018 and 2017 is set out in Note 3.4.1 to the Consolidated Financial Statements (chapter 20.1 of this Reference Document).

9.2.2 Comparison of fiscal years ended December 31, 2018 and 2017

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Revenues	17,331.1	15,783.0
Purchases	(3,648.6)	(3,032.2)
Personnel costs	(4,598.4)	(4,115.1)
Depreciation, amortization and provisions	(1,167.7)	(1,109.2)
Other operating expenses	(6,999.2)	(6,816.1)
Other operating income	225.2	289.8
Current operating income	**1,142.4**	**1,000.2**
Mark-to-Market on operating financial instruments	(0.8)	1.3
Impairment on property, plant and equipment, intangible and financial assets	(25.6)	(20.3)
Restructuring costs	(87.6)	(157.6)
Scope effects	(6.2)	77.6
Other gains and losses on disposals and non-recurring items	60.1	33.6
Costs linked to the acquisition of GE Water	–	(44.4)
Income from operating activities	**1,082.3**	**890.4**
Share in net income of equity-accounted companies considered as core business	192.9	211.6
Of which: share in net income of joint ventures	*82.0*	*92.2*
Of which: share in net income from associates	*110.9*	*119.4*
Income from operating activities after share in net income from equity-accounted companies considered as core business	**1,275.2**	**1,102.0**
Financial expenses	(555.6)	(518.5)
Financial income	90.2	89.6
Net financial income	**(465.4)**	**(428.9)**
Income tax expense	(244.0)	(157.2)
Net income	**565.8**	**515.9**
Net income, Group share	**334.9**	**295.5**

For the fiscal year ended December 31, 2017, the consolidated income statement was restated compared to what was presented in the Reference Document published on December 31, 2017 to take into account impacts related to the application of the new standard IFRS 15 "Revenue from Contracts with Customers" and the finalization of the purchase price allocation of GE Water.

Other income items

(in millions of euros)	2018	2017 restated
EBITDA	2,768.3	2,578.4
EBIT	1,335.3	1,211.8

Revenues

(in millions of euros)	2018	2017 restated	Change	% change
Water Europe	4,628.9	4,618.8	10.1	0.2%
Recycling and Recovery Europe	6,206.1	6,139.3	66.8	1.1%
International	3,990.2	3,951.3	38.9	1.0%
WTS	2,396.3	970.7	1,425.6	N/A
Other	109.6	102.9	6.7	6.5%
Revenues	**17,331.1**	**15,783.0**	**1,548.1**	**9.8%**

SUEZ posted revenues of EUR 17,331 million in 2018, a +9.8% increase. This growth is the result of the following elements:

- organic growth of +EUR 564 million (+3.6%), broken down as follows:
  - the Recycling and Recovery Europe segment posted +2.7% growth with a growing level of activity in France and in the Business Unit dedicated to hazardous waste treatment (Industrial Waste Specialties). Revenues were also up in Northern Europe and in the Benelux/Germany region, but waned slightly in the United Kingdom,
  - the Water Europe segment posted +0.9% growth, mainly due to rising volumes and prices in Chile,
  - the International segment increased +5.0% (+EUR 196 million). Activity grew in every region except for Africa/Middle East/India, which had generated a substantial amount of construction revenues in 2017,
  - the WTS division totaled EUR 2,396 million, up +6.7% (+EUR 156 million), driven by its two business segments;
- favorable scope effects of +EUR 1,314 million (+8.3%), primarily due to the contribution of GE Water in the WTS division;
- unfavorable exchange impacts of -EUR 309 million (-2.0%) mainly due to the US dollar (-EUR 131 million), the Australian dollar (-EUR 72 million) and the Chilean peso (-EUR 22 million);
- a negative impact of -EUR 21 million due to the US tax reform impacting the regulated activities.

As of December 31, 2018, the Group generated 29% of its revenues in France and 39% outside Europe.

WATER EUROPE

The Water Europe segment contributed EUR 4,629 million to Group revenues in 2018, up EUR 10 million (+0.2%).

Water Europe posted +0.9% in organic revenue growth (+EUR 40 million):

- Water France recorded an organic decrease of -2.6% (-EUR 58 million). This change is notably due to the termination of the Valenton contract. Favorable weather in July and August lightly offset the structural erosion in water volumes sold, which came to -0.8%. Price indexations, at +1.0%, were driven by changes in electricity prices;
- Spain achieved marginally positive organic growth, at +0.5% (+EUR 7 million), despite the decline in water volumes sold, given less favorable weather and tourist activity than in 2017. Prices were stable, including the decrease negotiated in Barcelona in effect since May 2018 and an increase on contracts in other regions;
- the Latin America segment grew organically by +10.6% (+EUR 91 million) due to increased volumes, with a particularly dry winter and price increases due to indexing tied to inflation in the country. The area also benefited from sales momentum in Panama and in Mexico.

Changes in currencies against the euro had a negative impact on revenues (-EUR 30 million, or -0.6%) mainly due to the Chilean peso weakening.

RECYCLING AND RECOVERY EUROPE

The Recycling and Recovery Europe segment's contribution to Group revenues was EUR 6,206 million in 2018, up +EUR 67 million (+1.1%) compared to 2017.

Recycling and Recovery Europe posted organic revenue growth of +2.7% (+EUR 165 million). Performance was driven by an increase in waste volumes treated (+2.4%) as well as an increase in prices in service activities. However, it was impacted by unfavorable changes in recycled raw material prices, and particularly paper/cardboard prices after China's decision to sharply reduce its imports:

- revenues in France were up +3.8%. This increase primarily reflects a growth in volumes and prices in both municipal and industrial collection activities;
- outside France, activity rose and was mainly driven by the Business Unit dedicated to hazardous waste treatment (Industrial Waste Specialties), which grew +6.4%. The Benelux/Germany and UK/Scandinavia regions posted organic growth of +0.8% and +0.6%, respectively. The increased level of business in the industrial and commercial (I&C) segment and the price increases in certain service activities offset the adverse impacts from pricing changes in recycled raw materials, the smaller contribution from construction activities and the closure of the Tilbury treatment site at the end of 2017 in the United Kingdom.

The scope effect was -1.0% (-EUR 63 million), primarily due to the disposal of the infectious medical waste activities.

Changes in currencies against the euro had a net negative impact on revenues (-EUR 36 million, or -0.6%) particularly due to a depreciation in the Swedish krona and the pound sterling.

INTERNATIONAL

The International segment's contribution to Group revenues was EUR 3,990 million in 2018, up +EUR 39 million (+1.0%) compared to 2017.

The organic variation was +EUR 196 million, or +5.0%, resulting from the following trends:

- the Italy Central and Eastern Europe segment delivered very strong organic growth of +17.7% (+EUR 74 million), driven in particular by hazardous waste management activities in the Czech Republic and in Poland, and by making construction progress on the treatment and energy recovery plant in Glina, Romania;
- Australia achieved +11.1% (+EUR 115 million) organic growth. This performance was based on a sustained rise in volumes treated and prices, on an increase in industrial collection contracts and on a positive contribution from new construction contracts;
- Asia posted a +13.0% organic growth (+EUR 55 million), with largely positive contributions from water and waste activities;
- the Africa/Middle East/India region posted a decrease of -7.5% in organic growth (-EUR 85 million) due to the termination of construction contracts such as the Doha West contract (Qatar) and the Barka contract (Oman) without any equivalent in 2018;
- North America posted a +3.9% organic growth (+EUR 37 million). Water volumes sold in the regulated business were stable compared to 2017 despite bad weather during the summer and fall. Due to changes in US tax law, revenues for regulated activities were also adversely impacted (-EUR 22 million); however, this had no effect on net income. Non-regulated activities delivered solid revenue growth.

Changes in currencies against the euro had a negative impact on revenues (-EUR 142 million, or -3.6%).

WTS

The new division, created at the time of the first consolidation of GE Water on October 1, 2017, represented EUR 2,396 million in revenues in 2018, *versus* EUR 971 million in 2017.

The organic change totaled +EUR 156 million, or +6.7%, resulting from the following trends:

- the Engineered Systems segment grew +11%., benefiting from growth in product and services activities, and especially in ultra-filtration and in reverse osmosis;
- the Chemical Monitoring Solutions segment achieved +5% organic growth, mainly driven by China and Europe.

Operating expenses

PURCHASES

Purchases totaled EUR 3,649 million in 2018, up EUR 616 million (+20.3%) compared to 2017, primarily due to 2018 being the first full year of consolidation for GE Water activities (in 2017, only the fourth quarter was taken into account).

PERSONNEL COSTS

Personnel costs reached EUR 4,598 million in 2018, up EUR 483 million (+11.7%) compared to 2017 (for a breakdown of personnel costs, see Note 4.2 to the Consolidated Financial Statements in chapter 20.1 of this Reference Document).

DEPRECIATION, AMORTIZATION AND PROVISIONS

Net depreciation, amortization and provisions amounted to EUR 1,168 million in 2018, up EUR 59 million compared to 2017.

OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses totaled -EUR 6,774 million in 2018, a EUR 248 million net increase in expenses compared to 2017.

CURRENT OPERATING INCOME

(in millions of euros)	2018	2017 restated	Change	% change
Water Europe	431.4	442.7	(11.3)	– 2.6%
Recycling and Recovery Europe	201.3	213.7	(12.4)	– 5.8%
International	362.9	340.4	22.5	6.6%
WTS	117.0	(15.4)	132.4	N/A
Other	29.8	18.8	11.0	58.5%
Current operating income	**1,142.4**	**1,000.2**	**142.2**	**14.2%**

Group current operating income was EUR 1,142 million in 2018, up +EUR 142 million compared to 2017. This increase breaks down as follows:

- a +EUR 152 million organic increase (+15.2%);
- a scope effect of +EUR 62 million (+6.2%);
- a negative currency effect of -EUR 12 million mainly related to the appreciation of the euro against the US dollar, the Australian dollar and the Chilean peso;
- the remaining amount corresponds to the impacts of the purchase price allocation of GE Water and the US tax reform on the regulated activity.

WATER EUROPE

The Water Europe segment's contribution to Group current operating income was EUR 431 million in 2018, down -EUR 11 million (-2.6%) compared to 2017. This includes an unfavorable exchange rate effect (-EUR 9 million). In terms of organic growth, current operating income was almost the same as 2017 at -EUR 2 million (-0.5%). Increasing efforts to save on costs, especially in France and in Spain, reflect this stabilization.

RECYCLING AND RECOVERY EUROPE

The Recycling and Recovery Europe segment's contribution to Group current operating income totaled EUR 201 million in 2018, down -EUR 12 million (-5.8%) compared to 2017. This change mainly stems from unfavorable changes in recycled raw material prices, and particularly for paper/cardboard prices after China's decision to sharply reduce its imports, as well as from an increase in diesel prices. These effects were only partially offset by the positive impact of increased electricity prices.

INTERNATIONAL

The International segment's contribution to Group current operating income was EUR 363 million in 2018, up +EUR 23 million (+6.6%) compared to 2017.

WTS

This new division, created at the time of first GE Water's consolidation on October 1, 2017, contributed EUR 117 million to current operating income in 2018, up EUR 132 million.

EBITDA

(in millions of euros)	2018	2017 restated	Change	% change
Water Europe	1,136.1	1,164.8	(28.7)	– 2.5%
Recycling and Recovery Europe	683.8	707.5	(23.7)	– 3.3%
International	816.3	799.2	17.1	2.1%
WTS	249.6	31.3	218.3	N/A
Other	(117.5)	(124.4)	6.9	5.5%
EBITDA	**2,768.3**	**2,578.4**	**189.9**	**7.4%**

Group EBITDA totaled EUR 2,768 million in 2018, up EUR 190 million (+7.4%) compared to 2017, including +3.4% organic growth.

SCOPE EFFECTS

Scope effects amounted to -EUR 6 million in 2018, *versus* +EUR 78 million in 2017.

Income from operating activities

Income from operating activities was EUR 1,082 million in 2018, up EUR 192 million compared to 2017.

The main items behind reconciliation between current operating income and income from operating activities are detailed below.

IMPAIRMENT ON PROPERTY, PLANT AND EQUIPMENT, INTANGIBLE AND FINANCIAL ASSETS

The Group posted -EUR 26 million in impairment on property, plant and equipment, intangible and financial assets in 2018, compared to -EUR 20 million in 2017, a change of -EUR 6 million. In 2018, this item mainly includes impairment on property, plant and equipment in the operational Recycling and Recovery Europe segment, mainly in France.

OTHER REVENUES AND DISPOSALS

Capital gains from asset disposals totaled EUR 60 million in 2018. The largest transactions concerned disposals of SUEZ RV OSIS's (formerly SRA SAVAC) nuclear division and the infectious medical waste management activities.

RESTRUCTURING COSTS

Restructuring costs amounted to -EUR 88 million in 2018, compared to -EUR 158 million in 2017. As of December 31, 2018, this item notably included the additional costs of the restructuring plans initiated in 2017 in Spain and France.

COSTS RELATED TO THE GE WATER ACQUISITION

No costs stemming from the GE Water acquisition were recorded in 2018. In 2017, external service providers provided consulting services to SUEZ regarding the acquisition of GE Water, generating a total net cost of -EUR 44.4 million.

Net financial income

(in millions of euros)	2018	2017 restated	Change	% change
Cost of net debt	(422.5)	(377.8)	(44.7)	–11.8%
Other financial income and expenses	(42.9)	(51.1)	8.2	16.0%
Net financial income	**(465.4)**	**(428.9)**	**(36.5)**	**–8.5%**

The Group's net financial income in 2018 was -EUR 465.4 million, a decline of -EUR 36.5 million compared to 2017 (see Note 6 to the Consolidated Financial Statements in chapter 20.1 of this Reference Document).

The cost of net debt totaled -EUR 423 million, compared to -EUR 378 million in 2017, with an average rate of 3.88%, *versus* 3.84% in 2017. In 2018, the average duration of net debt was 6.5 years.

Income tax expense

Group income tax expense totaled -EUR 244 million in 2018, up EUR 87 million compared to 2017.

The difference between the effective tax rate for the Group in 2018 (39.6%) and the prevailing tax rate in France in 2018 (34.43%) is mainly explained by not recognizing deferred tax assets in certain geographic regions as well as the impact from changes in tax regulations, particularly in the United States.

Net income, Group share

Net income Group share was EUR 335 million, up EUR 39 million compared to 2017.

9.3 Financing and net debt

9.3.1 Cash flows in fiscal years 2018 and 2017

(in millions of euros)	2018	2017 restated
Cash flows from/(used in) operating activities	1,973.4	1,962.4
Cash flows from/(used in) investing activities	(1,230.3)	(3,426.0)
Cash flows from/(used in) financing activities	(593.0)	1,145.9
Impact of changes in exchange rates and other	4.7	(51.6)
Total flows for the period	**154.8**	**(369.3)**
Opening cash and cash equivalents	2,555.4	2,924.7
Closing cash and cash equivalents	2,710.2	2,555.4

Cash flow from operating activities

(in millions of euros)	2018	2017 restated	Change	% change
EBITDA	**2,768.2**	**2,578.4**	**189.8**	**+7.4%**
+ Net disbursements under concession contracts	(262.4)	(255.9)	(6.5)	–2.5%
+ Impairment of current assets	(3.2)	(28.4)	25.2	+ 88.7%
+ Impact of restructuring costs	(144.8)	(102.2)	(42.6)	– 41.7%
+ Dividends received from joint ventures and associates	144.6	140.8	3.8	+ 2.7%
– Net allocation to provisions for employee benefits	(33.4)	(46.6)	13.2	+ 28.3%
+ Costs linked to the acquisition of GE Water	–	(44.4)	44.4	N/A
- Share in net income (loss) of equity-accounted companies considered as core business	(192.9)	(211.7)	18.7	+ 8.8%
– Other	0.6	1.3	(0.7)	N/A
Gross cash flow before net financial income/(expense) and income tax	**2,276.7**	**2,031.3**	**245.4**	**+ 12.1%**
Tax paid	(156.9)	(192.5)	35.6	+ 18.5%
Change in working capital requirement	(146.4)	123.6	(270.0)	N/A
Cash flows from/(used in) operating activities	**1,973.4**	**1,962.4**	**11.0**	**+ 0.6%**

Cash flow from operating activities amounted to EUR 1,973 million in 2018, up +EUR 11 million compared to 2017.

This change mainly reflects:

- a -EUR 270 million net decrease in working capital requirement;
- a +EUR 36 million decrease in tax paid;
- a +EUR 245 million increase in cash flows from operations before net financial income/(expense) and income tax.

Cash flows from investment activities

(in millions of euros)	2018	2017 restated	Change	% change
Investments in property, plant and equipment and intangible assets	(1,342.9)	(1,177.2)	(165.7)	–14.1%
Financial investments	(146.4)	(2,600.4)	2,454.0	+ 94.4%
of which acquisitions of entities net of cash and cash equivalents acquired	*(114.7)*	*(2,581.6)*	*2,466.9*	*+ 95.6%*
including acquisitions of equity instruments	*(31.7)*	*(18.8)*	*(12.9)*	*– 68.6%*
Disposals of property, plant and equipment and intangible assets	157.9	234.1	(76.2)	– 32.6%
Disposals of entities net of cash and cash equivalents sold	83.1	117.9	(34.8)	– 29.5%
Disposals of equity instruments	4.2	3.9	0.3	+7.7%
Interest from on non-current financial assets	14.1	(5.2)	19.3	N/A
Dividends from on non-current financial assets	8.5	5.0	3.5	+70.0%
Change in loans and receivables issued by the Company and others	(8.8)	(4.1)	(4.7)	N/A
Cash flows from/(used in) investing activities	**(1,230.3)**	**(3,426.0)**	**2,195.7**	**+ 64.1%**

Cash flow from investment activities amounted to -EUR 1,230 million as of December 31, 2018, compared to -EUR 3,426 million as of December 31, 2017.

Total investments in property, plant and equipment, intangible assets and financial assets fell sharply by EUR 2,454 million compared to 2017 when the GE Water acquisition had generated a major increase in financial investments. Disposals generated a positive flow of EUR 245 million.

MAINTENANCE AND DEVELOPMENT CAPITAL EXPENDITURE AND FREE CASH FLOW

Within "Investments in property, plant and equipment and intangible assets", the Group distinguishes:

- maintenance capital expenditure, corresponding to investments incurred to replace equipment and machinery operated by the Group, as well as investments made in order to comply with new regulations; and
- development capital expenditure [1], corresponding to investments incurred to build new facilities for operation.

The maintenance capital expenditure as of December 31, 2018 and 2017 is presented in the following table:

(in millions of euros)	2018	2017 restated
Total maintenance capital expenditure [a]	**(606.8)**	**(626.2)**
Of which maintenance capital expenditure	(629.0)	(598.1)
Of which change in maintenance asset supplier debt [b]	22.2	(28.1)

(a) The total amount of maintenance capital expenditure in 2018 breaks down as follows: EUR 185.5 million for the Water Europe segment, EUR 185.9 million for the Recycling and Recovery Europe segment, EUR 186.1 million for the International segment, EUR 45.5 million for the WTS segment and EUR 3.8 million for the Other segment. The breakdown as of December 31, 2017 (restated) was as follows: EUR 204.9 million for the Water Europe segment, EUR 201.0 million for the Recycling and Recovery Europe segment, EUR 192.8 million for the International segment, EUR 16.2 million for the WTS segment and EUR 11.3 million for the Other segment.
(b) Change in trade payables concerning the acquisition of maintenance-related property, plant and equipment and intangible assets.

The Group uses free cash flow as an indicator to measure cash generation from the Group's existing operations before development capital expenditure.

The reconciliation of cash generated from operations before net financial income and income tax with free cash flow as of December 31, 2018 and 2017 is presented in the following table:

(1) Total development capital expenditure (EUR 736.1 million in 2018 vs. EUR 551.0 million in 2017) breaks down as follows in 2018: EUR 245.0 million for the Water Europe segment; EUR 194.2 million for the Recycling and Recovery Europe segment; EUR 247.7 million for the International segment, EUR 43.4 million for the WTS segment and EUR 5.8 million for the Other segment.

(in millions of euros)	2018	2017 restated
Cash flows from operations before net financial income/(expense) and income tax	2,276.7	2,031.3
Total maintenance capital expenditure	(606.8)	(626.2)
Change in working capital requirement	(146.4)	123.6
Tax paid	(156.9)	(192.5)
Financial interest paid	(392.5)	(364.5)
Financial interest received	26.6	32.4
Interest from on non-current financial assets	14.1	(5.2)
Dividends from non-current financial assets	8.5	5.0
Other	0.1	0.3
Free cash flow	**1,023.4**	**1,004.2**

Free cash flow amounted to EUR 1,023 million as of December 31, 2018, up +1.9% compared to December 31, 2017.

In 2018, the breakdown of free cash flow by operating segment was as follows:

- Water Europe segment: +EUR 511 million;
- Recycling and Recovery Europe segment: +EUR 230 million;
- International segment: +EUR 373 million;
- WTS segment: -EUR 43 million;
- and Other segment: -EUR 48 million.

Cash flows from financing activities

(in millions of euros)	2018	2017 restated	Change	% change
Increase or decrease in share capital of the parent company	–	863.5	(863.5)	N/A
Purchase/sale of treasury shares	(4.9)	(47.9)	43.0	+ 89.8%
Increase or decrease in share capital of non-controlling equity interests	(23.4)	729.2	(752.6)	N/A
Change in share of interests in controlled entities	(10.8)	(61.4)	50.6	+ 82.4%
Dividends paid to shareholders of the parent company	(446.7)	(352.2)	(94.5)	–26.8%
Dividends paid to non-controlling equity interests	(249.4)	(218.6)	(30.8)	-14.1%
Issue of undated deeply subordinated notes net of issuance costs	–	597.7	(597.7)	N/A
New borrowings and financial debt	1,323.0	1,037.7	285.3	+27.5%
Repayment of borrowings and financial debt	(766.5)	(1,172.2)	405.7	+34.6%
Change in financial assets at fair value through income	27.5	5.7	21.8	N/A
Financial interest paid	(392.5)	(364.5)	(28.0)	–7.7%
Financial interest received	26.6	32.4	(5.8)	– 17.9%
Flows on financial derivative instruments qualifying as net investment hedges and compensation payments on financial derivatives	(75.9)	96.5	(172.4)	N/A
Cash flows from/(used in) financing activities	**(593.0)**	**1,145.9**	**(1,738.9)**	**N/A**

Cash flows from financing activities amounted to -EUR 593 million as of December 31, 2018, a -EUR 1,739 million difference compared to December 31, 2017.

Cash flows from financing activities in 2018 of -EUR 593 million are mainly due to:

- an issue in September 2018 of a bond amounting to EUR 500 million and maturing in 12 years;
- an increase in outstanding commercial papers in the amount of EUR 242 million;
- a redemption of a EUR 100 million bond that matured on November 15, 2018;
- a draw-down on a confirmed credit line maturing in 2023 for EUR 263 million;
- EUR 402 million in cash dividends paid by SUEZ;
- EUR 232 million corresponding to dividends paid to non-controlling interests by other Group entities;
- EUR 392 million in financial interest payments.

The reconciliation of the changes in financial debt (excluding derivatives) presented in Note 13.2.1 of chapter 20.1 of this document for +EUR 635.0 million and the net increase in financial debt of +EUR 556.5 million presented in the consolidated statement of cash flows is composed of the following items:

- changes in bank overdrafts repayable upon request positioned as a reduction in cash and cash equivalents in the consolidated statement of cash flows (IAS 7.8) for +EUR 48.0 million;
- IFRS 9 restatement related to debt rescheduling for -EUR 5.1 million;
- exchange rate effects for +EUR 7.0 million;
- changes in scope effect for -EUR 3.7 million;
- changes in fair value and amortized cost for +EUR 14.6 million;
- other items for +EUR 17.7 million.

9.3.2 Net debt

Net debt as of December 31, 2018 and 2017

(in millions of euros)	2018	2017 restated	Change	% change
Bonds	9,766.4	9,345.5	420.9	+4.5%
Commercial paper	641.8	400.0	241.8	+60.5%
Draw-downs on credit facilities	319.1	72.5	246.6	N/A
Borrowings under finance leases	87.2	149.1	(61.9)	– 41.5%
Other bank borrowings	484.4	704.5	(220.1)	– 31.2%
Other borrowings	223.8	140.1	83.7	+59.7%
Total borrowings	**11,522.7**	**10,811.7**	**711.0**	**+6.6%**
Bank overdrafts and current accounts	928.8	989.9	(61.1)	– 6.2%
Total outstanding borrowings	**12,451.5**	**11,801.6**	**649.9**	**+5.5%**
Financial assets measured at fair value through income excluding financial derivative instruments	(29.2)	(56.9)	27.7	+48.7%
Cash and cash equivalents	(3,424.1)	(3,221.3)	(202.8)	-6.3%
Total net financial debt, excluding derivative financial instruments and amortized cost	**8,998.2**	**8,523.4**	**474.8**	**+5.6%**
Impact of derivative financial instruments and amortized cost	(44.3)	(48.6)	4.3	+ 8.8%
Net debt	**8,953.9**	**8,474.8**	**479.1**	**5.7%**

Net debt amounted to EUR 8,954 million as of December 31, 2018, compared to EUR 8,475 million as of December 31, 2017, a EUR 479 million increase.

Key transactions that led to an increase of net debt are the following:

- the payment of cash dividends to shareholders of SUEZ amounting to EUR 401.9 million;
- the payment of cash dividends to minority shareholders of subsidiaries amounting to EUR 231.6 million (withholding taxes included);
- the payment of EUR 78.8 million in "exit fees" for GE Water defined benefit pension plans in the United Kingdom and in the Netherlands which closed after SUEZ's acquisition of GE Water;
- changes in foreign exchange rates for EUR 103.1 million, primarily related to the appreciation of the US dollar against the euro.

Key transactions that led to a decrease of net debt are the following:

- excess cash generated by the Group's activities generated a decrease in net debt of EUR 445.2 million.

Net debt represents 99.6% of total shareholders' equity at the end of 2018 compared to 93.9% at the end of 2017. The net debt over EBITDA ratio was 3.2 at year-end 2018, stable compared to the end of 2017.

As of December 31, 2018, the Group had undrawn confirmed credit facilities for a total of EUR 2,290.7 million.

9.3.3 Return on capital employed (ROCE)

ROCE is calculated by dividing net operating profit after taxes (NOPAT) for the period (see details below) by the opening capital employed adjusted for the scope effects on a *pro rata temporis* basis, as well as for material foreign exchange rate effects.

Current tax used in the calculation of NOPAT is the tax payable on current operations and does not include the tax due on non-recurring operations.

The calculations of NOPAT, capital employed and return on capital employed for 2018 and 2017 are presented in the following tables:

(in millions of euros)	2018	2017 restated
EBIT	1,335.3	1,211.8
Income tax expense	(209.0)	(167.5)
NOPAT	**1,126.3**	**1,044.3**

(in millions of euros)	2018	2017
Net goodwill	5,142.1	3,646.9
Net property, plant and equipment and intangible assets	13,422.4	12,502.8
Equity instruments at fair value	259.2	142.6
Investments in associates	984.8	984.3
Investments in joint ventures	1,003.9	916.0
Provisions	(1,755.5)	(1,663.7)
Impact of material foreign exchange fluctuations and scope effects	165.3	186.3
Other	(992.2)	(842.1)
Capital employed as of January 1 [a]	**18,230.0**	**15,873.1**

(a) Opening capital employed, adjusted for material scope and foreign exchange effects.

The amount of equity instruments at fair value used to calculate the capital employed does not include changes in the fair value of financial assets recognized in equity.

The "Other" item, for -EUR 992.2 million includes:

- trade receivables and payables in the net amount of +EUR 693.4 million;
- other assets and liabilities in the net amount of -EUR 3,008.8 million;
- actuarial gains and losses on pension obligations in the amount of EUR 9.6 million;
- loans and receivables at amortized cost in the amount of +EUR 858.5 million; and
- inventories in the amount of +EUR 455.1 million.

(in millions of euros)	NOPAT	Capital employed	ROCE [a]
2018	1,126.3	18,230.0	6.2%
2017 restated	1,044.3	15,873.1	6.6%

(a) To be compared to the weighted average cost of capital (WACC) estimated at 6.2% in 2018 (6.1% in 2017).

ROCE by segment breaks down as follows:

- in 2018: Water Europe segment: 7.0%, Recycling and Recovery Europe segment: 6.4%, WTS segment: 2.8%, International and Other segments: 7.1%;
- in 2017 restated: Water Europe segment: 7.3%, Recycling and Recovery Europe segment: 7.3%, WTS segment: -2.0%, International and Other segments: 6.5%.

9.4 Provisions

The table below presents changes in provisions between December 31, 2018 and December 31, 2017:

(in millions of euros)	2018	2017 restated	Change	% change
Pensions and other post-employment and long term benefits	805.1	793.1	12	+1.5%
Sector-related risks	60.8	83.6	(22.8)	– 27.3%
Warranties	21.9	25.3	(3.4)	– 13.4%
Disputes, claims, and tax risks	79.9	90.2	(10.3)	– 11.4%
Site restoration	535.4	543.3	(7.9)	– 1.5%
Restructuring costs	49.1	104.3	(55.2)	– 52.9%
Other contingencies	451.5	522.0	(70.5)	– 13.5%
Total provisions	**2,003.7**	**2,161.8**	**(158.1)**	**– 7.3%**

The main variation between 2018 and 2017 is:

- a net reversal of provisions for restructuring costs amounting to -EUR 55.2 million following departures recorded under restructuring plans in France and in Spain decided on in 2017;
- a reversal for a surplus of -EUR 22.9 million related to reversals of provisions for liability guarantees and for adjustments to contractual terms and conditions in Spain;
- a decrease in provisions for equity interest risk for -EUR 22.1 million, classified as sector-related risks;
- a EUR 43 million increase corresponding to the impact of unwinding discount adjustments on provisions for site restoration and on provisions for post-employment benefit obligations and other long-term benefits, and provisions for onerous contracts, classified as provisions for other contingencies;
- lastly, a change in foreign exchange effect of -EUR 2.1 million, primarily recorded by the American and Australian subsidiaries.

The details regarding these provisions are presented in Note 17 to the Consolidated Financial Statements, chapter 20.1 of this Reference Document.

9.5 Contractual commitments

9.5.1 Commitments relating to Group financing

Financial debt

The Group's total outstanding borrowings and its repayment schedule as of December 31, 2018 are set out in the following table:

(in millions of euros)	Total	2019	2020	2021	2022	Beyond 2022
Total borrowings	11,522.7	1,706.4	557.5	1,164.1	875.5	7,219.2
Bank overdrafts and current accounts	928.8	928.8				
Outstanding borrowings	**12,451.5**	**2,635.2**	**557.5**	**1,164.1**	**875.5**	**7,219.2**

Secured, pledged and mortgaged assets

Assets pledged and mortgaged as collateral borrowings amounted to EUR 10.6 million as of December 31, 2018, against EUR 11.0 million as of December 31, 2017.

The maturities of these commitments are as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
2018	–	0.7
2019	1.0	0.2
2020	0.6	0.7
2021	0.1	0.1
2022	0.1	0.0
Beyond	8.8	9.3
Total	**10.6**	**11.0**

Financing commitments

The following table presents financing commitments provided or received by the Group for the fiscal years ended December 31, 2018 and 2017:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Personal securities provided for borrowings	1,015.8	1,008.1
Total commitments given	**1,015.8**	**1,008.1**
Financing commitments received	2,290.7	2,614.4
Total commitments received	**2,290.7**	**2,614.4**

Commitments received related to financing mainly concern undrawn confirmed credit facilities.

Personal securities cover the repayment of the principal amount and interest on the debt: the latter is not recognized as a liability on the Group's statement of financial position. Guarantees are also provided in the context of the receivables securitization program for EUR 429 million.

9.5.2 Contractual investment commitments

Contractual commitments to invest in property, plant, and equipment

In the ordinary course of their business activities, certain Group companies have also entered into commitments to purchase, and related third parties to deliver property, plant and equipment. These commitments break down by maturity as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
2018	–	248.3
2019	214.1	113.6
2020	96.7	56.0
Beyond	135.8	11.8
Total	**446.6**	**429.7**

The increase observed from 2017 to 2018 primarily stemmed from an increase in property, plant and equipment investment commitments at R&R France.

Other contractual investment commitments

The Group has made various investment commitments in intangible assets, and, to a lesser extent in equity interest purchases, for a total of EUR 268 million as of December 31, 2018. These investment commitments amounted to EUR 293 million as of December 31, 2017.

9.5.3 Lease-related commitments given

Commitments related to finance leases

The main financial leases entered into by the Group mainly concern the SUEZ RV Énergie incineration plants in France.

The future minimum lease payments under these leases were as follows as of December 31, 2018 and 2017:

(in millions of euros)	Future minimum lease payments as of December 31, 2018		Future minimum lease payments as of December 31, 2017 restated	
	Undiscounted value	Discounted value	Undiscounted value	Discounted value
During the 1st year	36.3	35.3	76.6	76.0
From the 2nd to the 5th year inclusive	37.6	32.5	66.5	59.8
From the 5th year onwards	29.8	19.7	20.3	13.9
Total	**103.7**	**87.5**	**163.4**	**149.7**

Commitments related to operating leases

Future minimum lease payments under non-cancelable operating leases can be analyzed as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
During the 1st year	268.1	252.5
From the 2nd to the 5th year inclusive	698.5	638.2
From the 5th year onwards	372.3	483.4
Total	**1,338.9**	**1,374.1**

9.5.4 Operation-related commitments given

Operation-related commitments given amounted to EUR 3.6 billion as of December 31, 2018, compared to EUR 3.2 billion as of December 31, 2017. They concern guarantees given by the Group with respect to contracts and markets, including bid bonds accompanying tender offers, advance payment bonds and completion or performance bonds given in the context of signing contracts or concession arrangements. The EUR 0.4 billion increase is due to new guarantees given, particularly at SUEZ Water Inc in the US.

9.6 Parent Company financial statements

See chapter 20.3 of this Reference Document, which also includes the position of accounts payable by maturity.

9.7 Outlook

See section 6.3.4 of this Reference Document.

10 cash and shareholders' equity

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10.1 Company shareholders' equity

Total shareholders' equity as of December 31, 2018 amounted to EUR 8,992.6 million, down EUR 29.2 million compared to December 31, 2017. This change notably includes the impact of dividend payments in cash for fiscal year 2017 in the amount of -EUR 623.2 million and -EUR 44.8 million paid as coupon relating to undated deeply subordinated notes. It also includes foreign exchange adjustments (-EUR 5 million), changes in actuarial gains and losses (+EUR 9.6 million), and net income for fiscal year 2018 (+EUR 565.8 million).

Group net debt (including amortized cost and impact of derivative instruments) was EUR 8,954 million as of December 31, 2018, *versus* EUR 8,475 million as of December 31, 2017. Consequently, the net debt/EBITDA ratio was 3.2 as of December 31, 2018.

10.2 Source and amount of the issuer's cash flows and description of cash flows

10.2.1 Cash flows from operating activities

CASH FLOWS FROM OPERATIONS BEFORE FINANCIAL INCOME/(EXPENSE) AND INCOME TAX

(in millions of euros)	2018	2017 restated	Gross change as a %
Water Europe	875.8	880.6	–0.5%
Recycling and Recovery Europe	484.9	505.4	–4.1%
International	668.7	620.1	+7.8%
WTS	216.9	(43.6)	N/A
Other	30.4	68.8	–55.8%
Total	**2,276.7**	**2,031.3**	**+12.1%**

Cash flows from operations before financial income/(expense) and income tax came to EUR 2,276.7 million as of December 31, 2018, up 12.1% compared to 2017.

In total, cash flows from operating activities generated a cash surplus of nearly EUR 2.0 billion in 2018.

10.2.2 Cash flows from investing activities

Cash flows from investing activities in 2018 totaled EUR 1,230.3 million and included:

- financial investments of EUR 146.4 million (EUR 2,600.4 million in 2017), including EUR 4.6 million for acquisitions in the Water Europe segment, EUR 12.2 million in the Recycling and Recovery Europe segment, EUR 60.7 million in the International segment, EUR 65.9 million in the WTS segment and EUR 3.0 million in the Other segment;
- maintenance capital expenditure of EUR 606.8 million (EUR 626.2 million in 2017), including EUR 185.5 million for the Water Europe segment, EUR 185.9 million for the Recycling & Recovery Europe segment, EUR 186.1 million for the International segment, EUR 45.5 million for the WTS segment, and EUR 3.8 million for the Other segment;
- development capital expenditure of EUR 736.1 million (EUR 551.0 million in 2017), broken down by segment as follows: EUR 245.0 million for the Water Europe segment, EUR 194.2 million for the Recycling & Recovery Europe segment, EUR 247.7 million for the International segment, EUR 43.4 million for the WTS segment, and EUR 5.8 million for the Other segment.

Disposals in 2018 represented EUR 245.2 million, *versus* EUR 355.9 million in 2017. The primary transactions impacting the disposals for fiscal year 2018 are described in Note 2 to the Consolidated Financial Statements, in chapter 20.1 of this Reference Document.

In total, cash flows from investing activities resulted in a cash outflow of EUR 1,230.3 million in 2018, *versus* an outflow of EUR 3,426.0 million in 2017.

10.2.3 Cash flows from financing activities

This figure includes the dividends paid in cash for 2018 of EUR 696.1 million [1] (compared to EUR 570.8 million in 2017). These include dividends paid by SUEZ to its shareholders in the amount of EUR 401.9 million, as well as the EUR 44.8 million coupon for the subordinated notes. It also includes the dividends paid by certain subsidiaries to non-controlling interests in the amount of EUR 238.7 million and withholding taxes in the amount of EUR 10.7 million. Net financial interest paid totaled EUR 365.9 million in 2018, *versus* EUR 332.1 million in 2017.

In total, cash flows from financing activities resulted in an outflow of EUR 593.0 million in 2018, *versus* a surplus of EUR 1,145.9 million in 2017.

10.3 Borrowing terms and issuer's financing structure

10.3.1 Debt structure

Outstanding borrowings (excluding amortized cost and the effect of derivatives) as of December 31, 2018 was EUR 12,452 million, *versus* EUR 11,802 million as of December 31, 2017, and breaks down as follows:

- bonds (mainly subscribed by the parent company SUEZ) in the amount of EUR 9,766 million (EUR 9,346 million in 2017);
- commercial paper in the amount of EUR 642 million (EUR 400 million in 2017);
- bank borrowings in the amount of EUR 804 million (EUR 777 million in 2017); and
- other borrowings and current accounts totaling EUR 1,240 million (EUR 1,279 million in 2017).

Including amortized cost and the impact of derivatives, 43% of net debt was denominated in euros, 29% in US dollars, 5% in pound sterling, 12% in Chilean pesos and 8% in Hong Kong dollars at the end of 2018. In 2017, it was 44% denominated in euros, 27% in US dollars, 5% in pound sterling, 14% in Chilean pesos and 8% in Hong Kong dollars.

58% of outstanding borrowings and 82% of net debt is fixed rate. The Group's 2018 objective was to implement a dynamic distribution between the various reference rates, taking into account changes in the market. The average cost of net debt was 3.88%, *versus* 3.84% in 2017. In 2018, the average term of net debt was 6.5 years.

10.3.2 Major transactions in 2018

SUEZ issued a EUR 500 million bond on September 17, 2018 as part of its EMTN program. It matures on September 17, 2030 and has a fixed annual coupon of 1.625%.

On October 26, 2017, the Company's Board of Directors had authorized renewal of the EUR 8 billion *Euro Medium-Term Note* program and the use of a EUR 3 billion issuance package.

(1) The EUR 696.1 million above correspond to the dividends and coupons of undated deeply subordinated notes paid in cash in 2018, while the EUR 668.0 million presented in the consolidated statement of changes in shareholders' equity correspond to the dividends approved by shareholders in 2018 (see chapter 20.1 of this Reference Document).

10.3.3 Group rating

SUEZ has its senior debt rated by Moody's rating agency. The rating confirmed on March 22, 2019 is A3 for long-term debt and Prime 2 for short-term debt, along with a negative outlook.

Moody's applied the following main adjustments to the Group's net debt:

- addition of funding shortfall on pension liabilities (see chapter 20.1, Note 18);
- addition of the present value of future minimum payments on operating leases (see chapter 20.1, Note 20).

10.4 Restrictions on the use of capital

As of December 31, 2018, the Group had undrawn confirmed credit lines (which may be used for such purposes as back-up credit facilities for the commercial paper program) totaling EUR 2,290.7 million.

Some loans contracted by Group subsidiaries or by SUEZ on behalf of its subsidiaries include clauses requiring specific ratios to be maintained. Such ratios, as well as their levels, are known as financial covenants and are agreed to with the lenders, and may be revised during the term of the loan. The liquidity risk arising from the Group's possible breach of financial covenants is described in section 4.1.3.3 of this Reference Document.

For most loans relating to subsidiaries and involving negotiation of financial covenants, the lending banks usually require the relevant company to maintain a minimum level of debt coverage (with respect to the principal amount and interest), which is measured by the DSCR (debt service cover ratio), or, with respect to interest, by the ISCR (interest service cover ratio).

With regard to project financing, lending banks may also require that the relevant company maintains an actuarial ratio for debt coverage for the remaining term of the loan, called the LLCR (loan life cover ratio). Within the context of other financing, lending banks may also require the relevant company to observe a balance sheet ratio, which generally takes the form of a debt to equity ratio.

The Group has implemented a semi-annual procedure for monitoring its financial covenants that involves the CFOs of the major subsidiaries sending representation letters, indicating (i) whether the subsidiary or other legal entities supervised by this subsidiary have, as of the last reporting date, been in default or potential default situations (situations likely to become default situations contingent upon a decision of the lenders or the expiry of time limits), or (ii) whether default or potential default situations may occur at the next half-year closing. The letters of representation must include an appendix listing the loan agreements, including covenants, types of covenants, and the consequences to the borrower in the event of a breach of such covenants.

10.5 Expected sources of financing to meet commitments relating to investment decisions

10.5.1 Contractual commitments

The following table shows outstanding borrowings maturities as of December 31, 2018:

	Amount per period				
(in millions of euros)	Less than 3 months	3 months to 1 year	1 to 5 years	More than 5 years	Total
Outstanding borrowings	1,368.2	1,267.0	3,597.6	6,218.7	12,451.5

10.5.2 Expected sources of financing

As of December 31, 2018, the Group had EUR 2,524.5 million in available cash (consisting of EUR 3,424.1 million in cash and cash equivalents, EUR 29.2 million in financial assets valued at fair value through income, net of bank overdrafts and liabilities current account for EUR 928.8 million) and EUR 2,290.7 million in unused confirmed credit facilities, including EUR 227.0 million due to expire in 2019.

The Group anticipates that its future financing needs for major capital investments will be covered by its net cash, future cash flows from operating activities and possibly the use of available credit facilities.

Liquidity as of December 31, 2018 is sufficient to cover medium-term cash requirements and the split between net cash and unused confirmed credit facilities is optimized to minimize carrying costs.

11 research and innovation, trademarks, patents and licenses

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11.1 Research and Innovation

Every day, SUEZ is taking up the challenge created by the Resource Revolution with the goal of supplying its customers with innovative technologies, products and services, driving growth in its domestic markets, and conquering new markets.

Worldwide, SUEZ provides its customers (local authorities, industrial clients, consumers) with practical solutions to respond to new resource management challenges and facilitate the rise of a circular economy. As a driving force for transformation, innovation is at the core of Group strategy. This entails concrete actions and commitments: investing in people and tools, reinventing our ways of working by introducing more interdisciplinary collaboration within our businesses and BUs, and adopting a mindset that is resolutely turned toward the future.

The objective of the ambitious Research and Innovation (R&I) policy practiced by SUEZ is to create differentiated and high value-added offers to enable its customers to more efficiently manage their resources.

In 2018, innovation helped SUEZ achieve several accomplishments. Several factors contributed to these successes, including the acceleration of the Group's transformation – and especially the Group's digital transformation – as well as the successful integration of GE Water into the new Water Technologies & Solutions (WTS) business unit (BU).

In 2018, the Group invested EUR 120 million in Research and Development, the continued improvement of its processes, top-level technical assistance and the management of acquired knowledge. Beyond the conquest of new markets, this investment enhances operational performance through the integration of innovative industrial practices into the businesses, by ensuring their circulation and sharing thanks to a network of global experts. The implementation of those actions relies on a variety of programs and projects developed in the Group's Research and Development Centers, by sharing all Group innovations and through the worldwide openness of innovation.

11.1.1 The innovation ecosystem

In order to offer increasingly efficient and innovative solutions to its customers, SUEZ has organized its Research and Innovation around an open and collaborative ecosystem, forming a truly international network of internal resources and external partnerships.

11.1.1.1 An internal program to stimulate innovation

To foster innovation, SUEZ relies upon the talent of more than 650 researchers and experts worldwide, coming from the 17 centers of expertise and research and from the Group's network of operational experts. Their roles range from technical assistance to the operations teams, to implementing advanced research programs that pave the way for the Group's future activities, expertise and technologies. The Group's main centers of expertise and research are located in France (Le Pecq-Croissy and Bordeaux), Spain (Barcelona), Belgium (Haasrode), the United States (Houston, Trevose), China (Shanghai), India (Bangalore), Hungary (Oroszlany) and Singapore. In 2018, SUEZ opened a new 50-person testing and R&D lab dedicated to oil and gas in Tomball, Texas, as well as an Innovative Water Treatment Solutions facility in Shanghai.

New teams and skills were also integrated into WTS in 2018. WTS demonstrated its power to innovate with the development of new solutions such as new chemical products to separate water and oil and an expansion of its range of membrane-based technologies.

At the Group level, the Innovation, Marketing and Industrial Performance Department (DIPI) rolled out a new global Innovation – Digital – Performance – Intrapreneurship system to strengthen the Group's capacity to innovate, stand out from the competition and support the Group's development. This system is based on four tools:

- technological priorities for the Group validated by the Management Committee, the BUs and the Global Business Lines;
- the Innovation, Marketing and Performance departments' Group vision to guarantee that resources line up with priorities;
- a unique Innovation process for the entire Group, with a shared digital platform, INNOV@SUEZ, to guarantee access to all innovation projects;
- a simplified governance structure that plans for quarterly business reviews with each BU to continuously monitor results and how this relates to commercial and operational challenges.

As a result, the DIPI also restructured its teams. There are:

- 5 Chief Technology Officers – one per business activity: water for municipal use, recycling and recovery, treatment construction/infrastructure, water for industrial purposes, Advanced Solutions. Each aims to guarantee the consistency and efficacy of actions and projects from strategic marketing, research, innovation, technology, expertise, and partnerships through to solution realization;
- 6 business accelerators-the real "control towers" of the system-that are responsible for maintaining the Group's vision and policy, challenging all the initiatives, defining methods and allocating resources in the best way for all the Group's programs. They cover the following areas: strategic marketing, partnerships and SUEZ Ventures, Digital and SUEZ Digital Hub, Performance and industrial and environmental risks, Scientific and Intellectual Property Department and networks of R&D and Innovation centers.

To support this momentum, priority programs have been rolled out and digital, intrapreneurship and open innovation projects have been launched.

Already in operation, this new system enables SUEZ to make more competitive and innovative solutions available to our markets and customers faster while meeting resource challenges.

At SUEZ, far beyond large research programs, innovation is a state of mind shared by all. A number of tools and procedures are deployed by the Group to strengthen the dynamic of innovation and to encourage the expression of ideas by employees. As a result, the BUs organize an increasing number of internal innovation challenges both globally and locally (France, China, Morocco, India, North America, Australia, etc.).

Among these methods are the ideas challenges and competitions organized by different Group entities that eventually feed into the "SUEZ Innovation Awards", which celebrated its 10th anniversary in 2018 with record participation: 200 projects were submitted. Encompassing not only technological aspects but also all the innovations that encourage the Group's forward progress, with regard to management, safety, sustainable development and working conditions. The Innovation Awards recognized 14 innovative projects in 8 categories this year.

Lastly, the major innovation event for 2018 was the Group's first Innovation Week, which took place from October 12 to 19, 2018. During 7 days, the Group lived and breathed "innovation" 24/7 around the world. Motivated by the legacy of the Technical World Congress and thrilled with all the possibilities offered by all the new collaborative tools, this event gave a lot of enthusiasm and drive, both inside and outside the Group: 130 events were organized around the world, 65,000 visits were registered on the dedicated digital platform with 14,000 unique visitors, 35 internal and external experts attended open_resource and innovation_time conferences, 7 webinars were broadcast, 500 participants from 15 countries attended the various hackathons that were organized and more than 100 ideas were proposed, 312,000 views were registered on social media, and more than 60 sites around the world were opened up to visitors.

11.1.1.2 Open Innovation

SUEZ has implemented a structured policy of Open Innovation in order to fully benefit from the innovative capacity of its partners in areas that contribute to its growth. To this end, partnerships are formed and consist of stimulating, promoting, and co-financing innovative projects in technical, commercial and managerial fields. Such partnerships allow the Group to leverage its Research and Development efforts while benefiting from collaborative work with some of the best research teams and operators in the world. They take various shapes (including technological tests, direct investments or investments *via* funds dedicated to start-ups, research partnerships, etc.) to adapt to the maturity of technologies and to the size of the structures with which SUEZ works. Thanks to these collaborative projects, the Group has access to knowledge and technologies that complement its internal expertise and accelerate the time-to-market of innovative products and solutions.

AN INTERNATIONAL NETWORK OF PARTNERS

SUEZ maintains long-term privileged relationships with numerous high-level scientific and technical players:

- academic partnerships with the University of Bordeaux, IRSTEA, CNRS (France), the University of Barcelona, the Polytechnic University of Catalonia (Spain), the University of Tsinghua (Beijing), the Harbin Institute of Technology (China), etc. as well as WTS's long-standing partners: NUS (Singapore), Rice University (USA), the University of Toronto (Canada), the University of Darmstadt (Germany); or
- French innovation and skills networks, such as competitiveness clusters in line with our business activities in Bordeaux. La Maison de l'Eau, an educational area and resource center created and managed by SUEZ, reorganized its locations to house an incubator-La Source-in addition to its normal training activities. Opened last January 22, this new area is dedicated to supporting green start-ups. After setting up the LyRE and *Maison pour Rebondir*, this project has fallen under a new innovation venture that has been shared for several years between SUEZ and the Bordeaux metropolitan area; or
- European networks (Water Supply and Sanitation Technology Platform, Climate-KIC).

SUEZ VENTURES

Created in 2010, SUEZ Ventures is the Group investment fund. A leading player in corporate venture capital in the water, waste recycling and recovery, and urban services businesses, SUEZ Ventures invests in and forms industrial partnerships with young and innovative tech start-ups. This investment fund, which invests several million euros per year, rounds out the Group's array of Open Innovation tools by helping operating entities access innovative solutions for the various businesses.

SUEZ Ventures spots several hundreds of innovative start-ups per year, and has made eleven investments in high-growth potential SMEs that have synergies with the Group. In 2018, SUEZ Ventures invested in the French start-up Hydrelis, which has a patented technology that detects leaks after the meter reader and then stops the water supply. SUEZ Advanced Solutions integrated this new partner offer into its ON'connect solution product line.

In September, SUEZ acquired the American-Australian start-up Optimatics, the global leader in water and wastewater treatment network optimization software. This integration has enabled SUEZ to strengthen its digital solutions offering and round out its AQUADVANCED® range *via* a service that optimizes the overall performance of water infrastructures throughout their life cycle.

After having acquired equity interests in Demeter 3 Amorçage and Demeter 6 Amorçage-both seed fund investment companies, SUEZ Ventures strengthened in 2018 its presence in the capital-development segment *via* a new equity interest in Paris Fonds Vert (France). This new investment will help SUEZ grow strategic partnerships with emerging companies in Europe in the cleantech and smart city sectors.

TECHNOLOGICAL TESTS

The "Technological Innovation Tests" are additional measures that test, in industrial conditions, innovative solutions provided by our partners, whether they are start-ups, large groups, or small and medium-sized companies.

This procedure has the advantage of accelerating time-to-market for new technological solutions that meet the needs of our customers and encourage partnership-type collaborations.

Among the tests conducted in 2018, several promising technological innovations have been green-lighted, especially in the areas of paper recycling, robotics, cybersecurity, and Legionella disease treatment without the use of chemicals or methanization.

CHALLENGES

In 2018, SUEZ dedicated a significant portion of its open innovation to challenges in which start-ups are involved. Thus, the Group participated in the third edition of the "DataCity" challenge organized by the start-up incubator NUMA and the Paris City Hall. This challenge invites start-ups to imagine solutions to meet the short- and medium-term needs of cities and their inhabitants. After selecting start-ups based on their case and pitch, the chosen ones have two months to develop an initial prototype (Minimum Viable Product) by using data made available to them by the City of Paris and its partners. In 2018, SUEZ partnered up with three noteworthy projects. The first one, led by start-ups Affluences and GeoUniq, involves providing reliable and high-quality information on crowds in public transit systems to improve the passenger experience. The second one, led by the start-up Co-Reyclage, wants to promote reusing bulky waste by making the process easier through an interface accessible from the Paris City Hall website. The third one, with the start-up Backacia, aims to encourage the reuse of construction waste on work sites.

11.1.2 Significant achievements in 2018

SUEZ launched programs to respond to the needs of its customers and offer them increasingly innovative solutions. In 2018, the innovation ecosystem implemented by SUEZ continued to grow through new projects and new partnerships. The main highlight of this year was the boost given to the Group's digital transformation *via* several initiatives and projects.

DIGITIZING OUR COMPANY AND OUR SYSTEMS

Digitization represents a powerful lever in responding to the environmental and societal challenges with which our customers are confronted. SUEZ innovates to support them in this process and strengthen the performance of their facilities. Following the arrival of the Chief Digital Officer in 2017, the Group rolled out its digital roadmap.

As a result, SUEZ decided to boost its data science expertise to better utilize the massive amount of data that its operational activities produce (read-outs from water meters or waste container fill levels, etc.). A team and a network of data scientists were formed.

In order to speed up development and get digital solutions to market, the Group created the SUEZ Digital Hub. This new structure brings together data scientists, internal teams and partners in a single location and uses agile methods to accelerate and incubate digital projects.

In addition, Artificial Intelligence is playing an increasingly significant role in all industrial sectors, including resource management. As such, the Group is a founding member of the PRAIRIE Institute, created as part of the French Artificial Intelligence Program. The PRAIRIE Institute was created in March by players in both academia and in industry, including Inria, the public research center dedicated to IT, CNRS, Microsoft, Google, PSA and SUEZ, among others. The five-year goal is to bring together scientific and industrial leaders in Artificial Intelligence and make the PRAIRIE Institute a global leader. PRAIRIE was preselected by the government to become one of the French interdisciplinary Artificial Intelligence Institutes (called "3IA"). Next step for early 2019: obtain the "3IA" seal.

DIGITIZING OUR WASTE RECYCLING AND RECOVERY BUSINESS

The world of waste recycling and recovery is facing rapid and permanent change, creating new pressures, but also new opportunities for SUEZ, particularly due to the benefits of digital innovation.

Wasteconnect® is a new line of digital waste management solutions. In practical terms, using sensors placed inside containers such as recycling banks, compactors; no more overflows. Once the fill threshold is met, an email alert is sent out. The supervisor can then either take action or include it in the collection that is already scheduled. The entire fleet can be monitored *via* a web interface with the ability to act immediately in the event that the alarm goes off. This first "mymonitor" solution implemented in the Plaine municipality (France) reduced the weekly collection service, increased metric tons collected per hour by 50% and halved the number of kilometers traveled per receptacle.

ACTING TO PRESERVE THE SANITARY QUALITY OF WATER

Each year, SUEZ co-organizes, with the Universities of Lorraine (France) and Bonn (Germany), the International seminar for PhD students on water and health. In 2018, 36 scientists participated in its 10th edition. The goal of this annual meeting is to give young researchers from the different part of the world an opportunity to present their work and discuss their results with other students working in the same field, as well as with internationally renowned scientists and representatives from the water sector. The SUEZ Award was handed out by the Scientific Committee to the PhD work that best contributed to advancing water safety and security. The "2018 Water & Health Award" was awarded to Esther Sib of the University of Bonn (Germany) for her work on "antibiotic-resistant bacteria and resistance genes in biofilms in wastewater networks".

AUTOMATING DRINKING WATER QUALITY MONITORING IN DISTRIBUTION NETWORKS

The performance and safety of drinking water supply systems are core public health concerns. SUEZ relies on its long-standing expertise in water services and digital technologies to offer a unique solution to track drinking water quality in distribution networks in real time. AQUADVANCED® Quality Monitoring detects and locates irregularities in drinking water quality in real time using sensors placed at strategic inspection points throughout the distribution network. These sensors simultaneously measure up to eight physical, chemical and bacteriological parameters and act as quickly as possible when a risk is confirmed. For facilities without electricity, the solution includes a patented self-powered electrical system.

ENCOURAGING PACKAGE RECYCLABILITY

Companies that design packaging for major retail brands often do not know how to optimize package recyclability. In order to help them on that subject, SUEZ has designed CircPack, a consulting service to offer them support using a circular economy approach.

CircPack helps them make good choices via a three-step process: 1) understand which components of the packaging can be recycled and which cannot, 2) increase package recyclability, and 3) develop new packaging that meets sorting and recovery requirements by following the advice given.

MAKING OFFICE WASTE RECOVERY EASIER

SUEZ and La Poste launched RECYGO, a company participating in the circular economy and specializing in the collection and recovery of all office waste. *Via* a digital platform, www.recygo.fr makes sorting accessible at all offices throughout France. La Poste collects small quantities *via* mail carriers and SUEZ handles larger volumes from 380 logistics centers spread throughout the country.

TRANSFORMING WASTEWATER TREATMENT PLANTS INTO RESOURCE-GENERATING BIOFACTORIES

Over the past few years, the production of biogas through anaerobic digestion, or methanization, of organic waste and sludge from wastewater treatment plants has grown so sharply that the Group is able to use its expertise and innovative solutions it imagines to improve profitability and reliability in this area. In 2018, the Group took another step forward with the advent of the biofactory concept. Wastewater treatment plants could become not only energy self-sufficient with a low environmental impact, but they could also start producing resources, such as water (recycled), fertilizer, biogas, electricity, and heat. The first steps were taken in Santiago, Chile, where three large wastewater treatment plants converted to biofactories producing biogas and operated by the Group received the Momentum for Change Award from the United Nations. This award was presented by the United Nations Framework Convention on Climate Change during the UN Climate Summit (COP 24) held in Katowice, Poland. Additionally, not far from Paris in Villiers-Saint-Frédéric, another even more "circular" biofactory was created thanks to internal synergies that enabled the Group to win a call for tenders launched by the "Syndicat Intercommunal d'Assainissement" (Intermunicipal Wastewater Treatment Syndicate) for the Neauphle-le-Château region. The goal is to take advantage of upgrading the existing wastewater plant to make it a plant that produces biogas and fertilizer (sold to municipal customers) by implementing four innovative technologies: co-digestion of sludge with organic waste; Phosphogreen™, which recovers the phosphorus present in the supernate from the anaerobic digestion to recover it as fertilizer; Cleargreen™, a cost-effective process that turns nitrogen into energy and produces more biogas; and lastly, Primegreen™, a primary filtration cleaning process that captures carbon, saves energy and produces even more biogas.

INCREASING THE AMOUNT OF CONSTRUCTION WASTE RECYCLED

The goal of the Energy Transition Act is for 70% of building and demolition waste to be reused or recycled by 2020.

Developed in partnership with Resolving, batiRIM® quantifies, qualifies and maps out the product and material flows of a building being renovated, redeveloped, or dismantled, and assesses their potential for reuse and recycling. Step one: the building plans are integrated *via* a digital 2D or 3D interface. Step two: the inspected items are returned and secured in an interactive database. Step three: all information is available *via* a touchscreen tablet. It is then possible to simulate recovery hypotheses for the resource and choose the best solution (reuse and/or planned dismantling/renovation, etc.). As proof, the first experiment on selective dismantling carried out in downtown Neuilly-sur-Seine (France) achieved results that exceeded the 70% goal set by regulations, with nine types of materials being handled and a 75% effective and traced recovery rate.

OFFERING NEW CONTRACTUAL MODELS FOR WATER AND WASTEWATER TREATMENT SERVICES

India must meet the challenge of managing water resources against a backdrop of a rapidly rising population, urbanization and sustained economic and industrial development. To this end, SUEZ has developed a very innovative contractual model. To make sure that a rapidly growing population has access to drinking water and wastewater treatment services and to sustainably manage water resources, especially in industry, local authorities are calling on international corporate experts to help under major public-private partnership programs. This model is a win-win situation as it offers both a clear improvement in service quality as well as operating performance through structured knowledge transfer. Until now, contracts had certain inconvenient elements, such as a lack of flexibility in allocating financial resources or the absence of incentive to optimise investments. To fix this, SUEZ has developed a new contractual model recognized by customers and international lenders. Proof of its popularity: contracts won by SUEZ in Coimbatore or in Davangere, which are among the top 10 municipalities in the "Smart Cities" program launched by the French government.

DEVELOPING AN EXPERTISE IN DATA SCIENCE

Digitizing our businesses requires us to process increasingly large quantities of data, whether it be data from our own business activities (remote meter readings, information transmitted *via* sensors, etc.) or data made available by our stakeholders (open data). To make the most of this bulk data, the Group decided to strengthen its knowledge and expertise in data science. What can we do with all this data? How can we add value to the data to provide new services to our customers and improve our industrial performance? How can artificial intelligence help to overcome these challenges? What type of expertise and human resources do we need?

USING DATA TO MAKE SUSTAINABLE AND CONNECTED CITIES A REALITY

Committed to preserving resources, SUEZ has developed a smart water meter solution called ON'connect™. It makes monitoring and managing daily water consumption easier and brings new high-value-added services to cities and their inhabitants. At the Pollutec 2018 trade show, SUEZ introduced two new digital platforms: ON'connect™ tourism and ON'connect™ generation. Both were designed with municipal customers to improve service quality within cities.

ON'connect™ tourism to optimize urban services during seasonal peaks

Intended for cities that welcome a lot of tourists, ON'connect™ tourism is a decision-making tool for municipal customers that visualizes, forecasts and controls impacts from the peak tourist season on a region. The platform combines daily water consumption data with open data (*e.g.* summer vacations, weather forecasts, ticket counters, etc.) and uses predictive algorithms to provide municipal customers with practical information to adjust their services (expected visitor numbers, planning construction work, collecting waste, safety and security, mobility, etc.) and optimize its communications with tourists. This solution, developed in collaboration with tourism professionals, will be used by the tourist office in Biarritz, France.

ON'connect™ generation helps elderly people to stay in their own homes

With the population growing ever older, improving elderly people's autonomy and enabling them to stay in their own home is a growing challenge. The ON'connect™ generation platform for caregivers and municipal customers' social structures offers a preventative support service for isolated elderly people to promote autonomy and remaining at home. By interpreting daily water consumption data, the app monitors daily habits and detects weak signals as early as possible to anticipate loss of autonomy. This information can then trigger a rapid response for elderly that may require assistance and helps caregivers to monitor elderly people on a daily basis. For community welfare organizations, this service makes it easier to monitor vulnerable or isolated people.

OPTIMIZING INDUSTRIAL FACILITY PERFORMANCE THROUGH DATA SHARING AND TRANSPARENCY

The EfW (Energy from Waste) portal is a unique performance monitoring and knowledge-sharing tool that collects, consolidates and implements best practices for using Energy Recovery Units (ERU).

This tool measures the performance of 47 ERUs operated by the Group all over the world, enabling 650 users in the Group's EfW community to access information that will allow them to more effectively respond to their customers' goals and expectations. Between the operational efficiency of equipment, one-click access to each unit's ID card, assessing performance data from the dashboard, monitoring different projects being managed around the world and many other functionalities (including a documentary base), the EfW platform industrializes and continuously improves the Group's ERUs.

11.2 Patents and Trademarks

The assets developed by SUEZ to offer its customers new products and services with high added value contribute significantly to value creation. That is why the Group is particularly attentive to the development, recovery, and especially the protection of, its assets. Whether with regard to trademarks or patents, SUEZ employs a deliberate policy to protect intellectual property.

SUEZ's intellectual property strategy aims to gain a decisive competitive edge for the Group's business units through its portfolio of proprietary technologies and to protect them from litigation risk, but also to make the Group more attractive to technology and sales partners and to create a portfolio of intangible assets that have potential monetary value.

Since 2015, the Group has centralized its intellectual property strategy and had it supervised by an *ad hoc* department comprising qualified patent engineers. This department ensures the roll-out of intellectual property processes throughout the Group, which are managed *via* a database that includes all the Group's patents.

In January 2018, during the Innovation IP Forum & Awards organized by the magazine *Décideurs*, the Group's Intellectual Property (IP) Department was awarded the Silver Award in the "Best IP Department: France" category. This event is dedicated to global challenges and opportunities related to patents, trademarks, information technologies, intellectual property litigation and other related rights. Presented two months after the Trophée d'Or awarded during the Corporate edition of the Trophées du Droit, this award gave international recognition for all the work accomplished since the Corporate Department was created in 2014, in terms of strategy, organization and achievements.

Since 2018, SUEZ's intellectual property structure integrated the WTS team and now has several European patent attorneys and US patent attorneys.

11.2.1 Patents

As of December 31, 2018, SUEZ's intellectual property portfolio had 3,921 active patents divided into 829 families. These patents are grouped into four cross-entity business portfolios: Water for municipal use and Treatment Infrastructures, Industrial Solutions, Recycling and Recovery, Digital and Emerging Business.

In 2018, SUEZ filed 59 new patent applications, including 27 in industrial activities and 17 in digital solutions. Among the strategic subjects protected, for industrial operations, are methods to treat soluble polyaromatic compounds in the Oil & Gas field, and a specific membrane design for water at elevated temperature and pH levels, and a composition to prevent high-temperature surfaces in contact with oil from getting clogged. A digital fraud detection solution for meter readers has also been protected.

In the municipal business activity, for Recycling and Recovery (R&R), there are filings on biofactories and improvements in sorting processes and mechanical treatment, and for water, there are filings for recovering phosphorus from sludge. Chinese sludge treatment innovations have also been protected.

In an effort to optimize, structure and align the patent portfolio with the Group's priorities, the portfolio review process set up in 2016 was expanded to all Group business activities in 2018 with the launch of R&R portfolio reviews and Industrial portfolio reviews including WTS.

11.2.2 Trademarks

Regarding institutional trademarks held by SUEZ and its subsidiaries, in 2018 the Group pursued the implementation of its unique trademark.

The "SUEZ" trademark was filed in France in March 2005 and was registered internationally in August 2005.

Apart from the "institutional" trademarks, at the end of 2018, SUEZ was at the head of a portfolio of around 2,000 "product" trademarks in effect. These trademarks protect product names such as "AQUADVANCED" and "Densadeg", as well as the names of services and technological platforms. In 2018, SUEZ filed the Reef Sea'ty trademark, which is an offshore energy positive water and waste treatment platform concept, the Seadvanced Sound trademark, pertaining to methods for measuring the impact of human activities on biodiversity, and the Netscan trademark, which refers to predictive maintenance methods of water distribution networks.

In 2018, a Naming Committee was also set up in France to ensure that new product trademark names are in line with SUEZ's single brand.

12 information on trends

The major trends that have affected the Group's activities since the close of the latest fiscal year are described in chapters 6 and 9 of this Reference Document.

13 profit forecasts or estimates

In a more volatile environment where the services SUEZ offers its customers are becoming increasingly necessary, the Group strives to deliver consistently better results.

Maintaining a selective investment policy, delivering at least EUR 200 million in cost savings and achieving synergies with the WTS consolidation should help SUEZ meet the goals it has set for 2019 [1]:

- organic revenue growth of +2 to 3%;
- organic EBIT growth of +4 to 5%;
- Free Cash Flow (FCF) growth of around +7 to 8%;
- net debt/EBITDA ratio of around 3x in 2019 [2].

On this basis, and with the Board of Directors' agreement, the Group intends to propose a dividend of EUR 0.65 per share for fiscal 2019 to the Shareholders' Meeting in May 2020.

(1) Assuming water volumes sold are in line with historical trends, waste volumes treated will be up +1% and raw material prices will be stable compared to December 31, 2018.
(2) Excluding the impact of applying IFRS 16.

14 governance, management and supervisory bodies, and general management

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14.1 Composition of governance and management bodies

14.1.1 Composition of the Board of Directors

Since the beginning of 2018, the following changes have taken place in the composition of the Board of Directors:

- the appointment of Brigitte Taittinger-Jouyet as a Director during the Shareholders' Meeting of May 17, 2018;
- the appointment of Franck Bruel as a Director during the Shareholders' Meeting of May 17, 2018;
- the non-renewal of Ines Kolmsee's and Jérôme Tolot's terms of office, which expired at the end of the Shareholders' Meeting of May 17, 2018.

The Board of Directors therefore has 19 members as of the date of this document. In addition, a representative of the Works Council of the SUEZ's Economic and Social Unit attends the meetings of the Board of Directors.

Detailed information on the composition of the Board of Directors can be found in paragraph 1 of the Report on Corporate Governance, in chapter 16.4 of this Reference Document.

The information below shows the composition of the Board of Directors as of December 31, 2018, which has 19 members, as well as individual information about each of the Directors (including the offices and positions held by the Directors during the last five years).

Gérard Mestrallet

70 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Chairman of the Board of Directors of SUEZ

Offices and positions held at the Company:
Chairman of the Board of Directors and Chairman of the Strategy Committee

Number of SUEZ shares held:
19,564 shares (of which 2,000 as a loan granted by ENGIE)

BIOGRAPHY

Gérard Mestrallet, born on April 1, 1949, is Chairman of SUEZ and Honorary Chairman of ENGIE. He chairs the Foundation *Agir Contre l'Exclusion* (FACE) and the organization Paris Europlace (which promotes Paris as a marketplace). A former student of École polytechnique, École nationale de l'aviation civile, the Toulouse Institut d'études politiques and the École nationale d'administration, he began his career in the State Department of Treasury. He was a technical advisor for industrial affairs for the Minister of Economy and Finance (Jacques Delors) before joining Compagnie Financière de SUEZ in 1984. In 1991, he was Chairman of the Management Committee at Société Générale de Belgique, and in 1995, he became Chairman and Chief Executive Officer of Compagnie de SUEZ. From July 2008 to May 2016, Gérard Mestrallet was Chairman and Chief Executive Officer of GDF SUEZ (which became ENGIE in 2015). In addition to several other directorships (Société Générale, Saudi Electricity Company, member of the Beijing, Chongqing, and Moscow Council of Mayors), Gérard Mestrallet recently took over the executive chairmanship of the Agence Française pour le développement d'Al Ula (French Agency for the Development of Al Ula) in Saudi Arabia at the request of the French Head of State. The *Agence française pour le développement d'Al Ula* is a French organization responsible for regional tourism and cultural development in cooperation with Saudi Arabia.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of **Société Générale** (France) and **Saudi Electricity Company** (Saudi Arabia)

Expired during the last five years

Chairman of the Board of Directors of ENGIE (until May 18, 2018)
Member of the Supervisory Board of Siemens AG (until January 31, 2018)
Chairman and Chief Executive Officer of ENGIE (until May 3, 2016)
Director of Saint-Gobain (until June 4, 2015) and Pargesa Holding SA (until May 6, 2014)
Terms of office in various ENGIE group and SUEZ group companies.

(1) **In bold:** listed companies.

Jean-Louis Chaussade

67 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Chief Executive Officer of SUEZ

Offices and positions held at the Company:
Chief Executive Officer and Director

Number of SUEZ shares held:
80,891 shares
18,807.96 units of the Company mutual fund, SUEZ Actionnariat France, acquired under the SUEZ Group Employee Shareholding Plans

BIOGRAPHY

Jean-Louis Chaussade, born on December 2, 1951, has an engineering degree from ESTP (1976) and holds a Master's degree in Economics (Sorbonne, 1976). He is also a graduate of the Institut d'études politiques de Paris (1980) and the Harvard Business School's Advanced Management Program (1988). He first joined Degrémont in 1978, and was subsequently appointed Chief Operating Officer of Degrémont Espagne, headquartered in Bilbao, in 1989. During that period, he was also appointed Director of Aguas de Barcelona. Jean-Louis Chaussade became Chief Executive Officer of Dumez Copisa (Spain) in 1992. In 1997, he was appointed Chief Operating Officer of Lyonnaise des Eaux in South America, and Chief Operating Officer of SUEZ (now ENGIE) for South America. He was appointed Chairman and Chief Executive Officer of Degrémont in 2000 and, in 2004, Deputy CEO of SUEZ (now ENGIE) and Chief Executive Officer of SUEZ Environnement (now SUEZ). He has been Chief Executive Officer of SUEZ since July 23, 2008. Jean-Louis Chaussade has been a Director of Criteria Caixa SAU since October 19, 2011. He co-chairs the France-China Committee, and also chairs the France-Algeria Council of Chief Executives within MEDEF International. He also chairs the "circular economy" group within AFEP.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of Criteria Caixa SAU (Spain), **Kaufman & Broad** (France) and the Institut du Capitalisme Responsable (France)
Chairman of the Board of Directors of the Université de technologie de Compiègne (France)
Term of office within SUEZ Group: Chairman of the Board of Directors of SUEZ NWS Ltd (Hong Kong)

Expired during the last five years

Terms of office in various companies within the SUEZ Group.

(1) **In bold:** listed company.

Nicolas Bazire

61 years old
French

Business address:
Groupe Arnault
22, avenue Montaigne
75008 Paris, France

Main position:
Chief Executive Officer of Groupe Arnault SAS

Offices and positions held at the Company:
Independent Director and member of the Audit and Financial Statements Committee, the Appointments and Governance Committee and the Strategy Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Nicolas Bazire, born on July 13, 1957, is a graduate of the French Naval Academy and the Institut d'études politiques de Paris, and studied at the École nationale d'administration. Nicolas Bazire was an auditor and then an auxiliary judge at the Cour des comptes. In 1993, he became Chief of Staff for Prime Minister Édouard Balladur. Managing Partner of Rothschild & Cie Banque from 1995 to 1999, Nicolas Bazire was then appointed Chairman of the Partnership Board. He has served as Chief Executive Officer of Groupe Arnault SAS since 1999.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of **Carrefour SA** (France), **Atos** (France) and **SBM** (Monaco)
Manager of Les Chevaux de Malmain SARL (France)
Terms of office within LVMH group/groupe Arnault: Chief Executive Officer of Groupe Arnault SAS (France), Chief Operating Officer and permanent representative of Groupe Arnault SAS and Director of Financière Agache SA (France), Vice-Chairman of the Supervisory Board of Les Échos SAS (France), Director of LVMH Fashion Group (France), **LVMH Moët Hennessy-Louis Vuitton SA** (France), the Louis Vuitton Foundation (France), Financière Agache Private Equity SA (France), Agache Développement SA (France), Europatweb SA (France), **Christian Dior** (France), and Groupe Les Échos SA (France), and member of the Supervisory Committee of Montaigne Finance SAS (France) and Semyrhamis SAS (France)

Expired during the last five years

Chairman of Société Financière Saint-Nivard SAS (France), of Tajan SA (France) and of Go Invest SA (Belgium)
Member of the Supervisory Committee of Lyparis SAS (France).

(1) **In bold:** listed companies.

Miriem Bensalah-Chaqroun

56 years old
Moroccan

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Vice-Chairwoman and Chief Executive Officer of Eaux Minérales d'Oulmès

Offices and positions held at the Company:
Independent Director

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Miriem Bensalah-Chaqroun was born on November 14, 1962 and received an MBA in International Management and Finance from the University of Dallas. She held various positions at Société Marocaine de Dépôt et de Crédit from 1986 to 1989 before joining the Holmarcom group (the family holding company) in 1990. She is currently Vice-Chairwoman and Chief Executive Officer of Eaux Minérales d'Oulmès. From 2012 to 2018, she was also Chairwoman of the Conféderation Générale des Entreprises du Maroc, Morocco's employers' association.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Chairwoman of the Board of Directors of Orangina Maroc (Morocco)
Director of **Renault** (France) and of Bank Al Maghrib (Central Bank of Morocco)
Terms of office within the Holmarcom group: Director of Holmarcom (Morocco) and Vice-Chairwoman and Chief Executive Officer of **Eaux Minérales d'Oulmès** (Morocco) and Chairwoman and Chief Executive Officer of Oulmès Drinks Development (Morocco)

Expired during the last five years

Director of Eutelsat Communications (until 2017).

(1) **In bold:** listed companies.

Valérie Bernis

60 years old
French

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris-La Défense, France

Main position:
Vice-Chairwoman
of the ENGIE Foundation

Offices and positions held at the Company:
Director and member of the Appointments and Governance Committee and of the Ethics and Sustainable Development Committee

Number of SUEZ shares held:
2,608 shares (of which 2,000 as a loan granted by ENGIE)

BIOGRAPHY

Valérie Bernis, born on December 9, 1958, is a graduate of the Institut Supérieur de Gestion de Paris and Université de Sciences Économiques in Limoges. Valérie Bernis was a member of the minister's office at the Ministry of Economy, Finance and Privatization (1986-1988), Director of Communications at Cerus (1988-1993), and the Communications and Press Officer at the French Prime Minister's Office (1993-1995). Later, she was Director of Communications at Compagnie de SUEZ (1995-1997), Deputy Chief Financial Communication Officer of the SUEZ Lyonnaise des Eaux Group (1997-2001), Chairwoman and CEO of the television channel Paris Première (1999-2004), Deputy CEO, and member of the Executive Committee of SUEZ, in charge of Communications and Sustainable Development (2001-2008). In July 2008, Valérie Bernis became a member of the Executive Committee of GDF SUEZ in charge of Communications and Institutional Relations (2008-2011). Between 2011 and 2016, Valérie Bernis was a member of the General Management Committee and Deputy CEO of ENGIE (formerly GDF SUEZ) in charge of Communications, Marketing and Environmental and Corporate Responsibility. She has been the Vice-Chairwoman of the ENGIE Foundation since 2010.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Chairwoman of the Corporate Social Responsibility Committee and Director of **Atos** (France)
Member of the Compensation Committee and Director of **Occitane International SA** (France)
Director of the Association pour le rayonnement de l'Opéra de Paris (France)
Vice-Chairwoman of the ENGIE Foundation (France)

Expired during the last five years

Terms of office in various companies within the ENGIE Group
Member of the Supervisory Board of Euro Disney SCA (until January 11, 2017).

(1) **In bold:** listed companies.

Franck Bruel

56 years old
French

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris-La Défense, France

Main position:
Deputy CEO in charge of the BtoB France BU and the Hydrogen BU at ENGIE

Offices and positions held at the Company:
Director

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Franck Bruel, born on July 8, 1962, has served as Deputy CEO of ENGIE and has been a member of the Executive Committee and head of the France BtoB BU since December 2016. Franck Bruel has extensive experience in the services industry, both in France and abroad. He began his career at L'Oréal before joining the Pinault Distribution Group, followed by the Samse group, where he held marketing and sales positions. In 2000, he joined Saint-Gobain where he was successively appointed President of the Paris Region for the Point P group, then Chief Executive Officer of Dahl in Sweden in 2004, and Chief Executive Officer of Point P in 2006. In 2010, he joined the family-owned group Sonepar (world leader in the distribution of electrical equipment) as Chief Operating Director, before being appointed Chief Executive Officer of the Sonepar group. He joined ENGIE in 2016.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of **ANTALIS International** (France)
Terms of office within the ENGIE Group: Director of Axima Concept SA (France), ENGIE Energie Services SA (France) and Ineo SA (France)

Expired during the last five years

Various terms of office within the SONEPAR group between 2010 and 2016.

(1) **In bold:** listed company.

Francesco Caltagirone

50 years old
Italian

Business address:
Cementir Holding SpA
200, corso di Francia
00191 Rome, Italy

Main position:
Chairman and Chief Executive Officer of Cementir Holding SpA

Offices and positions held at the Company:
Independent Director and member of the Strategy Committee

Number of SUEZ shares held:
10,000 shares

BIOGRAPHY

Francesco Caltagirone Jr. was born in Rome on October 29, 1968. He began working at his family's company at the age of 20. After six years of experience in the building sector, he joined the Cementir Group in 1995. The company operates in the cement sector (specifically in the production and distribution of gray and white cement, ready-mix concrete, aggregates and concrete products) and also in waste management. He worked his way up in the group and in 1996, at the age of 27, he became its Chairman and CEO. Over the last 20 years, Francesco Caltagirone Jr. has been Chairman and Chief Executive Officer of the Cementir Group, showing deep knowledge and extensive experience in the cement and recycling sectors. Through a series of mergers and acquisitions he led and transformed an Italian company into a group having a multi-national presence in 17 countries and 5 continents, with EUR 1.3 billion in revenues and 3,600 employees.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current (1)

Terms of office within the Caltagirone Group: Chairman of the Board of Directors of **Caltagirone SpA** (Italy), Chief Executive Officer of Aalborg Portland Holding AS (Denmark)
Chairman and Chief Executive Officer of **Cementir Holding SpA** (Italy) and
Director of **Caltagirone Editore SpA** (Italy) (since April, 2018)

Expired during the last five years

Vice-Chairman of the Board of Directors of Cimentas AS (Turkey) and of Cimbeton AS (Turkey) (until April 18, 2017)
Director of Caltagirone Editore SpA (Italy) (until June 9, 2017) and ACEA SpA (Italy) (until April 27, 2017).

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(1) **In bold:** listed companies.

Delphine Ernotte Cunci

52 years old
French

Business address:
France Télévisions
7, esplanade Henri de France
75015 Paris, France

Main position:
Chairwoman of France Télévisions

Offices and positions held at the Company:
Independent Director, Chairwoman of the Ethics and Sustainable Development Committee and member of the Audit and Financial Statements Committee

Number of SUEZ shares held:
2,088 shares

BIOGRAPHY

Delphine Ernotte Cunci, born on July 28, 1966, is a graduate of École Centrale de Paris. She joined the France Telecom Group in 1989 and held various operational roles throughout the group, particularly in research and development. Delphine Ernotte Cunci then pursued her career with commercial management responsibilities, as Director of the distribution agency and Centre Val-de-Loire Regional Director, before becoming Director of Communications and Sponsoring for France. From 2010 to August 2014, she was Deputy Chief Executive Officer of the France Telecom/Orange Group and Executive Director of Orange France in charge of operations for the France Telecom Group in France. She has been Chairwoman of France Télévisions since August 22, 2015.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

Chairwoman of France Télévisions (France)
Director of the École Centrale de Paris (France) and of the cultural institution Le Cent-Quatre (France)
Chairwoman of the Board of Directors of École Nationale Supérieure de la Photographie in Arles (France)

Expired during the last five years

Deputy CEO of the France Telecom/Orange Group (France) and Executive Director of Orange France (France) (until August 2014).

Lorenz d'Este

63 years old
Belgian

Business address:
COBEPA
Rue de la Chancellerie, 2
1000 Brussels, Belgium

Main position:
Managing Partner of E. Gutzwiller & Cie

Offices and positions held at the Company:
Independent Director, Chairman of the Compensation Committee and member of the Appointments and Governance Committee and the Ethics and Sustainable Development Committee

Number of SUEZ shares held:
2,139 shares

BIOGRAPHY

Lorenz d'Este was born on December 16, 1955. After his studies at the University of Saint Gallen in Switzerland, he subsequently obtained a Master's degree in Economics and Politics from the University of Innsbruck, Austria. Lorenz d'Este joined the Swiss bank E. Gutzwiller & Cie in 1983, first as a banking executive and then as a Director. He became Managing Partner at E. Gutzwiller & Cie, Banquiers in 1990. He is also a Director of Six Group in Switzerland.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

Director of Six Group (Switzerland).

Expired during the last five years

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Isidro Fainé Casas

76 years old
Spanish

Business address:
La Caixa
Avenida Diagonal 621-629
Torre 2 – Piso 11
08028 Barcelona, Spain

Main position:
Chairman of Criteria Caixa

Offices and positions held at the Company:
Director and member of the Strategy Committee

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Isidro Fainé Casas, born on July 10, 1942, is Chairman of the Board of Trustees of La Caixa banking foundation and Chairman of Criteria Caixa. He holds a Doctorate in Economics, an International Senior Managers Program certificate in Business Administration from Harvard Business School, and is a graduate in Senior Management from the IESE Business School. He is a member of the Spanish Royal Academy of Economics and Finance and the Spanish Royal Academy of Doctors. He began his professional career in the banking sector as Investment Manager for Banco Atlántico in 1964, and was appointed as Chief Executive Officer of Banco de Asunción in Paraguay in 1969. He then returned to Barcelona, taking on various responsibilities in financial institutions: Director of Human Resources at Banca Riva y Garcia (1973), Advisor and Chief Executive Officer of Banca Jover (1974) and Managing Director of Banco Unión (1978). In 1982, he joined La Caixa as Deputy CEO, subsequently taking on various other positions. In April 1991, he was appointed Executive Assistant Managing Director and then, in 1999, Chief Executive Officer of the bank, of which he served as Chairman from June 2007 to June 2014. Isidro Fainé Casas is Honorary Chairman of the Naturgy Energy Group, Vice-Chairman of Telefónica and Director of The Bank of East Asia. He currently chairs Confederación Española de Cajas de Ahorros (the Spanish Confederation of Savings Banks) and is Chairman of the World Savings Banks Institute and Vice-Chairman of the European Savings Banks Group (ESBG). He is also Chairman of Confederación Española de Directivos y Ejecutivos (the Spanish Confederation of Directors and Executives), the Spanish section of the Club de Roma (Club of Rome) and of the Circulo Financiero (the Financial Circle). He is also a member of the Board of Trustees of the Prado National Museum.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Terms of office within La Caixa Group or in companies in which La Caixa holds an equity interest: Chairman of the Board of Trustees of La Caixa banking foundation (Spain), Chairman of Criteria Caixa (Spain), Chairman of Caixa Capital Risc (Spain), Vice-Chairman of Inmo Criteria Caixa (Spain), Vice-Chairman of **Telefónica** (Spain), Honorary Chairman of **Naturgy Energy Group** (Spain) and Director of **The Bank of East Asia** (Hong Kong)

Expired during the last five years

Chairman of Gas Natural (until February 2018) and of CaixaBank (until June 2016)
Director of Banco BIP (until October 2016)
1st Vice-Chairman of Repsol (until September 2016) and of Abertis (until May 2015)
2nd Vice-Chairman of Sociedad General de Aguas de Barcelona (until November 2014).

(1) **In bold:** listed companies.

Judith Hartmann

49 years old
Austrian

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris-La Défense, France

Main position:
Deputy CEO of ENGIE in charge of Finance and oversight of the North America and United Kingdom BUs

Offices and positions held at the Company:
Director and Member of the Audit and Financial Statements Committee

Number of SUEZ shares held:
2,000 shares (as a loan granted by ENGIE)

BIOGRAPHY

Judith Hartmann, of Austrian nationality born on June 15, 1969, received a Master's in International Business Administration and a Doctorate in Economics from WU Vienna University of Business Administration & Economics. She began her career in 1993 at the Canadian Department of Transportation in Ottawa. In 1997, she joined the Finance Department at Walt Disney Europe in France. In 2000 she joined GE, where she held various positions in finance over 12 years, first at GE Healthcare Europe in France and later at the headquarters of GE Healthcare in the United States, before becoming Chief Financial Officer of a subsidiary of GE Healthcare in 2004 and of GE Water Europe, Middle East & Africa (GE Energy) in Belgium (2007). She was appointed CFO in 2009 in Brazil, then Chief Executive Officer of GE Healthcare Latin America. In 2011, she became CFO of GE Germany. In 2012, she was appointed CFO and member of the Management Committee of the German Group Bertelsmann and non-executive Director of the RTL Group, and was a member of the Board of Directors of Penguin Random House LLC and Gruner & Jahr AG & Co KG until the end of 2014. In 2015, she joined ENGIE as Deputy CEO in charge of Finance. In 2016, she was appointed Deputy CEO of ENGIE in charge of Finance and oversight of the North America and United Kingdom BUs. She is also a non-executive Director at Unilever.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Non-executive Director at **Unilever** (United Kingdom/Netherlands)
Terms of office within the ENGIE group: Director of Electrabel (Belgium) and of the ENGIE Foundation (France)

Expired during the last five years

Director at Penguin Random House LLC (United States) (until 2014) and at Gruner & Jahr AG & Co KG (Germany) (until 2014)
Non-executive Director of the RTL Group (until 2014).

(1) **In bold:** listed company.

Isabelle Kocher

52 years old
French

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris-La Défense, France

Main position:
Chief Executive Officer and Director of ENGIE

Offices and positions held at the Company:
Director and member of the Strategy Committee

Number of SUEZ shares held:
4,475 shares (of which 2,000 as a loan granted by ENGIE)

BIOGRAPHY

Isabelle Kocher, born on December 9, 1966, is a graduate of École Normale Supérieure (ENS-Ulm) and a member of Corps des Mines. In 1997, she was appointed Budget Officer for Telecommunications and Defense at the French Ministry of the Economy. She was Industrial Affairs Advisor to the French Prime Minister's Office between 1999 and 2002. In 2002, she joined the SUEZ Group, where she held various positions (from 2002 to 2005 in the Strategy and Development Department; from 2005 to 2007 as Director of Performance and Organization; from 2007 to 2008 as Deputy Chief Operating Officer of Lyonnaise des Eaux; from 2009 to October 2011 as Chief Executive Officer of Lyonnaise des Eaux, in charge of water development in Europe). She was Deputy CEO of ENGIE in charge of Finance from October 2011 to November 2014. Isabelle Kocher was then appointed as Chief Operating Officer and Director of ENGIE. She has been Chief Executive Officer of ENGIE since May 3, 2016.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Terms of office within the ENGIE Group: Chief Executive Officer and Director of **ENGIE** (France), Chairwoman of Electrabel (Belgium) and Director of the ENGIE Foundation (France)

Expired during the last five years

Director of Axa (until April 25, 2018) (France)
Chief Operating Officer of ENGIE (until May 3, 2016) (France)
Vice-Chairwoman of Electrabel (until April 26, 2016) (Belgium)
Terms of office in various companies within the ENGIE Group.

(1) **In bold:** listed company.

Anne Lauvergeon

59 years old
French

Business address:
ALP
13, rue du Docteur Lancereaux
75008 Paris, France

Main position:
Chairwoman and Chief Executive Officer of ALP SA

Offices and positions held at the Company:
Independent Director, Chairwoman of the Appointments and Governance Committee and member of the Compensation Committee

Number of SUEZ shares held:
2,570 shares

BIOGRAPHY

Anne Lauvergeon, born on August 2, 1959, is a Chief Engineer from École des Mines, a former student of École Normale Supérieure, and also has a degree in Physics. She started her career in 1983 in the steel industry at Usinor. In 1984, she studied chemical safety-related issues in Europe for the Commissariat à l'Énergie Atomique (CEA), the French nuclear energy authority. From 1985 to 1988, she was in charge of subsoil administration in Île-de-France. In 1988, she was appointed Deputy Department Head at the Conseil Général des Mines. In 1990, Anne Lauvergeon was appointed Special Assistant for International Economy and Trade to the President of France, and in 1991 she was named Deputy Chief of Staff and Representative to the President of France for the organization of international summits (G7/G8). In 1995, she joined Lazard Frères as Managing Partner. In March 1997, Anne Lauvergeon joined the Alcatel Group as Deputy CEO of Alcatel Télécom. She joined the Executive Committee of the Alcatel Group in 1998. She supervised the group's international activities and was in charge of the group's shareholdings in the defense, energy, transportation and nuclear power sectors (Thomson, CSF, Alstom, Framatome). From June 1999 to July 2011, Ms. Lauvergeon was appointed Chairwoman and Chief Executive Officer of COGEMA (now Areva NC). She founded Areva in June 2001. She was Chairwoman of the Board of the Areva group from July 2001 to June 2011. Since 2011, Anne Lauvergeon has been the Chair of ALP SA, a consultancy and investment firm. Since 2013, Anne Lauvergeon has been Chairwoman of the Innovation Commission 2030. In 2014, she was appointed Chairwoman of the Board of Directors of Sigfox. In 2018, Anne Lauvergeon was appointed Co-Chairwoman of the Innovation Commission of the French employers' federation (MEDEF).

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current[1]

Director of **American Express** (United States), of **Koç Holding** (Turkey), of Avril Gestion (France) and of Alliance Minière Responsable (Guinea)
Chairwoman of the Board of Directors of Sigfox (France) and of IB2 (France)
Chairwoman and Chief Executive Officer of ALP SA (France)

Expired during the last five years

Chairwoman of the Board of Directors of BoostHeat (until September 29, 2017)
Director of Rio Tinto (until May 4, 2017), of Airbus (until May 2016), of Total (until May 29, 2015), and of Vodafone (until July 2014).

(1) **In bold:** listed companies.

Pierre Mongin

64 years old
French

Business address:
ENGIE
Tour T1
1, place Samuel de Champlain
Faubourg de l'Arche
92930 Paris-La Défense, France

Main position:
Deputy CEO, General Secretary, in charge of the Africa, Benelux, France Renewables, France Networks and France BtoC BUs, and of coordinating nuclear safety for ENGIE

Offices and positions held at the Company:
Director and member of the Compensation Committee

Number of SUEZ shares held:
2,000 shares (as a loan granted by ENGIE)

BIOGRAPHY

Pierre Mongin was born on August 9, 1954 and holds a Master's degree in Economics from the University of Paris I, as well as degrees from the Institut d'études politiques de Paris and the École nationale d'administration (Voltaire Class). In 1980, he held the position of Deputy Prefect in the Ain, Ariège and Yvelines departments. He became a technical advisor for the National Police in the French Interior Affairs Ministry in 1984, and then advisor to the Interior Affairs Minister for local authorities, and finally Chief of Staff to the deputy minister for the local authorities. He was in charge of administrative and financial affairs and relations with the Paris Council at the Paris Prefecture of Police from 1988 to 1993. In 1993, he became Chief of Staff to Prime Minister Édouard Balladur and Advisor for French Overseas Departments and Territories. In April 1993, he was appointed Prefect, first in the Eure-et-Loir, then in the Vaucluse, and from 1995 to 2004, Prefect of the Auvergne region and Prefect in the Puy de Dôme, where he was appointed Chief of Staff to the Minister of the Interior, and then in 2005 Chief of Staff to the French Prime Minister. From 2006 to 2015, he was Chairman and CEO of RATP (the Paris area transportation company). He has been Deputy CEO and General Secretary of ENGIE since July 1, 2015.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

Chairman of the Audit Committee and Director of CMA-CGM (France)
Director of CULTURESPACES (France)
Terms of office within the ENGIE Group: Chairman of ENGIE Énergie Services (France) and Director of Electrabel (Belgium) and of the ENGIE Foundation (France)

Expired during the last five years

Chairman and CEO of RATP (2006 to 2015).

Guillaume Pepy

60 years old
French

Business address:
SNCF
2, place aux Étoiles
93633 La Plaine-Saint-Denis, France

Main position:
Chairman of the Management Board of SNCF

Offices and positions held at the Company:
Independent Director, Chairman of the Audit and Financial Statements Committee and member of the Strategy Committee

Number of SUEZ shares held:
2,100 shares

BIOGRAPHY

Guillaume Pepy, born on May 26, 1958, studied at the École nationale d'administration and is a Legal Advisor to the Conseil d'État (France's highest administrative court). Guillaume Pepy has held various roles at SNCF (Director of Main Lines, then Investment, Economy and Strategy Director, and since 2003 Chief Executive Officer) and in ministerial offices (technical advisor to the office of Michel Charasse, then Chief of Staff for Michel Durafour and Chief of Staff for Martine Aubry). Since February 26, 2008, Guillaume Pepy has been Chairman and Chief Executive Officer, and subsequently, Chairman of the Management Board of SNCF (French railways).

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

Terms of office within the SNCF group: Chairman of the Management Board of SNCF (France) and Chairman and Chief Executive Officer of SNCF Mobilités (France)

Expired during the last five years

Member of the Supervisory Board of Systra (France) (until March 19, 2018).

Brigitte Taittinger-Jouyet

59 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Director

Offices and positions held at the Company:
Independent Director

Number of SUEZ shares held:
2,000 shares

BIOGRAPHY

Born on August 7, 1959, Brigitte Taittinger-Jouyet is a graduate of the Institut d'Études Politiques de Paris and holds a Master's in History from the Faculty of Human Sciences at Reims University. In 1984, she was appointed Advertising Manager at Publicis, before joining the Marketing Department within the Taittinger group in 1988, where she was in charge of industrial and hotel companies. From 1991 to 2012, she was Chairwoman and CEO of the perfume company Annick Goutal. From 1995 to 2015, she was also Vice-Chairwoman of Baccarat. Between 2013 and 2017, she was Director of Strategy and Development at Sciences Po Paris. She has been also a Director of HSBC France since 2008, of the Centre Pompidou since 2013 and of Fnac Darty since 2014.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current [1]

Director of HSBC France (France), of **Fnac Darty** (France) and of Centre Pompidou (France)

Expired during the last five years

Director of Miller Harris (subsidiary of Neo Capital) and of the Addoha group.

(1) **In bold:** listed company.

Directors representing employees

Enric Xavier Amiguet i Rovira

50 years old
Spanish

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Project Development at the Communication and Marketing Department of SUEZ Spain

Offices and positions held at the Company:
Director elected by employees (nominated by the European Works Council) and member of the Ethics and Sustainable Development Committee

Number of SUEZ shares held:
87 shares
41.37 units of the SUEZ Shareholding international mutual fund

BIOGRAPHY

Enric Xavier Amiguet i Rovira, born on November 21, 1968, is a graduate of the Catalan School of Public Relations and holder of a marketing degree from the ESIC Business and Marketing School. He also holds an Executive MBA from EADA Business School and participated in several training programs at the IFA. He joined Aguas de Barcelona in 1996, where he has held various positions. He started out in the Office of the Chairman in charge of Protocol, Public Relations and Press. In 2002, he joined the safety department, where he was responsible for customer relations. He then worked in the corporate marketing department, with a particular focus on digital and environmental matters. Since 2010, he has held project development roles within the customer management department. He is currently developing projects at the Corporate Communication and Marketing Department of SUEZ Spain.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

—

14

Agatta Constantini

54 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Project Manager at SUEZ

Offices and positions held at the Company:
Director elected by employees (nominated by the France Group Work Council), member of the Compensation Committee and of the Strategy Committee

Number of SUEZ shares held:
136 shares
159.35 units of the SUEZ Actionnariat France mutual fund

BIOGRAPHY

Agatta Constantini, born on February 23, 1965, holds a diploma in secretarial studies and communications. She joined Lyonnaise des Eaux in 1993 as a receptionist. She then became a switchboard operator. She participated in the creation of network scheduling in 1999 and held various positions there until 2007. She was appointed store manager in 2007, then senior purchasing technician in 2008. Agatta Constantini is currently a project manager at SUEZ.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

—

Director representing employee shareholders

Guillaume Thivolle

59 years old
French

Business address:
SUEZ
Tour CB21
16, place de l'Iris
92040 Paris-La Défense, France

Main position:
Project Director within the Group Human Resources Department (Training Department)

Offices and positions held at the Company:
Employee Shareholder Director and member of the Audit and Financial Statements Committee

Number of SUEZ shares held:
38 shares
452.6 units of the SUEZ Actionnariat France mutual fund

BIOGRAPHY

Guillaume Thivolle was born on July 16, 1959. He holds a diploma from the École Supérieure d'Administration des Entreprises (Paris), and has worked in several industrial groups: Pernod Ricard, Grosfillex and Alcatel, before joining the Environment sector, first with GLS and later with the IRH Ingénieur Conseil Group. He joined the teams at Degrémont in January 2011 and was then appointed, within the SUEZ Group, to head up the Water Treatment Services Development Division. He is now a Project Director in the SUEZ Group's Human Resources Department.

LIST OF OTHER MAJOR OFFICES AND POSITIONS HELD DURING THE LAST FIVE YEARS

Current

—

Expired during the last five years

—

Under the declaration of interests that must be made yearly by the Directors of the Company in accordance with the Code of Conduct relating to the prevention of market abuse, none of the members of the Board of Directors has declared to the Company that he/she:

- has family ties with other members of the Company's Board of Directors (including the Chairman or the Chief Executive Officer);
- has been convicted of fraud in the last five years;
- has participated as a manager in any bankruptcy, receivership or liquidation in the last five years;
- has been incriminated or received an official public sanction by statutory or regulatory authorities;
- has been barred by a court of law from acting as a member of an administrative, management or supervisory body of any issuer or participating in the management or business of any issuer in the last five years.

14.1.2 Management bodies

In order to successfully perform his mission, the Chief Executive Officer is assisted by a Management Committee, which is an analysis and decision-making body that examines the Group's major decisions and strategic objectives, and meets every two weeks.

The composition of the Management Committee was changed in 2018. As of December 31, 2018, it included 10 members together with Jean-Louis Chaussade:

Jean-Marc Boursier, born on October 5, 1967, worked as a Statutory Auditor for Mazars in Paris and London between 1993 and 1999. He holds a civil engineering degree from Telecom SudParis and a Master's degree in international finance from the École des hautes études commerciales (HEC Paris). He joined the SUEZ Group in 1999 as financial controller for Sita France (now SUEZ RV France). He became Head of Financial Control for Sita (now SUEZ) in 2000, then Head of Financial Control and Mergers and Acquisitions for Sita (now SUEZ) in 2001, and finally Head of Planning and Control for SUEZ in 2002. He was appointed CFO of SUEZ in 2004 and then Deputy CEO in charge of Finance and Procurement and CEO of Safege, SUEZ's consulting subsidiary, and has headed performance improvement plans starting in April 2013. In September 2015 he was appointed Group Deputy CEO for the Recycling and Recovery Europe segment. Since March 1, 2018, he has been Deputy CEO in charge of Finance and Recycling and Recovery in Northern Europe (United Kingdom, Germany, Benelux and Sweden).

Isabelle Calvez was born on March 1, 1965 and is a graduate of the Institut d'études politiques de Paris. She began her career at Thomson-CSF Group (now Thalès), where she worked both in Human Resources and in operations, where she was appointed Head of Strategy and International Cooperation for Electronic Warfare Communications Activities. In 2000, Isabelle Calvez joined the Canal+ Group as Head of Human Resources of Canal+ Technologies and Head of Human Resources for the group. Then, in 2003, she was appointed Head of Human Resources France and Benelux for Accenture, and in 2007, Head of Group Human Resources for Groupama. In 2012, she was appointed Head of Human Resources for Carrefour France. On April 18, 2017, Isabelle Calvez joined SUEZ as Head of Group Human Resources.

Bertrand Camus, born on February 9, 1967, is a graduate of the École nationale des Ponts et Chaussées. Prior to joining the SUEZ Group in 1994, he held various roles within the Project Financing division of BNP Paribas. He was Chief Operating Officer of the subsidiary Aguas Argentinas from 2000 to 2006, then Director of Internal Audit at SUEZ. From 2008 to 2015, he was Chief Executive Officer of United Water and SUEZ North America. In 2015, he was appointed Deputy CEO of the Water Europe division before being appointed Deputy CEO in charge of the Africa, Middle East, India, Asia and Australia-Pacific regions in 2018. On December 20, 2018, he was unanimously appointed by the Board of Directors Chief Executive Officer of SUEZ, subject to his appointment as a Director by the General Meeting of May 14, 2019.

Christophe Cros, born on August 3, 1959, was a magistrate at the Cour des comptes (1985-1989) and then Head of Financial Organization for the Centre National des Caisses d'Épargne. Mr. Cros studied at the École nationale d'administration (ENA), and is a graduate of the Institut d'études politiques de Paris and holds a Master's degree in Economics from Université de Paris I. He joined the SUEZ Group in 1991, where he became Chief Financing and Treasury Officer in 1993. From 1995 to 1998, he was Chief Operating Officer, then Chairman and Chief Executive Officer of Crédisuez, the division covering all the Group's real estate activities. He was appointed Chief Operating Officer of Sita (now SUEZ) in 1999, head of all European business activities in 2002, Chief Operating Officer of SUEZ in 2004, and Chief Executive Officer of Sita France (now SUEZ RV France) in 2007. In April 2013, Christophe Cros was appointed Deputy CEO in charge of the Recycling and Recovery Europe segment. In September 2015, he was appointed Group Deputy CEO in charge of Finance. Since October 2017, he has been Chairman of Water Technologies & Solutions (WTS), which combines the activities of the former GE Water, a company acquired in 2017, and SUEZ's industrial services. He oversees the partnership relations with CDPQ (Caisse des Dépôts et Placements du Québec), the proper integration of these activities within the Group, and the implementation of synergies.

Marie-Ange Debon, born on May 18, 1965, is a graduate of HEC and ENA and holds a Master's degree in law. In 1990, she started her career as a magistrate at the Cour des comptes. She then joined France 3 and was Management Director, then Deputy CEO for Resources. In 1998, she joined the Thomson Group as Deputy Chief Financial Officer and as of July 2003 as General Secretary. She joined SUEZ in 2008 as General Secretary in charge of legal affairs and auditing, and in 2009 took over responsibility for Water and Waste Projects, Information Systems, Risks/Investments, Insurance, and Procurement. She has been a Director and member of the Audit Committee of Technip since 2010. She was also a member of the Board of the French Financial Markets Authority (AMF) from 2008 to 2014 and Chairwoman of the Corporate Law Committee of MEDEF from 2009 to 2013. In April 2013, Marie-Ange Debon was appointed Group Deputy CEO in charge of the International segment. Since March 19, 2018, she has been Deputy CEO in charge of France, Italy, and Central Europe. Marie-Ange Debon has also been a Director of Arkema since May 18, 2018.

Jean-Yves Larrouturou, born on October 17, 1961, holds degrees from École Centrale Paris and from the École nationale d'administration. He began his career in the French Administration and has held various positions in the Ministry of Economy and Finance. In 2003, he joined the France Telecom Orange Group where he was General Secretary and Deputy CEO. On June 3, 2013 Jean-Yves Larrouturou was appointed General Secretary of the SUEZ Group. In April 2016 he was appointed Deputy CEO in charge of a division that includes the General Secretariat, Sustainable Cities, SUEZ Consulting, Chemicals and Pharmaceuticals Markets and Key Accounts, Innovation and Industrial Performance, Procurement and Information Technology. Since March 1, 2018, he has also been in charge of Key Industrial Accounts.

Heiner Markoff graduated from the University of Cologne with a degree in Business Administration and Economics. Before joining SUEZ, he spent 23 years working for General Electric where he held various management positions, including CEO of Water & Distributed Power, President of GE Plastics Europe/Middle East/Africa, Chief Executive Officer of the Automotive Division of GE Plastics Americas and CEO of GE Bayer Silicones. Prior to that, Heiner Markoff worked for the consulting firm Booz Allen & Hamilton, which specializes in strategy and IT consulting. He was appointed Chief Executive Officer of SUEZ Water Technologies & Solutions in September 2017.

Denys Neymon, born on June 18, 1960, worked for 10 years in the construction industry (Bouygues group) as Director of Human Resources. In 2002, Mr. Neymon joined the Group as Director of Human Resources of Degrémont. He has degrees in law (1983) and human resources (1984). In 2004, he was appointed Head of Human Resources of SUEZ. He has been CEO of the Water and Waste Treatment Solutions Global Business Line since September 1, 2015.

Frédérique Raoult, born on July 13, 1966, is a graduate of the Institut d'études politiques de Paris and holds a Master's degree in history. She has held a number of communication positions relating to the environment within the Group. In 1997, she joined Degrémont as Director of Communications. Director of Communications of SUEZ since 2004, Frédérique Raoult has been a member of the SUEZ Management Committee since January 1, 2009. In April 2013, Frédérique Raoult was appointed Group Director of Sustainable Development and Communications.

Angel Simon, born on November 9, 1957, holds a degree in civil engineering *(Ingeniero de Caminos, Canales y Puertos)* from the Universidad Politécnica in Barcelona (1980) and an MBA from ESADE. From 1989 to 1995 he was Director of the Barcelona Urban Community. He joined Agbar in 1995 as the Group's representative in Portugal before being appointed in 1998 as Chief Executive Officer of the International segment for the Water and Wastewater division. In 1999, he became Head of Aguas Andinas, SA in Chile, one of the largest wastewater companies in Latin America, which provides services to more than six million inhabitants of Santiago and its surrounding communities. In 2002, he was appointed Chief Executive Officer of Aguas de Barcelona and of the Water and Wastewater division of the Agbar Group, before becoming Chief Executive Officer of the Agbar Group in September 2004. Since June 2010, Angel Simon has served as Chairman of Aguas de Barcelona (Agbar). Angel Simon is also the Chairman of Aqualogy, the integrated water solutions brand launched by Agbar. In April 2013, Angel Simon was appointed Group Deputy CEO in charge of the Water Europe segment. Since March 19, 2018, he has been Deputy CEO in charge of Spain and the North America and Latin America regions.

The Company has an Executive Committee, which is a Group policy management and implementation body that meets approximately every two months. It includes the 11 members of the Management Committee as well as the Chief Executive Officers of the main business units and support function representatives. Its exact composition is detailed on the Company's website (www.suez.com).

14.2 Conflicts of interest within administrative bodies and General Management

The Company has put in place various mechanisms to prevent any conflict between the private interests of its Directors and those of the Company.

The Director's Charter (as annexed to the Board of Directors' Internal Regulations) stipulates that every Director must inform the Board of any conflict of interest, even potential, in which he or she could be directly or indirectly involved. In the event that a Director cannot avoid being in conflict of interest, he or she must refrain from participating in discussions and any decisions on the relevant matters.

Moreover, the Board of Directors, under the recommendation of the Appointments and Compensation Committee, adopted a Code of Conduct in 2012 in relation to the prevention of market abuse, updated in 2016 in order to take into account the provisions of EU Regulation 596/2014. This code:

- sets internal procedures for identifying privileged information and, as the case may be, for deciding to defer the publication of such information;
- recalls legal and regulatory provisions concerning crime and insider trading, and the rules applicable to the Company's list of insiders;
- sets "blackout periods" during which members of the Board of Directors, Management Committee, Executive Committee and certain management positions having access to Company financial information before its publication must withhold from engaging in transactions involving Company shares, as follows:
  - a period of 30 days prior to the publication of the Company's annual and interim results, until two days after their publication, and

- a period of 15 days prior to the publication of the Company's first- and third-quarter results, until two days after their publication;

- recalls the obligation of Corporate Officers and certain "Top Executives" of the Group to report transactions involving Company shares;
- establishes the obligation for Directors to make an annual declaration of interests, indicating in particular any potential conflict of interest that could exist between their duties to the Company and other duties or private interests.

Under the declaration of interests made yearly by all the Directors of the Company at the end of 2018, none of the members of the Board of Directors (including the CEO) has declared to the Company that he/she is in potential conflict of interest between his/her duties toward the Company and other private duties or interests.

Furthermore, to the Company's knowledge, as of the date of this Reference Document, no member of the Board of Directors or the Chief Executive Officer enjoy benefits as a result of service contracts between them and the Company or any of its subsidiaries.

15 compensation and benefits

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15

15.1 Compensation and benefits in kind

15.1.1 Compensation policy for the Chairman of the Board of Directors and the Chief Executive Officer

The compensation policies for the Chairman of the Board of Directors and the Chief Executive Officer described below were established in application of Article L. 225-37-2 of the French Commercial Code. They present the principles and criteria for the determination, breakdown, and allotment of the elements making up total compensation and benefits of any kind for which the Chairman of the Board of Directors and the Chief Executive Officer are eligible due to their office.

These compensation policies will be subject to a vote during the Combined Shareholders' Meeting of May 14, 2019.

The term of office of the Chief Executive Officer, Jean-Louis Chaussade, will end on May 14, 2019. On December 20, 2018, the Board of Directors appointed Bertrand Camus as Chief Executive Officer with effect from May 14, 2019, subject to his appointment as a Director. This chapter therefore presents the compensation policy applicable to the Chief Executive Officer, firstly for the period January 1 to May 14, 2019 and, secondly, for the period from May 14 to December 31, 2019.

The term of office of the Chairman, Gérard Mestrallet, will also end on May 14, 2019. The Board of Directors appointed Jean-Louis Chaussade as Chairman from May 14, 2019. This chapter therefore presents the compensation policy applicable to the Chairman, firstly for the period January 1 to May 14, 2019 and, secondly, for the period from May 14 to December 31, 2019.

Compensation policy for the Chairman of the Board of Directors

The compensation policy recommended by the Compensation Committee for the Chairman has been drawn up by the Board of Directors, in application of the principles for determining compensation for Corporate Officers set out in the AFEP-MEDEF Code. The Board of Directors reviewed the principles governing this compensation policy, as described below, at its meeting of February 26, 2019, in the context of the appointment of a new Chairman from May 14, 2019. The Board of Directors decided it was appropriate to draw a distinction between the compensation policy that applied to the Chairman of the Board of Directors for the period from January 1 to May 14, 2019 and the policy for the period from May 14 to December 31, 2019.

Description of the compensation policy applicable to the Chairman

FOR THE PERIOD FROM JANUARY 1 TO MAY 14, 2019:

The compensation policy for the Chairman of the Board of Directors was determined in 2014 by the Board of Directors, upon recommendation of the Compensation Committee. It has remained unchanged since that date and was renewed for the period from January 1 to May 14, 2019.

Under this policy, the Chairman of the Board of Directors, whose duties are described in chapter 16.4 of this Reference Document, does not receive any compensation for his office apart from Directors' fees allotted to him under the allotment rules set by the Board of Directors on the recommendation of the Compensation Committee (these rules are described in section 15.1.4 below), which have also remained unchanged since 2014. This compensation policy is covered by resolution 10 of the Shareholders' Meeting of May 14, 2019, which is set out in chapter 26 of this Reference Document. The policy is described below.

The Chairman of the Board of Directors receives the following Directors' fees:

- a fixed annual amount of EUR 15,000, applicable to each Director;
- a variable amount of EUR 4,000 per Board meeting;
- a variable amount of EUR 4,000 per meeting of the Strategy Committee, which is chaired by the Chairman of the Board of Directors.

It should be noted that the amount of Directors' fees will be reduced, based on the attendance rate, in the event that the annual amount of EUR 700,000 set by the Shareholders' Meeting is exceeded, and that the Board of Directors may decide to share the unpaid balance, depending on the attendance rate of each Director, in the event that the amount has not been used in full.

The Chairman of the Board of Directors receives no other element of compensation or benefits from the Company.

FOR THE PERIOD FROM MAY 14 TO DECEMBER 31, 2019:

Given the start date of the term of office of the Chairman, Jean-Louis Chaussade, on May 14, 2019, the Board of Directors, on the recommendation of the Compensation Committee, has defined a new compensation policy that will be applicable from May 14, 2019. The policy has been drawn up on the basis of studies and analyses by independent experts in order to match the market practices of similar companies with a governance structure in which the duties of the Chief Executive Officer and the Chairman of the Board of Directors are separate. This compensation policy is covered by resolution 11 of the Shareholders' Meeting of May 14, 2019, which is set out in chapter 26 of this Reference Document. The policy is composed of a gross annual fixed compensation of EUR 250,000. The Chairman of the Board of Directors may also benefit from a company car.

The Chairman of the Board of Directors does not receive Directors' fees. In accordance with the recommendations of the French AFEP-MEDEF Code, the Chairman is not entitled to variable compensation.

Compensation policy for the Chief Executive Officer

The compensation policy recommended by the Compensation Committee for the Chief Executive Officer has been developed by the Board of Directors in accordance with the principles for determining compensation for executive and Corporate Officers set out in the AFEP-MEDEF Code. The Board of Directors reviewed the principles governing this compensation policy, as described below, at its meeting of February 26, 2019, in the context of the appointment of a new Chief Executive Officer from May 14, 2019. The Board of Directors therefore decided it was appropriate to draw a distinction between the compensation policy applicable to the Chief Executive Officer for the period from January 1 to May 14, 2019 and the policy for the period from May 14 to December 31, 2019, so as to take into account the different personal situations of the current Chief Executive Officer, who has claimed retirement benefits since 2014, and the future Chief Executive Officer.

General principles for determining the compensation of the Chief Executive Officer

The Board of Directors and the Compensation Committee determine the compensation policy for the Chief Executive Officer on the basis of the following principles:

- comparability and competitiveness: the Compensation Committee makes recommendations and proposals and submits them to the Board of Directors, drawing on studies and analyses by independent experts of the market practices of similar companies;
- balance: the Compensation Committee and the Board of Directors ensure that there is proper balance between the elements comprising the total compensation of the Chief Executive Officer, in particular between short- and long-term elements of compensation;
- alignment with the interests of shareholders: the Compensation Committee ensures that the compensation allotted to the Chief Executive Officer is determined in a manner consistent with Group performance (on financial, strategic, environmental and corporate levels). A significant proportion of total compensation is subject to meeting both short-term and long-term performance criteria;
- stability: the compensation policy must be sustainable, as criteria determining this compensation are only reviewed at lengthy intervals. This policy may be adjusted, however, if necessary to adapt to changes of objectives adopted by the Group or in the event of a major operation with a significant impact on the Group's scope. The compensation policy for the Chief Executive Officer will also be reviewed by the Board of Directors in the event of the succession of the Chief Executive Officer. The Board of Directors then carries out an overall analysis of the situation of the Chief Executive Officer and provides its opinion on all of the elements of compensation (fixed, annual variable and long-term variable compensation, supplementary pension plans, severance pay, etc.), taking into account the existing practices within the Company and the individual compensation awarded to the Chief Executive Officer in the past.

Description of the compensation policy applicable to the Chief Executive Officer

FOR THE PERIOD FROM JANUARY 1 TO MAY 14, 2019:

Given the expiration of Jean-Louis Chaussade's term of office as Chief Executive Officer on May 14, 2019, the Board of Directors, on the recommendation of the Compensation Committee, has defined a specific compensation policy for this period, composed of the elements shown below. The policy is covered by resolution 13 of the Shareholders' Meeting on May 14, 2019, which is set out in chapter 26 of this Reference Document.

- **annual fixed compensation** (including annuities paid in respect of pension plans) determined according to the Chief Executive Officer's experience, years of service and market standards for similar positions.

  This fixed compensation is set at an annual gross amount of EUR 750,000 (including annuities paid under the general scheme of the National Pension Fund (CNAV) and the mandatory AGIRC-ARRCO scheme) and will be calculated *pro rata* until May 14, 2019;
- **annual variable compensation** intended to motivate and reward executives when the Company meets annual financial and non-financial objectives. The main characteristics of the annual variable compensation are as follows:
  - amount: between 0% and 145% of fixed annual compensation (the achievement of set objectives corresponds to a variable amount equivalent to 80% of fixed compensation),
  - conditions governing compensation: these are based on achieving quantifiable objectives (accounting for 75% of the award), meaning criteria related to changes in the share price or financial criteria and set consistent with objectives and forecasts communicated to the market by the Group, with levels that can be identified by the public, as well as qualitative objectives (accounting for 25% of the award) during the fiscal year. The nature of these objectives, as well as their expected level of achievement, are determined at the beginning of each year.

    The performance criteria for 2019, which will be assessed by the Board of Directors based on the Company's consolidated accounts to December 31, 2019, are as follows:
    - quantifiable criteria, representing 75% of the overall weighting of the variable amount, relating to EBIT (20%), Free Cash Flow (20%), ROCE (10%) and total shareholder return (25%), and
    - qualitative criteria, representing 25% of the overall weighting of the variable amount, relating to the managerial transition and results in terms of health and safety.

    The amount of the annual variable compensation attributable for each of the quantifiable criteria is calculated as follows:

	Minimum	Target objective	Maximum	Remarks
Quantifiable criteria	Amount equal to 0 if the achievement level is below 80% of the target objective.	Amount equal to 80% if the achievement level is 100% (target objective achieved).	Amount equal to 145% if the achievement level is 120% of the target objective.	Straight line calculation between milestones.

The amount determined pursuant to these performance criteria will be considered on a *prorata* basis, taking into account Jean-Louis Chaussade's actual period of work as Chief Executive Officer during 2019.

In accordance with Article L. 225-100 of the French Commercial Code, payment of the annual variable compensation is contingent upon approval at the annual Shareholders' Meeting called to approve the 2019 financial statements.

The Chief Executive Officer is entitled to a company car and the group health care plan for Company employees. The Chief Executive Officer will not receive any long-term compensation for 2019 due to the imminence of the conclusion of his term of office.

FOR THE PERIOD FROM MAY 14 TO DECEMBER 31, 2019:

Given the start date of the term of office of Bertrand Camus as Chief Executive Officer on May 14, 2019 (subject to his appointment as a Director by the Shareholders' Meeting), the Board of Directors, on the recommendation of the Compensation Committee, has defined a new compensation policy that will be applicable from May 14, 2019. This policy has been adapted to consolidate the alignment between the interests of the Chief Executive Officer and those of shareholders, by increasing the weighting of long-term compensation and the obligation to invest in and own shares on the one hand and by increasing performance-related compensation (while keeping fixed compensation at the same level since 2009) on the other. The policy further takes into account the personal situation of the individual in question (age, years of service with the Company, experience, etc.) and considers independent expert studies and analyses of the market practices of comparable companies in order to provide a competitive compensation policy that allows the Company to retain or attract high-level executives within the Group. This compensation policy is covered by resolution 14 of the Shareholders' Meeting of May 14, 2019, which is set out in chapter 26 of this Reference Document. The policy is described below.

► Elements related to the Chief Executive Officer taking up office

- **Welcome bonus:** in accordance with the AFEP-MEDEF Code, no allowance may be granted for the Chief Executive Officer taking up office when this individual is selected from the Group's existing executives.
  Bertrand Camus therefore receives no allowance for his appointment as Chief Executive Officer.
- **Employment contract:** the Chief Executive Officer, in accordance with the recommendation of the AFEP-MEDEF Code, decided to terminate his employment contract by resigning. This resignation will take effect subject to his appointment as a Director at the Shareholders' Meeting of May 14, 2019 and the subsequent start date of his term of office as Chief Executive Officer.
  The termination of the employment contract does not give rise to the payment of an allowance.

► Elements of compensation linked to the term of office of the Chief Executive Officer

- **Annual fixed compensation:** the purpose is to retain and attract high-level and experienced executives *via* a consistent and competitive compensation plan. It is calculated taking into account the Chief Executive Officer's experience, seniority and common market practices for similar positions.
  It is intended to be stable, only changing over relatively longer periods or following significant changes in the Group's scope.

  Applying these principles, the Board of Directors, at its meeting of February 26, 2019, followed the recommendation of the Compensation Committee in maintaining the Chief Executive Officer's fixed compensation for 2019 at EUR 750,000 (this amount is unchanged since 2009). This amount will be calculated on a *prorata* basis in 2019 given that Bertrand Camus starts his term of office as Chief Executive Officer on May 14, 2019.
- **Annual variable compensation:** the purpose is to motivate and reward executives when the Company meets annual financial and non-financial objectives.
  The main characteristics of the annual variable compensation are as follows:
  - amount: between 0% and 150% of fixed annual compensation (the achievement of set objectives corresponds to a variable amount equivalent to 100% of fixed compensation),
  - conditions governing compensation: the award of compensation is based on achieving specific, predetermined, diversified and demanding objectives that enable a comprehensive analysis of performance aligned with corporate issues and strategy and with shareholders' interests. These objectives must include both quantifiable financial criteria (accouting for 75% of the award), determined in accordance with the objectives and forecasts released by the Group to the market, with levels that can be observed by the public, or related to Group commitments on social and environmental responsibility, and criteria that are qualitative in nature (accouting for 25% of the award) over the course of a year.

    The amount of the annual variable compensation attributable to each of the quantifiable criteria is calculated as follows, with the triggering threshold being raised from 80% to 85% of the target objective:

	Minimum	Target objective	Maximum	Remarks
Quantifiable criteria	No allocation if the achievement level is less than 85% of the target objective.	Amount equal to 100% if the achievement level is 100% (target objective achieved).	Amount equal to 150% if the achievement level is 120% of the target objective.	Straight line calculation between milestones.

The nature of these objectives, as well as their expected level of achievement, are determined at the beginning of each year.

Due to how strategic these principles are, and since the Group already had pre-determined targets defined on these topics, at its meeting of February 26, 2019, the Board of Directors applied these principles and followed the recommendation of the Compensation Committee in deciding to include a quantifiable criterion for 2019 linked to the Group's social and environmental responsibility commitments and therefore set the performance criteria applicable to the annual variable compensation as follows, with financial criteria being in line with indicators used for forecasts disclosed to the market:

  - quantifiable criteria, representing 75% of the overall weighting of the variable amount, relating to EBIT (20%), Free Cash Flow (20%), Revenues (10%), total shareholder return (15%) and the Group's health and safety results (10%), and
  - qualitative criteria, representing 25% of the overall weighting of the variable amount, relating firstly to the managerial transition and secondly to the Company's strategy and project and the management of their implementation.

  The Board of Directors will assess the level of achievement of the performance criteria at its meeting to approve the SUEZ Consolidated Financial Statements for 2019. The amount thus determined will be considered on a *prorata* basis, taking into account Bertrand Camus' actual period of work as Chief Executive Officer.

  In accordance with Article L. 225-100 of the French Commercial Code, payment of the annual variable compensation is contingent upon approval at the annual Shareholders' Meeting called to approve the 2019 financial statements.

- **Long-term variable compensation:** mainly to retain executives and align their interests with those of the Company and its shareholders.
  The main characteristics of the long-term variable compensation are as follows:

  - type: fully linked to the Company's market price and may take the form of performance units (variable compensation in cash, in an amount which is indexed to the share price) or the allocation of performance shares,
  - amount: the value of the long-term variable compensation of the Chief Executive Officer may not exceed 50% of the Chief Executive Officer's total compensation (total of fixed compensation, annual variable compensation paid in respect of the previous year and the value of the long-term variable compensation awarded),
  - performance conditions: this variable long-term compensation is fully subject to the achievement of two performance conditions, assessed over a minimum period of three years, namely an "internal" performance condition established on the basis of a financial indicator audited and disclosed by the Company, consistent with the forecasts and/or objectives published by the Group, as well as the Group budget and medium-term plan (for example, EBIT for the latest long-term variable compensation plans implemented). The second condition concerns an "external" performance requirement, used to evaluate the Company's performance compared to a panel of similar companies (for example the average change in the Total Shareholder Return (TSR) for the Company over a three-year period, compared to changes in the TSR of the Euro Stoxx Utilities index over the same period). A non-financial performance requirement related to the Group's corporate and environmental responsibility policy is also included,
  - service condition: the allocation of long-term variable compensation is subject to a service condition of a minimum of three years. As such, in the event of the departure of the Chief Executive Officer before the service condition is met, the rights related to long-term compensation plans will be lost unless the Chief Executive Officer claims retirement benefits (in which case, the rights are fully maintained but remain subject to the performance conditions) or unless it is a non-voluntary departure following a change of control or change of strategy (in which case, the rights are maintained in proportion to the duration of service within the Group but remain subject to the performance conditions),
  - obligation to hold shares: the Chief Executive Officer has agreed, until the end of his or her term of office, to hold 25% of the performance shares vested, or to reinvest in shares 25% of the amount actually received for performance units, up to a number of registered shares held by the Chief Executive Officer equal to twice the fixed compensation. Finally, the Chief Executive Officer has agreed not to engage in hedging transactions with respect to the performance shares or stock options that he or she receives from the Company.

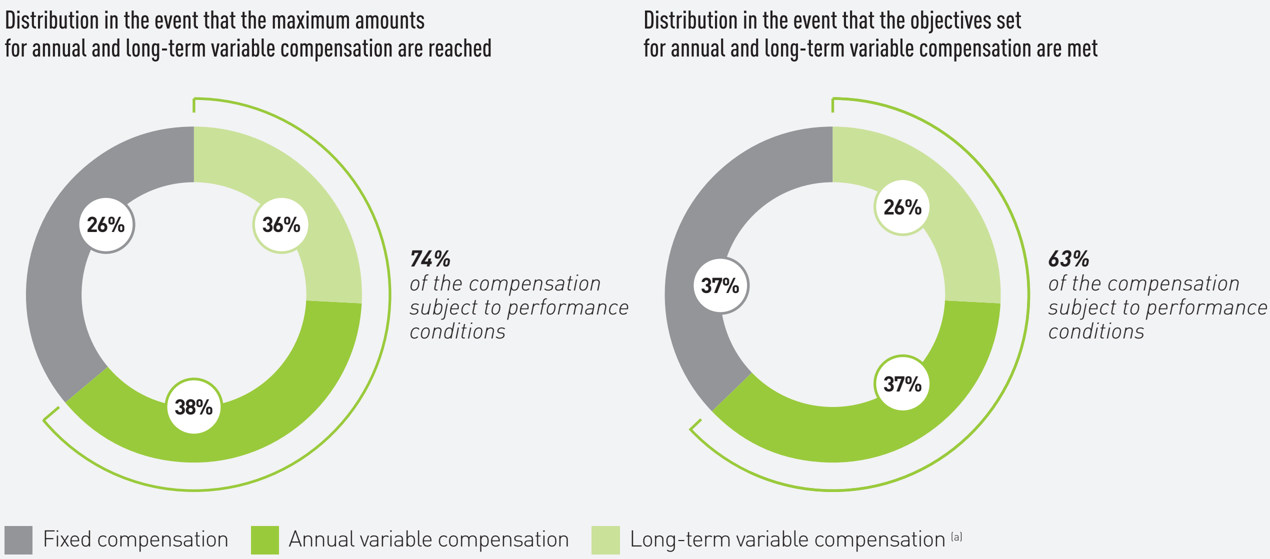
  The Board of Directors, at its meeting of February 26, 2019, followed the recommendation of the Compensation Committee in deciding that for 2019, this long-term variable compensation would be allocated in the form of performance units (payment in cash whose amount is determined in consideration of the share price). The allocation itself, as well as the related performance conditions, will be determined by the Board of Directors during the third quarter, after the new Chief Executive Officer has taken up office.

- **Exceptional compensation:** in accordance with Article 24.3.4 of the AFEP-MEDEF Code, the Board of Directors may decide to pay exceptional compensation to the Chief Executive Officer only under circumstances resulting in a significant change in the scope of the Group. In this case, payment of this exceptional compensation would then be entirely subject to the achievement of the performance conditions.
  Since the Company's IPO in 2008, the Board of Directors has only enacted exceptional compensation once, in connection with the acquisition of the GE Water & Processes Technologies business in 2017. It should be noted that pursuant to Article L. 225-100 of the French Commercial Code, the payment of exceptional compensation is conditional upon the approval of the Annual Shareholders' Meeting.

- **Benefits in kind:** the Chief Executive Officer has the use of a company car.
  The Board of Directors decided that he would continue to be entitled to the Group health care and insurance plans applicable to SUEZ employees. Under Articles L. 225-38 *et seq.* of the French Commercial Code, these commitments to the Chief Executive Officer in respect of Group health care and insurance plans will be subject to the approval of the SUEZ Shareholders' Meeting of May 14, 2019.

- **Directors' fees:** the Chief Executive Officer does not receive Directors' fees.

The weighting of the fixed, annual variable and long-term variable elements (excluding exceptional compensation) in the total compensation of the Chief Executive Officer is as follows:



(a) Valuation at the date of allocation.

Elements related to the termination of the term of office or subsequent to the term of office of the Chief Executive Officer

- **Severance pay:** may be granted taking into account the Chief Executive Officer's personal situation on the date of taking up office.

  As such, the Board of Directors, having taken note of the termination of the employment contract of Bertrand Camus and, consequently, the loss of existing contractual and legal arrangements in this regard in the event of redundancy, decided, at its meeting of February 26, 2019, to grant compensation to Bertrand Camus in the event of forced departure from the position of Chief Executive Officer (in particular following dismissal or resignation linked to a change of control or strategy of the Company).

  No compensation would be payable in the following cases:

  - if the departure occurs less than two years after the start date of the Chief Executive Officer's term of office or in the event of resignation, unless the departure follows a change of control of the Company or a change of strategy,
  - in the event of a change of duties within the SUEZ Group,
  - if the departure, regardless of its form, is a consequence of gross negligence or misconduct by the Chief Executive Officer,
  - if the Chief Executive Officer has the opportunity to claim retirement benefits as of the date of departure,
  - if the age limit for exercising the office of Chief Executive Officer has been reached, or
  - in the event of death.

  The amount of severance pay is capped at two years of annual fixed and variable compensation. The variable compensation to be taken into account when calculating severance pay will correspond to the average of the previous two annual variable compensation amounts actually paid to the Chief Executive Officer.

  Furthermore, severance pay may only be paid after prior assessment by the Board of Directors of the achievement of the performance conditions, assessed on the expiration date of the Chief Executive Officer's term of office. These performance conditions correspond to the levels of achievement of the quantifiable performance criteria set by the Board of Directors at the beginning of each year for the calculation of the Chief Executive Officer's annual variable compensation.

  As a result, if the average amount obtained by the Chief Executive Officer in accordance with quantifiable criteria for the three years prior to departure is greater than or equal to the target amount of the annual variable compensation, then 100% of the severance pay will be payable to the Chief Executive Officer. If the average amount obtained is on average between 90% and 100% (excluding) the target amount for the three years prior to departure, 70% of the amount of the severance pay will be payable to the Chief Executive Officer. If the average amount obtained is on average less than 90% (excluding) of the target amount for the three years prior to his departure, no severance pay will be payable to the Chief Executive Officer. If the Chief Executive Officer leaves before the end of the third fiscal year, then fulfillment of the performance condition will be assessed on one or two years only, depending on how long the Chief Executive Officer remained in the position.

  Under Article L. 225-42-1 of the French Commercial Code, the commitments made to the Chief Executive Officer in respect of this termination benefit will be subject to the approval of a special resolution by the SUEZ Shareholders' Meeting of May 14, 2019. The resolution will be decided on the basis of a Statutory Auditors' Special Report, the auditors being notified of this commitment.

- **Non-compete commitment:** may be implemented in respect of the Chief Executive Officer in order to protect the legitimate interests of the Company, given the duties exercised by the Chief Executive Officer and the strategic, confidential information to which he or she has access in this context.

At its meeting of February 26, 2019, the Board of Directors therefore decided, in return for a commitment from Bertrand Camus not to exercise, directly or indirectly, any activity that competes with that of the Company or SUEZ Group companies for a period of two years from the end of his term of office as Chief Executive Officer, irrespective of the reason for the cessation of his duties, to grant him a payment of an amount equal to one year's compensation (fixed and variable amounts, the variable compensation considered for the calculation of this payment being the average of the last two annual variable compensation amounts actually paid to the Chief Executive Officer), paid in the form of 24 equal, successive monthly installments.

In accordance with the AFEP-MEDEF Code, the total severance pay and non-compete compensation may not, under any circumstances, exceed two years' compensation (fixed and variable, the variable compensation considered for the calculation of this payment being the average of the last two annual variable compensation amounts actually paid to the Chief Executive Officer). Accordingly, if the Board of Directors was to decide to implement the non-compete commitment, the amount of the severance pay would be capped at one year's compensation.

The non-compete compensation will not, under any circumstances, be paid if the Chief Executive Officer claims retirement benefits or if he/she is aged over 65 at the end of his/her term of office as Chief Executive Officer.

Furthermore, the Board of Directors may waive the implementation of this non-compete commitment at the time of the Chief Executive Officer's departure, in which case no compensation is then payable.

Under Articles L. 225-38 *et seq.* of the French Commercial Code, the commitments to the Chief Executive Officer in respect of non-compete compensation will be subject to the approval of the SUEZ Shareholders' Meeting of May 14, 2019.

- **Retirement plan:** the Chief Executive Officer may be entitled to a pension plan established by the Company.

Since 2006, Bertrand Camus has been entitled under his employment contract to a defined benefit pension plan (under Article L. 137-11 of the French Social Security Code) applicable to employees of the Company, and has acquired potential pension rights under this plan. These rights will be maintained provided that Mr. Camus serves out the rest of his career with the Company. The termination of Bertrand Camus' employment contract, to which he agreed subject to his appointment as a Director by the Shareholders' Meeting of May 14, 2019, will result in the permanent waiver of the rights accrued under this plan.

The Board of Directors has looked at the cost that would be entailed in maintaining the Chief Executive Officer in this system. On completion of the review, the Board felt that setting up another optional defined contribution pension plan would be in the Company's interests insofar as the cost of this plan is significantly lower than the current defined benefits scheme, while remaining competitive for the beneficiary.

Consequently, the Board of Directors decided at its meeting of February 26, 2019 that the Chief Executive Officer would be entitled to optional membership of this defined contribution pension plan set up by the Company, which is governed by the provisions of Article 82 of the French General Tax Code and provides the beneficiary with the guarantee of an additional retirement income benefit or in the form of an annuity or a cash sum when he claims his pension entitlement. In this regard, the Company will pay an annual amount, linked to the Group's performance, corresponding to 30% of the fixed compensation and the annual variable compensation paid to the Chief Executive Officer, on the understanding that this amount will be paid in cash by the Company. Half will be paid to the insurer responsible for managing the plan and half to the Chief Executive Officer, given the immediate taxation on payments made into this new plan.

Although the payments made by the Company under the defined contribution pension plan do not guarantee the Chief Executive Officer a level of annuity equivalent to the amount he would have received had he stayed in the defined benefit plan (subject to serving out the remainder of his career with the Company), this change allows the Chief Executive Officer to accrue certain rights and the Company to make an estimated saving of 47% (comparing the cost of the two plans until the age at which the Chief Executive Officer may claim retirement benefits).

Under Articles L. 225-38 *et seq.* of the French Commercial Code, the commitment to the Chief Executive Officer in respect of this defined contribution pension plan will be subject to the approval of the Shareholders' Meeting of May 14, 2019.

15.1.2 Total compensation of the Chief Executive Officer

Compensation for 2018

The tables below summarize the compensation of the Chief Executive Officer, the Company's sole corporate executive officer, according to the model defined by the AFEP-MEDEF Code and AMF recommendations.

SUMMARY TABLE OF COMPENSATION, OPTIONS AND SHARES ALLOCATED TO THE CHIEF EXECUTIVE OFFICER – GROSS AMOUNTS (IN EUROS)

Jean-Louis Chaussade, Chief Executive Officer	Fiscal year 2018	Fiscal year 2017	Fiscal year 2016
Compensation due for the year (see breakdown below)	1,426,788	1,301,471	1,397,828
Valuation of long-term compensation plans allocated during the year (according to IAS 19 revised)	–	166,386	254,389
Valuation of options or performance shares allocated during the year	–	–	–
Valuation of exceptional compensation allocated during the year (according to IAS 19 revised)	1,478,826	–	–
Total	**2,905,614**	**1,467,857**	**1,652,217**

SUMMARY TABLE OF THE CHIEF EXECUTIVE OFFICER'S COMPENSATION (IN EUROS)

	Amounts in fiscal year 2018		Amounts in fiscal year 2017		Amounts in fiscal year 2016	
Jean-Louis Chaussade, Chief Executive Officer	due	paid	due	paid	due	paid
Fixed compensation [a]	750,000	750,000	750,000	750,000	750,000	750,000
Variable compensation	666,415 [b]	541,098 [c]	541,098	637,455 [c]	637,455	940,292 [c]
Long-term compensation	–	351,000 [d]	–	750,000 [e]	–	–
Exceptional compensation	–	–	–	–	–	–
Benefits in kind	10,373	10,373	10,373	10,373	10,373	10,373
Total	**1,426,788**	**1,652,471**	**1,301,471**	**2,147,828**	**1,397,828**	**1,700,665**

(a) Including contributions under the general social security retirement plan (CNAV) and under the mandatory supplementary pension plans (AGIRC and ARRCO).
(b) Subject to approval by the Shareholders' Meeting of May 14, 2019.
(c) Variable compensation paid corresponds to the variable compensation in respect of year n-1.
(d) The payment of EUR 351,000 in 2018 corresponds to long-term variable compensation granted for the 2015 fiscal year.
(e) The payment of EUR 750,000 in 2017 corresponds to long-term variable compensation granted for the 2014 fiscal year.

The gross fixed compensation for Jean-Louis Chaussade has remained unchanged since 2009 and amounts to EUR 750,000 for 2018. Since August 1, 2014, the amount of the annuities paid to Jean-Louis Chaussade under the general social security retirement plan of the National Pension Fund (CNAV) and under the mandatory supplementary pension plans ARRCO and AGIRC has been deducted from the amount paid by the Company, and the total fixed compensation actually paid by SUEZ to Jean-Louis Chaussade in 2018 was EUR 639,251. The amount paid for his mandatory pension plans in 2018 was EUR 110,749.

In addition to this fixed compensation, variable compensation ranging from 0% to 145% of the total fixed amount is paid, with a target if 100% of the set objectives are achieved corresponding to the allocation of a variable portion equal to 80% of the fixed compensation.

This variable amount was defined according to budget-based quantifiable criteria (for internal criteria), for 75%, and qualitative criteria for 25%. The details of these criteria, for which the expected level of achievement level was pre-established by the Board of Directors at its meeting of February 28, 2018 on the recommendation of the Compensation Committee, are shown below.

	Weighting	Scope of evaluation	Level of achievement	Amount *(in EUR)*
EBIT	20%	0 to 120%	104.31%	141,005
Free Cash Flow	20%	0 to 120%	114.80%	192,150
ROCE	10%	0 to 120%	105.57%	73,572
Total Shareholder Return	25%	0 to 120%	<80%	–
Total quantifiable criteria	**75%**		**98.08%**	**406,727**
Total qualitative criteria [a]	**25%**	**0 to 120%**	**118.00%**	**259,688**
Total variable amount	**100%**		**102.72%**	**666,415**

(a) Qualitative criteria pertained to health and safety performance, the implementation of the Group transformation plan and implementation of the strategy (profitable growth, asset turnover).

As a reminder, the 2017 variable amount, paid in 2018, was EUR 541,098.

In addition to the fixed and variable compensation mentioned above, 2018 benefits in kind totaled EUR 10,373, corresponding to the provision of a company car.

Long-term compensation

At Mr. Chaussade's request, the Board of Directors decided at its meeting of February 28, 2018 not to allocate him any long-term variable compensation for 2018.

However, the Chief Executive Officer was paid EUR 351,000 in 2018 in respect of the long-term variable compensation plan set up by the Board of Directors on January 14, 2015. As a reminder, the amount paid in respect of this plan, capped at EUR 750,000 euros, was subject to two cumulative performance conditions with a 10% increase or decrease on the total amount depending on the fulfillment of a non-financial criterion relating to the proportion of women executives:

Performance conditions	Level of achievement	Award level
The Group's recurring cumulative net income for fiscal years 2015 to 2017 inclusive	104.9%	62.2%
Change in TSR for SUEZ compared to average TSR for companies in the DJ Euro Stoxx Utilities Index from January 1, 2015 to December 31, 2017	97%	83.6%
Proportion of women in management	94.7%	–10%
Total		**46.8%**

Other benefits

RETIREMENT AND HEALTH CARE COVERAGE

No specific supplementary retirement plan has been established for the Chief Executive Officer. Mr. Chaussade thus benefited from the supplementary Group retirement plan, with defined contributions and defined benefits, applicable to employees of the Company and some of its subsidiaries.

Mr. Chaussade decided to claim benefits under all of his pension plans as of August 1, 2014, including the defined contribution and defined benefit pension plans of the SUEZ Group. He did, however, decide to waive any pension payments under these supplementary plans until his current duties as Chief Executive Officer come to an end on May 14, 2019.

The annual pension resulting from Group supplementary retirement plans to be paid to Jean-Louis Chaussade (once he is no longer Chief Executive Officer) will be EUR 280,304, or 19.7% of his 2018 annual compensation (including fixed and variable compensation payable by the Company).

Mr. Chaussade is also eligible for benefits under the Company's current mandatory group health care plans.

EMPLOYMENT CONTRACT AND SEVERANCE PAY

As of December 31, 2018, Mr. Chaussade did not have an employment contract and did not benefit from any severance pay or other compensation under a non-compete clause.

	Employment contract		Supplementary retirement plan		Compensation or benefits due or that may become due pursuant to termination or a change in duties		Compensation due under a non-compete clause	
Corporate Officers	Yes	No	Yes	No	Yes	No	Yes	No
Jean-Louis Chaussade **Chief Executive Officer**		X		X		X		X
Start of term of office: 7/23/2008 **Date of the end of the Chief Executive Officer's term of office:** 5/14/2019								

15.1.3 Compensation of Management Committee members

The Management Committee has had 11 members since March 2018.

Eleven members of the Management Committee, including the Chief Executive Officer, received total gross compensation in 2018 of EUR 9,266,208 (excluding annuities totaling EUR 110,749 paid to Jean-Louis Chaussade under mandatory pension plans).

The table below specifies the annual fixed and variable amounts paid to Management Committee members over the last three years (amounts in euros). It does not include the valuation of the long-term compensation plans to which they are entitled. Note that there were eight members on the Management Committee from September 2016 to April 2017 and nine members from April 2017 to March 2018.

Year of payment	Total fixed portion	Total variable portion	Total compensation
2016	3,758,858	3,583,606	7,342,464
2017	3,793,191	3,080,503	6,873,694
2018	4,859,407	3,520,611	8,380,018

The change in compensation between 2017 and 2018 is explained by the addition of new members to the Management Committee at the start of 2018.

Added to the compensation described above is an amount corresponding to employee profit-sharing, which totaled EUR 74,424 paid to the entire Management Committee in 2018 for fiscal year 2017. This amount was EUR 54,582 in 2017 for 2016. Lastly, a total of EUR 886,190 was paid to nine Management Committee members in 2018 for the long-term compensation plan awarded in 2015.

15.1.4 Compensation of Directors

The compensation of Directors (excluding the Chief Executive Officer, the Directors representing employees and the Director representing employee shareholders) consists only of Directors' fees.

Gérard Mestrallet received no compensation for his term of office as Chairman of the Board of Directors of SUEZ, apart from Directors' fees, which amounted to EUR 53,055 for 2018.

The Chief Executive Officer of the Company does not receive any Directors' fees for his SUEZ directorship. The Directors representing employees, appointed pursuant to Article 10 of the Company bylaws, and the Director representing employee shareholders do not receive Directors' fees either, pursuant to Article 13 of the Board of Directors' Internal Regulations.

The total amount for Directors' fees set by the Combined Shareholders' Meeting of May 22, 2014 was EUR 700,000.

Since fiscal year 2014, the Directors' fees have been allocated according to the following rules, with the understanding that a reduction, based on the participation rate, of the amount of Directors' fees is applied in the event that the amount has been exceeded, and that the Board may decide to share the unpaid balance, depending on the attendance rate of each Director, in the event that the amount has not been used in full:

- a fixed annual portion of EUR 15,000 per Director;
- a variable portion of EUR 2,000 per meeting for each Director eligible to receive Directors' fees and EUR 4,000 per meeting for the Chairman of the Board of Directors;
- a variable portion of:
  - EUR 2,000 per meeting for each of the members of the Board of Directors' committees,
  - EUR 4,000 per meeting of the Committee that they chair for the Chairman of the Appointments and Governance Committee, the Compensation Committee, the Strategy Committee and the Ethics and Sustainable Development Committee,
  - EUR 6,000 per meeting of the Audit and Financial Statements Committee for the Chairman of the Committee.

The variable portion for attending a meeting of the Board of Directors or of a Committee is reduced to EUR 1,000 if attendance is by means of telecommunication (phone, video conference), except in exceptional circumstances.

These distribution rules mean that the variable portion related to the Directors' attendance at Board and Committee meetings is greater than the annual fixed portion allocated thereto, in compliance with the AFEP-MEDEF Code.

For fiscal year 2018, 17 Directors received Directors' fees.

The following table shows Directors' fees allocated to Directors, calculated in accordance with the above rules and approved by the Board of Directors at its meeting of January 23, 2019.

Board member	2018 Directors' fees [a] (in euros)	2017 Directors' fees [a] (in euros)
Gérard Mestrallet, Chairman of the Board of Directors and Strategy Committee	53,055	63,032
Nicolas Bazire	65,619	52,746
Gilles Benoist [b]	–	13,750
Miriem Bensalah-Chaqroun	23,619	30,381
Valérie Bernis	55,328	44,388
Franck Bruel [c]	11,555	–
Francesco Caltagirone [d]	31,055	32,282
Delphine Ernotte Cunci, Chairwoman of the Ethics and Sustainable Development Committee	49,328	53,506
Lorenz d'Este, Chairman of the Compensation Committee	79,055	65,032
Isidro Fainé Casas	26,619	43,031
Judith Hartmann	37,386	45,389
Isabelle Kocher	29,386	29,016
Ines Kolmsee [e]	7,500	36,425
Anne Lauvergeon, Chairwoman of the Appointments and Governance Committee	99,328	57,389
Pierre Mongin	31,055	40,148
Guillaume Pepy, Chairman of the Audit and Financial Statements Committee	73,055	59,819
Brigitte Taittinger-Jouyet [f]	13,555	–
Jérôme Tolot [g]	13,500	33,666
Total	**700,000**	**700,000**

(a) Gross amounts before any mandatory fixed levies, social security contributions or withholding tax, as applicable. Directors' fees for the second half of 2017 were paid in February 2018; Directors' fees for the second half of 2018 were paid in February 2019.
(b) Gilles Benoist resigned as a Director on February 28, 2017.
(c) Franck Bruel was appointed as a Director by the Shareholders' Meeting of May 17, 2018.
(d) Francesco Caltagirone was co-opted as a Director on February 28, 2017. His cooptation was ratified at the Shareholders' Meeting of May 10, 2017.
(e) The term of office of Ines Kolmsee expired on May 17, 2018.
(f) Brigitte Taittinger-Jouyet was appointed as a Director by the Shareholders' Meeting of May 17, 2018.
(g) The term of office of Jérôme Tolot expired on May 17, 2018.

15.1.5 Long-term compensation plans

General allocation policy

In 2018 the Board of Directors decided, in response to the proposal of the Compensation Committee, to pursue the long-term compensation policy by implementing a new performance share-based plan for beneficiaries resident for tax purposes in France and performance units (stipulating a payment in cash indexed to the share price) to beneficiaries resident for tax purposes outside France, fully subject to the achievement of performance conditions assessed over several years. The objective of long-term compensation is to involve certain categories of employees and Corporate Officers in the Company's future growth and value creation and to retain them and recognize their performance, as well as to align the interests of the Group's managers with those of shareholders.

The beneficiaries are:

- executives and senior managers ("Top Executives"), including members of the Management Committee and the Executive Committee, as well as high-potential managers and experts ("A Beneficiaries"); and
- employees who demonstrate outstanding performance but do not fall within the above categories ("B Beneficiaries").

The long-term variable compensation provided to all of the beneficiaries is fully subject to the achievement of an internal performance condition (related to audited financial indicators, made public by the Company and in line with the Company's published forecasts and/or objectives).

In addition, the long-term variable compensation is cumulatively subject to an external performance condition (related to stock market performance or the Company's Total Shareholder Return) together with the internal performance condition for 100% of the amount awarded to the Executive Corporate Officer and members of the Management Committee and the Executive Committee and for 50% of the amount awarded to other Top Executives of the Group.

Finally, the long-term compensation awarded to all A Beneficiaries is also subject to a non-financial performance condition (for example, based on the percentage of women in management). This performance condition is also evaluated over a period of several fiscal years.

Pursuant to the Code of Conduct on the prevention of market abuse, the members of the Management Committee, including the Chief Executive Officer, may not engage in trading in Company shares, including the sale of shares resulting from the exercise of stock options or the allocation of performance shares, if they are in possession of inside information, as well as during the following blackout periods:

- a period of 30 days prior to the publication of the Company's annual and interim results, until two days after their publication; and
- a period of 15 days prior to the publication of the Company's first and third-quarter results, until two days after their publication.

Long-term variable compensation plan awarded in 2018

Upon the proposal of the Compensation Committee, the Board of Directors of SUEZ decided, at its meeting of July 25, 2018, on the principles and procedures for the 2018 long-term variable compensation plan, taking the form of a payment in shares (for beneficiaries in France) and in cash (for international beneficiaries) subject to the achievement of performance conditions.

This plan covers 1,574 beneficiaries who have been allocated 777,944 performance shares (for beneficiaries in France) and 554,400 performance units (for other beneficiaries). The plan provides for the delivery of shares or a payment in cash in 2021, on the condition of achievement of performance conditions, which are more stringently applied according to the beneficiary's profile:

- an internal performance condition, based on the Group's aggregate EBIT for the fiscal years 2018 to 2020 inclusive (noting that the achievement of the target goal set by the Board of Directors only gives rise to the payment of 65% of the part of the amount subject to this condition). This applies to all beneficiaries of the plan for all amounts distributed;
- a market performance condition, related to the level of SUEZ's Total Shareholder Return (TSR) compared to the average TSR for companies in the DJ Euro Stoxx Utilities Index, for the period from January 1, 2018 to December 31, 2020, which applies cumulatively with the internal performance condition to the members of the Management Committee and the Executive Committee for 100% of the amount awarded and for 50% of the amount awarded for the other executives of the Group, called "Top Executives", *i.e.* 153 beneficiaries.

The above criteria would be applied as follows, with the understanding that the target objective for internal conditions corresponds to the objectives as they appear in the Group's medium-term plan:

	Minimum	Triggering threshold	Target	Maximum	Remarks
Internal Condition (related to EBIT)	No allocation if the achievement level is less than 90% of the target objective.	Allocation of 20% if the achievement level is greater than or equal to 90% of the target objective.	Allocation of 65% if the target objective is achieved.	Allocation of 110% if the achievement level is greater than or equal to 110% of the target objective.	Straight line calculation between milestones.
External Condition (related to TSR)	No allocation if the change in TSR is less than 90% of the change in the TSR of the index.	Allocation of 50% if the change in TSR is greater than or equal to 90% of the change in the TSR of the index.	Allocation of 80% if the change in TSR is greater than the change in the TSR of the index.	Allocation of 110% if the change in TSR is greater than or equal to 110% of the change in the TSR of the index.	Straight line calculation between milestones.

Furthermore, the amount that could be paid in 2021 to all A Beneficiaries, depending on the level achieved for the two performance conditions stated above, could be unchanged, increased or decreased by 10% depending on the degree of parity between men and women in management roles at December 31, 2020.

The long-term compensation plan provides for the loss of entitlement to payment in the event of resignation or termination due to gross negligence or serious misconduct; payment is maintained in other cases of termination of employment (retirement, disability, death).

The members of the Management Committee (excluding the Chief Executive Officer, not a beneficiary of the plan) are obliged to reinvest in SUEZ shares 15% of the net amount that will be received in 2021 in respect of performance units, and have an obligation to retain 25% of the performance shares vested, until the number of shares being held represents 100% their annual fixed compensation.

Summary of long-term variable compensation paid in cash to the Chief Executive Officer as of December 31, 2018

Plan	Target Amount [a] *(in euros)*	Maximum amount *(in euros)*	Amount due *(in euros)*	Performance conditions
2015	375,000	750,000	351,000	The amount paid in 2018 was subject to two cumulative performance conditions: ► the Group's recurring cumulative net income for fiscal years 2015 to 2017 inclusive (Level of completion: 104.9%; Level of allocation: 62.2%); ► the change in TSR for SUEZ compared to the average TSR of companies in the DJ Euro Stoxx Utilities Index from January 1, 2015 to December 31, 2017 (Level of completion: 97%; Level of allocation: 83.6%). Furthermore, this amount was reduced by 10% as the objective on the level of women representation in management was not achieved at December 31, 2017. The total award rate thus came to 46.8%.
2016	375,000	750,000	0	The amount which will be paid in 2019 was subject to two cumulative performance conditions: ► the Group's cumulative EBIT for fiscal years 2016 to 2018 inclusive (Level of completion: 99.2%; Level of allocation: 47.5%); ► the change in TSR for SUEZ compared to the average TSR of companies in the DJ Euro Stoxx Utilities Index from January 1, 2016 to December 31, 2018. (Level of completion: <90%; Level of allocation: 0%). As the target relating to the level of women representation in management at December 31, 2018 was met, this amount remains unchanged. The total award rate thus came to 0%.
2017	390,000	750,000	Not known	The amount which may be paid in 2020, subject to the approval of the Shareholders' Meeting, is dependent on two cumulative performance conditions: ► the Group's cumulative EBIT for fiscal years 2017 to 2019 inclusive; ► the change in TSR for SUEZ compared to the average TSR of companies in the DJ Euro Stoxx Utilities Index from January 1, 2017 to December 31, 2019. This amount may also be increased or reduced by 10% depending on the level of women representation in management at December 31, 2019.

(a) Corresponding to the achievement of objectives set in the Group's medium-term plan, applicable when the internal performance condition takes effect and when there is a change in SUEZ TSR that is equal to or greater than the TSR of the DJ Euro Stoxx Utilities Index.

Stock option plans

In accordance with the Company's long-term compensation policy, no stock option plans have been set up since December 2010.

Furthermore, at December 31, 2018, no stock options still exist.

Status of the performance conditions applicable to the stock option plans

	Applicable performance conditions	Level of achievement	Proportion of shares delivered relative to the initial allocation
Plan of December 17, 2009 [a]	Company stock price evolution from December 17, 2009 to December 16, 2013 compared to the CAC 40 and Euro Stoxx Utilities Indices	0%	Management Committee and Executive Committee: 30% Other beneficiaries: 50%
	Group's cumulative recurring net income for fiscal years 2009 to 2012	90%	
Plan of December 16, 2010 [b]	Company stock price evolution from December 16, 2010 to December 15, 2014 compared to the CAC 40 and Euro Stoxx Utilities Indices	0%	Corporate Officer, Management Committee and Executive Committee: 0% *Top Executives*: 17.5% Other beneficiaries: 50%
	Group's cumulative recurring net income for fiscal years 2010 to 2013	0% for the Corporate Officer, 35% for the other beneficiaries	

(a) The Chief Executive Officer was not a beneficiary under this stock purchase option plan, which lapsed on December 16, 2017.
(b) This plan lapsed on December 15, 2018.

Stock option plans allocated to the Corporate Officer in 2018

	Plan	Type of option	Valuation of stock options based on the method used for the Consolidated Financial Statements *(in euros)*	Number of options allocated during the fiscal year	Adjusted exercise price	Exercise period
Jean-Louis Chaussade, Chief Executive Officer	No options were awarded to the Corporate Officer by the Company in fiscal year 2018.					

Stock option plans subscribed or exercised by the Corporate Officer in 2018

	Plan	Number of options exercised during the fiscal year	Adjusted exercise price
Jean-Louis Chaussade, Chief Executive Officer	The Corporate Officer exercised no Company stock options during fiscal year 2018.		

Stock options granted to the first ten eligible non-corporate officer and options exercised by them

	Total number of options awarded/ shares subscribed or purchased	Purchase price	Plan
Options granted in 2018 by the Company or any company within the scope of option awards, to the 10 employees of the Company or any other company within this scope, who received the highest number of such options (aggregate information)	Not applicable – No stock options granted in 2018		
Options held on the Company and the aforesaid companies exercised during fiscal year 2018 by the 10 employees of the issuer and these companies who purchased or subscribed to the highest number of such options (aggregate information)	400	EUR 14.20	12/16/2010

Summary and features of stock option plans

	2009 plan	2010 plan
Date of authorization by the Shareholders' Meeting	May 26, 2009	May 26, 2009
Date of Board of Directors' meeting	December 17, 2009	December 16, 2010
Type of option	Purchase	Purchase
Total number of shares that may be purchased (initial allocation)	3,464,440	2,944,200
Of which by the Corporate Officer (initial allocation)	–	120,300
Total number of beneficiaries	984	977
Starting point for exercise of the options	December 17, 2013	December 16, 2014
Expiration date	December 16, 2017	December 15, 2018
Purchase price *(in euros)*	15.49	14.20
Number of options exercised as of December 31, 2018	527,140	186,306
Aggregate number of options canceled or forfeited	2,937,300	2,757,894
Stock options outstanding as of December 31, 2018	–	–
Of which for the Corporate Officer	–	–

Performance share plans

A performance share plan was allocated in 2018 (777,944 performance shares allocated) as described in section 15.1.5 above.

At December 31, 2018, there were 765,917 performance shares in circulation, representing 0.12% of the Company's share capital in the case of the acquisition of all of the performance shares allocated.

Status of performance conditions applicable to the performance share plans

	Applicable performance conditions	Level of achievement	Proportion of shares delivered relative to the initial allocation
Plan of December 17, 2009	**For the Corporate Officer:** Company stock price evolution from December 17, 2009 to December 16, 2013 compared to the CAC 40 and Euro Stoxx Utilities Indices (on 100% of the shares)	0%	0%
	Group's cumulative recurring net income for fiscal years 2009 to 2012 (on 50% of the shares)	90%	
	For the other beneficiaries: Group EBITDA for 2011	100%	100%
Plan of December 16, 2010	Group's cumulative recurring net income for fiscal years 2010 to 2013	0% for the Corporate Officer, 35% for the other beneficiaries	Corporate Officer: 0% Other A Beneficiaries: 35%
	Company stock price evolution from December 16, 2010 to December 15, 2014 compared to the CAC 40 and Euro Stoxx Utilities Indices	100%	
	Group EBITDA for fiscal year 2012	32%	B Beneficiaries: 32%
Plan of March 15, 2012 [(a)]	Group's cumulative recurring net income for fiscal years 2012 to 2014	39%	Topex: 39% Other A Beneficiaries: 27.5%
	Company stock price evolution from March 14, 2012 to March 13, 2015 compared to the CAC 40 and Euro Stoxx Utilities Indices	100%	
	Cumulative Group EBITDA for fiscal years 2012 and 2013	16%	B Beneficiaries: 16%
Plan of 27 March, 2013	Group's cumulative recurring net income for fiscal years 2013 to 2014	114%	Corporate Officer, Management Committee, Executive Committee and Top Executives: 114% Other A Beneficiaries: 94%
	Company stock price evolution from January 1, 2013 to February 27, 2015 compared to the CAC 40 and Euro Stoxx Utilities Indices	100%	
	Cumulative Group EBITDA for fiscal years 2013 and 2014	74%	B Beneficiaries: 74%
Plan of July 25, 2018 (b)	Cumulative Group EBIT for fiscal years 2018, 2019 and 2020	Not known	Not known
	Change in TSR for SUEZ compared to average TSR for companies in the DJ Euro Stoxx Utilities Index from January 1, 2018 to December 31, 2020	Not known	Not known
	Degree of gender parity among management	Not known	

(a) The Chief Executive Officer and the members of the Management Committee and of the Executive Committee were not beneficiaries of this performance share plan.
(b) The Chief Executive Officer is not a beneficiary of this performance share plan.

Performance shares granted to the Corporate Officer in 2018

	Plan	Number of shares granted during fiscal year	Value of shares based on the method used for the Consolidated Financial Statements *(in euros)*	Vesting date	Availability date	Performance conditions
Jean-Louis Chaussade, Chief Executive Officer	No performance shares granted to the Corporate Officer in 2018					

Performance shares fully vested during 2018 for the Corporate Officer

	Plan	Vesting date	Number of shares that became available	Vesting conditions
Jean-Louis Chaussade, Chief Executive Officer	No performance shares fully vested by the Corporate Executive Officer in 2018			

Performance shares that became available to the Corporate Officer during the fiscal year

	Plan	Vesting date	Number of shares that became available	Vesting conditions
Jean-Louis Chaussade, Chief Executive Officer	No performance shares became available in 2018			

Performance shares granted to the first ten eligible non-corporate officers

	Total number of performance shares granted	Plan Conditions
Performance shares granted by the Company in fiscal year 2018 to the ten non-corporate officer employees of the Group (aggregate information)	127,506	Please refer to the plan description above

Summary and features of performance share plans

	2009 plan	2010 plan	2012 plan	2013 plan	2018 plan
Date of authorization by the Shareholders' Meeting	May 26, 2009	May 20, 2010	May 20, 2010	May 24, 2012	May 17, 2018
Date of Board of Directors' meeting	December 17, 2009	December 16, 2010	March 15, 2012	March 27, 2013	July 25, 2018
Maximum number of performance shares initially granted	173,852	829,080	828,710	1,578,120	777,944
Of which for the Corporate Officer	28,800	24,060	–	72,000	–
Number of beneficiaries	1,071	2,124	1,995	1,773	803
Vesting date of shares					
For French tax residents	February 28, 2012[a]	December 16, 2014[c]	March 16, 2015[e][f]	March 30, 2015[h]	September 30, 2021
For foreign tax residents	February 28, 2014	December 16, 2014	March 15, 2016	March 28, 2017	–
Date of transferability of shares					
For French tax residents	February 28, 2014	December 16, 2016[d]	March 16, 2017[g]	March 30, 2017	September 30, 2021
For foreign tax residents	February 28, 2014[b]	December 16, 2014	March 15, 2016	March 28, 2017	–
Number of performance shares canceled or forfeited	–	–	615,064	342,408	12,027
Number of performance shares fully vested	130,438	251,532	213,646	1,235,712	–
Of which by the Corporate Officer	–	–	–	68,400	–
Performance shares outstanding as of December 31, 2018	–	–	–	–	765,917

(a) Also applies to tax residents of Belgium, Spain and Italy.
(b) For tax residents in Spain and Italy the date of transferability was February 28, 2015.
(c) The vesting date for "B Beneficiaries" who are French tax residents was March 1, 2013.
(d) The date of transferability for "B Beneficiaries" who are French tax residents was March 1, 2015.
(e) Also applies to tax residents of Belgium, Spain and Italy.
(f) The vesting date for "B Beneficiaries" who are tax residents of France, Spain and Italy was March 17, 2014.
(g) The date of transferability for "B Beneficiaries" who are French tax residents was March 17, 2016. For "B Beneficiaries" who are tax residents of Spain and Italy, the date of transferability was March 17, 2017.
(h) Also applies to tax residents of Belgium and Spain.

15.1.6 Elements of compensation due or awarded in 2018 to each Corporate Officer, submitted for vote by the shareholders

In accordance with Article L. 225-100-II of the French Commercial Code, on May 14, 2019, the Shareholders' Meeting will be required to vote on the elements of compensation due or awarded for 2018 to Gérard Mestrallet, Chairman of the Board of Directors, and to Jean-Louis Chaussade, Chief Executive Officer.

The Shareholders' Meeting of May 17, 2018 approved resolution 13 on the elements of compensation due or awarded for the 2017 fiscal year to Gérard Mestrallet with a 99.80% vote and resolution 15 on the elements of compensation due or awarded for the 2017 fiscal year to Jean-Louis Chaussade with a 94.48% vote.

The Shareholders' Meeting had also approved resolution 12 relating to the 2018 compensation policy for Gérard Mestrallet (with a 98.89% vote) and resolution 14 relating to the 2018 compensation policy for Jean-Louis Chaussade (with a 93.99% vote). Elements of compensation due or awarded to Gérard Mestrallet and Jean-Louis Chaussade for 2018, as presented below, were approved in accordance with these compensation policies.

Elements of compensation due or awarded for the 2018 fiscal year to Gérard Mestrallet, Chairman of the Board of Directors

No compensation was paid to Gérard Mestrallet by the Company during 2018, except for Directors' fees allocated to him for that year, in the amount of EUR 53,055. This element of compensation is subject to the approval of the Shareholders' Meeting of May 14, 2019 under resolution 9, which is set out in chapter 26 of this Reference Document.

Elements of compensation due or awarded for fiscal year 2018 to Jean-Louis Chaussade, Chief Executive Officer

The Shareholders' Meeting of May 14, 2019 (resolution 12, which is set out in chapter 26 of this Reference Document) will be asked to vote on the following elements of compensation due or awarded to Jean-Louis Chaussade, Chief Executive Officer for the 2018 fiscal year:

Elements of compensation due or awarded for fiscal year 2018	Amount or value	Presentation
Fixed compensation	EUR 750,000	This is the gross fixed compensation for fiscal year 2018, unchanged since 2009. Since August 1, 2014, the retirement benefits claim date, the amount of annuities paid to Jean-Louis Chaussade under the mandatory pension plan (EUR 110,749 for fiscal year 2018) has been deducted from the amount of the fixed compensation paid by the Company.
Annual variable compensation	EUR 666,415	Upon recommendation of the Compensation Committee, at its meeting on February 26, 2019 the Board of Directors adopted the annual variable compensation for Jean-Louis Chaussade for fiscal year 2018, which amounts to EUR 666,415, or 88.86% of his fixed compensation (compared to EUR 541,098 for fiscal year 2017). The Board of Directors deliberated on Jean-Louis Chaussade's compensation outside his presence. Jean-Louis Chaussade's variable compensation may represent between 0% and 145% of his fixed compensation and has been determined on the basis of: ► quantifiable criteria previously set by the Board of Directors in February 2018, based on the 2018 budget. These criteria represent 75% of the overall weighting of the variable compensation and are related to EBIT (20%), free cash flow (20%), ROCE (10%) and TSR (25%); and ► qualitative criteria, which account for 25% of the overall weighting of the variable compensation and are related to health and safety performance, the implementation of the Group's transformation plan and the implementation of the strategy (profitable growth, asset turnover). The payment of this annual variable compensation is subject to approval at the Shareholders' Meeting on 14 May, 2019.
Deferred variable compensation	N/A	Jean-Louis Chaussade is not entitled to deferred variable compensation.
Long-term variable compensation	N/A	At its meeting of February 28, 2018, the Board of Directors decided, at the request of Jean-Louis Chaussade, not to award him any long-term variable compensation for the 2018 fiscal year.
	EUR 351,000 paid	At its meeting on January 14, 2015, the Board of Directors decided to award Jean-Louis Chaussade long-term variable compensation for fiscal year 2015, of a maximum amount of EUR 750,000, or 100% of his annual fixed compensation, and providing, as the case may be, for a cash payment in 2018, subject to meeting two cumulative performance conditions: ► an internal performance condition based on the Group's cumulative recurring net income from 2015 to 2017; ► a market performance condition based on the level of Total Shareholder Return (TSR) for SUEZ compared to the average TSR of the companies included in the DJ Euro Stoxx Utilities Index over the period from January 1, 2015 to December 31, 2017. These two conditions having been met at the rate of 104.9% for the internal condition and 97% for the external condition respectively, the Chief Executive Officer was paid an amount of EUR 351,000 in 2018, *i.e.* 46.8% of the maximum amount initially allocated.

Elements of compensation due or awarded for fiscal year 2018	Amount or value	Presentation
Exceptional compensation	No amount paid in 2018 (IFRS valuation in the accounts: EUR 1,478,826)	The Board of Directors decided, at its meeting of February 28, 2018, to award Jean-Louis Chaussade exceptional compensation related to the acquisition of the GE Water business, of a target amount corresponding to twice Mr. Chaussade's fixed compensation, namely EUR 1,500,000. Should the set objectives be exceeded, this amount may be increased to a maximum of EUR 1,650,000, subject to the achievement of the following performance conditions, assessed over an 18-month period between October 1, 2017 and March 31, 2019: ► a performance condition concerning quantifiable criteria (80% of the total weighting) based on the organic growth of the new WTS business unit (20%), its EBITDA (32%), and its Operating Cash Flow (28%); ► a performance condition concerning qualitative criteria (20% of the overall weighting) relating to the integration process (change management, consistency within the teams, growth and development of the Group's revenue with industrial clients, speeding up the Group's transformation as a whole by means of the integration of GE Water). The achievement of these performance conditions will be considered by the Board of Directors in 2019 and payment of this compensation will be subject to the approval of the Shareholders' Meeting called to approve the financial statements for 2019.
Stock options, performance shares or any other item relating to long-term compensation	N/A	No allocation was made during fiscal year 2018.
Directors' fees	N/A	Jean-Louis Chaussade does not receive Directors' fees.
Value of benefits of all kinds	EUR 10,373	Jean-Louis Chaussade has a company car.
Severance pay	N/A	Jean-Louis Chaussade will receive no severance pay in the event of termination of his office.
Compensation due under a non-compete clause	N/A	Jean-Louis Chaussade is not entitled to compensation under a non-compete clause.
Health care plan	EUR 5,180	Jean-Louis Chaussade is covered by the Company's mandatory defined-contribution plan for health care.
Supplementary retirement plan	No payment	Jean-Louis Chaussade was covered by the Group supplementary retirement plans applicable to SUEZ employees: a mandatory defined-contribution plan under Article L. 441-1 of the French Insurance Code and a supplementary variable Group defined-benefit pension plan. Jean-Louis Chaussade decided to claim benefits under all of his retirement plans as of August 1, 2014, including collective defined contribution and defined benefit pension plans. He did, however, decide to waive any pension payments under these supplementary plans until his current duties as Chief Executive Officer come to an end. The annual amount of the annuity resulting from Group supplementary retirement plans to be paid to Jean-Louis Chaussade (once he is no longer Chief Executive Officer) will be EUR 280,304, or 19.7% of his 2018 annual compensation (including fixed and variable compensation payable by the Company).

15.2 Amounts provisioned by the Company and its subsidiaries for the payment of pensions, retirement benefits, and other benefits to members of the Management Committee

The total retirement obligations provisioned for the members of the Management Committee in the Consolidated Financial Statements as of December 31, 2018, including tax on employer contributions, amounted to EUR 22.1 million, compared to EUR 17.1 million in 2017. This difference arose both from the change in the composition of the Management Committee (one additional member for the pension commitments) and the commitment corresponding to an additional year within the plan.

16 functioning of governance and management bodies

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16.1 Terms of office of members of the Board of Directors

The following table shows the dates of first appointment and the expiration dates of the terms of office of the Directors of the Company, in office as of December 31, 2018:

Name and title	Date of first appointment	Start date of current term of office	Term of office expiration date
Gérard Mestrallet, Chairman of the Board of Directors	December 5, 2007	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Jean-Louis Chaussade, Director and Chief Executive Officer	December 5, 2007	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Nicolas Bazire, Director	July 15, 2008	May 12, 2015	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2018
Valérie Bernis, Director	July 15, 2008	May 12, 2015	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2018
Miriem Bensalah-Chaqroun, Director	April 28, 2016	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Franck Bruel, Director	May 17, 2018	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Francesco Caltagirone, Director	February 28, 2017	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Delphine Ernotte Cunci, Director	May 24, 2012	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Lorenz d'Este, Director	July 15, 2008	May 12, 2015	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2018
Isidro Fainé Casas, Director	October 29, 2014	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019
Judith Hartmann, Director	July 28, 2015	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Isabelle Kocher, Director	February 7, 2012	May 12, 2015	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2018
Anne Lauvergeon, Director	October 29, 2014	May 12, 2015	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2018
Pierre Mongin, Director	February 2, 2016	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Guillaume Pepy, Director	July 15, 2008	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Brigitte Taittinger-Jouyet, Director	May 17, 2018	May 17, 2018	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2021
Agatta Constantini, Director representing employees [a]	December 12, 2014	December 12, 2018	December 11, 2022
Enric Xavier Amiguet i Rovira, Director representing employees [a]	February 11, 2015	February 11, 2019	February 10, 2023
Guillaume Thivolle, Director representing employee shareholders [b]	April 28, 2016	April 28, 2016	Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2019

(a) Directors representing employees appointed pursuant to Article L. 225-27-1 of the French Commercial Code and Article 10 of the Company bylaws.
(b) Director representing employee shareholders, appointed pursuant to Article L. 225-23 of the French Commercial Code and Article 10.3 of the Company bylaws.

The Shareholders' Meeting of May 14, 2019 will be called to approve the appointment of two new Directors, Martha J. Crawford and Bertrand Camus, as well as renew the terms of office of Isabelle Kocher, Anne Lauvergeon and Nicolas Bazire. Note that Valérie Bernis and Lorenz d'Este did not request their terms of office be renewed.

16.2 Information on service contracts between members of the Company's governance and management bodies and the Company or any of its subsidiaries

To the knowledge of the Company, as of the date of this Reference Document, no member of the Board of Directors or the Chief Executive Officer enjoy benefits as a result of service contracts between them and the Company or any of its subsidiaries.

16.3 Committees of the Board of Directors

In accordance with Article 15 of the Company bylaws, the Board of Directors may decide to set up committees responsible for studying issues that the Board or its Chairman may ask them to examine.

In this context, the Board of Directors is supported by five Committees: the Strategy Committee, the Audit and Financial Statements Committee, the Ethics and Sustainable Development Committee, the Appointments and Governance Committee and the Compensation Committee. Their respective missions are described in the Board of Directors' Internal Regulations.

16.4 Report on corporate governance prepared in accordance with Article L. 225-37 of the French Commercial Code

This report has been prepared in accordance with Article L. 225-37 paragraph 6 *et seq.* of the French Commercial Code.

This report was approved by the Board of Directors on February 26, 2019 upon the recommendations of the Appointments and Governance Committee for the sections relating to corporate governance and of the Compensation Committee for the section relating to the compensation of Corporate Officers. It will be presented at the Shareholders' Meeting on May 14, 2019.

1. Composition of the Board of Directors

BOARD OF DIRECTORS IN 2018 [(a)]

50% Independent Directors [(b)] 41% women [(c)]	32% foreign nationals 6 different nationalities represented	1 employee shareholder representative 2 employee representatives	7 Board of Directors meetings 91.5% attendance

(a) Information updated on December 31, 2018.
(b) Directors representing employees and employee shareholders are not taken into account when calculating this percentage, in accordance with the AFEP-MEDEF Code.
(c) Directors representing employees are not taken into account when calculating this percentage, in accordance with the provisions of Article L. 225-27 of the French Commercial Code.

The Board of Directors is thus composed, as of the date of this Report, of 19 Directors.

The following changes took place in the Board's composition since the beginning of 2018:

- the appointments of Brigitte Taittinger-Jouyet and Franck Bruel as Directors during the Shareholders' Meeting on May 17, 2018;
- the non-renewal of Ines Kolmsee's and Jérôme Tolot's terms of office, which expired at the end of the Shareholders' Meeting on May 17, 2018.

Additionally, Judith Hartmann, Francesco Caltagirone, Pierre Mongin and Guillaume Pepy were reappointed as Directors for four years by the Shareholders' Meeting on May 17, 2018, and Agatta Constantini and Enric Xavier Amiguet i Rovira were reappointed as employee representative Directors for four years by the France Group Works Council and the European Works Council, respectively.

When new Directors join the Board of Directors, it is proposed that they have interviews with members of the Group's Management Committee and conduct site visits, so that the Group's activities can be presented to them. With reference to the Directors representing employees, specific training program was carried out, primarily concerning governance issues, the activities of the Group and the issues falling within the competence of the Board, including financial aspects, and health and safety themes. This program also includes language training and interpersonal skills development modules.

The bylaws provide for a four-year term of office for Directors and require every Director to hold at least 2,000 Company shares, unless otherwise provided by law, especially with reference to the Directors representing employee shareholders or employees.

Jean-Louis Chaussade, Chief Executive Officer, is the only Director with executive functions within the Group.

THE COMPOSITION OF THE BOARD OF DIRECTORS AS OF THE DATE OF THIS REPORT IS AS FOLLOWS:

- eight independent Directors:
  Nicolas Bazire, Miriem Bensalah-Chaqroun, Francesco Caltagirone, Delphine Ernotte Cunci, Lorenz d'Este, Anne Lauvergeon, Guillaume Pepy and Brigitte Taittinger-Jouyet;
- six Directors fulfilling or having fulfilled executive functions within ENGIE:
  Gérard Mestrallet, Chairman of the Board of Directors, Valérie Bernis, Franck Bruel, Judith Hartmann, Isabelle Kocher and Pierre Mongin;
- the Chief Executive Officer:
  Jean-Louis Chaussade;
- one Director appointed on the proposal of La Caixa:
  Isidro Fainé Casas;
- two Directors representing employees:
  Agatta Constantini and Enric Xavier Amiguet i Rovira;
- one Director representing employee shareholders:
  Guillaume Thivolle.

Details of the terms of office and functions fulfilled by each of the Directors can be found in chapter 14.1 of the Reference Document.

STAGGERED SCHEDULE OF RENEWALS

In line with the best governance practices and in accordance with the recommendations of the AFEP-MEDEF Code, in 2010 the Board of Directors decided to put in place a staggered renewal of the terms of office of Directors by one third approved by the Shareholders' Meeting.

Five Directors will reach the end of their terms of office at the Shareholders' Meeting on May 14, 2019. The other Directors' terms of office will be renewed by thirds in 2020 and 2022.

Information relating to the terms of office of Directors within the Company is set out in chapter 16.1 of the Reference Document.

DIVERSITY POLICY WITHIN THE BOARD OF DIRECTORS

At its meeting of October 27, 2010, the Board of Directors, upon the recommendation of the Appointments and Compensation Committee, promised to review diversity issues within the Board. The review has continued and, in relation to its self-assessment conducted since the beginning of 2014, the Board reiterated its desire to diversify its composition. In this context, the members of the Board formulated recommendations which primarily aim for a more international Board with a greater proportion of women, increased representation of the industrial sector, and more profiles of entrepreneurs or people with experience in innovation. The Appointments and Governance Committee has since carried out a recruitment process that meets these criteria, examined several applications, and submitted proposals to the Board.

In accordance with applicable regulations, the Board of Directors has defined a diversity policy applicable to Directors regarding criteria such as gender, expertise and professional experience, nationality and independence. The Board set the following goals regarding these criteria:

- **gender balance:** between 2009 and 2018, the presence of women on the Board of Directors has increased continuously, from 5.6% as of December 31, 2009 to 42.1% as of December 31, 2018 (or 41.2% not taking into account Directors representing employees), which is a rate that exceeds the 40% rate required by law. The Board also appointed women to chair two of its Committees: Anne Lauvergeon chairs the Appointments and Governance Committee and Delphine Ernotte Cunci chairs the Ethics and Sustainable Development Committee. The Board considers that the Board's current composition is gender balanced. In order to be able to permanently maintain this balanced representation, the Board has set a goal of identifying potential candidates for Director positions (especially women) whose profiles also meet the other criteria mentioned below. The proposal for the appointment of Martha J. Crawford at the General Meeting of May 14, 2019, is in line with this principle;
- **expertise and professional experience:** the Board believes that the Directors have varied expertise and professional experience, especially in the following areas, which have been identified by the Board as major areas for SUEZ's business:
  - saving resources/Expertise in SUEZ's business lines,
  - digital revolution,
  - industry,
  - public services,
  - international market,
  - finance,
  - operational management or governance of major companies/entrepreneurship;

During the Board's recent self-assessments, the Directors identified certain areas of improvement, particularly in innovation and Research and Development. The proposed appointment of Ms. Martha J. Crawford, who held various executive functions in R&D in large companies, meets this objective.

- **international diversity:** the Board has continued to make its membership more international over the past few years. The Board currently has six Directors that are foreign nationals, or 31.6% of its members, with six different nationalities represented. The proposal to appoint Ms. Martha J. Crawford, a US national, demonstrates the Board's will to improve the representativeness of all the regions in which the Group operates, including those outside Europe, as was the case in 2016 with the appointment of Ms. Miriem Bensalah-Chaqroun, a Moroccan national.
- **independence:** the Board wants the proportion of independent Directors to comply with AFEP-MEDEF Code recommendations for both the Board and its Committees. At its meeting of February 26, 2019, the Board also unanimously decided that the Chairmen or Chairwomen of the Committees will all be independent Directors in the future.

The Board also pays close attention to striking a balance between keeping Directors who have extensive knowledge of the Group and its businesses in their position for several years and integrating new members who bring new momentum and expertise to the Group.

Changes in the composition of the Board of Directors in previous fiscal years as well as those proposed to the Shareholders' meeting in 2019 are part of this diversity policy.

The Board of Directors will ensure that this diversity policy is followed, particularly when assessing the Board's and its Committees' operations, which will include a section on evaluating this policy.

INDEPENDENCE OF DIRECTORS

The independent status of some Directors (as defined by the AFEP-MEDEF Code) was reviewed in early 2019 by the Board of Directors, on the recommendation of the Appointments and Governance Committee.

To carry out this review, the Board of Directors referred to the definition of the AFEP-MEDEF Code, which considers that *"a Director is independent if (s)he has no relationship of any kind with the Company, its Group or its management that could compromise his/her freedom of judgment"*, and took into account all the criteria of that Code. Specifically, a Director must not:

- be an employee or Corporate Officer of the Company, or an employee or Director of a company within its scope of consolidation and must not have been one during the previous five years;
- be a Corporate Officer of a company in which SUEZ directly or indirectly holds a directorship, or in which an employee appointed as such or a Corporate Officer of the Company (currently or within the previous five years) holds a directorship;
- be, or have a direct or indirect relation with, a customer, supplier or corporate or investment banker:
  - of significance to the Company or its Group, or
  - whose business has a significant share provided by the Company or Group;
- have close family ties with a Corporate Officer;
- have been a Statutory Auditor of the Company during the previous five years;
- have been a Director of the Company for more than 12 years.

Directors representing major shareholders of the Company may be considered independent provided that they do not exercise control over the Company. If a Director exceeds a threshold of 10% of the share capital or voting rights, the Board, based on the Appointments and Governance Committee's report, must systematically review the independent status of the Director(s) concerned, taking into account the Company's ownership structure and whether or not there may be conflicts of interest. Furthermore, a non-executive Corporate Officer may not be considered independent if he or she receives variable compensation in cash or securities or any compensation related to the Company's or Group's performance.

In accordance with the AFEP-MEDEF Code, the Appointments and Governance Committee and then the Board of Directors evaluated the significance of business relationships maintained by the Company (and its subsidiaries) with the companies (and their subsidiaries) to which the Directors are related according to the following criteria:

- the proportion of business conducted between the Group and such companies, both in terms of purchases and revenue, which is far below 1%, and the absence of economic dependence;
- whether contracting is by tender or mutual agreement;
- the type of functions exercised by the Director concerned (whether executive or not) and the certainty that it does not affect the business relationship;
- the nature of services provided; and
- the length of the business relationship.

On the basis of this analysis, business relationships between the Group and the companies (and subsidiaries) in which Directors meeting all other criteria of independence have a role in management or a directorship were not considered to be significant.

Thus, the Board of Directors, on the recommendation of the Appointments and Governance Committee, decided, at its meeting of February 26, 2019, in relation to the review of this Chairman's Report, to:

- confirm the independence of eight Directors: Miriem Bensalah-Chaqroun, Delphine Ernotte Cunci, Anne Lauvergeon and Brigitte Taittinger-Jouyet as well as Nicolas Bazire, Francesco Caltagirone, Lorenz d'Este and Guillaume Pepy;
- confirm the non-independent status of the following Directors:
  - Jean-Louis Chaussade, Chief Executive Officer,
  - Valérie Bernis, Isabelle Kocher, Judith Hartmann and Gérard Mestrallet (Chairman), Franck Bruel and Pierre Mongin, as members fulfilling or having fulfilled functions within ENGIE, which holds 32.06% of the Company's share capital,

- Isidro Fainé Casas, in view of his office as Chairman of Criteria Caixa, where Jean-Louis Chaussade is a Director,
- Agatta Constantini and Enric Xavier Amiguet i Rovira, Directors representing employees, and Guillaume Thivolle, representing employee shareholders, due to their status as employees of a Company subsidiary.

The Board of Directors is therefore 50% composed of independent Directors, without taking into account the Directors representing employees and employee shareholders, in accordance with the French AFEP-MEDEF Code.

At its meeting of February 26, 2019, the Board also decided unanimously to apply the following two principles in the future:

- the chairmen or chairwomen of Committees shall all be independent directors;
- directors who lose their independent status during their term of office committed to resign as soon as they are no longer considered independent. This principle shall apply in 2020 to Nicolas Bazire and Guillaume Pepy, who will have been directors for over twelve years at that time.

Criteria / Directors	Gérard MESTRALLET	Jean-Louis CHAUSSADE	Nicolas BAZIRE	Miriem BENSALAH-CHAQROUN	Valérie BERNIS	Franck BRUEL	Francesco CALTAGIRONE	Delphine ERNOTTE CUNCI	Lorenz D'ESTE	Isidro FAINE CASAS	Judith HARTMANN	Isabelle KOCHER	Anne LAUVERGEON	Pierre MONGIN	Guillaume PEPY	Brigitte TAITTINGER-JOUYET	Agatta CONSTANTINI	Enric Xavier AMIGUET I ROVIRA	Guillaume THIVOLLE
Is not an employee or Executive Corporate Officer of the Company or a company of the Group [a]	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓			
Does not have cross-directorships with another Company executive or Director	✓		✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not have significant business relationships	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not have close family ties with another Corporate Officer	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Has not been a Statutory Auditor of the Company during the previous five years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Has not been a Director of the Company for more than 12 years	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Does not represent a shareholder holding more than 10% of the Company's share capital [a]		✓	✓	✓			✓	✓	✓	✓			✓		✓	✓	✓	✓	✓
Is not a non-executive Corporate Officer receiving variable compensation or compensation that is tied to the Company's performance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Independent Director			✓	✓			✓	✓	✓				✓		✓	✓			

(a) Or has not held such a position during the previous five years.

DIRECTORS' CHARTER

The Directors' Charter, annexed to the Board of Directors' Internal Regulations, contains guidelines to which each Director must adhere in order to fully exercise their functions, ensuring the full effectiveness of their personal contribution, in accordance with the rules of independence, ethics and integrity.

The Charter states that each Director must act in the Company's interest and must represent all shareholders. It also reminds them of the principles of independence, duties of expression, loyalty, discretion, confidentiality, professionalism, commitment, and the collegiality and efficiency of the Board's work.

In addition, the Directors' Charter stipulates that every Director must inform the Board of any conflict of interest, even potential, that might directly or indirectly affect him or her. In the event that a Director cannot avoid being in a conflict of interest, (s)he must refrain from participating in discussions and any decisions on the relevant matters.

The Board of Directors, upon the recommendation of the Appointments and Compensation Committee, also adopted in June 2012 a Code of Conduct relating to the prevention of market abuse that was reviewed by the Appointments and Governance Committee and then approved by the Board of Directors, in December 2016. The main provisions of this code can be found in chapter 14.2 of the Reference Document.

2. General Management

METHOD OF EXERCISING GENERAL MANAGEMENT

The Company is a public limited company with a Board of Directors that, since the date of its initial public offering in July 2008, opted to dissociate the functions of the Chairman of the Board of Directors from those of the Chief Executive Officer, whose respective duties are clearly defined in the Company bylaws and the Board of Directors' Internal Regulations.

The Board of Directors, on July 23, 2008, then appointed Gérard Mestrallet, Chairman of the Board of Directors, and Jean-Louis Chaussade, Chief Executive Officer. Their terms of office were then renewed several times and will expire at the end of the Shareholders' Meeting on May 14, 2019 due to reaching the statutory age limit set forth for the Chairman of the Board of Directors and the Chief Executive Officer.

In this context, upon recommendation of the Appointments and Governance Committee, during its meeting on December 20, 2018, the Board of Directors voted to confirm the separation of the positions of Chairman of the Board of Directors and of Chief Executive Officer and to appoint Bertrand Camus as Chief Executive Officer effective May 14, 2019, subject to his appointment as a Director by the Shareholders' Meeting on May 14, 2019. During its meeting on February 26, 2019, the Board voted to appoint Jean-Louis Chaussade as Chairman, effective as of May 14, 2019.

The Board of Directors considers that dissociating the positions makes it possible to clearly separate the powers of control and determination of the Company strategy exercised by the Board, for which the Chairman shall ensure the smooth operation, from the powers of management and implementation of this strategy, which lie with the Chief Executive Officer.

DUTIES OF THE CHAIRMAN OF THE BOARD OF DIRECTORS

In accordance with the law and Article 3 of the Internal Regulations, the Chairman of the Board of Directors organizes and manages its work and reports on it to the Shareholders' Meeting. The Chairman ensures that the Company's governing bodies function correctly and, in particular, that the Directors are fit to carry out their duties. The Chairman also participates in the process of appointing Directors. He may be consulted on certain significant or strategic events. He can monitor relations with shareholders, on the topic of governance.

As a result, throughout 2018, the Chairman helped organize and monitor the succession process for the Chairman of the Board and the Chief Executive Officer in close collaboration with the Appointments and Governance Committee.

LIMITS OF THE CHIEF EXECUTIVE OFFICER'S POWERS

The Chief Executive Officer holds the most extensive powers to act, under all circumstances, on behalf of the Company. He exercises those powers within the limit of the corporate purpose and subject to (i) the powers granted by law to Shareholders' Meetings and the Board of Directors, and (ii) internal limits on executive powers.

In this regard, the Internal Regulations define the limits on the powers of the Chief Executive Officer, which are summarized below.

- The Chief Executive Officer shall submit the following to the Board of Directors for prior approval:
  - material transactions likely to affect Group strategy or modify its financial structure, scope, activities or risk profile. The following in particular are considered material: transactions involving a commitment in excess of EUR 350 million, agreements, transactions and settlements in case of a dispute if the amount is greater than EUR 100 million, and
  - transactions that fall outside the Company's stated strategy.

  In addition, at its meeting of September 24, 2013, and in the context of the end of the Shareholders' Agreement, the Board of Directors specified that any acquisition, investment or disposal of an investment worth over EUR 100 million (other than maintenance capital expenditure), as well as any standard financing transactions with banks or on the bond market amounting to over EUR 700 million must have the Board's prior approval.
- In addition, the Chief Executive Officer may grant endorsements and guarantees up to a total amount granted by the Board of Directors, which in fiscal year 2018 was EUR 500 million, with an added secondary limit of EUR 100 million per transaction. Beyond these two limits, the Chief Executive Officer must request the prior approval of the Board of Directors.
- The Chief Executive Officer consults the Appointments and Governance Committee prior to any appointment of a member of the Management Committee.

MANAGEMENT COMMITTEE AND EXECUTIVE COMMITTEE

To successfully perform his duties, the Chief Executive Officer is assisted by a Management Committee comprising 10 other members whose biographies are provided in section 14.1.2 of the Reference Document.

The Company is continuing its goal of obtaining gender balance within the Management Committee.

Women currently represent 30% of the Management Committee (not counting the Chief Executive Officer), 23.8% of Top Executives and 29.4% of management positions. The Company set ambitious goals for adding women to middle management bodies (Top Executives and the Executive Committee), so it can build a suitable talent pool. In this regard, and since 2015, the long-term incentive plans of members of the Management Committee, the Executive Committee and Top Executives include a 10% increase or decrease depending on the level of gender balance achieved in management. This policy, driven by the Human Resources Department in line with the management of each business unit, is closely monitored by the Board of Directors and the Ethics and Sustainable Development Committee. The gender diversity policy implemented by the Group and results of it are detailed in chapter 17 of this Reference Document.

The Chief Executive Officer is also assisted by an Executive Committee comprising the Chief Executive Officers of the Group's Business Units and the heads of the functional departments.

The composition of these committees is detailed on the Company website (www.suez.com).

3. Preparation and organization of tasks performed by the Board of Directors and the specialized Committees

FUNCTIONING AND TASKS OF THE BOARD OF DIRECTORS

The Board of Directors has Internal Regulations which, beyond the provisions of the law and the Company bylaws, set out the rules on the composition, role and powers of the Board of Directors and its Committees. The main aspects of the Internal Regulations concerning the Board of Directors' operations are described in section 21.2.2.1 of this Reference Document.

The Internal Regulations were first adopted by the Board of Directors on July 23, 2008 at the time of the Company's initial public offering. These Internal Regulations were amended by the Board of Directors at its meeting of February 7, 2012. Indeed, it was decided at that time, with a view towards proper governance of the Company, to update the Internal Regulations, notably to strengthen the engagement of the Committees, particularly that of the Audit and Financial Statements Committee, to update and clarify certain provisions relating to the functioning of the Board of Directors, and the limits on the powers of the Chief Executive Officer and, lastly, to establish a Directors' Charter aimed at recalling the terms and conditions under which the Directors are to perform their duties, their contribution to the work of the Board and its Committees, the rights and resources granted to the Directors, and the rules on confidentiality, independence, ethics and integrity, which are an intrinsic part of their functions. The Internal Regulations were also updated on July 30, 2013, to take into account the end of the shareholders' Agreement relating to the Company on July 22, 2013 ; on July 28, 2015, in order to split the Appointments and Compensation Committee into two separate committees – the Appointments and Governance Committee and the Compensation Committee ; and on February 28, 2018 to adapt the duties of the Audit and Financial Statements Committee to the legal audit reform.

Activities of the Board of Directors in 2018

The Board meets as often as the interests of the Group require. In 2018, the Board met seven times (excluding the Directors' strategy seminar mentioned below), with a Board member attendance rate of 91.5% (90% in 2017).

They mainly dealt with subjects such as business reviews, the financial position and results (review of the annual, half-year and quarterly results, and analysis of earnings forecasts), the Group's financing position (debts, available cash, bond issue), the renewal of the share buyback program, governance (change of the composition of the Board of Directors and Committees and evaluation of the organization and functioning of the Board and Committees), monitoring the integration of GE Water and reviewing the vigilance plan. The Board has also monitored the succession process for the Chairman of the Board of Directors and the Chief Executive Officer whose terms of office are expiring at the end of the Shareholders' Meeting on May 14, 2019. It has also indicated that Jean-Louis Chaussade and Bertrand Camus will be appointed as Chairman and Chief Executive Officer, respectively, at the end of said Shareholders's Meeting subject to the appointment of Bertrand Camus as Director.

The Board also renewed the Chief Executive Officer's annual authorization to issue endorsements and guarantees, and approved guarantee projects of amounts greater than the Chief Executive Officer's authorization threshold. Lastly, it regularly reviewed the work of its various Committees.

Attendance rate of Directors at Board of Directors meetings and Committee meetings in 2018

	Overall attendance rate	Board of Directors	Audit and Financial Statements Committee	Compensation Committee	Appointments and Governance Committee	Ethics and Sustainable Development Committee	Strategy Committee
Gérard Mestrallet	100%	100%					100%
Jean-Louis Chaussade	100%	100%					
Enric Amiguet i Rovira	100%	100%				100%	
Nicolas Bazire	84%	71%	83%		94%		50%
Miriem Bensalah-Chaqroun	71%	71%					
Valérie Bernis	85%	86%			82%	100%	
Franck Bruel	100%	100%					
Francesco Caltagirone	100%	100%					100%
Agatta Constantini	100%	100%		100%			100%
Delphine Ernotte Cunci	94%	86%	100%			100%	
Lorenz d'Este	100%	100%		100%	100%	100%	
Isidro Fainé Casas	67%	71%					50%
Judith Hartmann	92%	83%	100%				
Isabelle Kocher	88%	83%					100%
Anne Lauvergeon	96%	86%		100%	100%		
Pierre Mongin	100%	100%		100%			
Guillaume Pepy	100%	100%	100%				100%
Guillaume Thivolle	92%	100%	83%				
Brigitte Taittinger-Jouyet	100%	100%					
Overall Average	**93.1%**	**91.5%**	**93%**	**100%**	**94%**	**100%**	**86%**

Performance assessment of the Board of Directors and Committees

As part of the work undertaken by the Board of Directors, to improve its composition, its functioning, its organization and its relations with the Committees, the Appointments and Governance Committee follows a process each year to assess the functioning of the Board of Directors and its Committees. This process takes the form of a self-assessment or, at regular intervals and at least every three years, an evaluation conducted by an external consultant (who then also assesses the individual contribution of Directors). Such an assessment by an external consultant was conducted in 2016.

During fiscal year 2017, individual self-assessment questionnaires relating to the composition and functioning of the Board of Directors, the relations between the Board and the Committees and the composition and functioning of each Committee, which take into account the standard questionnaire circulated by the AFEP and MEDEF, were prepared by the Appointments and Governance Committee. These questionnaires include factors for assessing the individual contribution of Directors.

The answers provided by the Directors were presented anonymously in December 2017 to the Appointments and Governance Committee, which also examined the individual attendance rates of Directors. The self-assessment report was then presented by the Chairman of this Committee to the Board of Directors at its meeting of February 28, 2018. After this evaluation and discussion of it, the Directors granted their approval of the organization and functioning of the Board and its Committees. The Board's composition is seen as rich in expertise and experience, and increasingly international. The Directors nevertheless indicated that it could, in future, be strengthened by new expertise in terms of entrepreneurship and innovation.

Regarding the functioning of the Board and the matters it handles, the Directors highlighted the quality of the strategy seminar, the format of which was very well received. Areas due for improvement have also been specified and decisions have been made by the Board in their regard, on the recommendation of the Appointments and Governance Committee. It was therefore decided to systematize the practice that allows Directors to meet at regular intervals without the executive corporate officers being present, at the annual strategy seminar, for example.

Upon the recommendation of the Appointments and Governance Committee, the Board of Directors voted to have an external assessment conducted on the Board. The assessment will be performed in 2019 and the report will be detailed in the 2019 Reference Document.

SPECIALIZED COMMITTEES

The Board of Directors is supported by five committees since July 28, 2015: the Audit and Financial Statements Committee, the Appointments and Governance Committee, the Compensation Committee, the Strategy Committee and the Ethics and Sustainable Development Committee.

The Internal Regulations set out the rules governing the composition and role of each Committee. The Committees have the option of requesting assistance from external experts.

Minutes from each meeting of these various committees were submitted to the Board of Directors and, where appropriate, recommendations were made for decisions within the Board's remit.

The Board of Directors will conduct a review, after the Shareholders' Meeting of May 14, 2019, of the composition of the various Committees.

The Audit and Financial Statements Committee

6 meetings in 2018
93% attendance
75% Independent Directors

Composition

The Audit and Financial Statements Committee is composed of five members: Guillaume Pepy (Chairman), Delphine Ernotte Cunci, Judith Hartmann, Nicolas Bazire and Guillaume Thivolle. This composition remained the same in 2018.

With Delphine Ernotte Cunci, Guillaume Pepy and Nicolas Bazire qualifying as independent, the proportion of independent Directors is 75% of the Committee members (excluding the Director representing employee shareholders), including the Chairman, in line with the recommendations of the AFEP-MEDEF Code. As described in the biographies of the members of the Audit and Financial Statements Committee in chapter 14 of the Reference Document, Delphine Ernotte Cunci, Judith Hartmann, Nicolas Bazire and Guillaume Pepy have financial and/or accounting competency based on their education or functions and as defined by Article L. 823-19 of the French Commercial Code. Moreover, Delphine Ernotte Cunci, Judith Hartmann, Nicolas Bazire and Guillaume Pepy hold Senior Management positions in large corporations.

Missions

The Audit and Financial Statements Committee assists the Board of Directors in ensuring the accuracy and fair presentation of SUEZ's parent company and Consolidated Financial Statements and the quality of the internal control procedures and information provided to shareholders and financial markets. The Committee presents opinions and recommendations in the areas described below to the Board of Directors.

The Board of Directors specifically entrusts the Committee with the following engagements, consistent with the engagements defined for the Audit Committee by Article L. 823-19 of the French Commercial Code. The Company also refers to the report of the working group on Audit Committees published by the AMF on July 22, 2010.

- As regards the financial statements, the Committee:
- monitors the process of preparing the financial information and, where applicable, draws up recommendations to ensure its integrity;
- reviews, before publication, the draft annual and interim financial statements, the activity and income report and any financial statements (including forecasts) drawn up for specific major transactions and significant financial press releases, before they are circulated to the Board of Directors or publicly released;
- assesses the relevance and permanence of the accounting rules and principles used in preparing the statutory and Consolidated Financial Statements and prevents any potential breach of those rules;
- requests details of any change in the scope of consolidation and, where necessary, obtains all required explanations;
- meets, whenever it deems it necessary, with the Statutory Auditors, Senior Management, the Finance Department, internal auditors and any other member of management; these hearings may take place, where necessary, without the presence of the General Management;
- ensures the quality of procedures to guarantee compliance with stock exchange regulations;
- is informed annually on financial strategy and on the terms and conditions of the Group's main financial transactions;
- is periodically informed about the Group's tax situation.
- As regards the external auditing of the Company, the Committee:
- ensures that both the annual and Consolidated Financial Statements are audited by the Company's Statutory Auditors;
- issues a recommendation on the Statutory Auditors' appointment or renewal at the Shareholders' Meeting; it also examines issues relating to the potential dismissal of the Statutory Auditors;
- supervises the rules for using the Statutory Auditors for work other than the auditing of the financial statements, by ensuring observance of the principles guaranteeing the independence of the Statutory Auditors, by analyzing the risks constraining their independence, as well as safeguard measures applied to reduce these risks;
- gives prior approval to any duty entrusted to the Statutory Auditors outside of the legal audit of financial statements, insofar as these duties are not prohibited by the regulations;
- monitors the fulfillment by the Statutory Auditors of their mission, taking into account, where applicable, the findings and conclusions of the Haut Conseil du Commissariat aux Comptes (Audit Office Control Board) arising from checks that it may carry out;
- examines the additional report prepared by the Statutory Auditors, which is intended for it;
- examines each year with the Statutory Auditors the audit fees paid by the Company and the Group to entities of the networks to which the Statutory Auditors belong, their audit schedule, the conclusions reached by the latter, their recommendations, and the follow-up to these recommendations;
- examines each year with the Statutory Auditors the amounts of fees relating to duties not arising from the legal audit paid by the Company and its Group to entities of the networks to which the Statutory Auditors belong;
- arbitrates, where necessary, on issues that may arise between the Statutory Auditors and General Management in the course of their work.
- As regards internal control and auditing of the Company, the Committee:
- monitors the efficiency and the quality of the Group's internal control systems, as well as the internal audit, with regard to the procedures relating to the preparation and handling of accounting and financial information without this infringing its independence;
- examines, with the heads of internal audit, the audit schedules and action plans involved in internal audit, the conclusions of these audits and actions, and the recommendations and their follow-up, without the General Management necessarily being present;
- is informed by the General Management, or by any other means, of any complaints from third parties or any internal information critical of the Company's accounting documents or internal control procedures, as well as the procedures put in place for this purpose and the remedies for such claims or criticisms;

- entrusts the internal audit with any assignment it deems necessary.
- As regards risks and commitments, the Committee:
- evaluates the efficiency and quality of the Group's systems and procedures for evaluating and managing risks;
- is regularly updated on the Group's financial and cash position and major commitments and risks;
- is regularly informed of the Group's main disputes.

Activity in 2018

The Audit and Financial Statements Committee met six times in 2018 (as well as one joint meeting with the Strategy Committee), with an attendance rate of 93%. The Committee's files are sent to Committee members several days before the Committee meeting, to give them enough time to review the documents concerned. The Committee has regular discussions with Company executives who are responsible for matters within the Committee's scope of authority: Deputy CEO in charge of Finance, General Secretary, Director of Internal Audit, Director of Risk and Investment, Group General Counsel, Director of Accounting, Consolidation, Tax and Internal Control, Director of Treasury and Capital Markets, Director of Corporate Planning and Finance. The Statutory Auditors, barring exceptional circumstances, attend all Audit and Financial Statements Committee meetings.

The main issues addressed by the Committee were as follows: the review of the annual financial statements as of December 31, 2017, the half-year accounts as of June 30, 2018, the quarterly results and press releases relating thereto, a review of the 2018 budget, the financing and debt situation, the financing and accounting impacts of the acquisition of GE Water (particularly the allocation of the purchase price).

The Statutory Auditors presented to the Committee highlights of the Company's results, the main accounting options retained and Key Audit Matters of the financial statements audit for the year in accordance with the provisions relating to justifying their assessment.

In addition, the Committee was asked to discuss earnings forecasts and updates, cash flow projections, the medium-term plan (jointly with the Strategy Committee) and the estimated financial documents for the current fiscal year. An overview of the off-balance sheet commitments of the Group, for which a report is issued at closing of the consolidated half-year and annual financial statements, was also carried out by the Finance Department.

The Committee supervised the execution of the 2018 internal audit plan and the main conclusions of the most significant audits. The Committee also reviewed and monitored progress in the internal control plans defined in conjunction with the main Group entities. The Committee also reviewed the internal audit and internal control plans for 2019.

The Committee reviewed the risk mapping presentation prepared by the Management Committee with support from the Risk and Investment Department, as well as the measures taken to manage identified risks. The Committee regularly took stock of the major litigation cases in progress. The Committee also examined the Group's policy with respect to insurance.

In 2018, the Committee approved the fees paid to the Statutory Auditors. The Committee also gave its approval to the tasks assigned to the Statutory Auditors outside their audit responsibilities and reviewed, at the end of 2018, the list of services authorized by type for 2019. Furthermore, at its request, the Committee may meet with the Statutory Auditors without Company management being present.

The Appointments and Governance Committee

17 meetings in 2018
94% attendance
75% Independent Directors

Composition

The Appointments and Governance Committee is composed of four members: Anne Lauvergeon (Chairwoman), Valérie Bernis, Nicolas Bazire and Lorenz d'Este. This composition remained the same in 2018.

With Anne Lauvergeon, Lorenz d'Este and Nicolas Bazire qualifying as independent, the proportion of independent Directors is 75% of the Committee members, in line with the recommendations of the AFEP-MEDEF Code.

The Chief Executive Officer is not a member of the Appointments and Governance Committee, in accordance with the AFEP-MEDEF Code. He participates in Committee meetings when the succession plan for the main executives of the Group is discussed. He is involved in the selection process for new Directors (with the Chairman of the Board of Directors), as well as other Committee work. In addition, he does not participate in discussions regarding his own position.

Missions

The Board of Directors tasks the Appointments and Governance Committee with the following:

- regularly reviewing the principles and independence criteria relating to members of the Board of Directors considered to be independent Directors;
- examining all applications for appointment to a seat on the Board of Directors or as a Board observer, where applicable, and formulating an opinion and/or recommendation to the Board of Directors on these applications;
- formulating all pertinent recommendations regarding the composition of Committees;
- preparing, in due course, recommendations for the successor to the Chief Executive Officer and, where necessary, the Chairman of the Board of Directors;
- preparing the discussions of the Board of Directors regarding the appointment of one or more Chief Operating Officers;
- periodically reviewing the succession plan for members of the Management Committee and the main executives;
- ensuring that the Company applies rules in the area of governance, especially the recommendations of the AFEP-MEDEF Code;
- formulating recommendations on governance issues that fall under the competence of the Board of Directors, especially with regard to implementing differentiated rights for certain categories of shareholders.

The Committee is also consulted on appointments to positions on the Management Committee. It is informed beforehand of the changes to managerial structures in the Group and of changes in its senior executives.

Lastly, the Committee is tasked by the Board of Directors with issuing an opinion on any new office that the Chief Executive Officer might consider holding in a listed French or foreign company. The Committee is also informed of any new office held by a Director in a listed French or foreign company (including on a Committee).

Activity in 2018

In 2018, the Appointments and Governance Committee met 17 times, with an attendance rate of 94%.

In 2018, the Committee's activity was particularly marked by monitoring the succession process for the Chief Executive Officer and Chairman of the Board. As a result, the Committee met very regularly to define the process for selecting candidates for Chief Executive Officer, then complete the different steps of this process in order to make a recommendation to the Board of Directors. Consequently, the Committee began by soliciting the help of an external consultant and receiving both internal and external applications. It then saw selected candidates with other available Directors in attendance, including the Chairman of the Board of Directors, to assess the candidates and analyze their vision for the Group in particular. Lastly, after having heard a diverse array of opinions on the candidates, and although the other candidates were excellent, the Committee formulated a recommendation to the Board that resulted in the unanimous appointment of Bertrand Camus as Chief Executive Officer effective as of May 14, 2019 (subject to his appointment as a Director by the Shareholders' Meeting on May 14, 2019). Regarding the term of office of the Chairman of the Board of Directors, in 2018, the Board launched an internal call for applicants which resulted in the appointment of Jean-Louis Chaussade in 2019.

Other topics handled by the Committee related to governance, assessment of the Board's and its Committees' functioning, a review of the independence of Directors and a review of the composition of the Board of Directors and the Committees.

The Compensation Committee

3 meetings in 2018
100% attendance

67% Independent Directors

Composition

The Committee is composed of four members: Lorenz d'Este (Chairman), Pierre Mongin, Agatta Constantini and Anne Lauvergeon. Its composition remained the same in 2018.

In accordance with the recommendations of the AFEP-MEDEF Code, a Director representing employees is thus a member of this Committee.

As Lorenz d'Este and Anne Lauvergeon are independent Directors, the Committee is two-thirds composed of independent Directors (excluding the Director representing employees).

Missions

The Committee is responsible for:

- setting the Chief Executive Officer's targets each year, which will subsequently serve as a reference in assessing his performance and in determining the portion of his compensation that is performance-based, and to assess, in due course, the level at which these performance criteria were achieved;
- making recommendations to the Board of Directors on compensation, retirement and employee benefit schemes, benefits in kind, and other cash entitlements, including, when applicable, the allocation of a long-term compensation in the form of stock options to subscribe or purchase shares of the Company, as well as the allocation of bonus shares or cash to the Chairman, Chief Executive Officer, and if applicable, the Chief Operating Officers (*Directeurs Généraux Délégués*);
- preparing the Board's work on issues related to employee shareholding and long-term incentive plans;
- making recommendations to the Board of Directors on the compensation of Directors and, if applicable, any Board observers.

Activity in 2018

In 2018, the Committee met three times, with an attendance rate of 100%.

The Committee reviewed the compensation of the Chairman and the Chief Executive Officer for 2018, the variable compensation of the Chief Executive Officer, the compensation of the Management Committee and the amounts and distribution of Directors' fees, as it does yearly. The Committee examined the long-term compensation plan as well as the integration of GE Water in the Group's compensation mechanisms. It also took stock of the Group's employee shareholding program. Lastly, the Committee began reviewing the 2019 compensation policy for Corporate Officers within the context of the succession of the Chairman and Chief Executive Officer so as to be in a position to make the necessary recommendations to the Board and submit these compensation policies for vote at the Shareholders' Meeting on May 14, 2019.

The Strategy Committee

2 meetings in 2018
86% attendance

50% Independent Directors

Composition

The composition of the Strategy Committee changed during 2018 as the directorship of Ines Kolmsee expired at the end of the Shareholders' Meeting on May 17, 2018.

The Strategy Committee is composed of seven members: Gérard Mestrallet (Chairman), Agatta Constantini, Isabelle Kocher, Nicolas Bazire, Francesco Caltagirone, Isidro Fainé Casas and Guillaume Pepy.

Nicolas Bazire, Francesco Caltagirone and Guillaume Pepy are independent Directors. The Committee is thus 50% composed of independent Directors (excluding the Director representing employees).

Missions

The Strategy Committee gives its opinion and submits a recommendation to the Board of Directors concerning:

- the strategic objectives set by the Board of Directors or proposed by the Chief Executive Officer; and
- all significant projects submitted to the Board of Directors involving internal and external growth, disposal, strategic agreements, alliances and partnerships.

Upon presentation of a report by the Chief Executive Officer, the Committee carries out a strategic review once a year, which it submits in due time to the Board of Directors.

Activity in 2018

In 2018, the Strategy Committee met twice (as well as once jointly with the Audit and Financial Statements Committee), with an attendance rate of 86%. The main issues addressed by the Committee related to the 2019-2022 medium-term plan (reviewed jointly with the Audit and Financial Statements Committee), the consolidation of GE Water's activities into the Group after its acquisition, change in the asset portfolio, and preparation of the Board of Directors' strategy seminar.

All of the Directors met in November 2018 for a two-day strategy seminar during which the Directors discussed the Group's strategy and its operational implementation and reviewed, in particular, the developments in the deployment of the Group strategy, the main areas for development (especially in the fields of industry and agriculture, as well as digital and innovation), investment and divestment projects under consideration, and aspects of the Group's transformation.

The Ethics and Sustainable Development Committee

3 meetings in 2018
100% attendance

67% Independent Directors

Composition

The Ethics and Sustainable Development Committee is composed of four members: Delphine Ernotte Cunci (Chairwoman), Valérie Bernis, Lorenz d'Este and Enric Xavier Amiguet i Rovira. The Committee's composition thus remained the same in 2018.

With Delphine Ernotte Cunci (Chairwoman) and Lorenz d'Este qualifying as independent, the proportion of independent Directors is 67% of the Committee members (excluding the Director representing employees).

Missions

The Ethics and Sustainable Development Committee ensures compliance with the individual and collective values on which the Group bases its actions and the rules of conduct that all staff members must follow.

These values include the Group's specific responsibilities with respect to environmental protection and improvement and sustainable development. The Group ensures that the necessary procedures are in place to:

- update the Group's current Ethics Charter and ensure that it is circulated and applied;
- ensure that French and foreign subsidiaries implement the Group's Ethics Charter, taking into account the domestic legal and regulatory framework of the country where they carry out their business;
- carry out training programs intended to support the circulation of the Group's Ethics Charter;
- obtain from the various Group companies information on the solutions they have selected for issues presented to their own Committee.

The Ethics and Sustainable Development Committee reviews and evaluates:

- the Group's sponsorship and philanthropic initiatives;
- the health and safety policies implemented, including their objectives and results;
- the Risk Management systems and policies involving corporate social responsibility and sustainable development.

Activity in 2018

In 2018, the Committee met three times, with an attendance rate of 100%.

The main topics addressed by the Committee were the health and safety policy with the 2017 review and the draft action plan to be implemented in 2018, the environmental and industrial Risk Management policy, and the quality of drinking water and the conformity of wastewater. The Committee established a report of sustainable development indicators at the end of 2017 and established a roadmap for the 2017-2020 period.

The ethics policy was also reviewed with the presentation of the Ethics Officer's 2017 report and the 2018 action plan. The Committee also reviewed the corruption risk mapping. Furthermore, the Committee examined the policy in terms of gender, salary equality, diversity and the actions to be implemented and also reviewed training in the context of the Group's transformation in France and the Social Report as of December 31, 2017. The Committee also took stock of the implementation of the Sapin 2 Law and general regulations on data protection. Finally, the Committee reviewed the non-financial performance statement and the non-financial ratings attributed to the Group.

4. Principles and criteria for the determination, distribution and allocation of compensation and benefits of any kind granted to Corporate Officers

This point is addressed in detail in chapter 15 of the Reference Document.

5. Corporate governance code

The Company follows the corporate governance recommendations defined by the French Association of Private Companies (AFEP) and the Movement for the Companies of France (MEDEF) in the AFEP-MEDEF corporate governance code for listed companies (hereinafter the "AFEP-MEDEF Code"). The latest version of this code, dated June 2018, can be viewed on the website www.medef.fr.

The Company referred to the latest version of the AFEP-MEDEF Code published in June 2018 for the preparation of this Report on corporate governance.

The recommendations of the AFEP-MEDEF Code are fully respected by the Company, except for the Code recommendation listed below:

Recommendation 10.3 of the AFEP-MEDEF Code	SUEZ's practice and justification
The AFEP-MEDEF Code recommends that at least one meeting per year be organized without executive Corporate Officers in attendance.	The Board of Directors met several times in 2018 without members of General Management in attendance, who usually participate in Board of Directors meetings as part of the General Management succession process. Not rejecting this recommendation on a long-term basis, the Board wanted the Chief Executive Officer to participate in discussions relating to his succession, as an exceptional circumstance. In addition, the Chief Executive Officer has recused himself from participating in Board and Committee discussions relating to assessing his performance, as has always been the case.

6. Specific terms and conditions governing shareholder participation in Shareholders' Meetings

The terms and conditions governing shareholder participation in Shareholders' Meetings are set forth in the Company bylaws under section VI, Shareholders' Meetings, Articles 20-23.

The terms and conditions governing shareholder participation in Shareholders' Meetings and their right to vote are also explained in chapter 21.2 of the Reference Document.

For the Combined Shareholders' Meeting of May 17, 2018, the attendance rate was 70.76%. SUEZ also set up an electronic method of notifying shareholders of meetings and 4,582 shareholders agreed to receive the notice of the 2018 Shareholders' Meeting by e-mail. Lastly, in 2012, SUEZ was one of the first companies to enable all of its shareholders, including holders of bearer shares, to vote online through the VOTACCESS system. Hence, 5,300 shareholders used the VOTACCESS online voting platform made available by the Company.

7. Factors likely to have an impact in the event of a takeover bid

Factors likely to have an impact in the event of a takeover bid, as listed in Article L. 225-37-5 of the French Commercial Code, are set forth in sections 18.3.2 and 21.2.6 of this Reference Document.

8. Authorizations and delegations of authority granted by the Shareholders' Meeting

The authorizations and delegations of authority in effect were approved by the Company's Shareholders' Meetings of May 17, 2018.

Authorization/Delegation of authority	Period of validity	Authorized cap	Amount used	Balance
1 Authorization granted to the Company to trade in its own shares (2018 Shareholders' Meeting, Resolution 16)	18 months as from 5/17/2018	Up to a maximum holding of 10% of the share capital	0.57% as of 12/31/2018	9.43%
2 Cancellation of treasury shares (2018 Shareholders' Meeting, Resolution 17)	26 months as from 5/17/2018	10% of the share capital per 24-month period	Not used	Not used
3 Share capital increase, with shareholders' preferential subscription rights, by issuing common shares and/or any transferable securities granting access to the Company's equity securities or granting rights to the allocation of debt securities (2018 Shareholders' Meeting, Resolution 18)	26 months as from 5/17/2018	EUR 497 million [a]	Not used	Not used
4 Share capital increase, without shareholders' preferential subscription rights, by a public issue of the Company's common shares and/or any transferable securities granting access to the Company's equity securities or granting rights to the allocation of debt securities (2018 Shareholders' Meeting, Resolution 19)	26 months as from 5/17/2018	EUR 248 million [a] [b]	Not used	Not used
5 Issue, through an offer as set out in Article L. 411-2-II of the French Monetary and Financial Code (a "private placement"), of common shares and/or transferable securities granting access to the Company's capital, without shareholders' preferential subscription rights (2018 Shareholders' Meeting, Resolution 20)	26 months as from 5/17/2018	EUR 248 million [a] [b]	Not used	Not used
6 Increase, by up to 15% of the initial issue, in the number of shares to be issued in the event of a capital increase, with or without shareholders' preferential subscription rights (2018 Shareholders' Meeting, Resolution 21)	26 months as from 5/17/2018	Up to 15% of the original issue [a] [c]	Not used	Not used
7 Share capital increase in consideration of contributions in kind consisting of equity securities or securities granting access to the capital (2018 Shareholders' Meeting, Resolution 22)	26 months as from 5/17/2018	EUR 248 million (up to 10% of capital) [a] [b]	Not used	Not used

(a) Resolution 28 of the 2018 Shareholders' Meeting set a limit on the total nominal amount of capital increases that may be carried out, immediately or in the future, pursuant to Resolutions 18 to 27 of the 2018 Shareholders' Meeting, of EUR 497 million for issues of shares and/or transferable securities representing debt or similar securities conferring entitlement to the Company's share capital and of EUR 3 billion for issues of transferable securities granting access to equity securities to be issued by the Company, or which grant entitlement to the allocation of debt securities.
(b) Common ceiling of a nominal amount of EUR 248 million, to which the total nominal ceiling set in Resolution 28 of the 2018 Shareholders' Meeting will be assigned.
(c) Subject to the ceiling of the authorization under which the issue is decided.

Authorization/Delegation of authority	Period of validity	Authorized cap	Amount used	Balance
8 Share capital increase in consideration for securities contributed as part of a public exchange offer initiated by the Company, without shareholders' preferential subscription rights (2018 Shareholders' Meeting, Resolution 23)	26 months as from 5/17/2018	EUR 248 million [a] [b]	Not used	Not used
9 Share capital increase through issues of shares or securities granting access to the share capital reserved for members of a company savings plan without shareholders' preferential subscription rights for those employees (2018 Shareholders' Meeting, Resolution 24)	26 months as from 5/17/2018	EUR 50 million [a]	Not used	Not used
10 Share capital increase, without shareholders' preferential subscription rights, in favor of the class (es) of named beneficiaries, as part of the implementation of the SUEZ Group international shareholding and savings plans (2018 Shareholders' Meeting, Resolution 25)	18 months from 5/17/2018	EUR 12 million [a]	Not used	Not used
11 Allocation of bonus shares in connection with an employee shareholding plan (2018 Shareholders' Meeting, Resolution 26)	26 months as from 5/17/2018	0.05% of the share capital	Not used	Not used
12 Free allocation of performance shares (2018 Shareholders' Meeting, Resolution 27)	26 months as from 5/17/2018	0.5% of the share capital	777,944 performance shares granted [d]	2,328,868

(a) Resolution 28 of the 2018 Shareholders' Meeting set a limit on the total nominal amount of capital increases that may be carried out, immediately or in the future, pursuant to Resolutions 18 to 27 of the 2018 Shareholders' Meeting, of EUR 497 million for issues of shares and/or transferable securities representing debt or similar securities conferring entitlement to the Company's share capital and of EUR 3 billion for issues of transferable securities granting access to equity securities to be issued by the Company, or which grant entitlement to the allocation of debt securities.
(b) Common ceiling of a nominal amount of EUR 248 million, to which the total nominal ceiling set in Resolution 28 of the 2018 Shareholders' Meeting will be assigned.
(c) Subject to the ceilling of the authorization under which the issuue is decided.
(d) Free allocation of 777,944 performance shares on July 25, 2018 under the long-term incentive plan.

The Board of Directors

17 employees

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17.1 Human Resources

17.1.1 A Human Resources management policy serving the transformation of the Group

Urban and demographic growth, climate change, the digital revolution and the ensuing new community expectations are major challenges for the Group. Faced not only with these challenges, but also with the multiple opportunities that they create, the Group has been undertaking a profound transformation for several years in its businesses by transforming its historical activities of water and waste into business models based on the principles of the circular economy, adapting its organization with the creation of a Group incorporating industrial services assembled under a unique brand, boosting its international growth capacities while conserving a development potential in its mainstay countries.

The Human Resources management policy related to this transformation, incorporating the personal aspirations and commitment of the employees of the Group, has enabled the business to remain competitive and to maintain a rhythm of regular growth.

The Group's General Management decided to accelerate this transformation by giving itself more room and the priority to boost its commercial effort and to invest in new markets by relying on more intensive innovation. This acceleration is reflected in the establishment of more integrated organizations that are better adapted to the change needed in the decision processes: fewer hierarchical lines, further cooperation, cross-discipline expertise and more shared support functions.

The Group has enhanced several Human Resources management measures, focusing in particular on improving the internal mobility policy, with intensification of the training systems, skills development and specific expertise so that workers can take better advantage of career opportunities related to the changes in the Group's markets and businesses.

This support concerning the Human Resources management of the Group's acceleration and transformation is provided in cooperation with all of the internal stakeholders, through continuous dialogue with the managers, the employees and the social partners.

17.1.2 Values and ethics

SUEZ has made ethics an indispensable element of its global performance. Employee development and mutual respect are central to the values and ethics promoted by the Group.

The Group's ethics policies are derived from the fundamental principles that guide our conduct and are supported by the Ethics Charter:

- strict respect for laws and regulations;
- a culture of integrity;
- loyalty and honesty;
- respect for others.

The Group strives to maintain quality human relationships: listening and accountability are the foundations of respect. In this context, it is the responsibility of management to enable all employees to perform their jobs in good physical and psychological conditions.

SUEZ's desire to be one of the leaders of the Resource Revolution will only be attained with the support of its managers and their ability to mobilize their teams.

To support the management, the Group has defined five shared Leadership Attitudes:

- commitment: ability to develop and show commitment to oneself and to others;
- customer focus: ability to anticipate, understand and respond to customer needs;
- entrepreneurial spirit: ability to anticipate problems and opportunities;
- cooperation: ability to understand and use the organization and its resources for more efficiency;
- learning from differences: ability to research various points of view and enrich our understanding of our ability to act more efficiently.

The Group has included a commitment to ethics in the "Commitment" Leadership Attitude.

In addition, SUEZ has developed and rolled out a simple and user-friendly HR system: "Talent'Up". This Group HR tool now enables each of its employees to showcase all their skills and expertise, manage their goals and share their career aspirations. This platform, which will eventually be shared by all employees (90,000 people), is also an opportunity for SUEZ to make its HR practices consistent for the entire Group and offer employee career paths that are tailored to each employee's goals and ambitions. The "Talent'Up" platform includes an assessment completed by the employee and manager on how the employee, their team and their business segment apply and comply with SUEZ's standards of ethics on a daily basis.

17.1.3 Our Human Resources strategy

All SUEZ employees are committed to the Resource Revolution. They are working hard all around the world to deliver concrete solutions to municipal customers, industrial clients, farmers and consumers so they can sustainably and efficiently manage their resources.

While the Resource Revolution is vital, the women and men who make it possible are even more so.

The Group must adapt to a major change in its business model and to a genuine cultural transformation.

Attracting, developing and supporting employees remains a crucial focus area of our HR policy to support our growth.

The SUEZ Group recognizes the importance of listening to employees, and in 2018, the Group conducted a global survey on commitment with all Group entities around the world for the first time, called "Tell us".

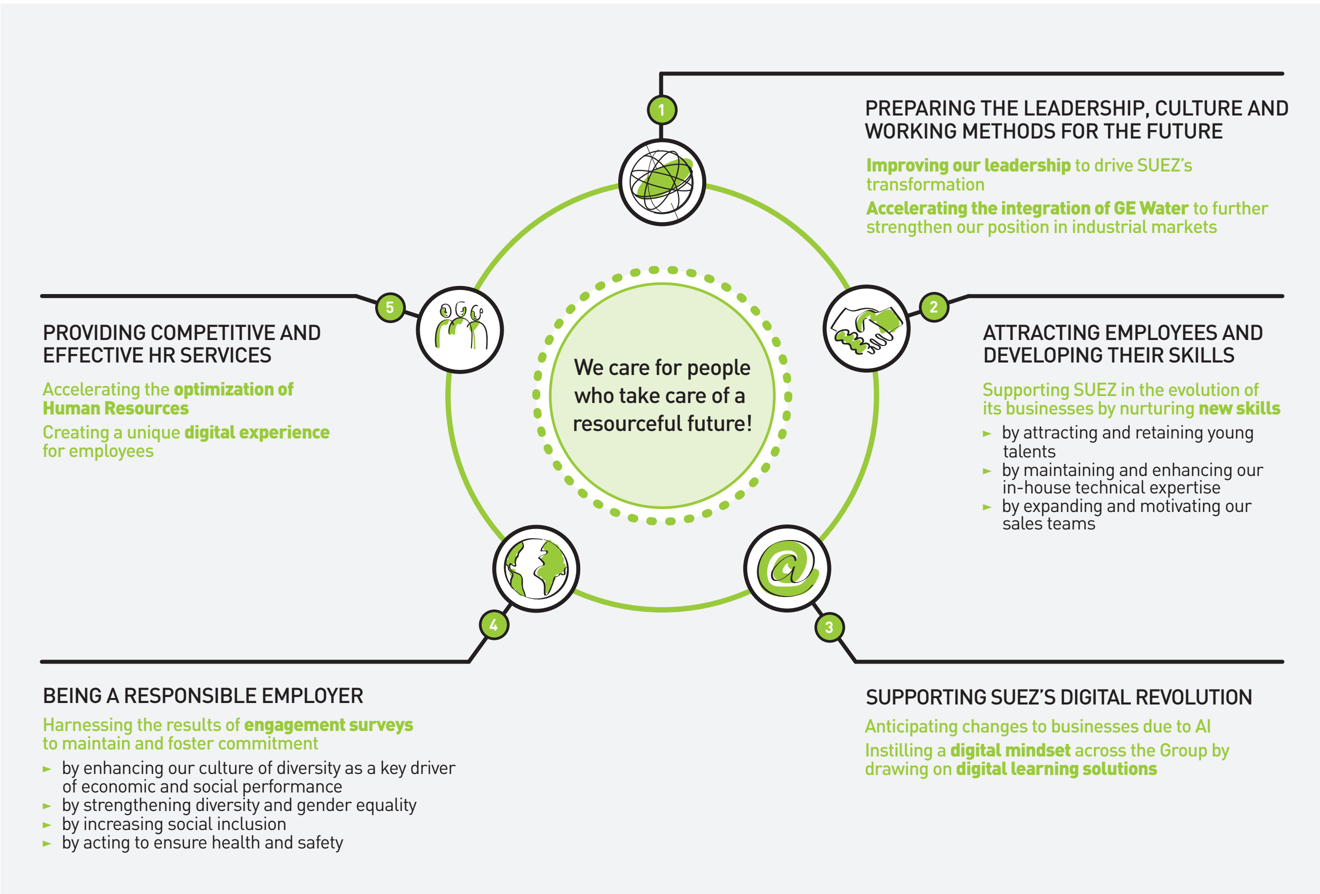
Thanks to a high participation rate (72%), the survey results have been an abundant and worthwhile source of information that have helped us to develop HR action plans.

The survey showed that SUEZ employees have a strong level of commitment (61%) and are genuinely proud to work for the Group (73%).

In addition, the survey showed that:

- 64% of employees have a positive opinion of their managers;
- 72% are genuinely interested in their work;
- 81% are very satisfied with the Health and Safety policy and initiatives led in this area.

Drawing on the summary of the "Tell us" results, and in line with SUEZ's strategic goals, the HR policy is divided into several focus areas:



Developing everyone's talents

SUEZ's Talent policy has a triple objective: develop the skills of its employees, support them in building enriching career paths, enable the Group to grow and be agile in its transformation.

Identifying employee potential is a local management process. Whether identifying future Top Executives or the best experts for tomorrow, the use by managers of the tools available to them guarantees progress and success. This approach is supplemented by a battery of People Reviews that allow us to provide every person at every level (local and central) with an individualized and appropriate response.

The entire People Reviews process has been deployed in the entities of the SUEZ Group. This process makes it possible for all employees from each entity to have a performance review and to offer means of development to each of them. In fact, at all job levels in the organization, employees of the Group benefit from support that enables them to grow (training, internal mobility, career interviews, etc.). Additionally, Human Resources Directors from the various entities define, together with management, all of the key roles in the organization of each of its entities. The purpose of this is to address the current and future development requirements of the Group. The People Reviews are also an opportunity for all entities to carry out a comprehensive review of "Talents", with the strongest potential abilities identified as Talent For Key Roles.

Once identified, the Talent For Key Roles will form a talent pool for the various succession plans for our key roles.

Individuals defined as Talent For Key Roles are reviewed through career specific monitoring at the Group level. In order to develop its Talent For Key Roles, SUEZ makes different development programs (French and international) available to all its entities, and particularly a Development Center. The main goal of the Development Center is to make it possible for Talents to assess their skills through a comprehensive and structured procedure based on the Leadership Attitudes. The Development Center allows them to assess where they stand in terms of skills and to reflect, accordingly, on their development. In 2018, two new Development Centers were rolled out within the Group:

- a 100% virtual Digital Development Center;
- a "Topex" Development Center to support young executives as soon as they are appointed.

The Leadership Academy also offers Talent For Key Roles or potential managers development programs, such as:

- Learning with stakeholders: a program aiming to open employees up to new perspectives by teaching them about different cultures and operating methods through international exposure;
- Global Mind Opener: an international program covering digital technologies (the program took place in Silicon Valley in 2018);
- Local Mind Opener: a program for managers to help them learn about their local innovation ecosystem;
- New Joiners: orientation program for new managers launched in 2018: a two-day seminar with the participation of members of the Management Committee.

The People Reviews are also an opportunity for Operating Management to identify Group experts, who are then approved by a technical committee. These experts, who are part of the Group's key staff, participate in a specific development program, Learning for Experts, that serves to better communicate and share their expertise.

Developing skills remains a determining factor in the Group's Career Management policy. Factors that contribute to this objective include specific methods of recognition and customized training programs.

SUEZ also plans to hire more young talents to rejuvenate the Group's culture and acquire new skills in line with changes in the business.

In order to attract and develop these profiles, the Group offers Graduate Programs for young talents in France, in China and in the Germany-Benelux region who are passionate about sustainable resource management. These Graduate Programs are true programs for excellence that aim to support students in higher education to management or expert-level positions, offering them opportunities to join, grow and advance within the Group. In 2018, the France program was enhanced by adding a several-month-long placement in a start-up as part of the program.

Training is a fundamental concern

For SUEZ, developing people is key to the Group's transformation as well as to its social and societal responsibilities. Our ambition for 2021, as mentioned in the SUEZ Sustainable Development Roadmap, is to train more than 80% of the Group's employees and make "apprenticeship for all" a reality within the Group.

The "SUEZ Academy" is an international center of excellence that offers learning solutions for the Group's managers. It promotes an adapted and harmonized corporate culture and strengthens employee engagement, innovation and performance through the Group.

The creation of the "SUEZ Academy" represents a new step in our development because it enables us to develop our employees' skills while teaching them the best ways to overcome the challenges of today and tomorrow around the world.

The "SUEZ Academy" is also a great driver in supporting the Company's digital and cultural transformation.

Seven academies offer rich and innovative programs tailored to SUEZ's business:

- the Leadership academy;
- the Digital and Innovation academy;
- the Technical academy;
- the Sales and Marketing academy;
- the Health and Safety academy;
- the Cross-Disciplinary Functions academy;
- the Operational Excellence academy.

To guarantee the excellence of the programs offered, the "SUEZ Academy" is based on an ecosystem:

- SUEZ's expertise in learning: to meet the needs of its current and future customers, SUEZ has developed a range of targeted apprenticeship solutions based on its expertise in water and waste service management;

- the "Learning Lab" is dedicated to educational experimentation and innovation, new types of work and collaborative apprenticeship. It helps all SUEZ academies to improve training systems and to exchange and promote innovation using a network approach;
- the network of in-house trainers provides its expertise in training programs and technical assistance.

The "SUEZ Academy" must make it easier for managers to work together within the network and must become one of the biggest levers of SUEZ's cultural transformation.

In addition, "iLearn", SUEZ's digital platform, has continued growing in terms of learners connected and the number of modules dedicated to the Group's businesses. In 2018, the number of digital training hours was 257,000, a sharp increase compared to the previous year (189,000 hours in 2017).

In addition to time for training identified as such, it is appropriate to include informal apprenticeship situations that are integrated into the daily working environment. Since 2012, each Group entity accounts for this time as well as the populations benefiting from it, and then transmits it to the Talents, Management and Culture Department of Human Resources. In 2018, 858,657 training hours (+16% compared to 2017) were cataloged by SUEZ entities and are re-usable for informal apprenticeships.

Encouraging internal mobility

In order to achieve its ambitions worldwide, the Group has to rely on employees who can adapt constantly, and who are flexible enough to use their skills wherever they are most useful.

While professional mobility is the key to meeting an activity's requirements with flexibility, it is also a lever of development for employees and a true source of personal enrichment for staff.

The Group encourages mobility by offering employees a particularly abundant and diversified area to build varied, motivating and educational career paths.

Commitments have been made to facilitate and better organize internal mobility and to optimize the Career Management of employees.

- The creation of a team dedicated to international mobility that aims to:
  - grow the number of transfers between the Group's various entities,
  - share the expertise among its pool of employees that are interested in international mobility.
- The creation of the "Explorer" program, which encourages and increases international mobility by offering employees the opportunity to complete Group assignments abroad that last from a few weeks to a few months (6 months maximum). Through this program, participants gain international experience, grow their network and make a name for themselves. It promotes the transfer of knowledge, know-how and resources and helps increase synergies between BUs by encouraging discussion and exchanges between the countries.
- The launch, in late 2018, of a system in France to support and accelerate internal mobility: #mymobility.

This system has been designed to meet the Group's strategic objectives of accelerating the Group's transformation by boosting internal mobility, which promotes better integration and meets our employees' expectations (as expressed in engagement surveys) by providing more personalized support in their projects and career. Therefore, the challenge is to change the mobility culture within the Group by moving from a hiring model where the job opening is the key focus of the process to a real Career Management model where the employee is the key focus of the process, by offering the employee a true "customer experience".

"#mymobility" offers a new personalized service that includes a toll-free number employees can call to get information from an employee relations manager or to arrange a meeting with a mobility counselor. In that case, the employee receives professional and personalized support from a dedicated mobility advisor who guides them throughout their process. The advisor helps the employee define their career path and supports them in their mobility, gives them access to an integrated HR network and thus an extensive knowledge of possible opportunities and careers within the Group, regardless of the business, BU or activity.

Additionally, a platform dedicated to mobility called "#mymobility" helps employees with their mobility plans by guiding them through each essential phase of the mobility process, step by step, and by answering frequently asked questions. All of the tools necessary to move to a different position are available: internal job offers, mobility policy, a how-to guide, testimonials, etc.

In 2018, a total of 4,047 people participated in the mobility program, a 12.2% increase compared to 2017.

In France, 642 managers were part of the mobility program.

Excluding positions reserved for young graduates, at the end of December 2018, 53.5% of vacancies were filled through the internal mobility program (the population of managers in France).

A constructive social dialogue

Social dialogue within the Group is based on an information and consultation process overseen by the European Works Council (EWC) and the France Group Works Council (FGWC). With this in mind, the social partners and Group Management meet regularly to exchange viewpoints, negotiate, enter into agreements and ensure their implementation.

Beyond these geographic boundaries, SUEZ is working toward organizing and energizing the employee representative bodies as established by the regulations of local labor law. In 2018, 86.7% of employees of the Group were covered by a social dialogue system, either directly within their legal entity connection, or at a more comprehensive level.

It is also to be noted that the stakeholders are committed to developing innovative social dialogue systems, such as a European Business Observatory or launching digital assignments in collaboration with social partners.

To this end, stakeholders created a joint working Group on Digital Innovation to anticipate and support the digital transformations inherent in the Group's business activities and in the nature of work, which, like other European working groups, meets twice per year. To help adapt to digital technologies, the Group launched a Digital Learning Expedition to raise the European Committee members' awareness of new ways of working and bringing Artificial Intelligence into the workplace. Lastly, the Group and the members of the Committee jointly launched training programs and multi-year missions to develop their expertise as well as their understanding of businesses and the business challenges the Group must overcome.

In 2018, the Group renewed the terms of office of its two employee Directors.

THE EUROPEAN WORKS COUNCIL (EWC)

The European Works Council covers a scope of 12 European countries (France, Germany, Belgium, the Netherlands, Spain, Hungary, Italy, Luxembourg, Poland, the Czech Republic, the United Kingdom and Sweden), representing 60,938 employees.

It is comprised of 28 members from these 12 countries. Its role is to inform and consult on policies and changes in the Group.

This Council met four times in plenary sessions throughout 2018. Furthermore, bi-monthly meetings with the European Works Council Secretariat allow for regular communications by this body regarding Group current events.

As part of the roll-out of the professional equality agreement signed on March 31, 2015, a debriefing meeting for the professional equality agreement was held in 2018 to define ways the agreement can be approved in preparation for its renewal. In this regard, a first negotiation meeting was held during the first quarter of 2018.

In line with the digital mission, the digital working group's meeting focused its thinking on presenting our artificial intelligence tools to assist in operational management (site surveillance by drone, data management to optimize fluid management, etc.) as well as using digital tools to serve support functions. Lastly, the Group continued the Employee Relations training cycle that began in 2017 so that all incumbent and deputy members of the EWC are trained on labor law mechanisms.

THE FRANCE GROUP WORKS COUNCIL (FGWC)

The France Group Council covers French companies in which the Group holds over 50% of the share capital. It represents 30,842 employees and comprises 28 members whose role is to provide information on the Group's strategy within its French businesses. In 2018, the Council held two plenary sessions.

The main highlight in terms of employee matters for the SUEZ Group in France was the signature of a Group agreement on the right to disconnect and the choice to be connected. The agreement was signed on January 25, 2018.

17.1.4 Diversity and Equal Opportunities

Since 2010, SUEZ has devised a Group Diversity and Inclusion policy and joint initiatives with all the business units.

A Diversity Committee for France was formed with the Chief Executive Officer and all departments whose roles involve successfully meeting these commitments: Human Resources, Communications and Responsible Purchasing as well as employee-representative unions.

Fundamental principles of the Diversity policy

These principles are shared with all SUEZ companies-in France and abroad-to strengthen their ability to integrate diversity to meet their social and business challenges.

They include:

- considering inclusion and diversity as part of SUEZ's responsibility as an employer to improve innovation capacities as well as the Company's performance, and thus contributing to social progress for society as a whole;
- anchoring our commitment to make inclusion and diversity a known strength to improve the Group's economic and societal performance. Our commitment is based on three guidelines: ensuring inclusion and diversity in skill-set backgrounds; fostering creativity and innovation; stepping up our business responses and making our customers happy;
- focusing on topics of strategic importance for inclusion and diversity: gender diversity, people with disabilities, social inclusion and sexual orientation. Most companies around the world must also address these themes, though the importance of these topics may vary or be defined differently.

Action programs

Action programs are the operational implementation of commitments made by the Group in its Sustainable Development Roadmap for 2017-2021, which include:

- **priority 1**, be a collaborative, open and responsible company: promote diversity and well-being at work,
- **priority 2**, contribute to the common good: to contribute to local development and the attractiveness of territories.

Gender diversity roadmap

The Group has implemented numerous ambitious initiatives to transition from commitment-oriented to results-oriented logic.

Several levers were activated simultaneously to increase the number of women among the executives (Topex), talents, managers, experts and technicians, and to grow our talent pools by working on six drivers of performance:

1. Attract workers

The proportion of women among new hires sharply increased in 2018: 33.4% of manager new hires in permanent positions were women (*versus* 28.6% in 2017)

SUEZ is committed to continue stepping up the hiring of women *via* the following actions:

- having at least one woman in the lists of candidate finalists,
- paying special attention to job descriptions (non-sexist writing that is appealing to women, encouraging women to apply for technical jobs),
- working on the employer brand and communicating on Equal Opportunities.

2. Create a female-friendly working environment

Continue initiatives to improve the level of well-being for women working at SUEZ:

- increase flexibility in terms of hours, locations and working conditions,
- develop the SUEZ women's network and other sharing initiatives.

3. Reduce wage gaps

Speed up measures to reduce wage gaps.

4. Promote

Increase promotions among women:

- ensure that women are sufficiently represented in the talent management process. Increase the number of women in People Reviews and in succession plans by 2021,
- guarantee equal executive appointments: women should hold 30% of executive positions by 2021 (currently 23.5%).

5. Grow

Accelerate the careers of women through specific development, coaching and networking actions:

- increase the number of women coached or mentored,
- open up additional career opportunities for women in the Group.

6. Transform culture through communication

Change mentalities about women in the workplace.

Continue initiatives in favor of women's rights: International Women's Day, an anti-sexism campaign, increase the number of testimonials by women holding leadership roles, etc.

► For 2018, the key figures regarding the proportion of women in the Group are as follows:

- 21.8% of the workforce are women,
- 23.8% of the members of the executives (Topex) are women,
- 29.4% of management positions are held by women (excluding WTS),
- 30.4% of Talents are women.

► Disability Roadmap

Taking disability into account varies substantially from one country to another, both from the standpoint of whether people with disabilities are more taken care of by society or by families, from people's perception of disability and ultimately translating these perceptions into law, either requiring or choosing not to require companies to employ people with disabilities.

In 2018, the Group hired 1,619 disabled people, up 14% compared to 2017 (1,422 people).

In France, companies with at least 20 employees must have a disability inclusion policy. Labor regulations stipulate that 6% of a company's workforce must be people with disabilities; if a company falls below this requirement, they have to pay a contribution to AGEFIPH, a fund management organization for the professional integration of people with disabilities.

To do this, SUEZ:

- leverages direct employment: through new hires and measures to encourage the recognition of persons with disability status (RQHT), a process based on initiatives related to quality of life in the workplace and well-being at work,
- purchases services or products from organizations that employ people with disabilities, either through protected work centers known as ESAT (formerly "CAT") centers or through specially adapted companies known as *Entreprises Adaptées* (formerly *Ateliers Protégés).*

In 2017, in France, the Group reached 3.5% (excluding reductions and weightings), which included 83% through direct hires and 17% through indirect employment *via* purchases from the protected and adapted sector. Taking into account the application of beneficiary units corresponding to reductions (efforts agreed to by the employer and for the ECAP), the rate reached 4.4%.

LABELS AND CERTIFICATIONS IN FRANCE

► Diversity Label

Certified by AFNOR in July 2014 for French entities, SUEZ's processes and practices were deemed to be compliant during an interim audit in 2016.

At the end of these audits, a Committee of diversity specialists, an operating body from the Diversity Committee for France, establishes a roadmap containing:

- essential SUEZ actions, meaning actions necessary to keep the Label,
- additional SUEZ actions demonstrating SUEZ's desire to undertake a continuous progress approach,
- actions recommended by the auditor that are specific to each business unit in France.

► Top Employer

SUEZ has received the Top Employer certification in France for the fifth year in a row. This certification recognizes the quality of the Group's Human Resources policy: HR policies and practices and employee working conditions.

The certification verifies nine major HR subjects: talent management strategy; workforce planning; performance management; training and development; inclusion; leadership development; career and succession management; compensation and employee benefits; corporate culture.

These subjects were analyzed across entities according to five focus areas: strategy and policy; involvement of General Management; practices; measurements/assessment of practices; tech support (specific software).

For the 2018 certification, SUEZ obtained an overall score of 80% (73% in 2017) and demonstrated improvements in the areas of talent management, training and development, leadership development and career management.

The certification strengthens the Group's brand as an employer, contributes to HR development and innovation through benchmark and analysis reports and opens up the opportunity for meetings and discussions on HR best practices with other Top Employers.

Units dedicated to integration

ROLE OF THE SUEZ SOCIAL INNOVATION DIVISION

The social innovation division aims to make the SUEZ Group a committed player in developing job opportunities for all and supporting the emergence of new local economies (social, collaborative, circular) in favor of ecological transition.

The role of the Social Innovation Division is to "make employment and the circular economy come together" in the regions where SUEZ operates by increasing collaboration with local players.

In concrete terms, the Social Innovation Division brings together, combines and organizes the Group's expertise in social integration and innovation to support the needs of the BUs as much as possible, and particularly as that relates to:

- responding to the social aspect of calls for tenders (with or without integration clauses) to make social innovation a way to set the Group apart;
- diversifying their hiring channels and opening jobs up to people excluded from the workforce;
- forming partnerships with the world of social integration and social economy organizations, and developing new "social business" solutions, which drive job creation and are complementary to SUEZ's businesses;
- mobilizing the Group's integration tools ("Rebond Insertion", "Valplus") and identifying the right partners;
- developing entrepreneurial programs (incubators dedicated to job seekers) and intrapreneurial programs (with employee-entrepreneurs);
- employee social commitment.

Social innovation takes place on a local level through the *Maison pour Rebondir* support program in France.

Drawing on its experience from the "SUEZ social innovation laboratory" created in Bordeaux seven years ago, the *Maison pour Rebondir* has begun expanding into other regions (in the Paris region [the Yvelines, Essonne, Hauts-de-Seine and Val-de-Marne departments] and in Lyon), and is becoming the operational mechanism for implementing the Group's social innovation measures.

The *Maisons pour Rebondir* serve as an internal and external "SUEZ one-stop shop" in the areas where they are located for questions related to integration through employment and through the social and circular economy.

Rebond Insertion, a company focused on rehiring and integration through temporary work, offers employment integration solutions for the sorting business.

Rebond Insertion specializes in assisting people in difficulty. This Recycling and Recovery subsidiary's areas of focus are:

- support;
- training;
- return to employment.

Rebond Insertion offers several paths to return to employment:

- by developing and setting up professional integration and social support projects. Rebond Insertion's business activities fall under framework laws pertaining to combating exclusion;
- by helping people reintegrate into the workforce through existing companies that operate in the construction, food services, logistics or environmental sectors;
- by offering support to the newly integrated through a socio-occupational mentoring and leadership team;
- by guaranteeing services throughout the country *via* 12 integration units located in the Nord-Pas-de-Calais, Champagne Ardennes, Ile-de-France and Provence Alpes Côte d'Azur (PACA) regions.

In 2018 in France, SUEZ launched the "HOPE" experimental project

In partnership with the AFPA (Association for the Professional Training of Adults), SUEZ is involved with the HOPE program, which helps refugees find employment and gain autonomy.

The goal of the HOPE program is to offer them training in highly-sought-after skilled professions where companies lack skilled labor.

SUEZ is training a class of 12 candidates as large truck drivers who will take up roles in our agencies in France (9 candidates in Ile-de-France and 3 candidates in Dijon). SUEZ Rebond Insertion's teams provide social and professional assistance.

17.1.5 Health and Safety – Quality of life in the workplace

SUEZ's Health and Safety policy supports ambitious targets for reducing occupational accidents and cutting the number of serious accidents. After having reached its goal of reducing the severity rate by 10% between 2012 and 2016, the Group implemented a new roadmap for 2017-2021. Although the objectives were very ambitious with the integration of WTS, the results for 2018 show that further improvements have been made as the severity rate and frequency rate have continued to reduce compared to 2017. The frequency rate was 8.15 and the severity rate was 0.41 at the end of December 2018. These results indicate steady improvement for the SUEZ Group, which is already among the industry's best-performing companies in this area. The 2017-2021 Roadmap comprises three priorities: preventing serious and fatal accidents, implementing a "Fair Culture" and increasing managers' local presence and follow-up on actions.

Preventing serious and fatal accidents combines both adhering to "Rules that Save Lives" and managing and controlling our major risks. Today, "Rules that Save Lives" apply to both our employees as well as our subcontractors working on-site or at our customers' sites. These ten rules implemented in both the Water and Waste business in 2013 stem from the analysis of serious and fatal accidents that the Group has experienced over the past ten years. A major effort to raise our staff's commitment is serving as an impetus for managers and operators in all countries in which the Group operates to strictly adhere to the ten "Rules that Save Lives". The Group also includes its subcontractors and partners in this process. This component forms part of every new entity's plan, and this process is currently under way with the new WTS business unit.

In 2016, the Group developed a new approach to major risk oversight with a "Zero fatal accidents" ambition. The work began with pedestrian-vehicle collision risk at our sites. The initiative, which was initially launched for our Recycling and Recovery (R&R) business activities in Europe, was expanded to all the Group's business activities across the world in 2017. The initiative breaks down into two parts. The first is to equip all the collection vehicles (in the European business units) in line with a new safety standard, the requirements of which exceed European standards. The second is to identify, indicate and organize access to "Restricted Access Areas" (ZARs) on our sites. These ZARs are areas on the sites that have a proven higher risk for pedestrians due to a constant or near-constant presence of moving vehicles. A set of measures are being taken to strictly control access to these areas to make them safer. This latest action resulted in an audit being launched of all the Group's R&R activities.

In 2018, in addition to the continued roll-out of the ZAR system, all subsidiaries in the waste sector were asked to focus on the risk of pedestrian-vehicle collisions outside our sites and subsidiaries in the water sector were asked to work on the issue of lockouts/shut-offs (for electrical, mechanical, pneumatic and hydraulic systems, etc.). In addition, the attention paid to the quality of shielding remains a major concern with regard to our subcontractors, especially in countries where local on-the-job safety requirements are not as stringent as the Group's rules. On water treatment sites, we will continue to rigorously monitor the gaseous chlorine risk to employees and persons living in the vicinity of our plants. Fatal accidents in 2018 were primarily collisions between collection trucks and pedestrians (third parties). Managing this collision risk remains our priority in 2019 with a focus on human and organizational factors in collection operations, road safety training for truck drivers, and installing digital tools to help our drivers better manage road risks and avoid fatal accidents.

The Group applies this same approach to controlling its health risks. In 2016 and 2017, the subsidiaries conducted a comprehensive review of preventative and protective measures for their major health risks. This ambitious work identified areas for improvement that then enabled the Health and Safety Department to review Group requirements in this area and make them more stringent. In 2018, the subsidiaries' mission was to start to implement effective management and control systems for their health risks. This is particularly the case for R&R France with the prevention of musculoskeletal disorders (MSDs) in the sorting centers and in relation to the use of chemical products. The signing of a "Quality of Life in the Workplace" agreement in the Water France business unit helped raise awareness of psychosocial risks with films produced internally and with the assistance of an external consultant.

Lastly, SUEZ organized a national cardiovascular risk screening campaign in France. This initiative, rolled out first in the Paris area with the participation of 600 volunteer employees, aims to encourage well-being, promote healthy lifestyles and spread innovative health measures within the company. The screening, performed during a 15-minute time slot, includes a blood test, a measurement-based cardiovascular risk assessment and personalized lifestyle recommendations. In 2019, the Group plans to roll out these preventative actions on other sites in France.

The second priority is implementing a Fair Culture for all of our business activities around the world. Launched in 2015, the Group's "Fair Culture" policy and its three pillars (recognizing and sharing best practices, reporting "near accidents" and applying customized disciplinary measures when rules and procedures are not followed) underwent a self-assessment within each of our entities at the end of 2016. 2018 was the second year that actions to develop all three pillars and build a true "fair and balanced safety culture" were implemented across the Group. Additionally, the Health and Safety Department is working with all entities on reporting near accidents and events with high potential severity with the goal of implementing corrective and proactive actions and preventing serious or fatal accidents.

The third priority, increasing the chain of command's involvement in risk prevention, was put into action by conducting Health and Safety Management visits, following up on corrective actions identified and introducing proactive indicators. Conducting these Health and Safety Management visits falls in line with the Group's Fair Culture mindset (recognizing best practices, reporting deviations and following up on corrective actions). The Group successfully increased visible engagement by management in all business units by substantially increasing site visits and sharing best practices.

For the Group, an integrated safety culture is based on three pillars: human and organisational factors, the technical aspect of safety and safety management systems. The technical aspect and safety management systems are integrated into the business units. These two pillars will continue to receive attention and continuous improvement in 2019, particularly through audits carried out by headquarters. As the fatal accidents in 2018 were primarily due to behaviours linked to violations of the rules, and in particular of our rules that save lives, the Group worked more in 2018 on human and organisational factors and will continue its efforts in 2019 to better integrate these concepts into the core of our activities.

These priorities were put into action and managed by a Group-wide process that includes formalizing each subsidiary's objectives, a Health and Safety subsidiary reporting to the highest managerial level, implementing a Health and Safety audit program, offering management training and monitoring by the Health and Safety Department using proactive performance indicators.

The Group-wide action plan prepared by the Health and Safety Department, then reviewed and approved by management and the Ethics and Sustainable Development Committee (ESDC), was distributed to all the Group's operating subsidiaries *via* an annual Health and Safety Contract. These "Health and Safety objectives contracts" between the Health and Safety Department and the entities emphatically promote Health and Safety Management training, oversight of major risks (with consideration of each entity's specific situation) and certain sensitive operational methods, and include actions on employee health.

These contracts can also be used to evaluate the progress of some priority actions such as the "ZARs" and the Fair Culture roll-out. This "Health and Safety objectives contract" is established with the management of each subsidiary at the beginning of the year and is subject to a special review at the end of the year to ensure that actions have been implemented and targets achieved.

Regarding the audit program, in 2018, ten Health and Safety audits were carried out by the Group's Health and Safety Department to assess the level of maturity of the Health and Safety Management system and the level of control of Major Risks within the subsidiaries. These audits are based on a Group reference framework that has been established gradually over the course of some ten years' continuous effort. This reference framework applies when local regulations do not exist or fall short of the Group's standards. The results of these audits show an increase in management leadership relating to Health and Safety, a more competent Health and Safety sector, a more clear-cut definition of roles and responsibilities, improved skills on managing major risks and more employee representative involvement.

The Group has stepped up training managers in "Health and Safety Leadership" since 2017 (700 managers in 2018 and 2017, *versus* 450 in 2016), and an equivalent course has been set up for local management both in France and abroad. This training equips managers with approaches and tools to more effectively implement the Group's Health and Safety policy. As part of the Health and Safety Academy created in late 2017, new innovative and strategic training courses were launched in 2018. Notably, there is the "Leadership influence" training in the Health and Safety field as well as the MOOC training (interactive apprenticeship) on human and organizational factors and safety culture.

Lastly, the Health and Safety Department has set up proactive performance indicators on top of existing reactive indicators (frequency rate, severity rate) to assess our subsidiaries' level of maturity with regard to their safety culture, and in particular, experience acquired from analyzing accidents and near accidents, discussions on best practices as well as managers' visible engagement through management safety visits.

The effectiveness of this policy, which has cut down the frequency rate by half for SUEZ in 10 years, would not be possible without the personal commitment of management at all levels: Group, business unit, regional, etc. This commitment is illustrated by the involvement of the SUEZ Chief Executive Officer and the Executive Committee in monitoring the "Ten Rules that Save Lives", by updating the Health and Safety policy or ensuring the concept of a Fair Culture is clearly explained, by deciding to have Health and Safety managers report directly to business unit operating managers, and by placing emphasis on the subject in performance reviews at all levels of the organization. Operational managers and operators are supported by a network of approximately 950 Health and Safety professionals.

17.2 Social information

17.2.1 Breakdown of employees

As of December 31, 2018, the workforce of the Group totaled 88,775 employees. This represents 199 additional employees and a change of +0.22% compared to the end of 2017, and can be broken down as follows:

- an increase of 546 employees due to the scope effect, the main contributors of which are:
  - acquisitions (number of people as at the acquisition date):

    +210 employees at Shanghai Chemical Industry Park Sino French Water Development Co. Ltd.: employees transferred from Chinese JV (consolidated using the equity method) to the new fully consolidated entity (Asia BU),
    +145 employees at Safège Poland (Consulting BU),
    +802 employees at WTS: the new entities are located in Brazil (+412 employees), Argentina (+112 employees), Kuwait (+65 employees), Taiwan (+59 employees), Thailand (+53 employees) and Russia (+50 employees), plus +51 other employees distributed among other small entities,
    +217 employees at R&R France (+56 at Val Oi and +44 at Val O'Marne);

  - disposals (number of people at the time of disposal):

    -330 employees at Epalia (R&R France BU),
    -265 employees following the sale of DASRI – several entities operating in the hospital waste treatment sector (R&R France BU),
    -171 employees at SUEZ Water Conditioning Services Ltd (WTS BU),
    -47 employees at Plastiques Aveyron and the closure of Haute Marne Tri (R&R France BU),
    -44 employees following the closure of Créteil Incinération Energie (R&R France BU);

- among the organic changes, the main gains and losses from contracts recorded this year have the following effects:

  -1,059 employees transferred from Sita Blanca to the new delegated company following the early termination of the Casablanca contract at R&R Morocco (AMEI BU),
  -216 employees following the loss of the Safi contract at SUEZ El Beida at R&R Morocco (AMEI BU),
  -150 employees in connection with the Lancashire County Council Household Waste Recycling Centre contract (R&R UK & Nordic BU),
  -141 employees as part of the loss of the Valenton contract, (-117 employees) and Gessienneau & LYSED, (-24 employees) (Water France BU),
  +175 LADEO employees at R&R Czech Republic (Italy and Central Europe BU),
  +82 employees at SUEZ Medio Ambiente Mexico where two new contracts were won (LATAM BU – Tijuana-Rosarito to build a desalination plant and Natura).

Breakdown of employees by geographical area

	2016 Number	2017 Number	2018 Number	2018 %
France (metropolitan and overseas territories)	32,864	31,249	30,842	34.7%
Europe (excluding France)	28,200	28,012	30,096	34.0%
North America [(a)]	4,264	11,183	7,918	8.9%
South America	3,102	3,757	4,543	5.1%
Africa/Middle East	8,972	8,555	7,639	8.6%
Asia-Pacific	6,519	5,820	7,737	8.7%
Total (XXX) [(b)]	**83,921**	**88,576**	**88,775**	**100.0%**

(a) The acquisition of GE Water was allocated in its entirety to the North America region in 2017. In 2018, the allocation was made in relation to the corresponding countries.
(b) See meaning of (XXX) in section 17.2.6: "Methodological factors in the Social Report".

Breakdown of employees by professional category

	2016 Number	2017 Number	2018 Number	2018 %
Executives (XXX) [(a)]	12,918	13,868	16,805	18.9%
Senior technicians and supervisors (XXX) [(a)]	18,545	21,732	19,783	22.3%
Manual and non-manual workers and technicians (XXX) [(a)]	52,458	52,976	52,187	58.8%
Total	**83,921**	**88,576**	**88,775**	**100.0%**

(a) See meaning of (XXX) in section 17.2.6: "Methodological factors in the Social Report".

The proportion of executives increased significantly. It reached 18.9%, compared to 15.7% at the end of 2017. This is partly due to the work to harmonize the notion of executive after rolling out the HRIS tool "Talent'Up".

The 30,842 employees in France can be broken down as follows: 6,005 executives (19.5%), 6,055 senior technicians and supervisors (19.6%), and 18,782 manual and non-manual workers and technicians (60.9%).

Breakdown of employees by gender

	2016	2017	2018
Proportion of women in total workforce (XXX) [(a)]	20.6%	21.1%	21.8%
Proportion of women in management (XXX) [(a)]	28.1%	27.4%	27.6%
Proportion of women in management excluding WTS (XXX) [(a)]	28.1%	28.4%	29.4%

(a) See meaning of (XXX) in section 17.2.6: "Methodological factors in the Social Report".

Within the total workforce, the percentage of women increased to 21.8% as of the end of December 2018. It increased slightly among management between 2017 and 2018. If we exclude the impact from the acquisition of GE Water, the proportion of women executives reached 29.4%, an increase compared to the end of 2017 (28.4%).

In France, the proportion of women reached 24.0% of the overall workforce and 33.4% among management. In 2017, these proportions were 23.2% and 32.3%, respectively.

Breakdown of employees by contract type

	2016	2017	2018
Permanent contracts	91.4%	92.1%	91.6%
Fixed-term contracts	6.8%	6.1%	6.3%
Part-time learning and social insertion contracts	1.8%	1.8%	2.1%

The proportion of employees with permanent contracts within the total workforce (91.6%) remained squarely in the majority.

Part-time learning and social insertion contracts are up compared to previous years and account for 2.1% of the workforce. They break down as follows:

- 1.8% linked to part-time learning contracts (apprenticeships and professionalization contracts in France, and similar types of contracts in other countries, if they exist). These contracts concern 1,575 employees;
- 0.3% of these were linked to social insertion contracts through dedicated Recycling and Recovery France initiatives (SUEZ R&R Rebond Insertion). They total 288 employees, *i.e.*, a +13.8% increase compared with last year.

In France, permanent contract employees total 28,463, fixed-term contract employees are 646 and employees in part-time learning and social insertion contracts totaling 1,733. The proportions are 92.3%, 2.1% and 5.6%, respectively.

Breakdown of employees by age group (permanent employees only)

	2016	2017	2018
Under 25	2.2%	2.3%	2.4%
25-29 years	8.0%	7.9%	7.8%
30-34 years	12.3%	12.0%	11.8%
35-39 years	14.2%	14.2%	14.2%
40-44 years	15.4%	14.8%	14.6%
45-49 years	15.9%	15.7%	15.6%
50-54 years	15.7%	15.3%	15.2%
55-59 years	11.6%	12.2%	12.7%
60-64 years	4.0%	4.7%	4.7%
65 and over	0.7%	0.9%	1.0%

The average age of Group employees is 44.3. The proportion of the workforce under the age of 30 is 10.2%, and employees aged 55 and over represent 18.4% of the workforce.

In France, the average age is 44.2. The proportion of the workforce under the age of 30 is 9.4%, and employees aged 55 and over represent 16.2% of the workforce.

17.2.2 Employment and working conditions

Hiring

	2016	2017	2018
Number of external hires on permanent contracts	6,024	6,526	8,424
Number of external hires on fixed-term contracts	10,041	9,641	10,239
Hiring rate [a]	19.0%	19.3%	21.0%
Hiring rate for permanent posts [b]	37.5%	40.4%	45.1%

(a) Hiring rate: number of hires under permanent and fixed-term contracts/average workforce.
(b) Hiring rate for permanent contracts: number of people hired under permanent contracts/number of people hired under permanent and fixed-term contracts.

The number of external hires under permanent contracts increased sharply by 29.1% (1,898 people) in 2018 compared to 2017.

The 8,424 new hires under permanent contracts in 2018 break down as follows:

- by professional category: 1,415 executives (16.8%), 1,802 senior technicians and supervisors (21.4%), and 5,207 manual and non-manual workers and technicians (61.8%);
- by gender: 2,078 women (24.7%) and 6,346 men (75.3%). Among executives: 465 women (32.9%) and 950 men (67.1%);
- by age group: 1,168 employees under the age of 25 (13.9%) and 1,194 employees aged 50 and over (14.2%).

In France, the Group hired 4,961 new employees in 2018, consisting of 2,106 under permanent contracts and 2,855 under fixed-term contracts. The overall hiring rate was 16.0% and the hiring rate under permanent contracts was 42.5%. The number of new hires under permanent contracts rose by 41.5% compared to 2017.

Since 2016, the Group has monitored the conversions from fixed-term contracts to permanent contracts. This year, 1,802 fixed-term contracts were converted into permanent contracts. The main countries involved were France (404), Poland (363), Spain (343), Chile (127), and Mexico (113). Compared to last year, this represents a 33.9% increase.

Employee turnover

	2016	2017	2018
Number of layoffs	2,570	2,535	2,394
Number of resignations	2,783	3,553	4,242
Number of retirements	1,094	1,007	1,124
Turnover [a]	6.3%	7.3%	7.5%
Voluntary turnover [b] (XXX) [c]	3.3%	4.2%	4.8%

(a) Turnover: number of layoffs and resignations/average workforce.
(b) Voluntary turnover: number of resignations/average workforce.
(c) See meaning of (XXX) in section 17.2.6: "Methodological factors in the Social Report".

Compared to 2017, the voluntary turnover rate increased, reaching 4.8% as of the end of December 2018. Overall turnover was also up slightly and reached 7.5% in 2018, compared with 7.3% in 2017.

In France, overall turnover was 6.1% and voluntary turnover was 3.0%. The figures were: 981 layoffs, 922 resignations and 469 retirements.

In the Group's database of indicators, contract terminations are counted as layoffs. In France, 29.2% of layoffs are, in reality, contract terminations.

Working hours

	2016	2017	2018
Average weekly number of hours worked per employee [a]	33.9	33.8	34.0
Overtime rate [b]	3.9%	4.2%	4.4%
Proportion of part-time workers among total workforce	4.2%	4.0%	4.4%

(a) On the basis of 52 weeks.
(b) Overtime rate: number of overtime hours/number of hours worked.

In France, overtime represented 2.8% of the total number of hours worked, and part-time workers represented 4.0% of the workforce.

Absenteeism

	2016	2017	2018
Average number of days of absence/person	11.8	11.6	11.7
Of which average number of days of sick leave (days/person)	8.2	8.0	8.2

Based on a theoretical eight-hour working day, average absenteeism per employee was 11.7 days in 2018. The Group generally believes that the absenteeism rate is not significant, because it comprises absences of all kinds, including suspended contracts. This rate is also dependent on the social systems and local situations (especially climate) in the countries where the Group operates.

In France, the average length of absence per employee was 12.8 days, of which 8.7 days involved sick leave.

Employees with disabilities

	2016	2017	2018
Employees with disabilities as % of total workforce at end of period	1.8%	1.6%	1.8%
Of which France	3.0%	2.4%	3.1%
Of which Germany	5.6%	5.8%	5.3%

The number of disabled workers is a difficult indicator to track at the Group level, insofar as the notion of disabled worker is not clearly defined in every country in which the Group operates.

At the end of December 2018, the Group employed 1,619 disabled workers, 116 of whom had been hired that year. Most (81.7%) of the disabled employees recorded work in France, Spain, Germany or the United States. These four countries, in which the Group's presence is significant, have had laws on hiring disabled persons for many years.

In France, a specific reporting system is used to measure the overall insertion rate. This rate is calculated by adding direct and indirect jobs. Indirect jobs include the number of invoiced contracts in the protected sector, under the terms defined in the mandatory disclosure on disability employment. It reached 3.5% for 2017 for direct jobs, purchases in the protected sector, hosting trainees. Taking into account the application of beneficiary units corresponding to reductions (efforts agreed to by the employer and for the ECAP), the rate reached 4.4%.

Wages and salaries

(in thousands of euros)	2016	2017	2018
Gross payroll	2,874,098	2,947,663	3,331,263
Average gross compensation per employee (FTE)	34.9	36.1	38.5
Executives	70.5	73.6	76.6
Non-executives	28.4	29.0	29.7
Average rate of employer's contributions	34.5%	34.6%	33.5%

The change in gross payroll is mainly due to the consolidation of former GE Water employees, which in 2018 affected the entire year rather than just one quarter in 2017. After the impact from the former GE Water consolidation was restated, gross payroll changed by +0.1%. Other factors also influence changes in this average data: country mix, foreign exchange rates, distribution by socio-economic category, the proportion of part-time employees and the "Noria" effect.

Temporary workers

	2016	2017	2018
Average temporary workforce (FTE)	5,907	6,321	6,887
As % of average contractual workforce expressed in full-time equivalents (FTE)	7.2%	7.7%	8.0%

The main reasons for employing temporary workers are temporary hiring difficulties and the replacement of absent employees. Temporary workers are hired primarily in the Recycling and Recovery segment.

In France, Group entities employed a total of 3,757 temporary workers, representing 12.5% of the average contractual workforce in FTE terms.

Workplace safety

	2016	2017	2018
Number of fatal accidents (employees) (XXX) [c]	6	4	4
Frequency rate of workplace accidents [a] (XXX) [c]	9.03	8.54	8.15
Severity rate of workplace accidents [b] (XXX) [c]	0.54	0.48	0.41

(a) Frequency rate: number of accidents with sick leave x 1,000,000/number of hours worked.
(b) Severity rate: number of days of sick leave x 1,000/number of hours worked.
(c) See meaning of (XXX) in section 17.2.6: "Methodological factors in the Social Report".

The improvement noted in recent years in the Health and Safety key indicators has continued both in terms of accident frequency and severity. The frequency rate fell 4.5% and the severity rate fell 14.5% compared to 2017. Although the number of fatal accidents in 2018 remained the same, the Group remains fully committed to continuing this improvement and pursuing its "Zero fatal accidents" target.

The overall progress in frequency rate and severity rate is the result of continuous efforts in our two businesses-Water (frequency rate of 4.74 and severity rate of 0.20 at the end of 2017; frequency rate of 4.53 and severity rate of 0.17 at the end of 2018) and Recycling and Recovery (frequency rate of 11.98 and severity rate of 0.73 at the end of 2017; frequency rate of 12.38 and severity rate of 0.69 at the end of 2018). Regarding occupational illnesses in the Group (excluding Australia where legislation does not define or require the monitoring of occupational illnesses), the number of new cases was 79 in 2018 (52 in 2017), which was made up of 70 in the Recycling and Recovery activity (32 for 2017) and 9 in the Water activity (20 for 2017).

17.2.3 Training

	2016	2017	2018
Number of training hours *(in thousands)* **(XXX)** [(a)]	**1,443**	**1,309**	**1,556**
Including number of hours of training *via* e-learning *(in thousands)*	172	189	257
Number of training hours per person trained *(h/pers.)*	**25.2**	**23.3**	**25.3**
Number of training hours per woman trained *(h/pers.)*	27	24	24
Percentage of workforce trained (XXX) [(a)]	**67.5%**	**67.2%**	**69.3%**
Breakdown of workforce trained by gender			
Women	20.6%	20.1%	21.2%
Men	79.4%	79.9%	78.8%
Breakdown of workforce trained by category			
Executives	17.1%	16.9%	20.3%
Senior technicians & supervisors + Manual and non-manual workers and technicians	82.9%	83.1%	79.7%
Training expenditure per person trained *(euros/pers.)*	504	447	449
Breakdown of training hours by type of activity *(as a % of total hours excluding e-learning)*			
Business techniques	27.4%	29.3%	24.2%
Quality, environment, safety	35.4%	36.0%	41.4%
Languages	6.3%	7.6%	3.9%
Other	30.9%	27.1%	30.5%

(a) See meaning of (XXX) in section 17.2.6: "Methodological factors in the Social Report".

At the end of December 2018, training efforts remained significant: approximately 1.5 million training hours (including e-learning), 25.3 training hours per person trained and 69.3% of the workforce received training.

The number of training hours *via* e-learning increased, representing 16.5% of total training hours during the year (compared to 14.4% in 2017).

The distribution of workforce trained by gender and by category is close to the distribution of total headcount according to these same criteria.

Quality, environment and safety remains the primary training area. This domain comprises 41.4% of the training hours delivered, followed by business techniques (24.2%). It should be noted that training classified as "Other" mainly comprises "management" and "sales" training.

In France, 58.4% of employees received training (57.8% in 2017). Training expenditure per person trained amounted to EUR 708 (EUR 800 in 2017) and the number of training hours per trained employee was 25.8 hours (22.6 hours in 2017).

It should be noted that two companies of the Group (SUEZ Water Advanced Solutions and Process Group, representing a combined total of 686 people) are not in a position to supply or estimate their training data.

17.2.4 Employee relations

	2016	2017	2018
Number of agreements with social partners	423	455	406
Proportion of workers with access to a representative body in their local legal entity	87%	86%	81%

The number of agreements signed decreased. The year over year variations can be explained by the pace of renewal of preexisting agreements which are not generally annual.

The decrease in the proportion of employees with access to a representative body in their local legal entity is related to WTS, because several of their small local entities do not have a representative body.

With regard to Health and Safety, the European agreement covers all the European entities. The first agreement transposed within SUEZ after setting up the EWC was signed in Barcelona on

June 12, 2014. Outside of Europe, the Group applies the principles of the European agreement on Health and Safety to its HR policies. In the rest of the world, agreements on Health and Safety are included in the overall figure of the agreements signed with the social partners shown in the table.

Nearly 46% of agreements signed relate to compensation and social benefits.

17.2.5 Key indicators by geographical area

	France (metropolitan and overseas territories)	Europe (excluding France)	North America	South America	Africa/ Middle East	Asia/ Pacific	Total
Number of employees	30,842	30,096	7,918	4,543	7,639	7,737	88,775
Proportion of women in the total workforce *(%)*	24.0%	23.0%	20.2%	21.1%	8.6%	22.8%	21.8%
Proportion of executives in the total workforce *(%)*	19.5%	15.6%	28.6%	13.8%	13.3%	28.7%	18.9%
Proportion of permanent contracts *(%)*	92.3%	90.5%	93.1%	92.4%	96.7%	86.6%	91.6%
Average weekly number of hours worked/employee	29.4	33.4	38.5	39.2	41.7	40.6	34.0
Average number of days of absence/employee	12.8	15.3	7.9	8.2	3.9	6.4	11.7
Average number of days of sick leave/employee	8.7	11.5	5.2	6.1	2.1	3.9	8.2
Average gross compensation/FTE employee *(in thousands of euros)*	40.7	34.2	76.1	27.6	13.8	40.4	38.5
Percentage of workforce trained	58.4%	79.7%	93.6%	76.9%	46.2%	66.9%	69.3%
Hiring rate	16.0%	27.8%	21.8%	21.2%	10.9%	24.7%	21.0%
Turnover rate	6.1%	8.7%	8.9%	6.3%	3.0%	12.0%	7.5%

17.2.6 Methodological factors in the 2018 Social Report

Scope

The employment analyses carried out in this report correspond solely to fully consolidated (FC) entities, companies that SUEZ controls in terms of share capital and management. When a company is fully consolidated in the SUEZ Group's financial statements, 100% of its social data is included, regardless of the percentage of share capital held. Except as noted below, the reporting scope for 2018 showing coverage of the indicator in question as a percentage of Group workforce was nearly 100% for all indicators.

Tools and methods

Social reporting is based on:

- a network of some 200 individuals around the world who collect and monitor their own entities' indicators during each quarterly HR reporting campaign. Each quarter, the data from around 650 legal entities is collected and consolidated, grouped into 350 reporting packages and fed in the tool by the local Human Resources managers. This network is managed through quarterly meetings (physical meetings for correspondents at French entities and Skype meetings for international correspondents). These meetings provide an opportunity for top-down communication, for clarifying the definition of some indicators, sharing best practices and reviewing major points of concern. A collaborative space is also available to all correspondents;
- the "User Guide," which consolidates all definitions and procedures comprising the Group's common reference system, *i.e.*, some 50 primary indicators with various collection criteria (age, gender, etc.) producing approximately 250 social indicators. This guide is available in French and English. It is distributed to all the contributors;
- SUEZ's financial consolidation software application which, based on a dedicated social indicators package, enables the collection, processing, and reporting of data entered by the local legal entities and subsidiaries of the Group. Each of these entities, including in the HR phase, is allocated the appropriate financial consolidation method: full consolidation (FC), proportional consolidation (PC), and equity method (EM). An e-learning module on HR reporting is available to contributors. This module allows new users to teach themselves how to navigate within the tool and acquire the social indicators requested (definitions, examples and hints). This training helps existing users to deepen their knowledge of the subject matter.

Consolidation and internal control

Once collected, the data is consolidated by the subsidiaries and the Group Human Resources Department (HRD), in accordance with clearly defined procedures and criteria. This data is controlled internally during the following stages:

- automated controls: the consolidation packages incorporate a certain number of automated controls that allow contributors to ensure the reliability of the information entered at the most detailed level. Contributors also have access to the comments sections, where they can explain significant changes or circumstances specific to their entity;

- checks at subsidiary level: the major subsidiaries carry out checks on the consistency of the data supplied by their entities;
- checks at Group HR level: the Group HR department carries out checks on the consistency of the data supplied by all entities. These checks consist specifically of analyzing changes in indicators over time. In the event of a significant change, the contributor in question is asked to provide a more in-depth analysis, which may result in a correction.

Methodology definitions and limits

We would like to highlight the following points in relation to the data published in this report:

- the breakdown of workforce by geographical area is in line with the reporting segments used in the Consolidated Financial Statements;
- regarding the acquisition of GE Water, for the second year of consolidation, the Group implemented the necessary actions to compile more in-depth reporting, with a breakdown of employees per country of activity;
- after the roll-out of a new Group Human Resources management tool, "Talent'Up", substantive work was done to harmonize the definition of the notion of "executive", which had been underestimated until that point;
- given the deadlines, the data concerning training is not always finalized and might therefore be based on estimates;
- as regards training, while collecting training hours completed through e-learning is relatively easy in the entities, it is not always as easy to reconcile the number of trainees who received in-person training with the number of trainees who received e-learning training. The risk lies in overestimating the total number of trainees due to double-counting employees who have received training both in-person and *via* e-learning. Therefore, only two entities (Agbar and SUEZ Water Inc.) count "e-learning" trainees in their trained workforce, because their internal tracking systems enable them to avoid the risk of double-counting;
- note that the figures on occupational illness have been reported on a global basis since 2014. Nevertheless, the Group continues to improve the organization and quality of its reporting on this subject. In fact, the concept of employer recognition of occupational illness, which applies in France, is not found in most countries worldwide. As a result, there may be discrepancies in the way data on occupational illnesses is calculated owing to differences in local practices and regulations.

External audit

As in previous years, the SUEZ Group hired the specialized services of the Statutory Auditors to verify 17 social indicators for 2018; 10 indicating reasonable assurance (indicated by the special characters "XXX") and seven indicating moderate assurance. More information regarding the work and findings of the Statutory Auditors can be found in section 6.8.6 of this Reference Document.

17.3 Employee incentives and employee shareholding

17.3.1 Employee incentives and profit sharing (France)

Each subsidiary of the Group in France has implemented profit-sharing agreements (pursuant to the mandatory provisions of French law). Incentive agreements (optional in France) have also been implemented within the following companies: SUEZ International, some companies of Water France and around half the French subsidiaries of Recycling and Recovery France.

These arrangements for 2017 produced the following results in 2018:

- EUR 14.8 million was paid out under profit-sharing agreements, benefiting 14,832 employees at an average of approximately EUR 1,000 per beneficiary;
- at the same time, EUR 20.9 million was paid out under incentive agreements, benefiting 21,648 employees at an average of around EUR 965 per beneficiary.

In total, incentive and profit-sharing agreements represented EUR 35.7 million, or 1.9% of the gross payroll including employer's contribution to the companies concerned, a decrease of 12.9% compared to the EUR 41 million paid out in 2017.

17.3.2 Group Salary and Pension Savings Plan

In 2016, SUEZ transformed its employee incentives program so that all Group employees can build up medium- or long-term savings, managed by a single point of contact. As part of this new program, employees now have access to a range of Socially Responsible Investment (SRI) funds.

Group savings plan (PEG)

The PEG set up in 2011, intended for all the employees of the Group companies in France, was replaced by the new PEG, for which an agreement was signed between the social partners on April 15, 2016.

As of December 31, 2018, 33,391 Group employees have invested in the PEG and hold around EUR 209 million in assets.

GOVERNANCE OF THE EMPLOYEE SAVINGS PLAN

The application of the new PEG agreement is managed by a joint monitoring committee made up of four members from Management and four members by trade union organization signatory. This commission meets once per year.

The financial, accounting and administrative management of the funds is overseen by a Supervisory Board which meets at least once per year.

These funds, invested in SUEZ shares within the Group savings plan, are managed by Supervisory Boards, which are 50% composed of representatives of the employee unitholders and 50% of management representatives. The Supervisory Board exercises the voting rights attached to shares held by the company mutual fund.

Group Pension Savings Plan (PERCO)

SUEZ offers a Group Pension Savings Plan (PERCO) through an agreement signed on December 10, 2013 with the social partners. This program offers employees of the Group in France the possibility of establishing long-term savings to supplement pension benefits at an attractive tax rate.

The SUEZ PERCO offers a range of diversified investments and a choice of plan management adapted to the investment period and employee life goals.

A Supervisory Board for dedicated PERCO funds is set up yearly. It is comprised of equal numbers of employee and management representatives.

As of December 31, 2018, 20,217 Group employees had savings in the PERCO, with assets representing close to EUR 59 million.

International Group savings plan (PEGI)

In 2011, SUEZ set up an International Group savings plan (PEGI) intended for all employees of the Group's companies around the world.

The PEGI was created to serve as a mechanism for acquiring shares of the Group *via* a company mutual fund and the allocation of free bonus shares.

17.3.3 Employee shareholding

Since its IPO in 2008, the Company has prioritized employee shareholding and has the dual objective of involving the Group's employees over the long term in its business development plans and having 5% of the share capital held by employees.

Employee shareholding programs in place

SUEZ has set up several programs to encourage employee shareholding:

- in 2009, the first worldwide bonus share allocation plan. 68,000 employee beneficiaries in over 40 countries received 30 shares;
- in 2011, an employee share issue, called "Sharing 2011", subscribed by 18,679 employees in 19 countries;
- in 2013, the second worldwide bonus share allocation plan. 79,000 employee beneficiaries in 32 countries received 38 shares;
- in 2014, a second employee share issue, called "Sharing 2014", subscribed by 16,519 employees in 22 countries;
- in 2017, a third employee share issue, called "Sharing 2017", subscribed by 21,845 employees in 20 countries.

Participation of employee shareholders

As of December 31, 2018, the total number of shares held by the Group's employees under the definition of the law for growth, activity and equal economic opportunities, the so-called "Macron Law" of August 6, 2015, directly in individual registered accounts or through Company mutual funds, accounts for 3.73% of the share capital. In accordance with that same definition, as of the end of December 2017, this figure was 3.81% of the share capital.

Since 2016, a Director representing employee shareholders sits on the Board of Directors.

17.4 Pensions and other employee benefit obligations

A description of the pensions and other employee benefit obligations appears in Note 18 to the Consolidated Financial Statements in chapter 20.1 of this Reference Document.

18 major shareholders

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18.1 Breakdown of share capital as of December 31, 2018

As of December 31, 2018, the Company's share capital totaled EUR 2,485,450,316. It consisted of 621,362,579 shares with a par value of EUR 4 each, representing 621,362,579 voting rights.

As of December 31, 2018, the number of shares without voting rights (shares held by the Company for the share buyback program described in section 21.1.3 of this Reference Document) totaled 3,534,950 shares, hence a total number of exercisable voting rights of 617,827,629.

The voting rights of the Company's major shareholders are no different from those of other shareholders.

The only change in the Company's share capital in 2018 was a capital reduction by canceling 2,000,000 treasury shares on February 28, 2018.

The following table shows the number of shares and percentages of capital and voting rights held by the Company's major shareholders, based on information available on the date this Reference Document was prepared.

	As of December 31, 2018			As of December 31, 2017			As of December 31, 2016		
Shareholders	Number of shares held	% of shares held	% of exercisable voting rights	Number of shares held	% of shares held	% of exercisable voting rights	Number of shares held	% of shares held	% of exercisable voting rights
ENGIE	199,233,320	32.06%	32.25%	199,233,320	31.96%	32.22%	183,815,133	32.57%	32.68%
Criteria Caixa [a]	37,110,685	5.97%	6.01%	36,545,000	5.86%	5.91%	32,373,830	5.74%	5.76%
Employee shareholding [b]	23,182,132	3.73%	3.75%	23,728,152	3.81%	3.84%	15,179,049	2.69%	2.70%
Caltagirone [c]	21,680,174	3.49%	3.51%	21,680,174	3.48%	3.51%	20,000,000	3.54%	3.56%
Treasury shares	3,534,950	0.57%	–	5,067,913	0.81%	–	1,914,796	0.34%	–
Other	336,621,318	54.17%	54.48%	337,108,020	54.08%	54.52%	311,118,438	55.12%	55.31%
Of which free float	*336,621,318*	*54.17%*	*54.48%*	*337,108,020*	*54.08%*	*54.52%*	*311,118,438*	*55.12%*	*55.31%*
Total	**621,362,579**	**100%**	**100%**	**623,362,579**	**100%**	**100%**	**564,401,246**	**100%**	**100%**

(a) Shares held by Criteria Caixa were subject to a lock-up period until September 2018.
(b) Including the shares from the bonus share allocation plans and the performance shares held in registered accounts by employees of the Company and its subsidiaries.
(c) The shares held by the Caltagirone Group, through the companies Gamma, FINCAL, VIAPAR SO.FI.COS and VIAFIN, are subject to a lock-up period until September 2020.

Pursuant to Article L. 233-13 of the French Commercial Code and to the knowledge of SUEZ, as of December 31, 2018, there were no shareholders other than those mentioned above holding 5% or more of the share capital or voting rights directly, indirectly or together.

18.2 Major shareholders' voting rights

Each Company share entitles the holder to one voting right.

18.3 Control of the Company

18.3.1 Absence of control of the Company

No third party exercised control over the Company in 2018.

18.3.2 Factors likely to have an impact in the event of a takeover bid

The information below, dated December 31, 2018, is provided in compliance with the provisions of Article L. 225-37-5 of the French Commercial Code:

- the Company's ownership structure is described in chapter 18.1 of this Reference Document;
- there are no restrictions in the bylaws on the exercise of voting rights or the transfer of shares or clauses of agreements notified to the Company pursuant to Article L. 233-11 of the French Commercial Code;
- direct or indirect shareholdings in the Company of which it is aware by virtue of Articles L. 233-7 (threshold crossing declaration) and L. 233-12 of the French Commercial Code are described in chapter 18.1 of this Reference Document;
- there are no holders of shares with special control rights;
- the operating mechanisms built into the Company's employee shareholding program are described in chapter 17.3 of this Reference Document;
- to the Company's knowledge, there are no agreements between shareholders that could lead to restrictions in the transfer of shares and in the exercise of the Company's voting rights. Caltagirone has made a commitment not to transfer its shares in the Company until September 2020. However, this commitment does not apply in the event of a takeover bid on the shares of the Company if this offer has received a favorable opinion from the Board of Directors of the Company;
- the rules applicable to the appointment and replacement of members of the Board of Directors are set out in chapter 21.2 of this Reference Document;
- the powers of the Board of Directors for the issuance or buyback of shares are presented in chapter 21.1 of this Reference Document;
- the Company may enter into agreements containing clauses which could, under certain conditions, lead to their early termination in the event of a change of control of the Company, some of which could, according to the Company, have an impact in the event of a takeover bid. These include:
  - certain financing agreements, as mentioned in Note 13 and 14 to the Consolidated Financial Statements in chapter 20.1 of this document for the year ended December 31, 2018, including bonds issued under the EMTN program set up by the Company, the issues of undated deeply subordinated notes, known as "hybrids", carried out in 2014, 2015, and 2017, the syndicated loan set up in February 2010, renegotiated in 2011 and 2014, maturing in 2021 and in the amount of EUR 1.5 billion, provided the change of control is accompanied by a downgrade of the Company's rating to below a certain threshold;
- there is no agreement providing for the payment of severance pay to a Director (including the Chief Executive Officer) if that person resigns or is dismissed following a public takeover or swap bid.

18.4 Agreement that may result in a change of control

None.

18.5 Summary of transactions made by the persons indicated in Article L. 621-18-2 of the French Monetary and Financial Code during the year ended December 31, 2018

Transactions in 2018 by the persons indicated in Article L. 621-18-2 of the French Monetary and Financial Code

Name of shareholder	Date of transaction	Nature of transaction	Amount	Price/share
Jean-Marc Boursier [(a)]	3/9/2018	acquisition of shares	EUR 93,280	EUR 11.66
Franck Bruel	6/8/2018	acquisition of shares	EUR 22,800	EUR 11.40
Francesco Caltagirone	1/26/2018	acquisition of shares	EUR 36,021	EUR 12.01
Francesco Caltagirone	3/8/2018	acquisition of shares	EUR 57,505	EUR 11.50
Jean-Yves Larrouturou	7/31/2018	acquisition of mutual fund units invested in SUEZ shares	EUR 8,598	EUR 12.00
Brigitte Taittinger-Jouyet	6/11/2018	acquisition of shares	EUR 23,080	EUR 11.54

(a) This information includes information pertaining to individuals closely related to Mr. Jean-Marc Boursier.

In addition, Criteria Caixa declared to have acquired SUEZ shares for a total of EUR 6,579,737.99.

Number of shares held by members of the Board of Directors as of December 31, 2018

	Number of shares held as of December 31, 2018
Gérard Mestrallet	19,564 shares [a]
Jean-Louis Chaussade	80,891 shares and 18,807.96 units of the SUEZ Actionnariat France mutual fund [b]
Enric Xavier Amiguet i Rovira [c]	87 shares and 41.37 units of the SUEZ Shareholding international mutual fund [b]
Nicolas Bazire	2,000 shares
Miriem Bensalah-Chaqroun	2,000 shares
Valérie Bernis	2,608 shares [a]
Franck Bruel	2,000 shares
Francesco Caltagirone	10,000 shares
Agatta Constantini [c]	136 shares and 159.35 units of the SUEZ Actionnariat France mutual fund [b]
Delphine Ernotte Cunci	2,088 shares
Lorenz d'Este	2,139 shares
Isidro Fainé Casas	2,000 shares
Judith Hartmann	2,000 shares [a]
Isabelle Kocher	4,475 shares [a]
Anne Lauvergeon	2,570 shares
Pierre Mongin	2,000 shares [a]
Guillaume Pepy	2,100 shares
Brigitte Taittinger-Jouyet	2,000 shares
Guillaume Thivolle [c]	38 shares and 452.6 units of the SUEZ Actionnariat France mutual fund [b]

(a) Of which 2,000 shares as a loan granted by ENGIE.
(b) Mutual fund units acquired as part of the SUEZ Group's Employee Shareholding plans.
(c) Directors representing employees and employee shareholders not subject to the statutory obligation of owning 2,000 shares.

This table was prepared on the basis of information provided to the Company by the Directors.

19 related-party transactions

Parties related to the Company include, among others, the Company's major shareholders, its non-consolidated subsidiaries, companies under joint control (proportionately consolidated companies), associates (equity affiliates), and entities on which various Company officers exercise at least a significant influence.

A breakdown of transactions with these related-parties for fiscal years 2018 and 2017, particularly ENGIE and its subsidiaries, appears in chapter 20.1, Note 22 of this document. The transactions are not significant at the level of the SUEZ Group.

The special report of the Statutory Auditors on the related-party agreements and commitments appearing in chapter 26.3 of this Reference Document describes the notified transactions.

Guarantees and counter-guarantees

The Company and ENGIE agree that all commitments involving guarantees, bonds, comfort letters, surety and any other similar commitments granted by ENGIE in respect of commitments made by Company subsidiaries to third parties have been transferred to the Company or any subsidiary acceptable by ENGIE. For any commitments unable to be transferred, the Company, or a subsidiary acceptable by ENGIE, must provide ENGIE with a counter-guarantee.

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20.1 Consolidated Financial Statements

20.1.1 Consolidated statements of financial position

(in millions of euros)	Note	December 31, 2018	December 31, 2017 restated
Non-current assets			
Intangible assets, net	10	4,982.1	4,916.3
Goodwill	9	5,223.8	5,142.1
Property, plant and equipment net	11	8,774.4	8,506.1
Equity instruments [a]	13	133.0	127.1
Loans and receivables carried at amortized cost	13	610.7	721.9
Derivative financial instruments	13	119.0	149.5
Investments in joint ventures	12.1	897.4	1,003.9
Investments in associates	12.2	1,084.3	1,023.8
Contracts assets	4.1.3	95.6	21.6
Other assets		214.0	274.5
Deferred tax assets	7	546.6	630.0
Total non-current assets		**22,680.9**	**22,516.8**
Current assets			
Loans and receivables carried at amortized cost	13	109.7	136.6
Derivative financial instruments	13	97.6	89.5
Trade and other receivables	13	4,584.0	4,709.8
Inventories		499.5	455.1
Contracts assets	4.1.3	627.2	414.9
Other assets		1,500.7	1,230.0
Financial assets measured at fair value through income	13	29.2	56.9
Cash and cash equivalents	13	3,424.1	3,221.3
Total current assets		**10,872.0**	**10,314.1**
Total assets		**33,552.9**	**32,830.9**
Shareholders' equity, Group share		6,391.8	6,510.4
Non-controlling interests	16	2,600.8	2,511.4
Total shareholders' equity		**8,992.6**	**9,021.8**
Non-current liabilities			
Provisions	17	1,507.6	1,579.2
Long-term borrowings	13	9,803.2	9,760.6
Derivative financial instruments	13	9.5	26.4
Other financial liabilities	13	47.2	43.1
Contracts liabilities	4.1.3	287.7	268.7
Other liabilities		591.6	561.6
Deferred tax liabilities	7	649.4	649.6
Total non-current liabilities		**12,896.2**	**12,889.2**
Current liabilities			
Provisions	17	496.1	582.6
Short-term borrowings	13	2,762.1	2,169.7
Derivative financial instruments	13	47.2	38.3
Trade and other payables	13	3,798.9	3,741.3
Contracts liabilities	4.1.3	976.5	1,058.8
Other liabilities		3,583.3	3,329.2
Total current liabilities		**11,664.1**	**10,919.9**
Total shareholders' equity and liabilities		**33,552.9**	**32,830.9**

(a) At 31 December, 2017 restated, the amount indicated refers to "Available-for-sale securities" measured in accordance with IAS 39. See Note 1.2.4.4.

For the year ended December 31, 2017, the consolidated statements of financial position have been modified compared to those presented in the Reference Document published on December 31, 2017 to take into account the impacts related to the application of the new standard IFRS 15 "Revenue from contracts with customers" and the finalization of the purchase price allocation of GE Water.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

20.1.2 Consolidated income statements

(in millions of euros)	Note	December 31, 2018	December 31, 2017 restated
Revenues	4.1	17,331.1	15,783.0
Purchases		(3,648.6)	(3,032.2)
Personnel costs		(4,598.4)	(4,115.1)
Depreciation, amortization and provisions		(1,167.7)	(1,109.2)
Other operating expenses		(6,999.2)	(6,816.1)
Other operating income		225.2	289.8
Current operating income	4	**1,142.4**	**1,000.2**
Mark-to-Market on operating financial instruments		(0.8)	1.3
Impairment on property, plant and equipment, intangible and financial assets		(25.6)	(20.3)
Restructuring costs		(87.6)	(157.6)
Scope effects		(6.2)	77.6
Other gains and losses on disposals and non-recurring items		60.1	33.6
Costs linked to the acquisition of GE Water		–	(44.4)
Income from operating activities	5	**1,082.3**	**890.4**
Share in net income of equity-accounted companies considered as core business		192.9	211.6
of which: share in net income (loss) of joint ventures	12.1	*82.0*	*92.2*
of which: share in net income (loss) of associates	12.2	*110.9*	*119.4*
Income from operating activities after share in net income of equity-accounted companies considered as core business		**1,275.2**	**1,102.0**
Financial expenses		(555.6)	(518.5)
Financial income		90.2	89.6
Net financial income (loss)	6	**(465.4)**	**(428.9)**
Income tax expense	7	(244.0)	(157.2)
Net income		**565.8**	**515.9**
Of which: Group share		334.9	295.5
Non-controlling interests		230.9	220.4
Net Income (Group share) per share *(in euros)*	8	**0.47**	**0.45**
Net diluted income (Group share) per share *(in euros)*	8	**0.47**	**0.45**

For the year ended December 31, 2017, the consolidated income statement has been modified compared to those presented in the Reference Document published on December 31, 2017 to take into account the impacts related to the application of the new standard IFRS 15 "Revenue from contracts with customers" and the finalization of the purchase price allocation of GE Water.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

20.1.3 Consolidated statements of comprehensive income

(in millions of euros)	December 31, 2018	December 31, 2018 of which Group share	December 31, 2018 of which non controlling interests	December 31, 2017 restated	December 31, 2017 of which Group share restated	December 31, 2017 of which non controlling interests restated
Net income	**565.8**	**334.9**	**230.9**	**515.9**	**295.5**	**220.4**
Available for sale securities [a]	2.4	2.7	(0.3)	0.1	(0.1)	0.2
Net investment hedges	0.4	0.4	–	(4.0)	(4.0)	–
Cash flow hedges (excluding commodities)	13.6	11.3	2.3	14.9	12.3	2.6
Commodity cash-flow hedges	(4.2)	(3.5)	(0.7)	(2.3)	(1.9)	(0.4)
Deferred taxes on items above	(1.0)	(0.5)	(0.5)	(3.0)	(2.4)	(0.6)
Share of joint ventures in reclassifiable items, net of taxes	0.8	0.8	–	(53.5)	(53.5)	–
Share of associates in reclassifiable items, net of taxes	9.1	9.1	–	(6.6)	(6.6)	–
Translation adjustments	(2.1)	27.8	(29.9)	(241.8)	(166.6)	(75.2)
Total reclassifiable items	**19.0**	**48.1**	**(29.1)**	**(296.2)**	**(222.8)**	**(73.4)**
Actuarial gains and losses	5.2	1.8	3.4	7.6	8.7	(1.1)
Deferred taxes on actuarial gains and losses	(33.8)	(32.8)	(1.0)	19.2	19.2	–
Equity instrument [a]	(124.0)	(123.6)	(0.4)	–	–	–
Deffered taxes on equity instrument	0.2	0.2	–	–	–	–
Share of associates in non-reclassifiable items, net of taxes	2.9	2.9	–	0.1	0.1	–
Total non-reclassifiable items	**(149.5)**	**(151.5)**	**2.0**	**26.9**	**28.0**	**(1.1)**
Comprehensive income	**435.3**	**231.5**	**203.8**	**246.6**	**100.7**	**145.9**

(a) IFRS 9 standard replaces IAS 39 as from January 1, 2018. Available-for-sale financial assets as specified in IAS 39 at December 31, 2017 have been reclassified and measured in accordance with the principles of IFRS 9 standard detailed in Note 1.2.4.4. Since January 1, 2018, reclassifiable items of comprehensive income corresponding to available-for-sale assets are no longer measured as reclassifiable items in accordance with IFRS 9. Their variation over the financial year corresponds to the restatement of the opening balance.

For the year ended December 31, 2017, the consolidated statements of comprehensive income have been modified compared to those presented in the Reference Document published on December 31, 2017 to take into account the impacts related to the application of the new standard IFRS 15 "Revenue from contracts with customers" and the finalization of the purchase price allocation of GE Water.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

20.1.4 Statements of changes in consolidated shareholders' equity

(in millions of euros)	Note	Number of shares	Share Capital	Premiums	Consolidated reserves	Change in fair value and other	Translation adjustments	Treasury shares	Undated deeply subordinated notes	Share-holders' equity, Group share	Non controlling interests	Total
Shareholders' equity at December 31, 2016		**564,401,246**	**2,257.6**	**4,632.3**	**(2,287.7)**	**(240.6)**	**180.0**	**(28.6)**	**982.9**	**5,495.9**	**1,869.9**	**7,365.8**
IFRS 15 restatement [a]					(49.9)		2.0			(47.9)		(47.9)
Shareholders' equity at January 1, 2017 restated		**564,401,246**	**2,257.6**	**4,632.3**	**(2,337.6)**	**(240.6)**	**182.0**	**(28.6)**	**982.9**	**5,448.0**	**1,869.9**	**7,317.9**
Net income published					301.8					301.8	218.4	520.2
IFRS 15 impact [a]					(11.6)		6.2			(5.4)	–	(5.4)
Opening balance sheet and purchase price allocation GE Water impact [a]					5.3		8.9			14.2	6.4	20.6
Other comprehensive income published					28.1	12.3	(250.3)			(209.9)	(78.9)	(288.8)
Comprehensive income					**323.6**	**12.3**	**(235.2)**			**100.7**	**145.9**	**246.6**
Purchase price allocation GE Water impact [a]					(12.8)					(12.8)	1.2	(11.6)
Share-based payment					3.0					3.0		3.0
Dividends distributed in cash					(366.6)					(366.6)	(205.9)	(572.5)
Issue of new undated deeply subordinated notes									600.0	600.0	–	600.0
Issuance fees of new undated deeply subordinated notes									(2.3)	(2.3)	–	(2.3)
Interests of undated deeply subordinated notes issue					(27.5)					(27.5)	–	(27.5)
Purchase/sale of treasury shares					0.5			(48.4)		(47.9)	–	(47.9)
Delivery of performance shares and bonus shares	15.1	1,514,949	6.0	(6.0)						–	–	–
Capital increase linked to the acquisition of GE Water [b]	15.1	47,468,354	189.9	555.7						745.6	–	745.6
Employee share issue [c]	15.1	9,978,030	39.9	78.0						117.9	–	117.9
Legal reserve appropriation [d]				(23.6)	23.6					–	–	–
Transactions between shareholders [e]					(41.7)					(41.7)	20.4	(21.3)
Business combinations [f]										–	688.4	688.4
Other changes					(6.0)					(6.0)	(8.5)	(14.5)
Shareholders' equity at December 31, 2017 restated		**623,362,579**	**2,493.4**	**5,236.4**	**(2,441.5)**	**(228.3)**	**(53.2)**	**(77.0)**	**1,580.6**	**6,510.4**	**2,511.4**	**9,021.8**

(a) Opening balance sheet restatement detailed in Note 1.2.4.
(b) Including a EUR 750.0 million capital increase and -EUR 4.4 million in set up costs for the GE Water acquisition.
(c) After the employee share issue ("Sharing 2017"), the share capital rose by 9,978,030 shares, totaling EUR 117.9 million, net of expenses.
(d) Following the various capital increases that occurred in 2017, the legal reserve was funded with 10% of the total amount of the capital increases, representing EUR 23.6 million.
(e) Primarily including the acquisition of non-controlling interest of Hydralia in Agbar and the dilution without loss of control in SWTS due to the entry in its shareholders equity of CDPQ.
(f) Including EUR 696.7 million relating to non-controlling interests in GE Water purchased on September 29, 2017, and -EUR 13.1 million pertaining to non-controlling interests in Palyja, sold in 2017.

For the year ended December 31, 2017, the consolidated statements of changes in consolidated shareholders' equity have been modified compared to those presented in the Reference Document published on December 31, 2017 to take into account the impacts related to the application of the new standard IFRS 15 "Revenue from contracts with customers" and the finalization of the purchase price allocation of GE Water.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

(in millions of euros)	Note	Number of shares	Share Capital	Premiums	Consolidated reserves	Change in fair value and other	Translation adjustments	Treasury shares	Undated Deeply Subordinated Notes	Share-holders' equity, Group, share	Non controlling interests	Total
Shareholders' equity at December 31, 2017 restated		**623,362,579**	**2,493.4**	**5,236.4**	**(2,441.5)**	**(228.3)**	**(53.2)**	**(77.0)**	**1,580.6**	**6,510.4**	**2,511.4**	**9,021.8**
Net income					334.9					334.9	230.9	565.8
Other comprehensive income items IFRS 9 [a]						(122.8)				(122.8)	(0.8)	(123.6)
Other comprehensive income items excluding IFRS 9					(28.2)	22.7	24.9			19.4	(26.3)	(6.9)
Comprehensive income					**306.7**	**(100.1)**	**24.9**			**231.5**	**203.8**	**435.3**
Retained earnings IFRS 9 restatement [a]					67.5					67.5	(0.1)	67.4
Share-based payment					1.1					1.1	–	1.1
Dividends distributed in cash					(401.9)					(401.9)	(221.3)	(623.2)
Interests of undated deeply subordinated notes issue					(44.8)					(44.8)	–	(44.8)
Purchase/sale of treasury shares					(0.1)			25.2		25.1	–	25.1
Capital increase/decrease [b]	15.1	(2,000,000)	(8.0)	(22.0)						(30.0)	(18.0)	(48.0)
Transactions between shareholders [c]					36.0					36.0	29.3	65.3
Business combinations [d]										–	96.6	96.6
Other changes					(3.1)					(3.1)	(0.9)	(4.0)
Shareholders' equity at December 31, 2018		**621,362,579**	**2,485.4**	**5,214.4**	**(2,480.1)**	**(328.4)**	**(28.3)**	**(51.8)**	**1,580.6**	**6,391.8**	**2,600.8**	**8,992.6**

(a) See Note 1.2.4.4.
(b) EUR 30 million capital reduction resulting from the cancellation of 2,000,000 treasury shares held by SUEZ. The decrease of EUR 18 million in non-controlling interests corresponds to the repayment of the contribution to shareholder CDPQ by SWTS.
(c) Primarily concerns movements resulting from the Group's sale of 6.5% stake of the Chilean company IAM, a shareholder of Aguas Andinas, without loss of control.
(d) Primarily concerns the change of consolidation method of a Chinese joint venture to full consolidation.

20.1.5 Consolidated statements of cash flows

(in millions of euros)	Note	December 31, 2018	December 31, 2017 restated
Net income		**565.8**	**515.9**
– Share in net income (loss) of joint ventures	12.1	(8.6)	(92.2)
– Share in net income (loss) of associates	12.2	(184.3)	(119.4)
+ Dividends received from joint ventures and associates		144.6	140.8
– Amortization, depreciation and provisions		1,103.7	1,109.8
– Other gains and losses on disposal and scope effects		(56.8)	(111.2)
– Other items with no cash impact		2.9	1.5
– Income tax expense	7	244.0	157.2
– Financial income	6	465.4	428.9
Cash flows from operations before financial income/(expense) and income tax		**2,276.7**	**2,031.3**
+ Tax paid		(156.9)	(192.5)
Change in working capital requirements		**(146.4)**	**123.6**
Cash flows from operating activities		**1,973.4**	**1,962.4**
Investments in property, plant and equipment and intangible assets	3.4.3	(1,342.9)	(1,177.2)
Acquisitions of interests in associates and joint-ventures	3.4.3	(47.8)	(19.9)
Acquisitions of equity instrument	3.4.3	(31.7)	(18.8)
Takeover of subsidiaries net of cash and cash equivalents acquired	3.4.3	(66.9)	(2,561.7)
Disposals of property, plant and equipment and intangible assets		157.9	234.1
Disposals of interests in associates and joint ventures		(5.3)	109.1
Disposals of equity instrument		4.2	3.9
Loss of controlling interests in subsidiaries net of cash and cash equivalents sold		88.4	8.8
Other net interest on financial assets		14.1	(5.2)
Dividends received on non-current financial assets		8.5	5.0
Change in loans and financial receivables		(8.8)	(4.1)
Cash flows from investing activities		**(1,230.3)**	**(3,426.0)**
Capital increase/ reduction of parent company [a]		–	863.5
Purchase/sale of treasury shares		(4.9)	(47.9)
Capital increase/ reduction of non controlling interests [b]		(23.4)	729.2
Change in share of interests in controlled entities	3.4.3	(10.8)	(61.4)
Dividends paid to parent company's shareholders [c]		(446.7)	(352.2)
Dividends paid to non controlling interests [c]		(249.4)	(218.6)
Issue of undated deeply subordinated notes net of costs [d]	15.6	–	597.7
Increase in loans and financial debt [e]	13.2.1	1,323.0	1,037.7
Repayment of borrowings and financial debt	13.2.1	(766.5)	(1,172.2)
Change in financial assets at fair value through income		27.5	5.7
Financial interest paid		(392.5)	(364.5)
Financial interest received		26.6	32.4
Flows on financial derivatives qualifying net investment hedges and compensation payments on financial derivatives		(75.9)	96.5
Cash flows from financing activities		**(593.0)**	**1,145.9**
Impact of changes in exchange rates and other		4.7	(51.6)
Total cash flows for the period		**154.8**	**(369.3)**
Opening cash and cash equivalents		**2,555.4**	**2,924.7**
Closing cash and cash equivalents [f]	13	**2,710.2**	**2,555.4**

(a) In 2017, this flow mainly included a capital increase of EUR 745.6 million, net of issue costs as part of the acquisition of GE Water and a capital increase of EUR 118 million net of issuance costs as part of the employee shareholding plan (SHARING 2017).
(b) This flow mainly includes, up to EUR 18 million, a repayment of the contribution to shareholder CDPQ by SUEZ WTS. The cash flow for the previous financial year was mainly composed of EUR 668 million of a capital increase by SWTS subscribed by CDPQ and EUR 60 million of a capital increase by SUEZ NWS Limited subscribed by NWS Holdings Limited.
(c) Including withholding taxes and coupons of deeply subordinated notes paid by the parent company.
(d) In 2017, this flow was related to the issuance by SUEZ, of undated deeply subordinated notes for EUR 597.7 million after allocation of issuance costs as part of the acquisition of GE Water.
(e) In accordance with IAS 7.8, bank overdrafts due on demand included in financial liabilities in the consolidated statement of financial position are reclassified as cash and cash equivalents in the consolidated statement of cash flows; the reclassification amounts to EUR 48 million. In total, the net change in borrowings in the consolidated statement of cash flows for 2018 iss EUR 556.5 million compared with EUR 604.5 million in Note 13.2.1. (See Notes 1.5.9.1 and 1.5.17).
(f) Cash and cash equivalents presented at the end of the restated 2017 financial year amounted to EUR 2,555.4 million compared with EUR 3,058.1 million in the 2017 Reference Document. The difference, *i.e.* - EUR 502.7 million, is explained by:
– a reclassification increasing cash and cash equivalents by EUR 163.2 million against a decrease in bank overdrafts;
– the reclassification of bank overdrafts due on request for an amount of - EUR 665.9 million in accordance with IAS 7.8. The total amount of bank overdrafts due in the closing cash position thus amounts to EUR 713.9 million.

For the year ended December 31, 2017, the consolidated statements of cash flows have been modified compared to those presented in the Reference Document published on December 31, 2017 to take into account the impacts related to the application of the new standard IFRS 15 "Revenue from contracts with customers" and the finalization of the purchase price allocation of GE Water.

NB: The values in the tables are generally expressed in millions of euros. Rounding may in some cases produce a non-material discrepancy in totals or variances.

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Note 1 Basis of presentation, principles and accounting policies

1.1 Basis of presentation

SUEZ, the Parent Company of the Group, is a French *société anonyme* subject to the provisions of Book II of the French Commercial Code, as well as to all other legal provisions applying to French commercial corporations. It was incorporated in November 2000. The Group's headquarter is in the CB21 tower – 16, place de l'Iris – 92040 Paris-La Défense – France.

The Group is a global player in the management of the water cycle and the waste cycle.

SUEZ is listed on the Euronext Paris (Compartment A) and Euronext Brussels markets since July 22, 2008.

On February 26, 2019, the Board of Directors of SUEZ approved and authorized the publication of the Group's Consolidated Financial Statements for the fiscal year ended December 31, 2018.

1.2 Accounting standards

Pursuant to European Commission Regulation (EC) 809/2004 on Prospectus dated April 29, 2004, the financial information concerning the assets, liabilities, financial position, and profit and loss of SUEZ has been provided for the last two fiscal years ended December 31, 2017 and 2018, and was prepared in accordance with European Regulation (EC) 1606/2002 of July 19, 2002 relating to the application of international accounting standards (IFRS). The Group's Consolidated Financial Statements for the year ended December 31, 2017 were prepared in accordance with IFRS as issued by the IASB and endorsed by the European Union[1].

The accounting standards applied in preparing the financial statements at December 31, 2018 are consistent with those applied in preparing the financial statements of December 31, 2017, with the exception of the items mentioned below in Note 1.2.1.

1.2.1 Standards, amendments and interpretations applied for annual periods beginning on January 1, 2018

The standards applied by the Group for the first time starting January 1, 2018 are the following:

- IFRS 9 – Financial instruments;
- IFRS 15 – Revenue from contracts with customers.

  Impacts of the application of these new standards are described in Note 1.2.4;
- IFRIC 22 – Foreign Currency Transactions and Advance Consideration;
- amendments to IFRS 2 – Share-based Payment;
- annual improvements to IFRS 2014-2016 Cycle.

Application of these standards and amendments does not have any major impact on the Group's Consolidated Financial Statements.

1.2.2 IFRS standards and amendments applicable after 2018 that the group has elected not to early adopt

Amendments published by the IASB and adopted by the European Union

- IFRS 16 – Leases

  As from January 1, 2019, IFRS 16 is replacing IAS 17 – Leases as well as the interpretations of IFRIC 4 – Determining Whether an Arrangement Contains a Lease, SIC 15 – Operating Leases – Incentives and SIC 27 -Evaluating the Substance of Transactions in the Legal Form of a Lease.

  IFRS 16 does not introduce any changes in accounting treatment for lessors compared to standards in effect up to December 31, 2018: lessors will continue to classify their leases as operating leases if they retain most of the risks and benefits associated with the assets, or failing that, as capital leases.

  By contrast, IFRS 16 introduces major changes in how the lessee measures, recognizes and presents leases. Starting on January 1, 2019, it requires the lessee to recognize a vast majority of its lease agreements in the statement of financial position using a single model, whether they be operational or capital leases.

  Starting from this date, the lessee will record:

  - assets in the statement of financial position under rights of use,
  - lease liabilities under liabilities,
  - depreciation and amortization of rights of use and interest expenses related to lease liabilities in the income statement.

  More specifically, the SUEZ Group will adopt IFRS 16 by recognizing the cumulative retrospective impact of initial application as of January 1, 2019. As a result, the Group will not restate comparative information for 2018.

  At the transition date January 1, 2019 as authorized by the standard, the SUEZ Group will measure and recognize:

  - lease liabilities at the present value of lease payments payable,
  - assets at the lease liability amount adjusted for prepaid rent or rent to be paid that has already been recognized in the statement of financial position as of December 31, 2018.

  In order to address organizational challenges posed by the standard, SUEZ rolled out a group-wide IFRS 16 project in 2017. Key milestones of the project included:

  - setting up and training of dedicated project teams and identifying contracts that could potentially be impacted by the standard (June 2017/September 2017),
  - simulating the impacts on the financial statements and indicators using the listed leases with the 18 largest entities and subgroups (September 2017/June 2018),

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(1) Available on the European Commission's website: http://ec.europa.eu/internal_market/accounting/index_en.htm.

- selecting and setting up a management tool to manage the standard's complex and specific needs as well as the massive volume involved, in a multi-country and multi-currency dimension (January 2018/September 2018),
- rolling out this management tool within Group entities as well as making training kits and operating procedures for upgrading interfaces upstream and downstream with local tools (September 2018/December 2018),
- helping entities and sub-consolidated units in the phase of transferring and checking historical data (beginning in October 2018).

Impacts generated by the new IFRS 16 standard will primarily come from real estate leases, vehicle leases and construction machinery. Waste collection, recycling and recovery activities have proportionally the largest lease agreements compared to those in effect in the Group's other business activities.

The SUEZ Group has retained two exemptions permitted by the standard and, as a result, will not restate rent on short-term leases or on low-value assets. As indicated in the standard, SUEZ Group will also not restate variable rent depending on the degree of use of the asset concerned. Rent related to all these leases will continue to be recognized as operating expenses and will not generate new lease liabilities.

The following simplification measures authorized by the new IFRS 16 standard will be applied by the SUEZ Group:

- an agreement already identified as a lease agreement according to IAS 17 and the IFRIC 4 interpretation will fall under the scope of the standard,
- an agreement that was not identified as a lease agreement within the meaning of IAS 17 and IFRIC 4 up to December 31, 2018 will not be restated under IFRS 16,
- as of the January 1, 2019 transition date, lease agreements whose residual term is less than or equal to 12 months will be considered as short-term leases and will remain recognized as operating expenses,
- all items included in equipment and transportation lease agreements, including items related to maintenance and other services, will be subject to restatement according to IFRS 16. In contrast, maintenance and other services included in the lease agreements for other assets will not be restated.

Lease liabilities as of January 1, 2019 that arise from the initial application of IFRS 16 standard will take into account impacts from early contract renewals or terminations when early renewals or terminations of existing contracts are reasonably certain.

Estimating impacts is currently being finalized. The new standard will have a material impact on debt, fixed assets and EBITDA. However, other items on the statement of financial position and the income statement (Current Operating Income, Net Financial Income, Net Income in particular) will only be marginally impacted.

Debt and fixed assets should increase within a range of EUR 1.2 billion to EUR 1.5 billion.

The impact on the cash flow statement would consist of:

- an increase in cash flow from operating activities up to the amount of rent reversed from operating expenses,
- a decrease corresponding in net cash flows from financing activities. This decrease will lead to the creation of the following two distinct aggregates: interest paid on lease liabilities and repayments on lease liabilities.

In addition, as of December 31, 2018, the Group publishes its outstanding minimum future payment liabilities under lease agreements in Note 20 in accordance with IAS 17.

The method for calculating the new lease liability will be different than what is used to determine future lease payment. In fact, future lease payments as of December 31, 2018 include future rent to be paid over only for non-cancelable periods. They exclude impacts from renewal options that can be reasonably taken by the lessee. On the contrary, they include impacts from short-term leases and impacts relating to low-value assets.

► IFRIC 23 – Uncertainty over Tax Treatments

This standard clarifies the accounting treatment of income tax expense. Some positions taken by the SUEZ Group may be uncertain from an income tax expense perspective, for example, because the text of certain local legislation may be subject to interpretation. IFRIC 23 requires calculating and recognizing income tax expense according to a calculation method that tax authorities are likely to use.

The SUEZ Group will apply IFRIC 23 as from January 1, 2019 without providing comparative data for 2018.

The SUEZ Group's activities are carried out in a multinational environment. The impact analysis of the application of IFRIC 23 is in progress. The accounting treatment of taxes other than income taxes remains unchanged.

The amendment below described will also be in application starting January 1, 2019.

► Amendments to IFRS 9 – Prepayment Features with Negative Compensation

The analysis of the possible impact of these amendments and improvements is ongoing.

Standards and amendments published by the IASB and not yet adopted by the European Union

The following interpretations and amendments will apply from January 1, 2020

- ► Amendments to IAS 19 – Plan amendments, curtailments, and settlements
- ► Amendments to IAS 28 – Long-term interests in associates and joint ventures
- ► Amendments resulting from the annual improvements to IFRS 2015-2017 Cycle
- ► Amendments to IFRS 3 – business combination – definition of a business
- ► Amendments to IAS 1 and to IAS 8 – definition of materiality
- ► Revised version of Conceptual Framework for Financial Reporting
- ► IFRS 14 – Regulatory Deferral Accounts

This last standard, which is not intended to be adopted by the EU, will have no impact on the Group's accounts since it is intended for first-time adopters of IFRS standards.

1.2.3 Reminder of IFRS 1 transition options

The Group used some of the options available under IFRS 1 for its transition to IFRS in 2005. The options that continue to have an effect on the Consolidated Financial Statements are:

- translation adjustments: the Group elected to reclassify cumulative translation adjustments within equity in the consolidated reserves on January 1, 2004;
- business combinations: the Group elected not to restate business combinations that took place prior to January 1, 2004 in accordance with IFRS 3.

1.2.4 Impact of the first-time application of IFRS 15 standard – revenue from contracts with customers, the finalization of the purchase price allocation of GE Water and the first-time application of IFRS 9 standard – financial instruments

1.2.4.1 IFRS 15 – Revenue from contracts with customers

IFRS 15 replaces IAS 11 Construction Contracts and IAS 18 Revenue. SUEZ applies this standard as of January 1, 2018 with a comparative information for year 2017 and a retroactive effect as of January 1, 2017.

The work carried out led to the documentation of a very broad convergence between the methods applied by the Group until December 31, 2017 and the provisions of IFRS 15.

The 2017 financial statements restatements primarily concern specific cases in two business units. One relates to the identification of distinct performance obligations presenting a different control transfer profile, while the other is related to the payment made to customers analyzed as a revenue reduction and formerly analyzed as expenses.

The impacts on the consolidated statements of financial position, the consolidated income statements and the consolidated statements of comprehensive income are set out in the tables of Note 1.2.4.3.

The impact of IFRS 15 on the Group's shareholder's equity on the transition date of January 1, 2018 is -EUR 53.3 million. Retroactive impact as of January 1, 2017 as presented in the consolidated shareholder's equity was -EUR 47.9 million.

The principles and accounting methods applied in accordance with IFRS 15 are summarized in Notes 1.5.13., 1.5.14. and 1.5.15.

1.2.4.2 Finalization of purchase price allocation of GE Water

The Group applies the purchase method as defined in IFRS 3 Revised, which consists of recognizing at the acquisition date the identifiable assets acquired and the liabilities assumed at their fair value, including any non-controlling interests in the acquired entity. These non-controlling interests are measured either at fair value or at proportionate share of the identifiable net assets.

At the closing date of a business combination, the fair value of the identifiable assets and assumed liabilities may be tentative. In this case, their value must be adjusted retrospectively during the remeasurement period. The remeasurement period is one year from the acquisition date. During the remeasurement period, the Group must also recognize at fair value the identifiable assets and assumed liabilities not recognized at the acquisition date.

On September, 30, 2017 at the date of GE Water acquisition, the fair value of identifiable assets acquired and the liabilities assumed was not definitive. On December 31,2018 fair value has been revised (refer to Note 2.1.1 and 2.1.2).

Impacts of purchase price allocation of identifiable assets acquired and the liabilities assumed are presented below in the statements of financial position at December 31, 2017.

1.2.4.3 Impacts related to the first-time application of the new IFRS 15 - Revenue from contracts with customers and the finalization of the purchase price allocation of GE Water

IMPACTS ON THE COMPARATIVE CONSOLIDATED STATEMENTS OF FINANCIAL POSITIONS AT DECEMBER 31, 2017

(in millions of euros)	December 31, 2017 published	First application of IFRS 15	Purchase price allocation of GE Water	December 31, 2017 restated
Non-current assets				
Intangible assets, net	4 161.9	(17.5)	771.9	4,916.3
Goodwill	5,587.2	–	(445.1)	5,142.1
Property, plant and equipment net	8,467.5	–	38.6	8,506.1
Investments in equity instruments	127.1	–	–	127.1
Loans and receivables carried at amortized cost	728.6	(6.7)	–	721.9
Derivative financial instruments	149.5	–	–	149.5
Investments in joint ventures	1,003.9	–	–	1,003.9
Investments in associates	1,020.4	(4.8)	8.2	1,023.8
Contracts assets	–	21.6	–	21.6
Other assets	274.5	–	–	274.5
Deferred tax assets	697.2	17.6	(84.8)	630.0
Total non-current assets	**22,217.8**	**10.2**	**288.8**	**22,516.8**
Current assets				
Loans and receivables carried at amortized cost	136.6	–	–	136.6
Derivative financial instruments	89.5	–	–	89.5
Trade and other receivables	4,689.7	30.4	(10.3)	4,709.8
Inventories	471.0	(1.7)	(14.2)	455.1
Contracts assets	–	414.7	0.2	414.9
Other assets	1,650.7	(408.6)	(12.1)	1,230.0
Financial assets measured at fair value through income	56.9	–	–	56.9
Cash and cash equivalents	3,058.1	–	163.2	3,221.3
Total current assets	**10,152.5**	**34.8**	**126.8**	**10,314.1**
Total assets	**32,370.3**	**45.0**	**415.6**	**32,830.9**
Shareholders' equity, Group share	6,562.3	(53.3)	1.4	6,510.4
Non-controlling interests	2,503.7	–	7.7	2,511.4
Total shareholders' equity	**9,066.0**	**(53.3)**	**9.1**	**9,021.8**
Non-current liabilities				
Provisions	1,574.9	–	4.3	1,579.2
Long-term borrowings	9,760.6	–	–	9,760.6
Derivative financial instruments	26.4	–	–	26.4
Other financial liabilities	43.1	–	–	43.1
Contracts liabilities	–	268.7	–	268.7
Other liabilities	893.6	(332.0)	–	561.6
Deferred tax liabilities	556.2	0.1	93.3	649.6
Total non-current liabilities	**12,854.8**	**(63.2)**	**97.6**	**12,889.2**
Current liabilities				
Provisions	505.8	(0.1)	76.9	582.6
Short-term borrowings	2,004.4	–	165.3	2,169.7
Derivative financial instruments	38.3	–	–	38.3
Trade and other payables	3,713.5	(47.9)	75.7	3,741.3
Contracts liabilities	–	1,081.0	(22.2)	1,058.8
Other liabilities	4,187.5	(871.5)	13.2	3,329.2
Total current liabilities	**10,449.5**	**161.5**	**308.9**	**10,919.9**
Total shareholders' equity and liabilities	**32,370.3**	**45.0**	**415.6**	**32,830.9**

OPENING IMPACTS ON THE COMPARATIVE CONSOLIDATED INCOME STATEMENTS AT DECEMBER 31, 2017

(in millions of euros)	December 31, 2017 published	First application of IFRS 15	Purchase price allocation of GE Water	December 31, 2017 restated
Revenues	15,871.3	(88.3)	–	15,783.0
Purchases	(3,092.4)	60.2	–	(3,032.2)
Personnel costs	(4,115.1)	–	–	(4,115.1)
Depreciation, amortization and provisions	(1,099.8)	0.1	(9.5)	(1,109.2)
Other operating expenses	(6,781.1)	25.8	(60.8)	(6,816.1)
Other operating income	289.8	–	–	289.8
Current operating income	**1,072.7**	**(2.2)**	**(70.3)**	**1,000.2**
Income from operating activities	**962.9**	**(2.2)**	**(70.3)**	**890.4**
Income from operating activities after share in net income of the equity-accounted companies considered as core business	**1,174.5**	**(2.2)**	**(70.3)**	**1,102.0**
Net financial income (loss)	**(428.9)**	**–**	**–**	**(428.9)**
Income tax expense	(225.4)	(9.4)	77.6	(157.2)
Net income	**520.2**	**(11.6)**	**7.3**	**515.9**
Group share	301.8	(11.6)	5.3	295.5
Non-controlling interests	218.4	–	2.0	220.4
Net income (Group share) per share *(in euros)*	**0.46**			**0.45**
Net diluted income (Group share) per share *(in euros)*	**0.46**			**0.45**

OPENING IMPACT ON THE COMPARATIVE CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME AT DECEMBER 31, 2017

(in millions of euros)	12/31/2017 published	12/31/2017 Group share published	12/31/2017 non controlling interests published	First application of IFRS 15	Group share	Non controlling interests	Purchase price allocation of GE Water	Group share	Non controlling interests	12/31/2017 restated	12/31/2017 Group share restated	12/31/2017 non controlling interests restated
Net income	**520.2**	301.8	218.4	**(11.6)**	(11.6)	–	**7.3**	5.3	2.0	**515.9**	**295.5**	**220.4**
Total reclassifiable items	**(315.7)**	(237.9)	(77.8)	**6.2**	6.2	–	**13.3**	8.9	4.4	**(296.2)**	**(222.8)**	**(73.4)**
Total non-reclassifiable items	**26.9**	28.0	(1.1)	**–**		–	**–**		–	**26.9**	**28.0**	**(1.1)**
Comprehensive income	**231.4**	**91.9**	**139.5**	**(5.4)**	**(5.4)**	**–**	**20.6**	**14.2**	**6.4**	**246.6**	**100.7**	**145.9**

OPENING IMPACTS ON THE COMPARATIVE CONSOLIDATED STATEMENT OF CASH FLOWS AT DECEMBER 31, 2017

(in millions of euros)	December 31, 2017 published	First application of IFRS 15	Depreciation/ Amortization of purchase price allocation of GE Water	December 31, 2017 restated for IFRS 15 and GE Water effects	Reclassification of bank overcraft due on demand [a]	December 31, 2017 restated
Net income	**520.2**	**(11.6)**	**7.3**	**515.9**		**515.9**
Cash flows from operations before financial income/(expense) and income tax	2,094.4	(2.3)	(60.8)	2,031.3		2,031.3
Tax paid	(192.5)	–	–	(192.5)		(192.5)
Change in working capital requirements	60.5	2.3	60.8	123.6		123.6
Cash flows from operating activities	1,962.4	–	–	1,962.4		1,962.4
Cash flows from investing activities	(3,589.1)	–	163.1	(3,426.0)		(3,426.0)
Cash flows from financing activities	1,811.8	–	–	1,811.8	(665.9)	1,145.9
Impact of changes in exchange rates and other	(51.7)	–	0.1	(51.6)		(51.6)
Total cash flows of the period	**133.4**	**–**	**163.2**	**296.6**	**(665.9)**	**(369.3)**
Opening cash and cash equivalents	**2,924.7**	**–**	**–**	**2,924.7**		**2,924.7**
Closing cash and cash equivalents	**3,058.1**	**–**	**163.2**	**3,221.3**	**(665.9)**	**2,555.4**

(a) In accordance with IAS 7.8, bank overdrafts due on demand included in financial liabilities in the consolidated statements of financial position are reclassified to cash and cash equivalents.

1.2.4.4 Impacts IFRS 9 – Financial Instruments

IFRS 9 replaces IAS 39 with effect from January 1, 2018. The first time application of this standard has not resulted in any significant restatement. The Group decided not to publish comparative information for 2017.

The standard includes three sections described below:

The SUEZ Group has applied the arrangements of the standard to sections 1 and 2 retroactively. As permitted by the standard, the cumulative effect of the transition has been recorded in the consolidated shareholders' equity balance as of January 1, 2018 without comparative restatement for the 2017 period. The Group applied arrangements related to section 3 prospectively starting from January 1, 2018.

IFRS 9 requires that financial assets are classified in the statements of financial position according to their nature, the characteristics of their contractual cash flows and the business model adopted for their management.

Within SUEZ Group, the only reclassification required by the first time application of IFRS 9 concerns the equity instruments initially classified as "Available-for-sale securities" under IAS 39, and which have now been divided into two categories of equity instruments, as detailed below and in Note 13.1.1.

The impact of reclassification at January 1, 2018 is as follows:

CLASSIFICATION AND MEASUREMENT OF FINANCIAL ASSETS AND LIABILITIES (SECTION 1)

(in millions of euros)	December 31, 2017 restated	Reclassification	January 1, 2018 restated
Available for sales securities	127.1	(127.1)	–
Equity instruments measured at fair value through equity		94.3	94.3
Equity instruments measured at fair value through income		32.8	32.8

Equity instruments measured at fair value through equity are essentially not consolidated, unlisted securities.

Equity instruments measured at fair value through income statement are mainly investments not consolidated, held in listed companies.

A reclassification of reserves to elements of comprehensive income, related to the IFRS 9 restatement, was carried out for an amount of – EUR 123.6 million.

IMPAIRMENT (SECTION 2)

IFRS 9 determines the applicable principles and methodology for measuring and recognizing impairment linked to credit risk on financial assets and contracts assets as defined by IFRS15.

Financial assets are defined in Note 1.5.9. and contracts assets are defined in Note 1.5.15.

The assets concerned within the SUEZ Group are primarily:

- trade receivables, including receivables recorded by applying IFRIC 12 interpretation to service concession;
- loans;
- deposits and guarantees;
- contracts assets as defined in IFRS 15;
- finance lease receivables.

Impairment is now recognized as soon as Group entities expect losses for non-recovery on these assets, even if these entities have not yet faced any unpaid amounts on these assets.

By contrast, in accordance with IAS 39, impairment was only recognized on financial assets when the losses were incurred (overdue).

The impact of the restatement resulting from the first-time application of IFRS 9 comes largely from the additional impairment recognized on trade receivables, recorded against equity, for an amount of -EUR 83.4 million before deferred taxes. This impact comes:

- on the one hand, from additional depreciation of receivables carried by fully consolidated entities for EUR -44.4 million;
- on the other hand, from the impairments on trade receivables carried by investments in associates for an amount of EUR -39.0 million.

The gross value of receivables and the amount of depreciation on receivables carried by fully consolidated entities are summarized as follows as at January 1, 2018, before and after application of IFRS9:

(in millions of euros)	December 31, 2017 restated	First application of IFRS 9	January 1, 2018 restated
Trade and other receivables - Gross	5,022.9	–	5,022.9
Trade and other receivables - Impairment	(313.1)	(44.4)	(357.5)
Trade and other receivables - Net	4,709.8	(44.4)	4,665.4

The carrying amount of investments in associates at January 1, 2018, before and after application of IFRS 9, is as follows:

(in millions of euros)	December 31, 2017 restated	First application of IFRS 9	January 1, 2018 restated
Investments in associates	1,023.8	(39.0)	984.8

The Group has also adapted the impairment methods for its contracts assets and other financial assets to the principles of IFRS 9 (see section 1.5.9.1). These other adjustments in methods did not generate any material restatements as at January 1, 2018.

HEDGE ACCOUNTING (SECTION 3)

The Group has a policy of hedging currency risks and interest rates risks.

SUEZ adopted hedge accounting in accordance with IFRS 9 from January 1, 2018. There is no restatement specifically on this topic at the transition date.

1.3 Measurement basis for preparation of the Consolidated Financial Statements

The Consolidated Financial Statements have been prepared using the historical cost convention, except for financial instruments that are accounted for according to the financial instrument categories defined by IFRS 9.

1.4 Use of judgment and estimates

The economic and financial crisis continues, while the Group maintains its risk management procedures of its financial instruments. The significant market volatility caused by the crisis is taken into account by the Group in the estimates made such as for its business plans and in the various discount rates used in impairment testing and computing provisions.

1.4.1 ESTIMATES

The preparation of the Consolidated Financial Statements requires the use of estimates and assumptions to determine the value of assets and liabilities, the disclosure of contingent assets and liabilities at the reporting date, as well as the revenues and expenses reported during the period.

Due to uncertainties inherent in the estimation process, the Group regularly revises its estimates in light of currently available information. Final outcomes could differ from those estimates.

The key estimates used by the Group in preparing the Consolidated Financial Statements relate mainly to:

- the measurement of the fair value of assets acquired and liabilities assumed in a business combination;
- the measurement of the recoverable amount of goodwill, property, plant and equipment and intangible assets (see Note 1.5.4.1 and 1.5.5);

- the measurement of provisions, particularly for legal and arbitration proceeding and for pensions and other employee benefits (see Note 1.5.12);
- the measurement of capital renewal and replacement liabilities (see Note 1.5.13.4);
- the measurement of financial instruments (see Note 1.5.9);
- the measurement of unmetered revenue (see Note 1.5.13);
- the measurement of margin at termination relating to construction contracts (see Note 1.5.13.3);
- the measurement of capitalized tax loss carry-forward.

1.4.1.1 Measurement of the fair value of assets acquired and liabilities assumed in a business combination

The fair value of the assets acquired and liabilities assumed is based on estimates and assumptions regarding in particular the expected market outlook and future cash flows as well as the discount rate to apply. The values used reflect management's best estimates.

1.4.1.2 Recoverable amount of goodwill, property, plant and equipment and intangible assets

The recoverable amount of goodwill, intangible assets and property, plant and equipment is based on estimates and assumptions regarding in particular the expected market outlook and future cash flows associated with the assets and the discount rate to apply. Any change in these assumptions may have a material impact on the measurement of the recoverable amount and could result in adjustments to the impairment losses to be booked.

1.4.1.3 Estimates of provisions

Parameters with a significant influence on the amount of provisions include the timing of expenditure and the discount rate applied to cash flows, as well as the actual level of expenditure. These parameters are based on information and estimates deemed to be appropriate by the Group at the current time.

To the Group's best knowledge, there is no information suggesting that the parameters used taken as a whole are not appropriate. Furthermore, the Group is not aware of any developments that are likely to have a material impact on the provisions booked.

1.4.1.4 Pensions and other employee benefit obligations

Pension obligations are measured on the basis of actuarial calculations. The Group considers that the assumptions used to measure its obligations are appropriate and documented. However, any change in these assumptions may have a material impact on the resulting calculations.

1.4.1.5 Capital renewal and replacement liabilities

This item includes concession operators' liabilities for renewing and replacing equipment and for restoring sites. The liabilities are determined by estimating the cost of renewing or replacing equipment and restoring the sites under concession (as defined by IFRIC 12), discounted each year at rates linked to inflation. The related expense is calculated on a contract-by-contract basis with probable capital renewal and site restoration costs allocated over the life of each contract.

1.4.1.6 Financial instruments

To determine the fair value of financial instruments that are not listed on an active market, the Group uses valuation techniques that are based on certain assumptions. Any change in these assumptions could have a material impact on the resulting calculations.

1.4.1.7 Revenues

Revenues generated from customers whose consumption is metered during the accounting period are estimated at the reporting date based on historical data, consumption statistics and estimated selling prices. The Group has developed measuring and modelling tools that allow it to estimate revenues with satisfactory degree of accuracy and subsequently ensure that risks of error associated with estimating quantities sold and the resulting revenues can be considered as not material. This estimated unmetered revenue is mainly due to the operating segment Water Europe.

1.4.1.8 Margin at termination relating to construction contracts

The determination of total expected revenue and costs at termination involves significant estimates related to technical solutions, duration of project and contractual issues.

Management reassesses those estimates for the preparation of Consolidated Financial Statements on a quarterly basis or more frequently if required by significant new developments in the course of the projects. Any significant change in expected revenue or expected costs implies an immediate adjustment of the margin already recognized for the portion of the project already performed, and impacts future margin for works still to be performed (See Note 1.5.13.3).

1.4.1.9 Measurement of capitalized tax loss carry-forwards

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that future taxable profit will be available to the Group against which the tax loss carry-forwards can be utilized. The likelihood of future taxable profits is estimated taking into account the existence of temporary taxable differences from the same tax entity and is passed on to the same deadlines towards the tax authority as well as the estimates of future taxable profits. Estimates of taxable profit and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts as included in the medium-term business plan and, if necessary, on the basis of additional forecasts.

1.4.2 Judgment

As well as relying on estimates, the Group management also makes judgments to define the appropriate accounting treatment to apply to certain activities and transactions, when the effective IFRS standards and interpretations do not specifically deal with the related accounting issue.

This particularly applies in relation to the recognition of concession arrangements, the classification of agreements that contain a lease, and the recognition of acquisitions of non-controlling interests prior to January 1, 2010.

In accordance with IAS 1, the Group's current and non-current assets and current and non-current liabilities are shown separately on the consolidated statement of financial position. For most of the Group's activities, the breakdown into current and non-current items is based on when assets are expected to be realized, or liabilities extinguished. Assets expected to be realized or liabilities extinguished within 12 months of the reporting date are classified as current, while all other items are classified as non-current.

1.5 Accounting policies

1.5.1 Scope and methods of consolidation

The consolidation methods used by the Group are the following:

- subsidiaries (over which the Group exercises exclusive control) are fully consolidated;
- joint operations over which the Group exercises joint control are consolidated in proportion to the direct rights to the assets and direct obligations for the liabilities of the entity;
- the equity method is used for:
  - joint ventures over which the Group exercises a joint control but has only rights to the net assets of the entity,
  - associate companies over which the Group exercises significant influence. In accordance with this method, the Group recognizes its proportionate share of the investee's net income or loss on a separate line of the consolidated income statement under "Share in net income of associates". The accounting policies applied by these companies comply with IFRS and are consistent with the accounting policies of the Group.

The Group analyses what type of control exists on a case-by-case basis, taking into account the situations illustrated in IFRS 10, IFRS 11 and IAS 28 revised.

All intercompany balances and transactions are eliminated in the Consolidated Financial Statements.

A list of the main fully consolidated companies together with the main investments accounted for by the equity method, is presented in Note 26 "List of the main consolidated companies at December 31, 2018 and 2017".

1.5.2 Foreign currency translation methods

1.5.2.1 Presentation currency of the Consolidated Financial Statements

The Group's Consolidated Financial Statements are presented in euros (EUR).

1.5.2.2 Functional currency

Functional currency is the currency of the primary economic environment in which an entity operates. In most cases, the functional currency corresponds to the local currency. However, certain entities may have a different functional currency from the local currency when that other currency is used for an entity's main transactions and better reflects its economic environment.

1.5.2.3 Foreign currency transactions

Foreign currency transactions are recorded in the functional currency at the exchange rate prevailing at the date of the transaction. At each reporting date:

- monetary assets and liabilities denominated in foreign currencies are translated at year-end exchange rates. The related translation gains and losses are recorded in the income statement for the year to which they relate;
- non-monetary assets and liabilities denominated in foreign currencies are recognized at the historical cost applicable at the date of the transaction.

1.5.2.4 Translation of the financial statements of consolidated companies with a functional currency other than the euro

The statement of financial position is translated into euros at year-end exchange rates. Income statement and statement of cash flow items are translated using the average exchange rate for the year. Any differences arising from the translation of the financial statements of consolidated companies are recorded under "Cumulative translation adjustment" as Other comprehensive income.

Goodwill and fair value adjustments arising from the acquisition of foreign entities are classified as assets and liabilities of those foreign entities. Therefore, they are denominated in the functional currencies of the entities and translated at the year-end exchange rate.

1.5.3 Business combinations

Business combinations accomplished before January 1, 2010 have been recognized in accordance with IFRS 3 prior to the revision. In accordance with IFRS 3 revised, these business combinations have not been restated.

Since January 1, 2010, the Group applies the purchase method as defined in IFRS 3 revised, which consists of recognizing at the acquisition date the identifiable assets acquired and liabilities assumed at their fair values, including any non-controlling interests in the acquired company. Non-controlling interests are measured either at fair value or at proportionate interest in the net identifiable assets. The Group determines on a case-by-case basis which measurement option is to be used to recognize non-controlling interests.

1.5.4 Intangible assets

Intangible assets are recognized at cost less any accumulated amortization and any accumulated impairment losses.

1.5.4.1 Goodwills

a) Recognition of goodwill

The application of IFRS 3 revised on January 1, 2010 requires the Group to identify business combinations carried out before or after that date.

Business combinations carried out before January 1, 2010

Goodwill represents the excess of the cost of a business combination (acquisition price of shares plus any costs directly attributable to the business combination) and the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities recognized at the acquisition date (except if the business combination is achieved in stages).

For a business combination achieved in stages – *i.e.* where the Group acquires a subsidiary through successive share purchases – the amount of goodwill is determined separately for each exchange transaction based on the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities at the date of each exchange transaction.

Business combinations carried out after January 1, 2010

Goodwill is measured as being the amount by which the total of:

i. the consideration transferred;

ii. the amount of any non-controlling interest in the acquired company; and

iii. in a business combination achieved in stages, the fair value at acquisition-date of the previously held interests in the acquired company;

exceeds the accounting net balance of identifiable assets acquired and assumed liabilities.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the measurement period.

Goodwill relating to associates and joint ventures are recorded respectively under "Investments in associates" and "Investments in joint ventures".

b) Measurement of goodwill

Goodwill is not amortized but is tested for impairment once a year, or more frequently when an indication of impairment is identified. Impairment tests are carried out at the level of cash-generating units (CGUs), which constitute groups of assets generating cash inflows that are largely independent of the cash inflows from other cash-generating units.

The methods used to carry out these impairment tests are described in Note 1.5.6 "Impairment of property, plant and equipment and intangible assets".

Impairment losses in relation to goodwill cannot be reversed and are shown under "Impairment" in the income statement.

Impairment losses on goodwill relating to associates and joint ventures are respectively reported under "Share in net income (loss) of associates" and "Share in net income (loss) of joint ventures".

1.5.4.2 Other intangible assets

a) Development costs

Research costs are expensed as incurred.

Development costs are capitalized when the asset recognition criteria set out in IAS 38 are met. Capitalized development costs are amortized over the useful life of the intangible asset recognized. In view of the Group's activities, capitalized development costs are not material.

b) Other internally generated or acquired intangible assets

Other intangible assets include mainly:

- amounts paid or payable as consideration for rights relating to concession arrangements or public service contracts;
- customer portfolios acquired on business combinations;
- surface and underground water drawing rights, which are not amortized as they are granted indefinitely;
- concession assets;
- exclusive rights to distribute drinking water in a defined geographic area in perpetuity;
- softwares.

Intangible assets are amortized on the basis of the expected pattern of consumption of the expected future economic benefits embodied in the asset. If this cannot be reliably calculated, the straight-line method is used, as a function of the useful lives presented in the table below.

Useful Life *(in years)*	Minimum	Maximum
Concession rights – duration of contracts	10	50
Customer portfolios	10	25
Other intangible assets	1	40

Some intangible assets (water rights, etc.) with an indefinite useful life are not amortized but are subject to an annual impairment test.

1.5.5 Property, plant and equipment

1.5.5.1 Property, plant and equipment – initial measurement and subsequent measurement

Items of property, plant and equipment are recognized at their historical cost of acquisition, production or entry to the Group, less any accumulated depreciation and any accumulated impairment losses.

The carrying amount of these items is not revalued as the Group has elected not to apply the allowed alternative method, which consists of regularly revaluing one or more categories of property, plant and equipment.

Investment subsidies are deducted from the gross value of the assets concerned under the heading they were received.

In accordance with IAS 16, the initial cost of the item of property, plant and equipment includes an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, when the entity has a present legal or constructive obligation to dismantle the item or restore the site. In counterpart, a provision is recorded for the same amount.

Property, plant and equipment acquired under finance leases are carried in the consolidated statement of financial position at the lower of the market value and the present value of the related minimum lease payments. The corresponding liability is recognized under financial debt. These assets are also depreciated using the methods and useful lives set out below.

The Group applies IAS 23, which consists in capitalizing borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset.

1.5.5.2 Depreciation

In accordance with the components approach, the Group uses different depreciation terms for each significant component of a sole tangible asset when one of these significant components has a different useful life from that of the main tangible asset to which it relates.

Depreciation is calculated on a straight-line basis over normal useful lives.

The range of useful lives is due to the diversity of the assets and contractual terms in each category. The shortest periods relate to smaller equipment and furniture, while the longest useful lives concern network infrastructure.

Standard useful lives are as follows:

Main depreciation periods *(in years)*

Constructions [a]	3 to 100
Plant and equipment	2 to 70
Transport equipment	3 to 14

(a) Including fittings.

With respect to the assets accounted for as counterpart for the site restoration provisions, they are amortized according to the method set forth in Note 17.4.

1.5.6 Impairment of property, plant and equipment and intangible assets

In accordance with IAS 36, impairment tests are carried out on intangible assets and on property, plant and equipment whenever there is an indication that the assets may be impaired. Such indications may be based on events or changes in the market environment, or on internal sources of information. Intangible assets that are not amortized are tested for impairment annually.

Impairment indicators

This impairment test is only carried out for property, plant and equipment and intangible assets for the defined useful lives when there are signs of an alteration in their value. In general, this arises as a result of significant changes in the operational environment of the assets or from a poorer than expected economic performance.

The main indications of impairment used by the Group are:

- external sources of information:
  - significant changes in the economic, technological, political or market environment in which the entity operates or to which the asset is dedicated,
  - fall in demand;
- internal sources of information:
  - evidence of obsolescence or physical damage not budgeted for in the depreciation/amortization schedule,
  - worse-than-expected performance.

Impairment

Items of property, plant and equipment or intangible assets are tested for impairment at the level of the individual asset or cash-generating unit as appropriate, determined in accordance with IAS 36. If the recoverable amount of an asset is lower than its carrying amount, the carrying amount is reduced to the recoverable amount by recording an impairment loss. Upon recognition of an impairment loss, the depreciable amount – and possibly the useful life – of the asset concerned is revised.

Impairment losses recorded in relation to property, plant and equipment or intangible assets may be subsequently reversed if the recoverable amount of the assets is once again higher than their carrying value. The increased carrying amount of an item of property, plant or equipment attributable to a reversal of an impairment loss may not exceed the carrying amount that would have been determined (net of depreciation/amortization) had no impairment loss been recognized in prior periods.

Measurement of recoverable amount

In order to review the recoverable amount of property, plant and equipment and intangible assets, the assets are, where appropriate, grouped into cash-generating units (CGUs) and the carrying amount of each unit is compared with its recoverable amount.

For operating entities which the Group intends to hold on a long-term and going concern basis, the recoverable amount of a CGU corresponds to the higher of its fair value less costs to sell and its value in use. Value in use is primarily determined based on the present value of future operating cash flows and a terminal value. Standard valuation techniques are used based on the following main economic data:

- discount rates based on the specific characteristics of the operating entities concerned;
- terminal values in line with the available market data specific to the operating segments concerned and growth rates associated with these terminal values, not to exceed inflation.

Discount rates are determined on a post-tax basis and applied to post-tax cash flows. The recoverable amounts calculated on the basis of these discount rates are the same as the amounts obtained by applying the pre-tax discount rates to cash flows estimated on a pre-tax basis, as required by IAS 36.

For operating entities which the Group has decided to sell, the related carrying amount of the assets concerned is written down to the estimated market value less costs of disposal. When negotiations are ongoing, this is determined based on the best estimate of their outcome as of the reporting date.

In the event of a decline in value, the impairment loss is recorded in the consolidated income statement under "Impairment".

1.5.7 Leases

The Group holds assets for its various activities under lease contracts.

These leases are analyzed based on the situations and indicators set out in IAS 17 in order to determine whether they constitute operating leases or finance leases.

A finance lease is defined as a lease which transfers substantially all the risks and rewards incidental to the ownership of the related asset to the lessee. All leases which do not comply with the definition of a finance lease are classified as operating leases.

The following main factors are considered by the Group to assess whether or not a lease transfers substantially all the risks and rewards incidental to ownership: whether (i) the lease transfers ownership of the asset to the lessee by the end of the lease term; (ii) the lessee has an option to purchase the asset and if so, the conditions applicable to exercising that option; (iii) the lease term covers the major part of the estimated economic life of the asset; and (iv) the asset is of a highly specialized nature. A comparison is also made between the present value of the minimum lease payments and the fair value of the asset concerned.

1.5.7.1 Accounting for finance leases

On initial recognition, assets held under finance leases are recorded as property, plant and equipment and the related liability is recognized under borrowings. At inception of the lease, finance leases are recorded at amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments.

1.5.7.2 Accounting for operating leases

Payments made under operating leases are recognized as an expense in the consolidated income statement on a straight-line basis over the lease term.

1.5.7.3 Accounting for arrangements that contain a lease

IFRIC 4 deals with the identification of services and take-or-pay sales or purchase contracts that do not take the legal form of a lease but convey rights to customers/suppliers to use an asset or a group of assets in return for a payment or a series of fixed payments. Contracts meeting these criteria should be identified as either operating leases or finance leases. In the latter case, a financial receivable should be recognized to reflect the financing deemed to be granted by the Group where it is considered as acting as lessor and its customers as lessees.

This interpretation applies to some contracts with industrial or public customers relating to assets financed by the Group.

1.5.8 Inventories

Inventories are measured at the lower of cost and net realizable value. Net realizable value corresponds to the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

The cost of inventories is determined based on the first-in, first-out method or the weighted average cost formula.

1.5.9 Financial instruments

Financial instruments are recognized and measured in accordance with IAS 39 until December 31,2017 and in accordance with IFRS 9 starting from January 1, 2018.

1.5.9.1 Classification, valuation and impairment of financial assets

Financial assets are mainly cash or the right to receive cash or shareholders' equity instruments from other entities.

Since January 1, 2018, financial assets are listed as follows:

- assets whose cash flows are not interests and principal repayments (equity interests in non-consolidated entities, derivative instruments);
- assets whose cash flows are interests and principal repayments (primarily loans and receivables);
- cash and cash equivalent instruments.

Until December 31, 2017, financial assets comprised available-for-sale securities, loans and receivables carried at amortized cost including trade and other receivables, financial assets measured at fair value through income including derivative financial instruments and cash and cash equivalent instruments.

In 2018, as in 2017, financial assets are broken down into current and non-current assets in the statement of financial position.

a) Equity interests in non-consolidated entities

Since January 1, 2018, the SUEZ Group's investments in non-consolidated companies are classified as either:

- equity instruments measured at fair value through income. This category mainly includes listed securities held in companies in which the SUEZ Group does not hold a significant influence; or
- equity instruments measured at fair value through other comprehensive income following an irrevocable option taken by the SUEZ Group, security by security, and from the first recognition. This category mainly includes unlisted securities held in companies in which the Group does not have significant influence.

In accordance with IFRS 9, equity instruments are recognized:

- at their initial cost plus transaction costs when they are measured at fair value through other items of comprehensive income;
- at their initial cost when they are measured at fair value through income. Transaction costs are then recorded on the income statement at the acquisition date.

Until December 31, 2017, in accordance with IAS 39, investments in non-consolidated companies were classified as:

- financial assets measured at fair value through income when securities were held for transaction and short-term investment purposes and did not meet the criteria to be classified as cash or cash equivalents;
- "available-for-sale securities" when the Group's investment did not meet the criteria to be classified as financial assets measured at fair value through income.

Until 2017, during initial recognition, these assets were usually recognized at their acquisition price plus transaction costs.

As of December 31, 2018, as at December 31, 2017, the Group's equity investments in non-consolidated companies are measured and recognized at their fair value. For listed companies, fair value is determined based on the quoted market price at the relevant closing date. For unlisted securities, fair value is measured using valuation models based primarily on the latest market transactions, discounted dividends, cash flows, or failing that, using net book value.

Since January 1, 2018:

- all impacts related to instruments measured at fair value through income generated after their vesting date are recognized in the income statement: dividends, positive or negative differences between the fair value and acquisition price throughout the entire time the securities are held, gains or losses on disposals;
- by contrast, impacts related to instruments measured at fair value through other items of comprehensive income are never recycled in the income statement. The positive or negative differences between fair value and acquisition price are recorded in other items of comprehensive income as long as the instruments are held. Gains and losses on disposals are classified in other items of comprehensive income, then the cumulative total of other items of comprehensive income related to the line of sold securities is reclassified to consolidated reserves. Only dividends received impact the Group's revenue;

- there is no longer impairment recognition for of the Group's investments in non-consolidated companies.

Until December 31, 2017, differences between the fair value and the acquisition price of investments in non-consolidated companies were recognized the entire time they were held:

- as fair value directly through income when the investments were classified as "Financial assets measured at fair value through income"; gains or losses on disposals were also recognized through income;
- as "Other items of comprehensive income" when the investments were classified as "Available-for-sale securities". However, material or prolonged decreases in value compared to the acquisition cost of these securities and the gains or losses from their disposal generated impacts on the income statement.

b) Derivative instruments

Derivative instruments are measured and recognized at their fair value; compensation for changes in fair value is recognized in the income statement, unless the derivative instruments are used as cash flow hedges or net investment hedges (see section 1.5.9.3).

c) Loans and receivables carried at amortized cost

Since January 1, 2018, the category mainly includes loans and receivables attached to investments, advances granted to associates or non-consolidated companies, guarantee deposits, long-term receivables from customers for concession contracts (see section 1.5.13.4) as well as trade and other receivables less than one year.

On initial recognition, these loans and receivables are recorded at fair value plus transaction costs, which generally corresponds to their nominal value. Then, at each reporting date, these assets are measured at amortized cost using the effective interest rate method.

In accordance with the terms and conditions of IFRS 9, since January 1, 2018, SUEZ Group entities have started using an impairment approach per type of asset for counterparty risk.

Regarding trade receivables and lease receivables, they have constituted non-recovery risk matrices for each homogeneous category of customer, adapted to their local realities, in light of the default rates observed in the recent past on receivables with a similar credit risk profile. They update their matrices at least once a year. They use these matrices to calculate impairments now based on the expected default rates on each of the homogeneous categories of customers.

For loans related to investments, current account advances to associates and deposits and guarantees, impairment losses are calculated on the basis of expected losses on assets taken individually.

Since January 1, 2018, these assets are classified into three categories:

- situation 1: Assets whose credit risk has not significantly deteriorated and debtors pay on time or with delays of less than 60 days;
- situation 2: Assets that have suffered material credit risk deterioration with overdue payments of between 60 and 180 days;
- situation 3: Assets that have deteriorated to the point where the loss has occurred, with overdue payments exceeding 180 days.

Assets classified under situation 1 are subject to impairment for expected losses up to 12 months. Assets classified under situation 2 or 3 are subject to impairment for expected losses for their entire useful life.The amount of impairment is calculated based on:

- the likelihood of default of the debtor;
- the estimated loss rate if the counterparty defaults applied to the total value of the asset.

Impairment on loans related to investments, current account advances to associates and deposits and guarantees are calculated on the basis of expected losses on assets taken individually

Receivables arising from concession contracts, when SUEZ Group has obtained an unconditional right to receive cash, contain a financing component within the meaning of IFRS 15 (see Note 1.5.13.4), since customers pay over several years for a service already provided by the Group. As authorized by IFRS 9, the impairment method used to calculate impairment losses on loans and advances on current accounts and described above has been applied to these receivables since January 1, 2018.

Up to December 31, 2017, SUEZ Group entities were already recording loans and receivables at amortized cost. However, they were recording impairments on these assets based on actual unpaid debts and not on expected losses.

Gross values of receivables are transferred to unrecoverable losses on receivables on the income statement when all avenues offered to the SUEZ Group to recover the assets have been exhausted. Accumulated impairment less receivables concerned are then also transferred to the income statement.

Contracts assets concluded with customers are defined in Note 1.5.15. They include amounts due from customers under construction contracts. The calculation method used is described in Note 1.5.13.3. These assets are subject to an impairment test using the same rules as trade receivables.

d) Cash and cash equivalents

The cash and cash equivalents line item includes cash as well as short-term investments that are considered to be readily convertible into a known amount of cash and where the risk of a change in their value is deemed to be negligible based on the criteria set out in IAS 7 and held in order to meet short-term cash commitments.

Bank overdrafts are not included in the calculation of cash and cash equivalents and are recorded under short-term borrowings on the statement of financial position.

1.5.9.2 Classification, valuation of financial liabilities

Financial liabilities include borrowings (of which bank overdrafts), trade and other payables, derivative financial instruments, and other financial liabilities.

Financial liabilities are broken down into current and non-current liabilities in the statement of financial position. Current financial liabilities primarily comprise:

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- financial liabilities with a settlement or maturity date within 12 months of the closing date;
- derivative financial instruments qualifying as fair value hedges;
- all derivative financial instruments not qualifying as hedges.

a) Measurement of borrowings and other financial liabilities

Borrowings and other financial liabilities are measured at amortized cost using the effective interest rate method.

On initial recognition, any issue premiums/discounts, redemption premiums/discounts and issuing costs are added to/deducted from the nominal value of the borrowings concerned. These items are taken into account when calculating the effective interest rate and are therefore recorded in the consolidated income statement over the life of the borrowings using the amortized cost method.

In 2018, as in 2017, the SUEZ Group treats restructurings of financial debts that do not take place between identical lenders and borrowers as an extinction of the initial debt and an acknowledgement of the new debt.

Similarly, a renegotiated debt whose value of cash flows under the new conditions (including fees paid to the counterparty bank, discounted using the initial effective interest rate) differs by more than 10% from the present value of the remaining cash flows of the initial financial liability is also considered to be an extinguishment of debt and the recognition of new debt.

At this time all fees related to the former and not yet amortized debt are transferred to the income statement.

In addition, until 31 December 2017, in accordance with IAS 39, renegotiated financial debt, whose revised cash flow value was less than 10% of the value of the remaining cash flows of the initial liability under the terms of the comparison mentioned above, had no impact on the income statement. Since January 1, 2018, the SUEZ Group reassesses, through the income statement, the amortized cost of financial debt following the renegotiation, in order to comply with IFRS 9.

b) Call options on non-controlling interests granted before January 1, 2010

Other financial liabilities primarily include put options on non-controlling interests granted by the Group. As no specific guidance is provided by IFRS and in view of the AMF (French Financial Market Authority) recommendations for year-end 2009, the Group has adopted the following accounting treatment for these commitments:

- when the put option of a non-controlling interest is initially granted, the present value of the exercise price is recognized as a financial liability, with a corresponding reduction in non-controlling interests. When the value of the put option is greater than the carrying amount of the non-controlling interests, the difference is recognized as goodwill;
- at each reporting date, the amount of the financial liability is revised and any changes in the amount are recorded with a corresponding adjustment to goodwill;
- payments of dividends to non-controlling interests result in an increase in goodwill;
- in the income statement, non-controlling interests are allocated their share in income. In the statement of financial position, the share in income allocated to non-controlling interests reduces the carrying amount of goodwill. No finance costs are recognized in respect of changes in the fair value of liabilities recognized against goodwill.

1.5.9.3 Derivatives and hedge accounting

The Group uses financial instruments to manage and reduce its exposure to market risks arising from fluctuations in interest rates, foreign currency exchange rates and commodity prices. Use of derivative instruments is governed by a Group policy for managing interest rate, currency and commodity risks.

a) Definition and scope of derivative financial instruments

Derivative financial instruments are contracts whose value changes in response to the change in one or more observable variables that do not require any material initial net investment and that are settled at a future date.

Derivative instruments therefore include swaps, options and futures, as well as forward commitments to purchase or sell listed and unlisted securities.

b) Derivative hedging instruments: recognition and presentation

Derivative instruments qualifying as hedging instruments are recognized in the statement of financial position and measured at fair value. However, their accounting treatment varies according to whether they are classified as:

- a fair value hedge of an asset or liability;
- a cash flow hedge;
- a hedge of a net investment in a foreign operation.

Fair value hedges

A fair value hedge is defined as a hedge of the exposure to changes in fair value of a recognized asset or liability, such as a fixed-rate loan or borrowing, or of assets, liabilities or an unrecognized firm commitment denominated in a foreign currency.

The gain or loss from re-measuring the hedging instrument at fair value is recognized in income. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is also recognized in income even if the hedged item is in a category in respect of which changes in fair value are recognized through Other comprehensive income, or if it is normally recognized at amortized cost in the absence of hedging. These two adjustments are presented net in the income statement, with the net effect corresponding to the ineffective portion of the hedge.

Cash flow hedges

A cash flow hedge is a hedge of the exposure to variability in cash flows that could affect the Group's consolidated income. The hedged cash flows may be attributable to a particular risk associated with a recognized financial or non-financial asset or a highly probable forecast transaction.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized in Other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in shareholders' equity are reclassified to the income statement, under the same caption as the loss or gain on the hedged item – *i.e.* current operating income for operating cash flows and financial income/expense for other cash flows – in the same periods in which the hedged cash flows affect income.

If the hedging relationship is discontinued, in particular because the hedge is no longer considered effective, the cumulative gain or loss on the hedging instrument remains separately recognized in shareholders' equity until the forecast transaction occurs.

However, if a forecast transaction is no longer highly probable, the cumulative gain or loss on the hedging instrument is recognized in income.

Hedging of a net investment in a foreign entity

In the same way as for a cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge of the currency risk is recognized directly in Other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in Other comprehensive income are transferred to the consolidated income statement when the investment is sold or liquidated.

c) Identification and documentation of hedging relationships

The Group identifies the hedging instrument and the hedged item at the inception of the hedge and formally documents the hedging relationship by identifying the hedging strategy, the hedged risk and the method used to assess the effectiveness of the hedge. Only derivatives traded with counterparties outside of the Group are considered eligible for hedge accounting.

This methodology complies with IFRS 9 and IAS 39.

From the outset and on an ongoing basis during all periods for which hedging has been designated, the Group demonstrates and documents the effectiveness of the hedging relationship.

In accordance with IFRS 9, hedges are considered effective from January 1, 2018 when:

- there is an economic relationship between the hedged item and the hedging item. This relationship exists when the characteristics of the hedging instrument (notional amount, maturity date,...) are highly correlated with the hedged item, and/or when the change in the value of the hedging instrument itself strongly correlates to the change in value of the item hedged;
- the hedging ratio is consistent with the risk management strategy of the company that is hedging the hedged item;
- the value of the hedging instrument is largely unrelated to the debtor's credit risk.

Until December 31, 2017, in accordance with IAS 39, hedges were considered to be effective when changes in fair value or cash flows between the hedging instrument and the hedged item were offset within a range of 80%-125%.

In 2018, as in 2017, hedge effectiveness has been demonstrated both prospectively and retrospectively using various methods, based mainly on a comparison between changes in fair value or in cash flows between the hedging instrument and the hedged item. Methods based on an analysis of statistical correlations between historical price data are also used by the Group.

d) Derivative instruments not qualifying for hedge accounting: recognition and presentation

These items mainly concern derivative financial instruments used in economic hedges that have not been – or are no longer – documented as hedging relationships for accounting purposes.

When a derivative financial instrument does not qualify or no longer qualifies for hedge accounting, changes in fair value are recognized directly in income, under "Mark-to-Market on commodity contracts other than trading instruments", in current operating income for derivative instruments with non-financial assets as the underlying, and in financial income or expenses for currency, interest rate and equity derivatives.

Derivative expiring in less than 12 months are recognized in the consolidated statement of financial position in current assets and liabilities, while derivatives expiring after this period are classified as non-current items.

e) Measurement of fair value

The fair value of listed instruments on an active market is determined based on the market price. In this case, these instruments are presented at Level 1 of the fair value measurement.

The fair value of non-listed financial instruments for which there is observable market data is determined by using valuation techniques such as the valuation models applied for options, or by using the discounted cash flows method. The counterparty risk is taken into account when valuing derivative contracts.

The models used to value these instruments include assumptions based on market data in accordance with IFRS 13:

- the fair value of interest rate swaps is calculated based on discounted future cash flows;
- the fair value of forward exchange contracts and currency swaps is calculated based on current prices for contracts with similar maturity profiles by discounting the differential of future cash flows (the difference between the forward price of the contract and the recalculated forward price based on new market conditions applied to the nominal amount);
- commodity derivatives are valued as a function of market quotes based on discounted future cash flows (firm contracts: commodity swaps or commodity forwards), and option valuation models (optional contracts) for which it may be necessary to observe market price volatility. For contracts with maturity exceeding the depth of transactions for which prices are observable, or that are particularly complex, valuations may be based on internal assumptions;
- for complex contracts entered into with independent financial institutions, the Group uses valuations carried out by counterparties, on an exceptional basis.

These instruments are presented in Level 2 of the fair value measurement hierarchy, unless their valuation depends significantly on non-observable parameters. In this case, they are presented at Level 3 of the fair value measurement hierarchy. These largely involve derivative financial instruments with maturities exceeding the observable horizon for the forward prices of the underlying asset, or for which certain parameters, such as underlying volatility, are not observable.

1.5.10 Treasury shares

Treasury shares are recognized at cost and deducted from equity. Gains and losses on disposal of treasury shares are directly recorded in equity and do not therefore impact income for the period.

1.5.11 Share-based payments

Under IFRS 2, the Group is required to recognize an expense (personnel costs) corresponding to benefits granted to employees in the form of share-based payments, in consideration for services provided. These services are valued at the fair value of the instruments awarded.

This payment may take the form of instruments paid in shares or in cash.

1.5.11.1 Equity-settled instruments

Stock option plans

Options granted to Group employees are measured at the grant date using a binomial pricing model for options with no performance conditions, or a Monte Carlo pricing model for those with external performance conditions. These models take into account the characteristics of the plan concerned (exercise price, exercise period, performance conditions if any), market data at the time of grant (risk-free rate, share price, volatility, expected dividends), and a behavioral assumption in relation to beneficiaries. The value determined is recorded in personnel costs over the vesting period and offset against equity.

Allotment of bonus shares

The fair value of bonus share plans is estimated based on the share price on the allotment date, taking into account the absence of dividend payments over the vesting period, the turnover rate for the relevant staff in each plan and the likelihood of the Group's performance. The estimation of the fair value of the plans also takes into account the non-transferability period associated with these instruments. The cost is expensed over the vesting period of the rights and offset against equity. For performance shares that are allotted on a discretionary basis and include external performance conditions, a Monte Carlo model is used.

Employee share purchase plans

Employee share purchase plans enable employees to subscribe to Company shares at a lower-than-market price. The fair value of the instruments awarded under employee share purchase plans is estimated on the allotment date based on the value of this discount awarded to employees and non-transferability period applicable to the share subscribed. As it is treated as a service rendered, the cost is recognized in full and offset against equity.

1.5.11.2 Cash-settled instruments

In specific cases where local legislation prohibits employee share purchase plans, Share Appreciation Rights (SAR) are granted instead. When these instruments are settled in cash, their fair value is recognized in expenses over the vesting period, with an offsetting entry recorded in employee-related liabilities. Changes in the fair value of the liability are taken to income for each fiscal year.

The long-term incentive plan, which will result in a cash payment to the beneficiary, is valued at its fair value and an expense is recognized on a straight-line basis over the term of the plan.

1.5.12 Provisions

1.5.12.1 Provisions for post-employment benefit obligations and other long-term benefits

Depending on the laws and practices in force in the countries where SUEZ operates, Group companies have obligations in terms of pensions, early retirement payments, retirement bonuses and other benefit plans. Such obligations generally apply to all of the employees within the companies concerned.

The Group's obligations in relation to pensions and other employee benefits are recognized and measured in accordance with IAS 19 revised. Accordingly:

- the cost of defined contribution plans is expensed based on the amount of contributions payable in the period;
- the Group's obligations concerning pensions and other employee benefits payable under defined benefit plans are assessed on an actuarial basis. These calculations are based on assumptions relating to mortality, staff turnover and estimated future salary increases, as well as the economic conditions specific to each country or subsidiary of the Group. Discount rates are determined by reference to the yield, at the measurement date, on high-quality corporate bonds in the related geographical area (or on government bonds in countries where no representative market for such corporate bonds exists).

Provisions are recorded when commitments under these plans less the unrecognized past service cost exceed the fair value of plan assets. When the value of plan assets (capped where appropriate) is greater than the related commitments, the surplus is recorded as an asset under "Other current assets" or "Other non-current assets".

As regards post-employment benefit obligations, the Group recognizes actuarial gains and losses resulting from changes in actuarial assumptions and experience adjustments directly to Other comprehensive income (equity) items. Where appropriate, adjustments resulting from applying the asset ceiling to net assets relating to overfunded plans are treated in a similar way.

However, actuarial gains and losses on other long-term benefits such as long-service awards, continue to be recognized immediately in income.

The net interest expense (income) in respect of pensions is presented as a "financial result".

1.5.12.2 Other provisions

The Group records a provision where it has a present obligation (legal or constructive), the settlement of which is expected to result in an outflow of resources embodying economic benefits with no corresponding consideration in return.

A provision for restructuring costs is recorded when the general criteria for setting up a provision are met, *i.e.*, when the Group has a detailed formal plan relating to the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Provisions with a maturity of over 12 months are discounted when the effect of discounting is material. The Group's main long-term provisions, excluding the provisions for post-employment benefit obligations, are provisions for site restoration costs (relating to the waste services business). The discount rate (or rates) used reflect current market measurements of the time value of money and the risks specific to the liability concerned. Expenses corresponding to the reversal of discounting adjustments to long-term provisions are recorded under other financial income and expenses.

A provision is recognized when the Group has a present legal or constructive obligation to restore a site. The counterpart for this provision is included in the carrying amount of the asset concerned. Adjustments to the provision due to subsequent changes in the expected outflow of resources, the site restoration date or the discount rate are deducted from or added to the cost of the corresponding asset in a symmetrical manner. The impacts of unwinding the discount are recognized in expenses for the fiscal year.

1.5.13 Revenues

Revenues correspond to proceeds from contracts signed with customers. They are calculated and recognized using IFRS 15 principles.

SUEZ determines performance obligations included in the contracts signed with customers. Most contracts only include one performance obligation.

When contracts include both a construction activity and facility operation activity, two performance obligations are distinguished. Total revenues related to the contract are then divided up between the construction and operations activities in accordance with IFRS 15.

The SUEZ Group only recognizes the variable portion of revenue, depending on the degree of achievement of contractual objectives (bonuses or penalties), if it is highly unlikely that there will be a material downward adjustment in future accounting periods.

The SUEZ Group recognizes its revenues when transferring control of goods or services promised to the customer, which happens either at delivery (*i.e.* when control is transferred to the buyer) or on an ongoing basis (services and construction activities recognized as the project progresses) often under long-term contracts.

SUEZ only recognizes revenues generated by its co-contracting parties as main operator if:

- the Group bears the main responsibility in managing and completing the overall service;
- the Group made a significant effort to integrate various work carried out by co-contracting parties; and
- the Group made significant efforts in technical supervision so the Group could take total control of the goods or services carried out before transferring control over to the customer.

The Group's revenue includes products related to the following business lines:

- Water Services;
- Waste Services;
- Engineering and construction contracts and other services.

1.5.13.1 Water Services

As of December 31, 2018, as during previous fiscal years, revenues are based on volumes delivered to the customer in the water distribution business, whether these volumes resulted in specific invoicing ("statement") or are estimated based on the output of the supply networks. As authorized by IFRS 15 and by simplification, revenues correspond to volumes delivered multiplied by a price per m^3 (see Note 1.4.1.7).

With regard to the wastewater services and wastewater treatment, the price of the service is either included in the water distribution bill or is invoiced specifically to the local authority or industrial customer.

The revenue recognition rules for concession contracts are detailed in Note 1.5.13.4.

1.5.13.2 Waste Services

As of December 31, 2018, as during previous fiscal years, revenues are recorded:

- depending on the tonnages collected and the service provided by the SUEZ Group, in the waste collection activity;
- depending on the volumes of waste treated and the additional income from waste recovery, in incineration (sale of heat and power in particular) and sorting (sale of raw materials – paper, cardboard, glass, metals, plastics).

As authorised by IFRS 15 and by simplification, revenues correspond to the tonnages of waste treated multiplied by a price per metric tonne.

The revenue recognition rules for concession contracts are detailed in Note 1.5.13.4.

1.5.13.3 Engineering, construction contracts and other services.

As of December 31, 2018, as during previous fiscal years, revenues are recognized using the percentage of completion method for engineering, construction and equipment sales activities.

When it is probable that total direct unavoidable contract costs will exceed the total economic benefits expected to be received from the contract, the Group recognizes expected loss at termination as an expense immediately. Potential losses at completion are calculated at the contract level in accordance with IAS 37 and not for each performance obligation.

Partial payments received under construction contracts before the corresponding work has been carried out are recorded on the liabilities side of the statement of financial position as advances received under contracts liabilities (see also section 1.5.15).

The difference between the cumulative amount of revenues recognized and intermediary billing is measured. If this difference is positive, it is recognized under "Amount due from customers under construction contracts" within contracts assets (see section 1.5.15). If this difference is negative, it is recognized under "Amount due to customers under construction contracts" within contracts liabilities.

1.5.13.4 Concession contracts

A significant part of the business activities in the Water and Waste businesses is conducted under concession contracts, especially for operating drinking water production and distribution facilities, wastewater treatment facilities or waste incineration facilities.

SIC 29 – Service Concession Arrangements: Disclosures deals with information about concession agreements to be disclosed in the Notes to the financial statements.

IFRIC 12 is the interpretation that specifies the common characteristics of concession agreements:

- the grantor, usually a public authority, is required to provide a public service that it delegates to the SUEZ concessionaire (determining criterion);
- the concession operator, SUEZ, is responsible for managing the related infrastructure and performing the actual public service and is not just a simple agent acting on orders;
- the concession operator, SUEZ, is entrusted with specific infrastructure expansion or upgrading obligations while maintaining the infrastructure in proper condition;
- the price and the conditions (regulation) for price revision are set at the origin of the contract.

For a concession contract to be included in the scope of IFRIC 12, the infrastructure must be controlled by the grantor. Control of the infrastructure by the grantor is ensured when the following two conditions are met:

- the grantor controls or regulates the public service, *i.e.* it controls or regulates the services to be provided through the infrastructure subject to the concession and determines to whom and at what price they should be provided; and
- the grantor controls all residual interest in the infrastructure at the end of the contract. This control is usually reflected through the grantor's right to take over the infrastructure at the end of the contract.

The IFRIC 12 interpretation applies under IFRS 15. Most of the time, concession contracts include two performance obligations – construction and operations:

- the construction performance obligation includes the creation of new infrastructure, the extension or improvement of existing infrastructure, financed by the concession operator SUEZ, which makes it possible to create future economic benefits. Revenues from construction performance are in all cases recognized using the percentage of completion method, since the infrastructure is built on the customer's site. The customer takes control of the infrastructure as it is completed. The accounting counterpart of revenue is a contract asset (see Note 1.5.15), while construction is in progress. On the date of entry into service, the contract asset is reclassified, depending on how the SUEZ Group is remunerated for the service. Thus:
  - the asset becomes a receivable, therefore a financial asset, when the operator has an unconditional right to receive a predetermined amount of cash, either directly from the grantor or indirectly through the guarantees given by the grantor on the amount of cash receipts from public service users *(e.g. via* a contractually guaranteed internal rate of return). The receivable contains a financing component within the meaning of IFRS 15 since the customer pays for a service the Group already performed over a period of several years. This accounting scheme applies in particular to BOT (Build, Operate and Transfer) contracts signed with local authorities and relating to public services such as wastewater treatment and household waste incineration,
  - when the concession operator does not receive an unconditional right to receive a predetermined amount of cash, the asset becomes an intangible asset: the concession operator is entitled to bill the users of the public service, the concession operator is paid in substance by the user. Most of the SUEZ Group's concession contracts fall under this model,
  - lastly, when the concession operator only obtains this unconditional right to receive cash only for part of its construction obligation performance, the revenue counterpart is a financial asset for that part, and an intangible asset for the residual amount;
- the operation performance obligation includes current operations of infrastructure, carrying out operations service for the customer (distribution of drinking water; waste treatment, etc.) and incurring identical renewal expenses to maintain the facilities in proper condition.

The amounts received from the customer on the concession contract are divided up between compensation for construction services on the one hand and compensation for operations services on the other, in accordance with the terms and conditions of IFRS 15 and IFRIC 12:

- when the asset created is a receivable, the amounts received from the customer as compensation for the construction performance obligation are partly recognized as interest income in revenues and partially as repayment of principal of the receivable. The amount received in compensation for the operations performance obligation is recorded as revenues;
- when the asset created is an intangible asset, it is amortized over the term of the concession contract. All amounts received from the customer are fully recognized in revenue.

Property, plant and equipment received at no cost from the grantor as infrastructure, to which the concession operator is granted access for the purposes of the service agreement, that may not be transferred as these will be returned to the grantor at no cost at the end of the contract, are not recorded in the statement of financial position.

The SUEZ Group may have to transfer cash to the grantor in certain cases. If these payments are not for the right to use an asset that is separate from the concession contract, according to IFRIC 12, then, these payments constitute:

- a reduction in the infrastructure's sales price, recognized as operating expenses when the consideration for the construction performance obligation is a financial asset;
- an increase in the intangible asset when the consideration for the construction performance obligation is an intangible asset and the payments to the grantor are fixed; the amount of this increase in intangible assets corresponds to the present value of future fixed payments;
- an operating expense when the consideration for the construction performance obligation is an intangible asset and the payments to the grantor are variable.

Renewal expenses correspond to obligations provided for in contracts whose terms and conditions may differ (contractual rehabilitation obligation, contractual renewal plan, contractual monitoring account, etc.).

They are recognized either as assets in the statements of financial position as intangible assets or financial assets in accordance with the model applicable to the contract if they generate future economic benefits (improving renewal), or as expenses in the opposite case (identical renewal).

Expenditure on identical renewals is recognized as an asset or a liability as concession renewal work when, at a given date, there is a time shift between the contractual commitment and its fulfilment.

The concession renewal work liability recorded in respect of the general obligation to restore the site amounted to EUR 194 million at the end of the financial year, compared with EUR 203 million at December 31, 2017. This item is classified as "other current liabilities".

Amounts are calculated contract by contract based on the obligations of each contract.

1.5.14 Costs to obtain and execute contracts

IFRS 15 also establishes the principles for recognizing the costs of obtaining and executing contracts signed with customers.

SUEZ recognizes under assets on the statement of financial position all significant marginal costs to obtain contracts signed with customers where costs were incurred after the date on which the Group was almost certain to be granted contracts. These marginal costs are the costs that SUEZ incurs to obtain a contract with a customer and that the Group would not have incurred if it had not obtained the contract *(e.g.* commissions paid to sales professionals when new contracts are being entered into).

SUEZ also recognizes contract costs under assets on the statement of financial position when these costs:

- are directly related to a specific contract (direct labor costs, costs that can be rebilled to the customer as per the contract, raw material costs);
- provide the Group new or increased resources which will be used to meet or to continue to meet a performance obligation in the future;
- the Group expects to recover these costs.

Assets thus recognized on the costs of obtaining and executing contracts are then transferred to the income statement as and when the services are provided to the client.

1.5.15 Contracts assets and liabilities

As of December 31, 2018, as during previous fiscal years, the SUEZ Group presents separately, as assets in the statement of financial position, trade receivables corresponding to the unconditional right to receive cash, in exchange for the contractual obligations that SUEZ has already fulfilled.

There are also situations in which SUEZ has fulfilled some of its obligations under contracts signed with customers but has not yet obtained an unconditional right to receive cash because, for example, a technical milestone has not been achieved as of the reporting date. These situations now require the Group to present the assets concerned on two separate lines on the statement of financial position: "Non-current Contracts Assets" and "Current Contracts Assets". Up to December 31, 2017, these assets were included in "Net intangible assets" and "Other current assets" on the statement of financial position.

Contracts assets are impaired as soon as impairments on these assets are expected, by applying the same principles as those described in section 1.5.9 for impairments on trade receivables.

In addition, there are contracts liabilities with customers which are incurred because customers have already paid for services that SUEZ has not yet performed (advances received on services not yet performed, deferred income). Until December 31, 2017, these contracts liabilities were all included in "Other current liabilities" and "Other non-current liabilities" on the statement of financial position. They are now separated into two line items: "Non-current Contracts Liabilities" and "Current Contracts Liabilities".

1.5.16 Current operating income (COI)

Current operating income is an indicator used by the Group to present "a level of operational performance that can be used as part of an approach to forecast recurring performance" (in accordance with ANC Recommendation 2013-03 in the financial statements of companies applying IFRS). COI is a sub-total which helps management to better understand the Group's performance because it excludes elements which are inherently difficult to predict due to their unusual, irregular or non-recurring nature. For the Group, these elements relate to the Mark-to-Market (MtM) value on operating financial instruments, asset impairments, restructuring costs, scope effects, other gains and losses on disposals, and non-recurring items. They are defined as follows:

- MtM on operating financial instruments: This corresponds to changes in the fair value (Mark-to-Market) of financial instruments relating to currency hedging, commodities and gas which do not qualify as either trading or hedging instruments. These contracts are used in economic hedges of operating transactions;
- impairment on property, plant and equipment, intangible and financial assets: this includes impairment losses on goodwill, intangible and tangible assets, investments in associates and equity instruments;
- restructuring costs: These relate to costs of a restructuring program planned and controlled by management that materially changes either the scope of a business undertaken by an entity, or the manner in which that business is conducted, based on the criteria set out in IAS 37;
- scope effects. This line includes:
  - direct costs related to acquisitions of controlling interests,
  - in the event of a business combination achieved in stages, impacts of the remeasurement of the previously held interests at acquisition-date fair value,
  - subsequent changes in the fair value of contingent consideration,
  - gains or losses from disposals of interests which result in a change in consolidation method, as well as any impact of the remeasurement of retained interests,
  - other gains and losses on disposals and non-recurring items: this includes mainly capital gains and losses on disposals of non-current assets and equity instruments,
  - costs linked to the acquisition of GE Water.

In 2017, costs linked to the acquisition of GE Water by nature unusual and material by amount,have been presented on a separate line in the income statement, between the current operating income and the income from operating activities. The costs reached a total of EUR 44.4 million in 2017.

1.5.17 Statements of cash flows

The Group consolidated statement of cash flows is prepared based on net income, using the indirect method.

"Interest received on non-current financial assets" is classified within investing activities because it represents a return on investments. "Interest received on cash and cash equivalents" is shown as a component of financing activities because the interest can be used to reduce borrowing costs.

Impairment losses on current assets are identified as definitive losses, and therefore any change in current assets is shown net of impairment.

Cash flows related to payment of taxes are treated separately.

Pursuant to IAS 7 amendment "Disclosure initiative for statement of cash flows", financial debt variations by flows are analyzed by type of transactions: cash flows, forex effect, scope effect, change in fair value and amortized cost, other. This breakdown is presented in Note 13.2.1 for the 2018 financial year.

In accordance with the terms and conditions of IAS 7 – Statement of Cash Flows, the Cash and cash equivalents line in the statements of cash flows includes bank overdrafts when the bank counterparty may require repayment of the negative balance and when the balance of the accounts concerned changes drastically from a negative to positive position on a regular basis. In this case, the "Consolidated statements of cash flows" includes explanations on reconciling items with the cash and cash equivalents line item on the statements of financial position.

1.5.18 Income tax expense

The Group computes taxes in accordance with the prevailing tax legislation in the countries where income is taxable.

In accordance with IAS 12, deferred taxes are recognized according to the liability method on temporary differences between the book values of assets and liabilities in the Consolidated Financial Statements and their tax bases, using tax rates that have been enacted or substantively enacted by the reporting date. However, under the provisions of IAS 12, no deferred taxes are recognized for temporary differences arising from goodwill for which impairment losses are not deductible for tax purposes, or from the initial recognition of an asset or liability in a transaction which (i) is not a business combination; and (ii) at the time of the transaction, affects neither accounting income nor taxable income. In addition, deferred tax assets are only recognized to the extent that it is probable that taxable income will be available against which the deductible temporary difference can be utilized.

Temporary differences arising on restatements of finance leases result in the recognition of deferred taxes.

A deferred tax liability is recognized for all taxable temporary differences associated with investments in subsidiaries, branches and associates, and interests in joint ventures, except if the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Net balances of deferred tax are calculated based on the tax position of each company or on the total income of the companies included within the consolidated tax Group and the net position of each fiscal entity is recorded on the statement of financial position under assets or liabilities, as appropriate.

Deferred taxes are reviewed at each reporting date to take into account factors including the impact of changes in tax laws and the prospects of recovering deferred tax assets arising from deductible temporary differences.

Deferred tax assets and liabilities are not discounted.

1.5.19 Earnings per share

Net income per share is calculated by dividing the adjusted net income Group share for the fiscal year attributable to ordinary shares by the weighted average number of shares outstanding during the fiscal year. The adjusted net income Group share takes into account the cost of the coupon attributable to holders of undated deeply subordinated notes issued by SUEZ. The average number of shares outstanding during the fiscal year is the number of ordinary shares outstanding at the beginning of the year, adjusted by the number of ordinary shares bought back or issued during the course of the year.

For the calculation of diluted earnings per share, the weighted average number of shares and earnings per share are adjusted to take into account the impact of the conversion or exercise of any dilutive potential ordinary shares (OCEANE convertible bonds mainly).

Note 2 Major transactions

2.1 Purchase price allocation following GE Water acquisition

On September 29, 2017, SUEZ finalized the acquisition of GE Water through SUEZ Water Technologies and Solutions ("SWTS"), a company held at 70% by SUEZ and 30% by CDPQ (Caisse de dépôt et placement du Québec).

The cash transaction included a purchase price of EUR 2.903 million. GE Water's cash in hand on the acquisition date amounted to EUR 204 million, generating a cash outflow of EUR 2.699 million, which is reflected in the 2017 cash flow statement. As of December 31, 2017, goodwill generated at the time of the acquisition totaled EUR 2,171 million (at the exchange rate USD/EUR as of December 31, 2017).

The acquisition agreement included purchase price adjustment procedures based on GE Water's financial statements prepared in accordance with US GAAP as of September 29, 2017. During the second half of 2018, the purchase price adjustment procedure led to a price reduction of USD 20 million (approximately EUR 17 million).

2.1.1 Purchase price allocation

During 2018, the Group performed the purchase price allocation in accordance with IFRS 3 revised – "business combinations". This purchase price allocation was finalized on September 29, 2018.

(in millions of euros)	Fair value of identifiable assets acquired and liabilities assumed at the acquisition date
Non-current assets	
Intangible assets, net	886
Net tangible assets	567
Investments in joint-ventures	24
Deferred tax assets	62
Current assets	
Other assets	716
Cash and cash equivalents	349
Non-current liabilities	
Other liabilities	79
Deferred tax liabilities	320
Current liabilities	
Other liabilities	1,033
Total net assets (100%)	**1,172**
Consideration transferred for the acquisition of GE Water	2,886
Non-controlling interests	39
Goodwill arising on acquisition	**1,753**

An independent advisor determined the fair value of identifiable assets and assumed liabilities acquired on the transaction date.

Intangible assets

The fair value of intangible assets amounted to EUR 886 million and mainly includes customer relationships and technologies. Intangible assets were valued using the income approach (discounted value of future cash flows) or based on the royalty method.

Property, plant and equipment

The fair value of property, plant and equipment amounted to EUR 567 million. Property, plant and equipment are valued using a combination of three approaches:

- market approach: price comparisons with similar assets;
- income approach: discounted value of future cash flows;
- cost approach: value of replacement cost.

Inventories

The fair value of inventories totaled EUR 198 million. They were measured at their sales price less costs of completion and marketing costs.

Provisions

In accordance with IFRS 3 revised, estimated provisions were adjusted to take into account provisions for contingent liabilities mainly due to ongoing litigation as of the acquisition date. These provisions are classified as "other current liabilities".

Deferred taxes

Deferred tax assets and liabilities are calculated based on temporary differences between the IFRS book values after the purchase price allocation and tax values of the assets acquired and liabilities assumed. Recognized net deferred taxes amounted to EUR 258 million.

Non-controlling interests

The Group decided to measure non-controlling interests using the full goodwill method.

Goodwill arising on acquisition

At the transaction date and after the purchase price allocation, residual goodwill amounted to EUR 1,753 million and corresponds not only to the ability to develop new assets in the future (technologies, customer relationships) but also to the level of synergies expected by the Group.

In 2018, the net impact in EBIT was -EUR 32 million and included the additional annual depreciation charge related to these various remeasurements, as well as the consumption of deferred charges and deferred income.

2.1.2 Information on the statements of financial position after purchase price allocation as of December 31, 2017

The impact of the allocation of assets and liabilities on the statement of financial position as at December 31, 2017 is as follows:

(in millions of euros)	December 31, 2017 published	Impact from purchase price allocation	December 31, 2017 after purchase price allocation
Net intangible assets	4,162	772	4,934
Goodwill	5,587	(445)	5,142
Property, plant and equipment, net	8,468	39	8,506
Deferred tax assets	697	(85)	612
Other	3,304	8	3,312
Total non-current assets	**22,218**	**289**	**22,507**
Inventories	471	(14)	457
Other assets	1,651	(12)	1,639
Other	8,030	153	8,183
Total current assets	**10,152**	**127**	**10,279**
Total assets	**32,370**	**416**	**32,786**
Shareholders'equity, Group share	6,562	1	6,564
Non-controlling interests	2,504	8	2,511
Total shareholders' equity	**9,066**	**9**	**9,075**
Provisions	1,575	4	1,579
Deferred tax liabilities	556	93	649
Other	10,724		10,724
Total non-current liabilities	**12,855**	**97**	**12,952**
Provisions	506	77	583
Other liabilities	4,188	14	4,202
Other	5,756	219	5,974
Total current liabilities	**10,449**	**310**	**10,758**
Total shareholders' equity and liabilities	**32,370**	**416**	**32,786**

2.1.3 Information on the statements of financial income statement after purchase price allocation as of December 31, 2017

The main impacts on the income statement for the period between the acquisition date and December 31, 2017 are as follows:

(in millions of euros)	December 31, 2017 published	Impact from purchase price allocation	December 31, 2017 after purchase price allocation
Revenues	15,871	–	15,871
Purchases	(3,092)	–	(3,092)
Depreciation, amortization and provisions	(4,115)	(10)	(4,125)
Other	(7,591)	(60)	(7,651)
Current operating income/(loss)	**1,073**	**(70)**	**1,003**
Income from operating activities	**963**	**(70)**	**893**
Income from operating activities after share in net income of the equity-accounted companies considered as core business	**1,175**	**(70)**	**1,105**
Financial income/(loss)	**(430)**	**–**	**(430)**
Income tax expense	(225)	77	(148)
Net income	**520**	**7**	**527**
Net income Group share	**302**	**5**	**307**

Purchase price allocation generated EUR 77 million of deferred tax income. This impact is the result of two items:

- EUR 17 million in deferred tax income related to the fair value adjustment of the various assets as part of the purchase price allocation at the acquisition date (at the prevailing tax rate as September 30, 2017);
- EUR 60 million deferred tax income related to the tax reform in the United States which took place at the end of December 2017.

The additional depreciation charge over the last quarter of 2017 related to these remeasurements impacts the income from operating activities by approximately EUR 10 million.

Inventory consumption after remeasurement as well as the consumption of deferred charges and deferred income generated a -EUR 60 million impact on the income from operating activities.

After taking into account all the impacts of the purchase price allocation, GE Water's revenues and EBITDA within SUEZ Group totaled EUR 511 million and EUR 16 million, respectively, as of December 31, 2017.

2.2 SUEZ Spain transformation plan

In late 2017, SUEZ Spain implemented a restructuring plan. This voluntary redundancy scheme resulted in the recognition of around EUR 20 million of restructuring costs in 2018.

2.3 Sale of Infectious Medical Waste (IMW) activities

On February 28, 2018, SUEZ sold its IMW business activities to MNH Group for EUR 16 million. These business activities accounted for EUR 47 million in revenues as of December 31, 2017.

As of December 31, 2018, this transaction generated a EUR 12 million gross disposal gain.

2.4 New non-controlling interests in the regulated water activity of SUEZ Water Inc.

In July 2018, an agreement was signed with Dutch fund manager PGGM for the sale of 20% of the regulated water activity of SUEZ Water Inc. for USD 601 million.

The finalization of this operation is scheduled during the first half of 2019.

2.5 Sale of 6,5% of Inversiones Aguas Metropolitanas (IAM) by SUEZ Inversiones Aguas del Gran Santiago Limited

In August 2018, SUEZ Inversiones Aguas del Gran Santiago Limited sold 6.5% of IAM for EUR 87 million.

This operation was considered as a transaction between shareholders and did not generate any capital gain considering the Group has maintained control over IAM.

2.6 New bond issue

On September 17, 2018, SUEZ Group placed a new bond for EUR 500 million maturing on September 17, 2030, bearing a 1.625% fixed annual coupon

2.7 Sale of nuclear waste treatment activities

On December 31, 2018, SUEZ RV Osis Sud Est sold its nuclear waste treatment activity for approximately EUR 39 million to Endel, an ENGIE subsidiary.

This transaction generated a EUR 27 million gross disposal gain.

Note 3 Operating segments information

In accordance with the provisions of IFRS 8 – "Operating Segments", the segments used below to present segment information have been identified based on internal reporting, in particular those segments monitored by the Management Committee, comprised of the Group's key operational decision-makers.

The Group uses five operating segments:

- Water Europe;
- Recycling and Recovery Europe;
- International;
- WTS (Water Technologies & Solutions);
- Other.

A distinction is made in Europe between the water distribution and water treatment services and the waste collection and waste treatment services.

The activities conducted internationally are grouped together and separated from those conducted in the Europe region. This specific segmentation reflects the difference in development strategy implemented internationally compared to the strategy pursued in Europe and is consistent with the Group's internal organizational systems and management structure.

Finally, all the water treatment services for industrial customers are now isolated in the WTS sector.

3.1 Operating segments

SUEZ's subsidiaries are divided into the following operating segments:

- **Water Europe:** water distribution and treatment services, particularly under concession contracts (water management). These services are rendered to individuals, local authorities and industrial clients;
- **Recycling and Recovery Europe:** waste collection and treatment services for local authorities and industrial clients. These services include collection, sorting, recycling, composting, energy recovery and landfilling for both non-hazardous and hazardous waste;
- **International:** The Group is expanding in these business segments, depending on the opportunities that may arise, in the areas of water, waste and engineering services, with a special focus on risk-management resulting from specific local environments by setting up partnerships, entering into hedges, and limiting invested capital or other investments in highly regulated environments;
- **WTS:** This sector includes all Water Services for the industrial customer segment;
- the "**Other**" segment is made up of holding companies, including SUEZ, as well as SUEZ Consulting, a consulting subsidiary of the Group.

The accounting principles and valuation methods used to prepare internal reporting are the same as those used to prepare the Consolidated Financial Statements. The EBITDA, EBIT, capital employed and investments indicators are reconciled with the Consolidated Financial Statements.

3.2 Key indicators by operating segment

The December 2017 data in the various tables below have been restated to take into account the impacts of the first-time application of IFRS 15 – Revenues from contracts with customers and the finalization of the purchase price allocation following the acquisition of GE Water (see Note 1.2.4.).

Revenues

	December 31, 2018			December 31, 2017 restated		
(in millions of euros)	Non-Group	Group	Total	Non-Group	Group	Total
Water Europe	4,628.9	54.1	4,683.0	4,618.8	69.8	4,688.6
Recycling and Recovery Europe	6,206.1	59.1	6,265.2	6,139.3	38.3	6,177.6
International	3,990.2	1.9	3,992.1	3,951.3	1.5	3,952.8
WTS	2,396.3	60.5	2,456.8	970.7	42.5	1,013.2
Other	109.6	132.1	241.7	102.9	4.6	107.5
Intercompany eliminations		(307.7)	(307.7)		(156.7)	(156.7)
Total revenues	**17,331.1**	**–**	**17,331.1**	**15,783.0**	**–**	**15,783.0**

EBITDA

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Water Europe	1,136.1	1,164.8
Recycling and Recovery Europe	683.8	707.5
International	816.3	799.2
WTS	249.6	31.3
Other	(117.5)	(124.4)
Total EBITDA	**2,768.3**	**2,578.4**

EBIT

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Water Europe	503.0	515.4
Recycling and Recovery Europe	287.1	302.8
International	562.6	555.1
WTS	127.7	(10.9)
Other	(145.1)	(150.6)
Total EBIT	**1,335.3**	**1,211.8**

Depreciation and amortization

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Water Europe	(443.2)	(444.9)
Recycling and Recovery Europe	(367.7)	(379.5)
International	(252.1)	(245.1)
WTS	(127.9)	(44.2)
Other	(19.4)	(20.0)
Total depreciation and amortization	**(1,210.3)**	**(1,133.7)**

Capital employed

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Water Europe	5,545.5	5,756.6
Recycling and Recovery Europe	3,538.0	3,555.1
International	6,035.3	5,542.0
WTS	3,458.9	3,184.9
Other	67.1	(25.5)
Total capital employed	**18,644.8**	**18,013.1**

Investments in property, plant and equipment, intangible assets and financial assets

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Water Europe	(441.8)	(496.5)
Recycling and Recovery Europe	(392.2)	(324.8)
International	(494.3)	(433.2)
WTS	(154.8)	(2,555.0)
Other	(17.0)	(29.5)
Total investments	**(1,500.1)**	**(3,839.0)**

Financial investments included in this indicator include the acquisitions and sales of additional interests in still remaining controlled entities, which are accounted for in cash flows used in financing activities in the consolidated statement of cash flows under the item "Change in share of interests in controlled entities". Reconciliation with the cash flow statement is made in Note 3.4.3.

3.3 Key indicators by geographical area

The indicators below are analyzed by:

- destination of products and services sold for revenues;
- geographical location of consolidated companies for capital employed.

	Revenues		Capital Employed	
(in millions of euros)	December 31, 2018	December 31, 2017 restated	December 31, 2018	December 31, 2017 restated
France	5,059.7	5,091.1	2,296.7	2,141.6
Europe	5,583.5	5,286.9	5,692.3	5,646.9
International	6,687.9	5,405.0	10,655.8	10,224.6
Total	**17,331.1**	**15,783.0**	**18,644.8**	**18,013.1**

3.4 Reconciliation of indicators with Consolidated Financial Statements

3.4.1 Reconciliation of EBIT and EBITDA with current operating income

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Current operating income	**1,142.4**	**1,000.2**
(+) Share in net income of equity-accounted companies considered as core business	192.9	211.6
EBIT	**1,335.3**	**1,211.8**
(-) Net depreciation, amortization and provisions	1,167.7	1,109.2
(-) Share-based payments [(a)]	2.9	1.5
(-) Disbursements under concession contracts	262.4	255.9
EBITDA	**2,768.3**	**2,578.4**

(a) The impact of Share Appreciation Rights is disclosed after hedging by Warrants. In addition, this amount does not include long-term cash compensation plans.

3.4.2 Reconciliation of capital employed with items of the statement of financial position

(in millions of euros)	December 31, 2018	December 31, 2017 restated
(+) Tangible and intangible assets, net	13,756.5	13,422.4
(+) Goodwill, net	5,223.8	5,142.1
(+) Equity instrument (excluding marketable securities and impact of revaluation to fair value)	264.5	131.7
(+) Loans and receivables carried at amortized cost (excluding assets related to financing)	720.4	858.5
(+) Investments in joint ventures (excluding Other comprehensive income net of taxes)	897.3	1,071.0
(+) Investments in associates (excluding Other comprehensive income net of taxes)	1,143.8	1,030.2
(+) Trade and other receivables	4,584.0	4,709.8
(+) Inventories	499.5	455.1
(+) Contracts assets	722.8	436.6
(+) Other current and non-current assets	1,714.7	1,504.4
(-) Provisions and actuarial losses/gains on pensions plans	(1,597.4)	(1,745.9)
(-) Trade and other payables	(3,798.9)	(3,741.3)
(-) Contracts liabilities	(1,264.2)	(1,327.5)
(-) Other current and non-current liabilities	(4,174.8)	(3,890.9)
(-) Other financial liabilities	(47.2)	(43.0)
Capital employed	**18,644.8**	**18,013.1**

3.4.3 Reconciliation of investments in property, plant and equipment and intangible assets and financial investments with items in the statement of cash flows

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Investments in property, plant and equipment and intangible assets	(1,342.9)	(1,177.2)
Takeover of subsidiaries net of cash and cash equivalents acquired	(66.9)	(2,561.7)
Acquisitions of interests in associates and joint-ventures	(47.8)	(19.9)
Acquisitions of equity instrument	(31.7)	(18.8)
Change in share of interests in controlled entities	(10.8)	(61.4)
Total investments	**(1,500.1)**	**(3,839.0)**

Note 4 Current operating income

The components of current operating income are as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Revenues	17,331.1	15,783.0
Purchases	(3,648.6)	(3,032.2)
Personnel costs	(4,598.4)	(4,115.1)
Depreciation, amortization and provisions	(1,167.7)	(1,109.2)
Other operating income and expenses	(6,774.0)	(6,526.3)
Current operating income	**1,142.4**	**1,000.2**

4.1 Revenues

4.1.1 Revenues by nature

The following table shows Group's revenues per category:

(in millions of euros)	December 31, 2018	December 31, 2017 restated [a]
Sale, transport and distribution of electricity	426.8	432.7
Water, Recycling and Recovery	13,719.7	13,421.5
Construction contracts, equipment sales, engineering and other services [b]	2,217.2	1,666.4
Sale of chemical treatments for industrial water [c]	967.4	262.4
Total	**17,331.1**	**15,783.0**

(a) Restatement due to the first-time application of IFRS 15 "Revenue from contracts with customers" (see Note 1.2.4.).
(b) Revenues include rental income of EUR 83.3 million.
(c) In 2017, the revenue corresponds to one quarter following the GE Water acquisition.

4.1.2 Backlog

Backlog represents future revenue on contracts signed with customers for the following activities: construction contracts (excluding new works and concessions), equipment sales and engineering.

At December 31, 2018, the breakdown of the backlog book is as follows:

(in millions of euros)	Total	Less than a year	From 1 to 5 years	Beyond 5 years
December 31, 2018	2,064.4	1,536.7	493.1	34.6

4.1.3 Contracts Assets and Contracts liabilities

The application of IFRS 15 leads in the separate presentation of contracts assets and contracts liabilities previously included in the aggregates "Net intangible assets", "Other current assets" and "Other current liabilities" (see Note 1.5.15).

	December 31, 2018		December 31, 2017 restated	
(in millions of euros)	Non-current	Current	Non-current	Current
Contracts assets	95.6	627.2	21.6	414.9
Contracts liabilities	287.7	976.5	268.7	1,058.8

Contracts assets and contracts liabilities include the amounts due to and due from customers under construction contracts:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Amounts due from customers under construction contracts	377.5	287.9
Amounts due to customers under construction contracts	217.6	178.9
Net position	**159.9**	**109.3**

In addition, at the closing date, the costs and margins incurred on construction contracts in progress are as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Cumulated costs incurred and margins recognized	5,763.6	5,389.9
Advances received	121.6	101.5
Retentions	53.2	37.8

4.2 Personnel costs

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Short-term benefits	(4,507.2)	(4,050.4)
Share-based payments or by cash payment	(6.9)	3.6
Post-employment benefit obligations and other long-term benefits	(84.3)	(68.3)
Total	**(4,598.4)**	**(4,115.1)**

Short-term benefits correspond to salaries and expenses recognized for the period. The amount of these short-term benefits is reduced by the impact of CICE (tax credit for competitiveness and employment) in France for an amount of EUR 36.9 million in 2018 for the companies included in the SUEZ French tax consolidation group *versus* EUR 43.6 million in 2017.

Share-based payments and cash-based payments are broken down in Note 21. This amount includes the expenses related to long-term incentive plans.

Post-employment benefit obligations and other long-term benefits are disclosed in Note 18. This amount corresponds to defined-benefit plan expenses (see Note 18.2.3) and to defined-contribution plan expenses (see Note 18.3).

4.3 Depreciation, amortization and provisions

The amounts shown below are net of reversals:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Amortization	(1,210.3)	(1,133.7)
Depreciation of inventories, trade receivables and other assets	(3.2)	(28.5)
Net change in provisions [a]	45.8	53.0
Total	**(1,167.7)**	**(1,109.2)**

(a) Excluding post employment benefit obligations presented in chapter 4.2.

The amortization breakdown is EUR 731.4 million for property, plant and equipment and EUR 478.9 million for intangible assets. The breakdown by type of asset is shown in Notes 10 and 11.

4.4 Other operating income and expenses

Other operating income and expenses include the following amounts:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Other operating income	**225.2**	**289.8**
Other operating expenses	**(6,999.2)**	**(6,816.1)**
Sub-contracting	(2,613.3)	(2,570.0)
Taxes excluding corporate income tax	(764.4)	(730.1)
Other expenses	(3,621.5)	(3,516.0)
Total	**(6,774.0)**	**(6,526.3)**

"Other expenses" mainly include the following types of costs: rental expenses, external personnel, professional fees and compensation of intermediaries.

Note 5 Income from operating activities

(in millions of euros)	Note	December 31, 2018	December 31, 2017 restated
Current operating income		**1,142.4**	**1,000.2**
MtM on operating financial instruments	5.1	(0.8)	1.3
Impairment on property, plant and equipment, intangible and financial assets	5.2	(25.6)	(20.3)
Restructuring costs	5.3	(87.6)	(157.6)
Scope effects	5.4	(6.2)	77.6
Other gains and losses on disposals and non-recurring items	5.5	60.1	33.6
Costs linked to the acquisition of GE Water	5.6	–	(44.4)
Income from operating activities		**1,082.3**	**890.4**

5.1 MtM on operating financial instruments

The Mark-to-Market on operating financial instruments amounted to a loss of EUR 0.8 million at December 31, 2018, *versus* a gain of EUR 1.3 million in 2017 resulting primarily from the following factors:

- implementation of economic hedging strategies through forward contracts traded on wholesale markets by certain Group entities. The objective of this strategy is to optimize margins by reducing their sensitivity to changes in raw material prices;
- recognition of gains and losses in the income statement in respect of the ineffective portion of hedging strategies for future cash flows on non-financial assets (cash flow hedge).

5.2 Impairments of property, plant and equipment, intangible assets and financial assets

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Impairments		
Property, plant and equipment and other intangible assets	(3.3)	(12.8)
Financial assets	(25.1)	(13.5)
Total	**(28.4)**	**(26.3)**
Write-back of impairments		
Property, plant and equipment and other intangible assets	0.3	5.0
Financial assets	2.5	1.0
Total	**2.8**	**6.0**
Total	**(25.6)**	**(20.3)**

5.2.1 Impairments of goodwills

As of December 31, 2018, one-off tests carried out on goodwill in accordance with the procedure described in Note 9.3 did not reveal any impairment on goodwill.

5.2.2 Impairments of property, plant and equipment and intangible assets excluding goodwills

In 2018, impairment losses on property, plant and equipment and intangible assets mainly concern the Recycling and Recovery Europe operating segment, especially in France.

In 2017, losses were also recorded in Recycling and Recovery in Europe operating segment and the Water Europe operating segment, linked to difficulties in the market, especially in France and Spain.

5.2.3 Impairments of financial assets

In 2018, as in 2017, this item includes impairment losses on financial receivables relating to concession contracts in the Recycling and Recovery Europe operating segment.

In 2017, this item mainly included impairment losses on tangible and intangible fixed assets in the Recycling and Recovery Europe and Water Europe operating segments due to difficult market trends, particularly in France and Spain.

5.3 Restructuring costs

At December 31, 2018, this item includes in particular the additional impacts of the restructuring plans initiated in 2017 in Spain and France.

At December 31, 017, this item included in particular the expense linked to the voluntary redundancy scheme plans negotiated in the French entities as part of the transformation plan launched by the Group for EUR 73 million.

5.4 Scope effects

At December 31, 2018, this item mainly includes the sale of a company having a peripheral activity in R&R France.

At December 31,2017, this item included in particular the sale of Palyja and the sale of 9.1% stake of Aquasure.

5.5 Other gains and losses on disposals and non-recurring items

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Disposals of property, plant and equipment and intangible assets	63.3	34.3
Disposals of shares	(3.9)	(0.8)
Others	0.7	0.1
Total	**60.1**	**33.6**

In 2018, this item mainly includes gains related to the sale by Recycling and Recovery France of its Infectious Medical Waste (IMW) activities, its nuclear waste treatment activities and, finally, the proceeds from various disposals of property, plant and equipment in Chile and France.

In 2017, the main part of the gains came from the sale of Torre Agbar in Spain and the sale of two sites in the United Kingdom.

5.6 Costs linked to the acquisition of GE Water

In 2017, different external service providers advised SUEZ as part of the acquisition of GE Water. The fees for this work reached a net amount of EUR 44.4 million.

Given their unusual nature and their significant amount those expenses are presented on a separate line in the income statement, between the current operating income and the income from operating activities.

Note 6 Net financial income/loss

(in millions of euros)	December 31, 2018 Expenses	December 31, 2018 Income	December 31, 2018 Total	December 31, 2017 restated Expenses	December 31, 2017 restated Income	December 31, 2017 restated Total
Cost of net debt	(458.6)	36.1	(422.5)	(417.7)	39.9	(377.8)
Other financial income and expenses	(97.0)	54.1	(42.9)	(100.8)	49.7	(51.1)
Financial income/(loss)	**(555.6)**	**90.2**	**(465.4)**	**(518.5)**	**89.6**	**(428.9)**

6.1 Cost of net debt

This item primarily includes interest expenses related to gross borrowings (calculated using the effective interest rate – EIR), gains and losses arising from foreign currency and interest rate hedging transactions on gross borrowings, as well as interest income on cash investments and changes in the fair value of financial assets measured at fair value through income.

(in millions of euros)	December 31, 2018 Expenses	December 31, 2018 Income	December 31, 2018 Total	December 31, 2017 restated Expenses	December 31, 2017 restated Income	December 31, 2017 restated Total
Interest expense on gross borrowings	(401.2)	–	(401.2)	(373.2)	–	(373.2)
Exchange gain/(loss) on borrowings and hedges	(40.2)	–	(40.2)	(26.3)	–	(26.3)
Unrealized income/(expense) from economic hedges on borrowings	(0.1)	–	(0.1)	–	–	–
Income/(expense) on cash and cash equivalents, and financial assets at fair value through income	–	25.1	25.1	–	28.7	28.7
Capitalized borrowing costs	–	0.7	0.7	–	1.2	1.2
Financial income (expense) relating to a financial debt or receivable restructuring	(17.1)	10.3	(6.8)	(18.2)	10.0	(8.2)
Cost of net debt	**(458.6)**	**36.1**	**(422.5)**	**(417.7)**	**39.9**	**(377.8)**

The increase in the cost of net debt between December 31, 2017, and December 31, 2018, is mainly due to the full-year effect of bond issues in 2017, as well as a new bond issue in 2018:

- on March 27, 2017, two issues for a total of EUR 1,200 million following the announcement, on March 8, 2017, of the acquisition project of GE Water:
  - the first for EUR 500 million with a maturity date of April 3, 2025, with a fixed annual coupon of 1.00% and,
  - the second for EUR 700 million with a maturity date of April 3, 2029, with a fixed annual coupon of 1.50%;
- on September 13, 2017, a EUR 500 million issue with a fixed annual coupon of 1.625% maturing on September 21, 2032;
- on 17 September 2018, a EUR 500 million bond issue with a fixed annual coupon of 1.625% maturing on 17 September 2030.

6.2 Other financial income and expenses

	December 31, 2018			December 31, 2017 restated		
(in millions of euros)	Expenses	Income	Total	Expenses	Income	Total
Net interest expenses related to post employment and other long-term benefits	(19.5)	–	(19.5)	(16.3)	–	(16.3)
Unwinding of discounting adjustment to long-term provisions (except post employment)	(44.3)	–	(44.3)	(41.7)	–	(41.7)
Change in fair value of derivatives not included in net debt	(0.8)	–	(0.8)	(1.2)	–	(1.2)
Income from equity instrument	–	8.7	8.7	–	5.0	5.0
Other	(32.4)	45.4	13.0	(41.6)	44.7	3.1
Other Financial Income and Expenses	**(97.0)**	**54.1**	**(42.9)**	**(100.8)**	**49.7**	**(51.1)**

Note 7 Income tax

7.1 Income tax expense in the income statement

7.1.1 Breakdown of income tax expense in the income statement

Income tax expense for the fiscal year amounted to EUR 244 million (compared to EUR 157.2 million in 2017 restated from impacts of purchase price allocation of GE Water) and breaks down as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Current income tax	(222.7)	(125.9)
Deferred taxes	(21.3)	(31.3)
Total income tax expense recognized in income	**(244.0)**	**(157.2)**

7.1.2 Theoretical income tax expense and actual income tax expense

The reconciliation between the Group's theoretical income tax expense and actual income tax expense is shown in the following table:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Net income	**565.8**	**515.9**
► Share in net income of associates and joint ventures	192.9	211.6
► Income tax expense	(244.0)	(157.2)
Income before income tax and share in net income of associates and joint ventures (A)	**616.9**	**461.5**
of which French companies	*26.4*	*(28.1)*
of which companies outside France	*590.5*	*489.6*
Statutory income tax rate of SUEZ (B) [a]	34.43%	34.43%
Theoretical income tax expense (C) = (A) x (B)	**(212.4)**	**(158.9)**
In fact:		
Difference between the normal tax rate applicable to SUEZ and the normal tax rate applicable in jurisdictions in France and outside France [b]	33.6	32.7
Permanent differences [c]	(28.4)	47.3
Income taxed at a reduced rate or tax-exempt	4.0	1.4
Additional tax expense [d]	(36.1)	11.3
Effect of unrecognized deferred tax assets on tax loss carryforwards and on other tax-deductible temporary differences [e]	(41.9)	(181.7)
Recognition or utilization of tax assets on previously unrecognized tax loss carryforwards and other tax-deductible temporary differences [f]	10.6	26.1
Impact of changes in tax rates [g]	(10.9)	1.3
Tax savings and credits [h]	24.8	29.6
Other [i]	12.7	33.7
Actual income tax expense	**(244.0)**	**(157.2)**
Effective tax rate (actual income tax expense divided by income before income tax and share in net income of associates and joint ventures)	**39.6%**	**34.1%**

(a) The overall corporate tax rate in France is 34.43%. Under current law, this rate will be 32.02% in 2019.
(b) It mainly reflects the impact of the rate difference in 2018 on the one hand between federal tax in United States (21%) and the rate in France and on ther hand beetween corporate tax in Chile (27%) and those in France.
(c) In 2018, this item includes particulary the limit on the deductibility of some financial expenses. In 2017, this item included the capital gain on the disposal of Aquasure securities.
(d) This item records mainly withholding taxes on dividends, "State Tax" on american subsidiaridies and the tax impact of dividends received. In 2017, this item included additionnally a EUR 53 million reimbursement by the state of the 3% contribution on dividends paid out between 2013 and 2017.
(e) In 2018, it reflects the impact of -EUR 16.5 million which corresponds to the impairment of deferred tax assets within the French WTS and SUEZ Spanish tax consolidation group. Furthermore, it includes -EUR 7 million of impairment of deferred tax assets previously recognised in relation with the limit on the deductibility of Interests in United States. In 2017 this item included an impact of -EUR 139.1 million which corresponded to the impairment of deferred tax assets within the French and Spanish tax consolidation group.
(f) In 2018, this item includes mainly the recognition of deferred tax on SUEZ R&R Belgium for EUR 3.9 million and R&R Netherlands for EUR 2.1 million. In 2017, this item included mainly the recognition of deferred tax on SUEZ Treatment Solutions Inc for EUR 8 million and SUEZ R&R Belgium for EUR 4 million.
(g) In 2018, this item primarily includes the impact of the tax rate difference in France beetween deferred tax rate by reversing horizon and normative tax rate. In 2017 this item included the impact of the revaluation of deferred tax of the entities based in France and US in particulary in the context of purchase price allocation of WTS subsidiaridies.
(h) In 2018 and 2017, this item includes the impact of the tax credit for Competitiveness and Employment (CICE) and the tax credit for research (CIR). Moreover, in 2017, this item included tax credits perceived in Spain.
(i) In 2017 and 2018, it mainly includes the impact of the tax savings generated by the tax consolidation group in France and in Spain as well as the impact of tax adjustments on prior years.

Increase of the effective tax rate at December 31, 2018 compared to 2017 restated can be mainly explained by impairment of deferred tax assets within French WTS and Spanish consolidation tax group and the impairment of deferred tax assets previously recognized in relation with the limit on the deductibility of financial expenses in United States. As of December 31, 2017, the effective tax rate benefited from the positive effect of the modification of the US tax rate and the reimbursement by French State of the 3% contribution on dividends paid out between 2013 and 2017.

7.1.3 Analysis by type of temporary difference in deferred tax income/expenses on the income statement

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Deferred tax assets		
Loss carryforwards	(25.7)	(50.6)
Pension obligations	(0.3)	4.4
Concessions arrangements	1.4	(3.0)
Non-deductible provisions	8.5	(9.7)
Differences between the carrying amount of PPE and their tax bases	(3.8)	(20.2)
Measurement of financial instruments at fair value	11.2	3.9
Other	(37.0)	(17.7)
Total	**(45.7)**	**(92.9)**
Deferred tax liabilities		
Differences between the carrying amount of PPE and their tax bases	0.2	64.3
Concessions arrangements	1.1	(0.2)
Tax-driven provisions	(2.8)	(3.1)
Measurement of assets and liabilities at fair value	(0.5)	4.3
Other	26.4	(3.7)
Total	**24.4**	**61.6**
Net Deferred Taxes	**(21.3)**	**(31.3)**

In 2018, the deferred tax assets recognized in relation with loss carryforwards mainly evolves under the effect of consumption of loss carryforwards within Australian consolidation tax group. Furthermore, the net change of deferred tax presented in the line "Other" corresponds in particular to the impairment of deferred tax assets previously recognized in the United States in relation with the limit on the deductibility of Interests and to the impairment of net deferred tax on other deductible temporary differences previously recognized in Spain.

In 2017, the amounts presented under "Loss carryforwards" mainly referred to the impact of the impairment of deferred tax assets within French and Spanish consolidation tax groups. The movement shown in "Differences between the carrying amount of PPE and their tax bases" was mainly related to the impact of change in US tax rate on the non-regulated activity and by the purchase price allocation of GE Water.

7.2 Deferred tax income and expense recognized in "other comprehensive income"

Deferred tax income and expense recognized in "other comprehensive income" break down as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Equity instrument	0.2	–
Actuarial gains and losses	(33.8)	19.2
Net investment hedges	(0.1)	(0.1)
Cash flow hedges	(0.9)	(2.9)
Total excluding share of associates and joint ventures	**(34.6)**	**16.2**
Share of associates	(2.8)	(2.0)
Total	**(37.3)**	**14.2**

In 2018, as in 2017, tax effect is mainly due to actuarial gains and losses on pension and other employee benefit obligations in SUEZ Water Inc. from EUR 14 million in 2017 and -EUR 31.1 million in 2018.

7.3 Deferred taxes in the statement of financial position

7.3.1 Change in deferred taxes

Movements in deferred taxes recorded in the statement of financial position, after netting off the deferred tax assets and liabilities by tax entity, are broken down as follows:

(in millions of euros)	Assets	Liabilities	Net Balances
At December 31, 2017 restated	**630.0**	**(649.6)**	**(19.6)**
IFRS 9 Restatement	6.5	(1.7)	4.8
At January,1,2018	**636.5**	**(651.3)**	**(14.8)**
From income statement	(45.5)	24.2	(21.3)
From other comprehensive income [a]	(49.1)	14.5	(34.6)
Scope effects	41.7	(63.9)	(22.2)
Translation adjustments	(1.5)	(5.3)	(6.8)
Other impacts	(1.5)	(1.6)	(3.1)
Deferred tax netting off by tax entity	(34.0)	34.0	–
At December 31, 2018	**546.6**	**(649.4)**	**(102.8)**

(a) Excluding share of associates and joint-ventures.

Movements in "Scope effects" mainly corresponds to the change in consolidation method of a Chinese joint venture which is now fully consolidated.

7.3.2 Analysis of the net deferred tax position recognized on the statement of financial position (before netting off deferred tax assets and liabilities by tax entity), by type of temporary difference

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Deferred tax assets		
Loss carry-forwards and tax credit	266.0	292.6
Pension obligations	184.5	208.8
Concessions arrangements	96.6	97.6
Non-deductible provisions	178.9	173.7
Differences between the carrying amount of PPE and their tax bases	125.2	174.1
Measurement of financial instruments at fair value	23.6	9.6
Other	321.8	191.8
Total	**1,196.6**	**1,148.2**
Deferred tax liabilities		
Differences between the carrying amount of PPE and their tax bases	(837.4)	(1,029.0)
Concessions arrangements	(76.7)	(77.4)
Tax-driven provisions	(20.0)	(17.4)
Measurement of assets and liabilities at fair value	(39.5)	(39.4)
Other	(325.8)	(4.6)
Total	**(1,299.4)**	**(1,167.8)**
Net Deferred Taxes	**(102.8)**	**(19.6)**

In 2017 restated, the movement in "Differences beetween the carrying amount of PPE and their tax bases" line in comparison with December 31, 2017 published is due to the impact of purchase price allocation of GE Water and first application of IFRS 15 " Revenue from Contracts with Customers" restatements.

The deferred tax assets recognized on tax loss carry-forwards amount to EUR 266.0 million as of December 31, 2018 *versus* EUR 292.6 million as of December 31, 2017. These tax losses carried forward mainly correspond to the losses recognized by the SUEZ French consolidation tax group.

In 2018, the Group impaired deferred tax assets arising during the year within the SUEZ French consolidation tax group, generated by the recurring tax effect of interest on hybrid loans since their inception. The total amount of net deferred tax assets within the SUEZ French tax consolidation group, including all temporary differences, is of EUR 201.4 million at December 31, 2018 (including EUR 131.2 million on tax loss carry-forward and tax credit) and amounted to EUR 211.3 million at December 31, 2017.

Management considers that the SUEZ French tax consolidation group will be able to use up its deferred tax assets not depreciated on loss carry-forwards over the 5-year medium-term plan (approximately 50% of them) or beyond.

7.4 Unrecognized deferred taxes

7.4.1 Deductible temporary differences unrecognized

Temporary differences on losses carried forward

At December 31, 2018, unused and unrecognized tax losses carried forward (unrecognized because they did not meet the criteria for recognition as a deferred tax asset) amounted to EUR 431.6 million for ordinary tax loss carry-forwards, *versus* EUR 417.8 million as of December 31, 2017. This movement is mainly related to the tax losses of the period, unrecognized in the WTS French consolidated tax group.

Other temporary differences unrecognized

The amount of deferred tax assets on unrecognized other temporary differences amounted to EUR 212.5 million at December 31, 2018, compared to EUR 81.2 million at December 31, 2017. These unrecognized deferred taxes mainly come from WTS scope subsidiaries.

7.4.2 Unrecognized deferred tax liabilities on taxable temporary differences relating to investments in subsidiaries

No significant deferred tax liability has been recognized on temporary differences when the Group is able to control the timing of their reversal and it is probable that the temporary difference will not reverse in the foreseeable future.

Note 8 Earning per share

	December 31, 2018	December 31, 2017 restated
Numerator *(in millions of euros)*		
Net income, Group share	**334.9**	**295.5**
► coupon attributable to holders of undated deeply subordinated notes issued by SUEZ in June 2014	(15.0)	(15.0)
► coupon attributable to holders of undated deeply subordinated notes issued by SUEZ in March 2015	(12.5)	(12.5)
► coupon attributable to holders of undated deeply subordinated notes issued by SUEZ in April 2017	(17.3)	
Adjusted Net Income, Group Share	**290.1**	**268.0**
Denominator *(in millions)*		
Weighted average number of outstanding shares	618.0	593.2
Earnings per share *(in euros)*		
Net income Group share per share	**0.47**	**0.45**
Net diluted income Group share per share	**0.47**	**0.45**

The Group's dilutive instruments included in the calculation of diluted earnings per share are as follows:

- the SUEZ bonus share plans;
- the SUEZ employee share issue;
- the OCEANE 2020 convertible bonds, *i.e.* 19,052,803 securities issued in 2014, which generate financial expense of EUR 6.6 million in 2018.

Note 9 Goodwill

9.1 Movements in the carrying amount of goodwill

At December 31, 2017, an estimated goodwill generated following the acquisition of GE Water amounted EUR 2,171 million.

In accordance with IFRS 3 revised on business combinations (see Note 2), the carrying amount of goodwill has been adjusted for the effects of the final allocation of the purchase price. The residual goodwill thus amounted to EUR 1,753 million.

(in millions of euros)	Gross amount	Impairment Losses	Carrying amount
At December 31, 2016	**3,741.3**	**(94.4)**	**3,646.9**
Scope effects	1,704.3	4.7	1,709.0
Impairment losses	–	–	–
Translation adjustments	(215.5)	2.2	(213.3)
Other	4.3	(4.8)	(0.5)
At December 31, 2017 restated	**5,234.4**	**(92.3)**	**5,142.1**
Scope effects	(24.4)	–	(24.4)
Impairment losses	–	–	–
Translation adjustments	98.7	1.9	100.6
Other	5.5	–	5.5
At December 31, 2018	**5,314.2**	**(90.4)**	**5,223.8**

In 2018, the net change in goodwill amounted +EUR 81.7 million. This is mainly the result of:

- the change in consolidation method of a Chinese joint venture which is now fully consolidated for -EUR 20.6 million;
- translation adjustments mainly relate to fluctuations in the US dollar for +EUR 109.8 million, the Australian dollar for -EUR 10.4 million and the Hong Kong dollar for EUR 10.9 million.

At December 31, 2017 restated, the net change in goodwill amounted +EUR 1,495.2 million and recorded, in addition of the final value of the goodwill of GE Water (after the purchase price allocation), the following items:

- translation adjustments mainly related to fluctuations in the US dollar for -EUR 110.9 million, the pound sterling for -EUR 14.2 million, and the Hong Kong dollar for -EUR 72.0 million;
- a EUR 14.0 million decrease following the sale of 9.1% stake of Aquasure.

9.2 Main goodwill cash generating units (CGUs)

Goodwill CGUs break down as follows:

(in millions of euros)	Operating segment	December 31, 2018	December 31, 2017 restated
Material CGUs			
SUEZ WTS	WTS	1,817.7	1,740.9
R&V France	Recycling and Recovery Europe	620.7	615.4
SUEZ Spain	Water Europe	565.4	562.1
R&R News	Recycling and Recovery Europe	510.1	507.1
SUEZ Water Inc.- regulated activity	International	456.7	436.1
R&R UK	Recycling and Recovery Europe	347.7	350.5
Water France	Water Europe	328.3	332.1
SUEZ NWS	International	239.3	248.7
R&R Australia	International	157.9	166.0
Other CGUs			
(individual goodwill of less than EUR 150 million)		180.0	183.2
Total		**5,223.8**	**5,142.1**

9.3 Impairment test

All goodwill cash-generating units (CGUs) are tested for impairment. Impairment tests were carried out based on actual results at the end of June, on the last forecast of the year taking into account the upcoming events in the second half of the year, on the following year budget and on the medium-term plan (MTP) over four years for the rest of the business plan.

The recoverable value of goodwill CGUs is calculated by applying various methods, primarily the discounted cash flow (DCF) method, which is based on the following:

- cash flow projections prepared over the duration of the medium-term plan approved by the Group's Board of Directors. These are linked to operating conditions estimated by the Management Committee, specifically the duration of contracts carried by entities of the CGU in question, changes in pricing regulations and future market outlooks;
- a terminal value for the period after the MTP, calculated by applying the long-term growth rate, which is between 2% and 3% depending on the activity, to normalized free cash flow[1] (used specifically in impairment tests) in the final year of the projections;
- a discount rate appropriate for the CGU depending on the business, country and currency risks of each CGU. The after-tax discount rates applied in 2018 range from 4.5% to 8.1%.

When this method is used, the measurement of the recoverable value of goodwill CGU is based on three scenarios ("low", "medium" and "high"), distinguished by a change in key assumptions: the discount rate and the long-term growth rate of normalized free cash flow. The "medium" scenario is preferred.

Valuations thus obtained are systematically compared with valuations obtained using the market multiples method or the stock exchange capitalization method, when applicable.

Based on events reasonably foreseeable at this time, the Group believes there is no reason to find material impairment on the goodwill shown in the statement of financial position, and that any changes affecting the key assumptions described below should not result in excess book value over recoverable amounts.

Main assumptions used for material goodwill

The following table describes the method and discount rate used in examining the recoverable amount of material goodwill CGUs:

Cash-generating units	Measurement method	Discount rates
SUEZ WTS	DCF	8.1%
R&V France	DCF	5.0%
SUEZ Spain	DCF	5.6%
R&R News	DCF	5.1%
SUEZ Water Inc.- regulated activity	multiples [a] + DCF	4.8%
R&R UK	DCF	5.3%
Water France	DCF	4.5%
SUEZ NWS	DCF	6.9%
R&R Australia	DCF	6.6%

(a) Valuation multiples of comparable entities: market value or transactions.

(1) The "normalized" free cash flow used in impairment tests is different from free cash flow in the following aspects: no financial interest, use of a normalized tax rate, taking into account all investment flows (maintenance capital expenditures and financial disposals, already committed development capital expenditures and financial acquisitions).

9.4 Sensitivity to interest rate and operational assumptions

A change of 50 basis points upward or downward in the discount rate or growth rate of normalized free cash flow does not affect the recoverable amounts of goodwill CGUs, which remain higher than their book values.

The table below shows the sensitivity of the measurements of recoverable value exceeding book value, in response to changes in discount rates and growth rates:

	Discount rates		Growth rate of "normalized" Free Cash Flow	
Impact in % on excess of recoverable value over book value	–50 pb	+50 pb	–50 pb	+50 pb
SUEZ WTS	109%	–91%	–68%	82%
R&V France	35%	–25%	–22%	31%
SUEZ Spain	89%	–67%	–59%	77%
R&R News	40%	–28%	–24%	34%
SUEZ Water Inc.- regulated activity	110%	–61%	–58%	104%
R&R UK	30%	–22%	–19%	26%
Water France	35%	–23%	–21%	32%
SUEZ NWS	36%	–28%	–25%	32%
R&R Australia	17%	–13%	–11%	14%

Moreover, the Group ensured that, in 2018, a reasonable decrease (equal to or less than 5%) of both cash flows during the medium-term plan and of the terminal value does not call into question the goodwill values of the different significant CGUs.

9.5 Segment information

The carrying amount of goodwills can be analyzed by operating segment as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Water Europe	741.8	744.3
Recycling and Recovery Europe	1,531.3	1,533.7
International	1,130.3	1,120.5
WTS	1,817.7	1,740.9
Other	2.7	2.7
Total	**5,223.8**	**5,142.1**

The segment breakdown above is based on the operating segment of the acquired entity (and not on that of the acquirer).

Note 10 Intangible assets

10.1 Movements in the carrying amount of intangible assets

(in millions of euros)	Softwares	Intangible rights arising on concession contracts	Other	Total
A) Gross amount				
At December 31, 2016	**756.6**	**5,562.2**	**1,358.0**	**7,676.8**
Acquisitions	38.8	154.7	131.9	325.4
Disposals	(27.7)	(191.8) [a]	(6.8)	(226.3)
Translation adjustments	(4.5)	(59.2)	(69.1)	(132.8)
Changes in scope of consolidation [b]	13.1	83.0	868.5	964.6
Other	19.4	285.9	(158.0)	147.3
At December 31, 2017 restated	**795.7**	**5,834.8**	**2,124.5**	**8,755.0**
Acquisitions	39.5	234.0	76.0	349.5
Disposals	(17.3)	(133.8) [a]	(8.5)	(159.6)
Translation adjustments	(3.5)	15.5	35.2	47.2
Changes in scope of consolidation	(2.8)	(9.3)	(8.8)	(20.9)
Other	40.8	198.9 [c]	(57.2)	182.5
At December 31, 2018	**852.4**	**6,140.1**	**2,161.2**	**9,153.7**
B) Accumulated depreciation and impairment				
At December 31, 2016	**(507.1)**	**(2,314.2)**	**(632.5)**	**(3,453.8)**
Depreciation	(66.8)	(312.3)	(62.6)	(441.7)
Impairment losses	–	(1.9)	(5.3)	(7.2)
Disposals	33.9	169.4 [a]	5.1	208.4
Translation adjustments	3.0	24.3	19.2	46.5
Changes in scope of consolidation	0.4	(0.2)	2.0	2.2
Other	(7.9)	(224.4)	39.2	(193.1)
At December 31, 2017 restated	**(544.5)**	**(2,659.3)**	**(634.9)**	**(3,838.7)**
Depreciation	(71.0)	(317.9)	(90.0)	(478.9)
Impairment losses	(0.6)	–	1.9	1.3
Disposals	15.8	128.1 [a]	7.7	151.6
Translation adjustments	2.8	(8.4)	(0.6)	(6.2)
Changes in scope of consolidation	2.5	7.8	2.7	13.0
Other	(6.9)	(11.7)	4.9	(13.7)
At December 31, 2018	**(601.9)**	**(2,861.4)**	**(708.3)**	**(4,171.6)**
C) Carrying Amount				
At December 31, 2016	**249.5**	**3,248.0**	**725.5**	**4,223.0**
At December 31, 2017 restated	**251.2**	**3,175.5**	**1,489.6**	**4,916.3**
At December 31, 2018	**250.5**	**3,278.7**	**1,452.9**	**4,982.1**

(a) At the end of the concession agreements, intangible assets falling within the scope of IFRIC 12 are balanced, at gross value and amortisation, by a disposal flow.
(b) Changes in the scope of consolidation in 2017 corresponded to the acquisition of VAK Karlovy Vary, the finalization of the allocation work related to the 2016 business combination of SUEZ NWS (Hong Kong) and the allocation of the purchase price of GE Water (see Note 1.2.4.3).
(c) Changes in "Other" mainly correspond to the change in consolidation method of a Chinese joint venture now fully consolidated in 2018.

10.2 Information on intangible assets

Intangible rights arising on concession contracts

The Group manages a large number of concession contracts as defined by SIC 29 (see Notes 1.5.4, 1.5.6 and 1.5.13.4) in the drinking water distribution, wastewater treatment and waste management businesses. Infrastructure rights granted to the Group as concession operator, falling within the scope of application of IFRIC 12, and corresponding to the intangible model, are recognized under this category. These include the rights to charge end users under IFRIC 12 the intangible asset model.

Most of the acquisition of the year are done in the Water Europe sector.

Non-depreciable intangible assets

Non-depreciable intangible assets, mainly composed of water rights, amounted to EUR 102 million at December 31, 2018, *versus* EUR 105 million at December 31, 2017, and were included in the column "Other".

No significant impairment was posted in this asset category in 2018.

Information on research and development expenses

Research and development activities relate to various studies regarding technological innovation, improvements in plant efficiency, safety, environmental protection and service quality.

Research and development activities that do not meet the assessment criteria defined in IAS 38 were posted to expenses in the amount of EUR 120 million, a slight increase as at December 31, 2018 compared with December 31, 2017 which were registered for EUR 92 million.

Expenses related to in-house projects in the development phase that meet the criteria for recognition as an intangible asset are not material for year end 2018.

Note 11 Property, plant and equipment

11.1 Movements in the carrying amount of property, plant and equipment

(in millions of euros)	Lands	Constructions	Plant and equipment	Transport equipment	Capitalized dismanting and restoration costs	Construction in progress	Other	Total property, plant and equipment
A) Gross amount								
At December 31, 2016	**1,850.8**	**3,311.8**	**8,084.0**	**1,460.6**	**538.1**	**745.3**	**511.8**	**16,502.4**
Acquisitions	26.9	52.6	158.0	31.7	–	608.8	28.7	906.7
Disposals	(11.8)	(169.3)	(223.6)	(129.3)	–	–	(26.1)	(560.1)
Translation adjustments	(43.6)	(98.0)	(448.0)	(18.7)	(6.3)	(29.1)	(25.2)	(668.9)
Changes in scope of consolidation	45.2	100.1	377.1	(0.7)	–	58.8	0.1	580.6
Other [a]	153.2	105.1	343.2	3.2	7.5	(533.0)	15.9	95.1
At December 31, 2017 restated	**2,020.7**	**3,302.3**	**8,290.7**	**1,346.8**	**539.3**	**850.8**	**505.2**	**16,855.8**
Acquisitions	7.2	115.5	245.9	23.8	–	638.6	30.6	1,061.6
Disposals	(12.5)	(55.0)	(193.9)	(121.3)	(0.6)	–	(23.2)	(406.5)
Translation adjustments	(26.7)	(45.3)	1.4	(8.9)	(5.1)	(14.4)	5.8	(93.2)
Changes in scope of consolidation	(7.6)	(15.5)	(10.1)	(2.3)	–	(6.9)	(4.3)	(46.7)
Other	30.0	24.6	534.1	21.1	0.3	(495.6)	19.5	134.0
At December 31, 2018	**2,011.1**	**3,326.6**	**8,868.1**	**1,259.2**	**533.9**	**972.5**	**533.6**	**17,505.0**
B) Accumulated depreciation and impairment								
At December 31, 2016	**(981.4)**	**(1,474.7)**	**(3,757.6)**	**(1,110.4)**	**(535.6)**	**(16.3)**	**(346.6)**	**(8,222.6)**
Depreciation	(67.2)	(127.5)	(348.2)	(90.4)	(0.3)		(58.5)	(692.1)
Impairment losses	(13.7)	(4.7)	(4.4)	(0.1)		–	(0.1)	(23.0)
Disposals	9.3	35.6	215.3	109.0	–	–	19.3	388.5
Translation adjustments	19.6	23.3	123.9	13.1	6.3	1.4	14.1	201.7
Changes in scope of consolidation	–	–	(6.6)	0.3	–	–	(3.8)	(10.1)
Other [a]	(28.2)	10.3	7.8	8.0	(7.5)	–	17.5	7.9
At December 31, 2017 restated	**(1,061.6)**	**(1,537.7)**	**(3,769.8)**	**(1,070.5)**	**(537.1)**	**(14.9)**	**(358.1)**	**(8,349.7)**
Depreciation	(71.2)	(136.7)	(391.8)	(76.4)	(0.3)		(55.0)	(731.4)
Impairment losses	(0.9)	(3.2)	3.1	(0.7)		(0.4)	(0.1)	(2.2)
Disposals	2.4	42.1	168.5	101.0	0.6	0.3	19.1	334.0
Translation adjustments	10.7	13.3	20.3	6.4	5.1	(0.4)	(3.0)	52.4
Changes in scope of consolidation	1.3	10.3	16.0	1.7	–	–	3.4	32.7
Other	(0.3)	8.5	(94.1)	3.0	(0.3)	0.3	16.5	(66.4)
At December 31, 2018	**(1,119.6)**	**(1,603.4)**	**(4,047.8)**	**(1,035.5)**	**(532.0)**	**(15.1)**	**(377.2)**	**(8,730.6)**
C) Carrying Amount								
At December 31, 2016	**869.4**	**1,837.1**	**4,326.4**	**350.2**	**2.5**	**729.0**	**165.2**	**8,279.8**
At December 31, 2017 restated	**959.1**	**1,764.6**	**4,520.9**	**276.3**	**2.2**	**835.9**	**147.1**	**8,506.1**
At December 31, 2018	**891.5**	**1,723.2**	**4,820.3**	**223.7**	**1.9**	**957.4**	**156.4**	**8,774.4**

(a) Torre Agbar in Barcelona had been reclassified as an "asset held for sale" in accordance with IFRS 5, at the end of December 2016. This asset was reclassified in tangible asset for a total amount of EUR 131.8 million in early 2017, before being sold, on January 12, 2017, to the Spanish real estate group Merlin.

In 2018, the main changes are as follows:

- the lines "Other" include the change in consolidation method of a Chinese joint venture which is now fully consolidated in SUEZ Group accounts, for EUR 117.8 million;
- the main translation adjustments on the carrying amount of property, plant and equipment concern the Chilean peso -EUR 139 million, the US dollar +EUR 126 million and the Australian dollar -EUR 13 million.

Acquisition of tangible assets in progress, stable over the period, were mainly made in the United States +EUR 193 million, France +EUR 191 million and Chile +EUR 116 million.

In 2017, the main changes were explained as follows:

- GE Water acquisition as of September 29, 2017 generating a scope effect of EUR 533 million. This effect was adjusted by +EUR 39 million following the completion of the price purchase allocation of GE Water (see Note 2.1.2);
- translation adjustments on the carrying amount of property, plant and equipment which primarily concerned the Chilean peso -EUR 131 million and the US dollar -EUR 303 million.

11.2 Pledged and mortgaged assets

Assets pledged and mortgaged as collateral for borrowings amounted to EUR 10.6 million at December 31, 2018 against EUR 11.0 million at December 31, 2017.

11.3 Contractual commitments for the acquisition of property, plant and equipment

In the course of ordinary operations, some Group companies also entered into commitments to invest in technical facilities, with a corresponding commitment by related third parties to deliver these facilities.

The Group's contractual commitments for property, plant and equipment amounted to EUR 446.6 million at December 31, 2018, against EUR 429.7 million at December 31, 2017.

Note 12 Investments in joint ventures and associates

12.1 Investments in joint ventures

The Group's most significant joint ventures are the Chinese joint ventures jointly owned by SUEZ NWS Limited, a Hong Kong-based company at 50% and by local concessionary authorities at 50%. Following the full consolidation of SUEZ NWS Limited in SUEZ, the shares of Chinese joint ventures are accounted for by using the equity method at 50% in SUEZ's consolidated statement of financial position at December 31, 2018 for EUR 561.1 million.

Another major joint venture is the Suyu Group, which is based in China and is 50% owned by SUEZ.

	Carrying amount of investments in joint ventures		Share in net income/(loss) of joint ventures	
(in millions of euros)	December 31, 2018	December 31, 2017 restated	December 31, 2018	December 31, 2017 restated
SUEZ NWS Limited Group	561.1 [a]	681.7	56.8	67.3
Suyu Group	298.0	284.6	17.9	14.8
Other	38.3	37.6	7.3	10.1
Total	**897.4**	**1,003.9**	**82.0**	**92.2**

(a) The decrease of EUR 120.6 million between December 2018 and December 2017 mainly corresponds to the change in consolidation method of a Chinese joint venture which is now fully consolidated in 2018.

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Net income	82.0	92.2
Other comprehensive income (OCI)	0.8	(53.5)
Comprehensive income	**82.8**	**38.7**

SUEZ NWS Limited Group

The summarized financial information presented below represent 100% of Chinese joint ventures' financial statements and income statement held at 50% by SUEZ NWS Limited.

Summarized Statement of financial position

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Non-current assets	607.3	629.9
Current assets	291.4	320.3
of which Cash and cash equivalents	*139.5*	*159.0*
Total assets	**898.7**	**950.2**
Shareholders' equity, Group share	478.9	529.0
Non-controlling interests	4.5	4.5
Total shareholders' equity	**483.4**	**533.5**
Non-current liabilities	189.6	196.2
Current liabilities	225.7	220.5
Total shareholders' equity and liabilities	**898.7**	**950.2**

Summarized Income Statement

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Revenues	360.8	341.9
Current operating income	68.7	77.8
Net income – Group share	62.4	60.5
Net income – non-controlling interests	0.6	0.5
Net income	**63.0**	**61.0**
Other comprehensive income (OCI) [(a)]	(2.4)	(34.3)
Comprehensive income	**60.6**	**26.7**

(a) This amount corresponds to translation adjustments.

Dividends (at 100%)

(in millions of euros)	Dividends related to 2017	Dividends related to 2016
Dividends paid by Chinese joint ventures	94.6	89.2

Suyu Group

The summarized financial information presented below represent 100% of the financial statements and income statement of Suyu Group.

Summarized Statement of financial position

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Non-current assets [(a)]	756.5	750.0
Current assets	2.2	0.6
of which Cash and cash equivalents	*2.2*	*0.6*
Total assets	**758.7**	**750.6**
Shareholders' equity, Group share	595.9	569.2
Total shareholders' equity	**595.9**	**569.2**
Non-current liabilities	162.8	181.4
Current liabilities	–	–
Total shareholders' equity and liabilities	**758.7**	**750.6**

(a) Includes Derun Environment shares equity accounted for EUR 721.3 million in December 2018 (EUR 714.5 million in December 2017).

Summarized Income Statement

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Net income [a]	**59.4**	**49.2**
Other comprehensive income (OCI)	(5.2)	(44.0)
Comprehensive income	**54.2**	**5.2**

(a) Derun Environment's share in net income accounted for using the equity method in the Suyu Group.

Dividends (at 100%)

(in millions of euros)	Dividends related to 2017	Dividends related to 2016
Dividends paid by Suyu Group	4.6	–

12.2 Investments in associates

	Carrying amount of investments in associates		Share in net income/(loss) of associates	
(in millions of euros)	December 31, 2018	December 31, 2017 restated	December 31, 2018	December 31, 2017 restated
In Acea Group	563.5	573.1	55.5	48.8
In Agbar Group	190.4	183.7	15.5	15.9
In the company Aquasure Holding	69.4	74.1	11.7	19.3
In Sita Waste Services Ltd Group	63.5	–	4.7	–
In the company Brnenske Vodarny A Kanalizace	35.6	36.0	1.4	1.3
In SWTS Group	25.6	20.9	3.5	1.2
In R&R BeLux	18.0	18.4	3.4	2.5
In the company Aguas de Saltillo S.A. de C.V.	17.3	15.9	1.7	1.2
In the company ACQUE BLU FIORENTINE SpA	17.2	17.2	1.7	1.8
In R&V France Group	17.1	12.9	6.1	3.4
In the company Aguas de Cartagena S.A E.S.P	13.2	12.5	3.3	2.4
In the company Arte SA de CV	7.5	7.2	1.2	1.4
In SUEZ Polska sp zoo Group	6.7	6.9	0.4	0.4
In the R&R UK Group	5.7	9.5	(0.4)	8.3
In the company Interagbar de Colombia S.A.S	5.7	5.9	–	–
In the company Aquasystema Maribor	5.7	5.7	1.1	1.2
In SUEZ R&R Deutschland GmbH Group	5.3	5.0	1.3	1.7
In SUEZ R&R Netherlands BV Group	4.8	2.1	(2.6)	0.5
In the company Degrémont WTE Praha v.o.s.	3.7	8.4	2.0	5.2
In SUEZ Water Inc. Group	2.0	1.9	–	–
In the company SUEZ Water Treatment Company Limited	1.8	1.8	–	(0.5)
Other	4.6	4.7	(0.6)	3.4
Total	**1,084.3**	**1,023.8**	**110.9**	**119.4**

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Net income	110.9	119.4
Other comprehensive income (OCI)	12.0	(6.6)
Comprehensive income	**122.9**	**112.8**

The Group's largest individual associates is the Acea Group, listed on the Milan Stock Exchange and in which the SUEZ Group holds 23.33% of the capital.

The book value of Acea in the statement of financial position as of December 31, 2018 is EUR 563.5 million and its market value is EUR 596.8 million.

Acea Group

The summarized financial information at 100% of the Acea Group are presented below.

The Consolidated Financial Statements of Acea Group at December 31, 2018 are not available at the date of publication of the Group's 2018 Consolidated Financial Statements.

In compliance with IAS 28 "Investments in Associates and joint ventures", the summarized statement of financial position and the summarized income statement at September 30, 2018 correspond to the latest available information.

Summarized Statement of financial position

(in millions of euros)	September 30, 2018	December 31, 2017
Non-current assets	5,373.6	5,147.6
Current assets	2,342.3	2,191.5
of which Cash and cash equivalents	*928.7*	*680.6*
Total assets	**7,715.9**	**7,339.1**
Shareholders' equity, Group share	1,663.8	1,717.6
Non-controlling interests	92.8	93.6
Total shareholders' equity	**1,756.6**	**1,811.2**
Non-current liabilities	4,015.8	3,340.2
Current liabilities	1,943.5	2,187.7
Total shareholders' equity and liabilities	**7,715.9**	**7,339.1**

Summarized Income Statement – of the first nine months

(in millions of euros)	September 30, 2018	September 30, 2017
Revenues	2,173.9	2,037.9
Gross operating profit	659.6	607.9
Operating profit /(loss)	381.0	291.3
Net income – Group share	214.8	152.6
Net income – non-controlling interests	11.0	9.0
Net income	**225.8**	**161.6**
Other comprehensive income (OCI)	13.4	(1.0)
Comprehensive income	**239.2**	**160.6**

Dividends (at 100%)

(in millions of euros)	Dividends related to 2017	Dividends related to 2016
Dividends paid by Acea	133.9	131.8

Note 13 Financial instruments

13.1 Financial assets

The following table shows the various financial asset categories and their breakdown as "non-current" and "current":

	December 31, 2018			December 31, 2017 restated [a]		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Equity instrument at fair value	133.0	–	133.0	127.1	–	127.1
Loans and receivables carried at amortized cost	610.7	4,693.7	5,304.4	721.9	4,846.4	5,568.3
Loans and receivables carried at amortized cost (excluding trade and other receivables)	610.7	109.7	720.4	721.9	136.6	858.5
Trade and other receivables	–	4,584.0	4,584.0	–	4,709.8	4,709.8
Financial assets measured at fair value	119.0	126.8	245.8	149.5	146.4	295.9
Derivative financial instruments	119.0	97.6	216.6	149.5	89.5	239.0
Financial assets measured at fair value through income	–	29.2	29.2	–	56.9	56.9
Cash and cash equivalents	–	3,424.1	3,424.1	–	3,221.3	3,221.3
Total	**862.7**	**8,244.6**	**9,107.3**	**998.5**	**8,214.1**	**9,212.6**

(a) Restatements due to the first-time application of IFRS 15 "Revenue from contracts with customers" and the finalization of the allocation of the purchase price of GE Water (see Note 1.2.4.).

13.1.1 Equity instruments at fair value

Since January 1, 2018 and the application of IFRS 9, equity instruments have been measured at fair value, either through profit or loss or through other comprehensive income, depending on the category used (see Note 1.5.9.1).

Movements on equity instruments at fair value are broken down as follows:

(in millions of euros)	Available for sale securities	Equity instruments at JV through OCI	Equity instruments at JV through income
At December 31, 2017	**127.1**		
IFRS 9 Restatement	(127.1)	94.3	32.8
At January 1, 2018	**–**	**94.3**	**32.8**
Acquisitions		31.6	0.1
Net book value of disposals		(1.5)	(1.1)
Changes in fair value posted to equity as other comprehensive income		(2.0)	–
Changes in fair value posted to income statement		–	(2.5)
Changes in scope, exchange rates and other		(17.4)	(1.3)
At December 31, 2018		**105.0**	**28.0**

The value of equity instruments at fair value through OCI held by the Group amounts to EUR 105 million of unlisted securities as at December 31, 2018.

The value of equity instrument at fair value through income held by the Group amounts to EUR 28 million as at December 31, 2018, which is divided between EUR 22.2 million of listed securities and EUR 5.8 million of unlisted securities.

13.1.2 Loans and receivables carried at amortized cost

(in millions of euros)	December 31, 2018 Non-current	December 31, 2018 Current	December 31, 2018 Total	December 31, 2017 restated[a] Non-current	December 31, 2017 restated[a] Current	December 31, 2017 restated[a] Total
Loans and receivables carried at amortized cost (excluding trade and other receivables)	**610.7**	**109.7**	**720.4**	**721.9**	**136.6**	**858.5**
Loans granted to affiliated companies[b]	405.8	66.3	472.1	312.2	126.7	438.9
Other receivables at amortized cost	2.6	–	2.6	3.0	–	3.0
Concession receivables	201.6	43.4	245.0	405.9	9.8	415.7
Finance lease receivables	0.7	–	0.7	0.8	0.1	0.9
Trade and other receivables	**–**	**4,584.0**	**4,584.0**	**–**	**4,709.8**	**4,709.8**
Total	**610.7**	**4,693.7**	**5,304.4**	**721.9**	**4,846.4**	**5,568.3**

(a) Restatements due to the first-time application of IFRS 15 "Revenue from contracts with customers" and the finalization of the allocation of the purchase price of GE Water (see Note 1.2.4.).
(b) This item primarily includes loans granted to associates accounted for under the equity method and to non-consolidated companies, and amounted to EUR 283.8 million as of December 31, 2018, *versus* EUR 281,8 million as of December 31, 2017.

Depreciation and impairment on loans and receivables carried at amortized cost are shown below:

(in millions of euros)	December 31, 2018 Gross	December 31, 2018 Depreciation and impairment	December 31, 2018 Net	December 31, 2017 restated[a] Gross	December 31, 2017 restated[a] Depreciation and impairment	December 31, 2017 restated[a] Net
Loans and receivables carried at amortized cost (excluding trade and other receivables)	843.0	(122.6)	720.4	956.2	(97.7)	858.5
Trade and other receivables	4,940.1	(356.1)	4,584.0	5,022.9	(313.1)	4,709.8
Total	**5,783.1**	**(478.7)**	**5,304.4**	**5,979.1**	**(410.8)**	**5,568.3**

(a) Restatements due to the first-time application of IFRS 15 "Revenue from contracts with customers" and the finalization of the allocation of the purchase price of GE Water (see Note 1.2.4.).

Information on the maturity of receivables that are past due but not impaired and on the monitoring of counterparty risk on loans and receivables at amortized cost (including trade and other receivables) is presented in Note 14.2 "Counterparty risk".

Net income and expenses on loans and receivables carried at amortized cost and recognized in the income statement break down as follows (including trade receivables):

(in millions of euros)	Interests	Remeasurement post-acquisition Translation adjustment	Remeasurement post-acquisition Impairment
At December 31, 2017 restated	58.5	(4.3)	(41.9)
At December 31, 2018	**56.9**	**6.4**	**(27.0)**

Trade and other receivables

On initial recognition, trade receivables are recorded at fair value, which generally corresponds to their nominal value. An impairment loss is recognized based on the risk of non-recovery by homogeneous category of customers and on the expected loss rate for each category of customers (see Note 1.5.9.1).

The fair value of trade and other receivables is equal to their net book value recorded in the statement of financial position.

13.1.3 Financial assets measured at fair value

This item comprises derivative financial instruments as well as financial assets measured at fair value through income excluding derivatives, and can be analyzed as follows:

(in millions of euros)	December 31, 2018			December 31, 2017 restated		
	Non-current	Current	Total	Non-current	Current	Total
Derivative financial instruments	**119.0**	**97.6**	**216.6**	**149.5**	**89.5**	**239.0**
Debt-related derivatives (see Note 13.3.1)	111.4	67.9	179.3	136.0	58.3	194.3
Derivative hedging commodities (see Note 14.1.1.2)	–	0.7	0.7	–	0.4	0.4
Derivative hedging other items [a]	7.6	29.0	36.6	13.5	30.8	44.3
Financial assets at fair value through income excluding derivatives	**–**	**29.2**	**29.2**	**–**	**56.9**	**56.9**
Financial assets measured at fair value through income (see Note 13.3.1)	–	29.2	29.2	–	56.9	56.9
Total	**119.0**	**126.8**	**245.8**	**149.5**	**146.4**	**295.9**

(a) Includes derivative financial instruments:
– for the interest rate futures portion of debt-related derivatives not designated as hedges for EUR 4.5 million at December 31, 2018, compared with EUR 5.0 million at December 31, 2017;
– as at 31 December 2018, there is no longer any investment hedging, compared to EUR 0.9 million at December 31, 2017.

Commodities derivatives, debt-related derivatives, and derivatives hedging other items are set up as part of the Group's Risk Management policy and are analyzed in Note 14.1.1.

Financial assets measured at fair value through income (excluding derivatives) are mainly UCITS and negotiable medium-term Notes (MTNs); which are included in the calculation of the Group's net debt (see Note 13.3).

Income recognized on all financial assets measured at fair value through income as of December 31, 2018 is not material.

13.1.4 Cash and cash equivalents

The Group's financial Risk Management policy is described in Note 14.

"Cash and cash equivalents" amounted to EUR 3,424.1 million as of December 31, 2018 *versus* EUR 3,221.3 million as of December 31, 2017.

This item mainly includes term deposits for EUR 699.8 million compared with EUR 600.2 million at December 31, 2017 restated and cash for EUR 2,669.2 million compared with EUR 2,565.7 million at December 31, 2017 restated.

In addition, restricted cash amounted to EUR 15.7 million as of December 31, 2018.

Income recognized in respect of "Cash and cash equivalents" as of December 31, 2018 amounted to EUR 24.0 million *versus* EUR 28.1 million as of December 31, 2017.

13.1.5 Pledged and mortgaged assets

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Pledge and mortgaged assets	12.1	103.1

The change in the item between 2017 and 2018 is mainly due to the cancellation of a loan from Banco de Chile to Aguas Andinas to cover 28% of IAM's shares.

13.2 Financial liabilities

Financial liabilities are accounted for:

- in "liabilities at amortized cost" for borrowings and debt, trade and other payables, and other financial liabilities;
- or in "liabilities measured at fair value" for derivative financial instruments.

The following table shows the various financial liability categories as of December 31, 2018, as well as their breakdown as "non-current" and "current":

	December 31, 2018			December 31, 2017 restated [a]		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Borrowings	9,803.2	2,762.1	12,565.3	9,760.6	2,169.7	11,930.3
Derivative financial instruments	9.5	47.2	56.7	26.4	38.3	64.7
Trade and other payables	–	3,798.9	3,798.9	–	3,741.3	3,741.3
Other financial liabilities	47.2	–	47.2	43.1	–	43.1
Total	**9,859.9**	**6,608.2**	**16,468.1**	**9,830.1**	**5,949.3**	**15,779.4**

(a) Restatements due to the first-time application of IFRS 15 "Revenue from contracts with customers" and the finalization of the allocation of the purchase price of GE Water (see Note 1.2.4.).

13.2.1 Borrowings and debt

	December 31, 2018			December 31, 2017 restated		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Bonds issues	8,921.9	844.5	9,766.4	9,135.0	210.5	9,345.5
Commercial paper	–	641.8	641.8	–	400.0	400.0
Draw downs on credit facilities	288.0	31.1	319.1	26.5	46.0	72.5
Borrowings under finance leases	53.4	33.8	87.2	74.9	74.2	149.1
Other bank borrowings	408.8	75.6	484.4	428.5	276.0	704.5
Other borrowings	144.2	79.6	223.8	98.6	41.5	140.1
Borrowings (gross amounts)	**9,816.3**	**1,706.4**	**11,522.7**	**9,763.5**	**1,048.2**	**10,811.7**
Overdrafts and current cash accounts	–	928.8	928.8	–	989.9	989.9
Outstanding financial debt	**9,816.3**	**2,635.2**	**12,451.5**	**9,763.5**	**2,038.1**	**11,801.6**
Impact of measurement at amortized cost	(82.0)	123.6	41.6	(77.6)	131.6	54.0
Impact of fair value hedge	68.9	3.3	72.2	74.7	–	74.7
Borrowings and debt	**9,803.2**	**2,762.1**	**12,565.3**	**9,760.6**	**2,169.7**	**11,930.3**

The fair value of borrowings and debt as of December 31, 2018 was EUR 13,503.7 million for a net book value of EUR 12,565.3 million (for details see Note 13.4.2).

Borrowings are analyzed in Note 13.3 "Net debt".

Variations by flows of financial debts are presented in the following table:

(in millions of euros)	December 31, 2017 restated	IFRS 9	January 1, 2018	Cash flows	Non cash flows: Forex effect	Non cash flows: Scope effect	Non cash flows: Change in fair value and amortized cost	Others	December 31, 2018
Bond issues	9,345.5		9,345.5	413.7	7.3	–	–	(0.1)	9,766.4
Commercial paper	400.0		400.0	240.8	1.0	–	–	–	641.8
Draw downs on credit facilities	72.5		72.5	247.6	(0.1)	(0.3)	–	(0.6)	319.1
Borrowings under finance leases	149.1		149.1	(79.7)	(0.5)	–	–	17.3	87.2
Other bank borrowings	704.5		704.5	(217.2)	(8.3)	0.1	–	5.3	484.4
Other borrowings	140.1		140.1	89.4	(0.3)	0.8	–	(6.2)	223.8
Borrowings (gross amounts)	**10,811.7**		**10,811.7**	**694.6**	**0.1**	**0.6**	**–**	**15.7**	**11,522.7**
Overdrafts and current cash accounts [a]	989.9		989.9	(64.5)	7.7	(4.3)	–	(0.1)	928.8
Outstanding financial debt	**11,801.6**		**11,801.6**	**630.2**	**7.8**	**(3.7)**	**–**	**15.6**	**12,451.5**
Impact of measurement at amortized cost	54.0	(5.1)	48.9	(25.7)	(0.8)	–	17.1	2.1	41.6
Impact of fair value hedge	74.7		74.7	–	–	–	(2.5)	–	72.2
Borrowings and debt	**11,930.3**	**(5.1)**	**11,925.2**	**604.5**	**7.0**	**(3.7)**	**14.6**	**17.7**	**12,565.3**

(a) The change in bank overdrafts due on demand, as defined by IAS 7.8, does not impact the item "Increase in financial liabilities" in the consolidated statement of cash flows for an amount of EUR 48 million, but is nevertheless taken into account in the 2018 cash flows of financial liabilities.

13.2.2 Derivative financial instruments (including commodities)

(in millions of euros)	December 31, 2018: Non-current	December 31, 2018: Current	December 31, 2018: Total	December 31, 2017 restated: Non-current	December 31, 2017 restated: Current	December 31, 2017 restated: Total
Debt-related derivatives	3.6	17.6	21.2	5.7	11.3	17.0
Derivatives hedging commodities	–	7.5	7.5	–	3.9	3.9
Derivatives hedging other items [a]	5.9	22.1	28.0	20.7	23.1	43.8
Total	**9.5**	**47.2**	**56.7**	**26.4**	**38.3**	**64.7**

(a) Mainly includes derivative financial instruments:
– for the interest rate futures portion of debt-related derivatives qualifying as cash flow hedge for EUR 2.5 million at December 31, 2018, compared with EUR 15.1 million at December 31, 2017.

These instruments are set up according to the Group's Risk Management policy and are analyzed in Note 14.

13.2.3 Trade and other payables

(in millions of euros)	December 31, 2018	December 31, 2017 restated [a]
Trade payables	3,527.2	3,405.7
Payables on fixed assets	271.7	335.6
Total	**3,798.9**	**3,741.3**

(a) Restatements due to the first-time application of IFRS 15 "Revenue from contracts with customers" and the finalization of the allocation of the purchase price of GE Water (see Note 1.2.4.).

The fair value of trade payables and other creditors correspond to their carrying amount recorded in the statement of financial position.

13.2.4 Other financial liabilities

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Payables on acquisition of shares	6.9	7.6
Other financial liabilities [a]	40.3	35.5
Total	**47.2**	**43.1**

(a) EUR 30 million in 2018 and EUR 34.6 million in 2017 related to the expansion of an Australian landfill.

13.3 Net debt

13.3.1 Analysis by type of debt

	December 31, 2018			December 31, 2017 restated		
(in millions of euros)	Non-current	Current	Total	Non-current	Current	Total
Outstanding borrowings	9,816.3	2,635.2	12,451.5	9,763.5	2,038.1	11,801.6
Impact of measurement at amortized cost [a]	(82.0)	123.6	41.6	(77.6)	131.6	54.0
Impact of fair value hedge [b]	68.9	3.3	72.2	74.7	–	74.7
Borrowings and debts	**9,803.2**	**2,762.1**	**12,565.3**	**9,760.6**	**2,169.7**	**11,930.3**
Debt-related derivatives under liabilities [c]	3.6	17.6	21.2	5.7	11.3	17.0
Gross debt	**9,806.8**	**2,779.7**	**12,586.5**	**9,766.3**	**2,181.0**	**11,947.3**
Financial assets measured at fair value through income excluding financial derivative instruments	–	(29.2)	(29.2)	–	(56.9)	(56.9)
Cash and cash equivalents	–	(3,424.1)	(3,424.1)	–	(3,221.3)	(3,221.3)
Debt-related derivatives under assets [c]	(111.4)	(67.9)	(179.3)	(136.0)	(58.3)	(194.3)
Net cash	**(111.4)**	**(3,521.2)**	**(3,632.6)**	**(136.0)**	**(3,336.5)**	**(3,472.5)**
Net debt	**9,695.4**	**(741.5)**	**8,953.9**	**9,630.3**	**(1,155.5)**	**8,474.8**
Outstanding borrowings	9,816.3	2,635.2	12,451.5	9,763.5	2,038.1	11,801.6
Financial assets measured at fair value through income excluding financial derivative instruments	–	(29.2)	(29.2)	–	(56.9)	(56.9)
Cash and cash equivalents	–	(3,424.1)	(3,424.1)	–	(3,221.3)	(3,221.3)
Net debt excluding amortized cost and impact of derivative financial instruments	**9,816.3**	**(818.1)**	**8,998.2**	**9,763.5**	**(1,240.1)**	**8,523.4**

(a) Includes accrued interest on gross debt as well as premiums and fees for setting up borrowings to be amortized.
(b) This item corresponds to the remeasurement of the interest rate component of debt in a designated fair value hedging relationship.
(c) It corresponds to the fair value of debt-related derivatives, regardless of whether or not they are designated as hedges.

The increase in the current portion of outstanding financial debt at December 31, 2018 is mainly due to the reclassification of the EUR 800 million bond issue issued by SUEZ maturing in April 2019.

The sensitivity of the debt (including interest rate and currency derivatives) to interest rate risk and currency risk is presented in Note 14.

13.3.2 Issue of Undated Deeply Subordinated Notes

As of December 31, 2018, the outstanding amount of Undated Deeply Subordinated Notes ("TSSDI") was EUR 1,600 million, unchanged compared to December 31, 2017. These lines are not recognized in financial debt as they meet the conditions required by IAS 32 to be recognized in equity.

13.3.3 Bond and Commercial paper issues

On September 17, 2018, SUEZ issued a EUR 500 million bond issue with a 1.625% coupon maturing on September 17, 2030.

SUEZ has a commercial paper program. At December 31, 2018, the outstanding notes totaled EUR 641.8 million.

Commercial paper is recognized as current financial debt. However, the Group's policy is to back all commercial paper by available credit lines. Thus, the refinancing of commercial paper is guaranteed even in case of closure of the money market.

At December 31, 2018, outstanding commercial paper was entirely covered by confirmed available for more than one-year credit lines.

13.3.4 Securitization of receivables

Context

In 2012, SUEZ implemented a program for the sales of trade receivables to a special purpose vehicle (SPV) called *Fonds Commun de Titrisation* (or FCT).

This so-called "deconsolidation" program concerns assignors from R&R France, IWS France, R&R Netherlands, R&R UK and R&R Germany.

In April 2017, this program was renewed for five years, and the scope of the transferred receivables portfolio was amended: the assignor, SUEZ R&R UK was removed and new French assignors from the OSIS division of SUEZ RV France joined that program.

The aim of the receivable assignment or receivable securitization program is to carry out so-called "deconsolidation" assignments within the meaning of IFRS 9.

The main characteristics of the program are as follows:

a) a compartment dedicated to the Group's receivables was created within a FCT;

b) the FCT used in the program is financing the compartment by issuing three types of instruments:

- shares known as "senior", issued on the markets through a dedicated channel,
- a deposit known as "mezzanine", underwritten by the Group,
- shares known as "subordinated", underwritten by an investor taking part in the program and with contracted involvement with the Group;

c) these shares are presented here in order of payment priority related to each other; the senior shares are therefore the first to be reimbursed and the subordinated shares are the last;

d) the Group subsidiaries involved remain in charge of recovering the receivables transferred against remuneration.

The sales of receivables are made by Group subsidiaries at their nominal value, minus a discount that covers the cost of financing the receivables, the risk of late payment and the credit risk.

The main commitments of the Group towards the securitization fund are the following:

e) set-up of a security deposit for the compartment, earning interest, and designed to cover, if the FCT reserves and the "subordinated" shares ever came to run out, any defaults and late payments on transferred receivables exceeding the amount estimated during the transfer and invoiced through the discount applied to the transfer price, to a set maximum limit (Cash Collateral 1 or CC1); this deposit is effective from the launch of the program and corresponds to the "mezzanine" deposit presented above;

f) set-up of a security deposit for the compartment, earning interest, and designed to preserve the correct execution of all financial obligations of Group entities party to the program, to a set maximum limit (Cash Collateral 2 or CC2); this deposit is only effective if certain events or triggers occur linked to the downgrading of SUEZ or to the non-respect by the Group of its contractual obligations.

As at December 31, 2018, this security deposit had not yet been formed;

g) an option, for all Group subsidiaries, to jointly request buyback at fair value of the receivables held by the compartment in a single and unique transaction, in case of program amortization, planned (with a 5-year term), or accelerated, and after agreement with the holders of "subordinated" shares. To this day, accelerated amortization of the program is not expected before its maturity date;

h) issue of a guarantee for the risk of modification of tax rules;

i) preservation by each Group subsidiary of the follow-up and collection of receivables that it has transferred to the compartment; to this effect, a follow-up and collection agreement was signed by each of the subsidiaries acting as collector and by the compartment, this service being remunerated by FCT.

The Group remains exposed to the risks linked to the receivables transferred within the limit of the security deposits.

However, the discount applied to the sales and the sizing of the "subordinated" shares allow almost all possible losses of the compartment to be absorbed. The probability that the "mezzanine" deposit is impacted is very low. Finally, the holders of the "subordinated" shares benefit from almost all the advantages through excess fees more favorable than those attributable to the Group, and the granting of the liquidation profit.

Accounting treatment

The compartment of the FCT is not controlled by the Group and is therefore not consolidated.

According to IFRS 9 and based on the terms of the program and the quantitative analyses implemented, the Group transferred almost all the risks and rewards inherent to the ownership of the receivables sold. The receivables transferred within the scope of the program are therefore fully derecognized from the Group's consolidated statement of financial position.

The loss arising from the sale of these receivables, through the applied discount, is recorded in the income statement under financial expenses (see Note 6).

The security deposit paid and representing the "mezzanine" shares underwritten by the Group is recorded under the item "Loans and receivables carried at amortized cost" on the Group's consolidated statement of financial position. Its remuneration is recorded in the income statement under financial income (see Note 6).

The remuneration of services provided by the Group for follow-up and recovery of receivables transferred is shown in the income statement under financial income (see Note 6).

Figures as of December 31, 2018

(in millions of euros)		
Total of receivables sold over the period	**2,440.4**	
Gain/(loss) arising from sale over the period	(17.3)	(B)
Remuneration for CC1	1.8	(C)
Remuneration of services for follow-up and recovery of receivables transferred over the period	**10.7**	**(D)**
Outstanding receivables transferred as of December 31, 2018	514.9	(A)
Book value of CC1 as of December 31, 2018	97.0	(E)
Fair value of CC1	97.0	
Book value of CC2	[a]	
Residual maturity of CC1	38	months
Impact of sales of derecognized receivables in the sense of IFRS 9 on net debt	**413.1**	**(A) + (B) + (C) + (D) – (E)**

(a) No security deposit known as "CC2" had been made as of December 31, 2018; payment of this deposit is subject to the conditions described above.

13.3.5 Change in net debt

Net debt increased by EUR 479.1 million during the year 2018 as a result of:

- the payment of cash dividends to shareholders of SUEZ amounting to EUR 401.9 million;
- the payment of cash dividends to minority shareholders of subsidiaries amounting to EUR 231.6 million;
- the payment of EUR 78.8 million in exit fees on GE Water defined benefit pension plans in the United Kingdom and in the Netherlands that were closed as a result of SUEZ's acquisition of GE Water;
- exchange rate fluctuations that generated a 103.1 million increase in net financial debt, mainly due to the appreciation of the US dollar against the euro;
- excess cash generated by the Group's activities leading to a decrease in net debt of EUR 445.2 million.

13.3.6 Debt/equity ratio

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Net debt	8,953.9	8,474.8
Total equity	8,992.5	9,021.8
Debt/equity ratio	**99.6%**	**93.9%**

13.4 Fair value of financial instruments by level

13.4.1 Financial assets

Equity instruments at fair value

Listed securities are recognized in the consolidated statement of financial position at fair value for EUR 22.2 million at December 31, 2018. They have a Level 1 fair value based on stock market prices at that date.

Unlisted securities valued at EUR 110.8 million at December 31, 2018 are measured using valuation models based primarily on the most recent transactions, discounted dividends or cash flows and net asset value (fair value Level 3).

At December 31, 2018, the change in Level 3 equity instruments at fair value breaks down as follows:

(in millions of euros)	Available for sale securities	Equity instruments at JV through OCI	Equity instruments at JV through income
At December 31, 2017	**103.5**		
IFRS 9 Restatement	(103.5)	94.3	9.2
At January 1, 2018		**94.3**	**9.2**
Acquisitions		31.6	–
Net book value of disposals		(1.5)	(1.1)
Changes in fair value posted to equity as other comprehensive income		(2.0)	–
Changes in fair value posted to income statement		–	(1.7)
Changes in scope, exchange rates and other		(17.4)	(0.6)
At December 30, 2018		**105.0**	**5.8**

The net value of unlisted securities is not of a significant uniform amount that would have to be presented separately.

Loans and receivables carried at amortized cost (excluding trade and other receivables)

Loans and receivables carried at amortized cost (excluding trade and other receivables), amounting to EUR 720.4 million at December 31, 2018, may contain elements that contribute to a fair value hedging relationship. At December 31, 2018, no hedge was put in place.

Derivative financial instruments

The portfolio of derivative financial instruments used by the Group within the context of its Risk Management consists primarily of interest rate and exchange rate swaps, interest rate options and forward currency sales and purchases. It is recognized at its fair value at December 31, 2018 for EUR 216.6 million. The fair value of virtually all of these contracts is determined using internal valuation models based on observable data. These instruments are considered Level 2.

Financial assets measured at fair value through income

Financial assets measured at fair value through income amounting to EUR 29.2 million at December 31, 2018 are considered Level 2. In fact, their fair value is determined based off from observable data.

13.4.2 Financial liabilities

The fair value of financial liabilities and financial instruments posted to liabilities are distributed as follows among the various levels of fair value (fair value levels are defined in Note 1.5.9.2):

	December 31, 2018				December 31, 2017 restated			
(in millions of euros)	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Borrowings	**13,503.7**	**7,895.6**	**5,608.1**		**12,864.3**	**7,716.4**	**5,147.9**	
Derivative financial instruments	**56.7**		**56.7**		**64.7**		**64.7**	
Debt-related derivatives	21.2		21.2		17.0		17.0	
Derivatives hedging commodities	7.5		7.5		3.9		3.9	
Derivatives hedging other items	28.0		28.0		43.8		43.8	
Total	**13,560.4**	**7,895.6**	**5,664.8**	**–**	**12,929.0**	**7,716.4**	**5,212.6**	**–**

Bonds and borrowings

Only listed bonds issued by SUEZ are presented in this table at Level 1. Other bonds are shown in this table at Level 2. All of these loans are measured in light of the interest rate risk (interest rate component); their fair value is determined on the basis of observable data.

Derivative financial instruments

See Note 13.4.1 for details on fair value level.

13.5 Offsetting of derivative assets and liabilities

At December 31, 2018, as at December 31, 2017, the Group does not offset financial assets and liabilities in its statement of financial position. Moreover, SUEZ has subscribed for OTC derivatives with first class banks under agreements that provide for the compensation of amounts due and receivable in the event of failure of one of the contracting parties. These master netting agreements do not meet the criteria of IAS 32 to allow the offsetting of derivative assets and liabilities in the statement of financial position. However, they do fall within the scope of disclosures under IFRS 7 on offsetting:

	December 31, 2018				December 31, 2017 restated			
	Financial derivatives instruments on net debt and others		Financial derivatives instruments on commodities		Financial derivatives instruments on net debt and others		Financial derivatives instruments on commodities	
(in millions of euros)	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities
Gross amount [a]	215.9	(49.2)	0.7	(7.5)	238.6	(60.8)	0.4	(3.9)
Amount after offsetting	**168.4**	**(1.7)**	**0.8**	**(7.5)**	**215.1**	**(37.3)**	**0.4**	**(3.9)**

(a) Gross amounts of recorded assets and liabilities.

Note 14 Management of risks arising from financial instruments

The Group mainly uses derivative instruments to manage its exposure to market risks. The management of financial risks is explained in chapter 4 "Risk factors" of the Reference Document.

14.1 Market risks

14.1.1 Commodity market risks

14.1.1.1 Hedging operations

The Group sets up cash flow hedge on fuel and electricity as defined by IFRS 9 by using the derivative instruments available on over-the-counter markets, whether they are firm commitments or options, but always settled in cash. The Group's aim is to protect itself against adverse changes in market prices, which may specifically affect its supply costs.

14.1.1.2 Fair value of derivative instruments linked to commodities

The fair value of derivative instruments linked to commodities at December 31, 2018 and 2017 is presented in the table below:

	December 31, 2018				December 31, 2017 restated			
	Assets		Liabilities		Assets		Liabilities	
(in millions of euros)	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Cash flow hedges	0.7	–	7.5	–	0.4	–	3.9	–
Total	**0.7**	**–**	**7.5**	**–**	**0.4**	**–**	**3.9**	**–**

The fair value of cash flow hedging instruments by type of commodity breaks down as follows:

	December 31, 2018				December 31, 2017 restated			
	Assets		Liabilities		Assets		Liabilities	
(in millions of euros)	Current	Non-current	Current	Non-current	Current	Non-current	Current	Non-current
Oil	**0.7**	**–**	**–**	**–**	**0.4**	**–**		
Swaps	0.7	–	–	–	0.4	–		
Electricity		**–**	**7.5**	**–**		**–**	**3.9**	
Swaps		–	7.5	–		–	3.9	
Total	**0.7**	**–**	**7.5**	**–**	**0.4**	**–**	**3.9**	

14.1.2 Currency risk

Subsidiaries work mostly in local currency, exposure to currency risk linked to transactions are limited.

Translation risk is mainly concentrated on equity holdings in the United States, United Kingdom, Chile, China and Australia. The Group's hedging policy with regard to investments in non-Eurozone currencies consists in contracting liabilities denominated in the same currency as the cash flows expected to derive from the hedged assets.

Among the hedging instruments used, borrowings in the relevant currency constitute the most natural hedging tool. The Group also uses foreign currency derivatives (swaps, cross currency swaps...), which allow for the creation of synthetic currency debts.

14.1.2.1 Analysis of financial instruments by currency

The breakdown by currency of outstanding borrowings and of financial net debt, before and after taking interest rate and currency hedges into account, is presented below:

Outstanding borrowings

	December 31, 2018		December 31, 2017 restated	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Euro zone	77%	51%	75%	52%
USD zone	7%	22%	7%	22%
GBP zone	2%	4%	3%	4%
CLP (Chilean peso)	10%	10%	11%	11%
HKD (Hong-Kong dollar)	1%	6%	1%	6%
Other currencies	3%	7%	3%	5%
Total	**100%**	**100%**	**100%**	**100%**

Net debt

	December 31, 2018		December 31, 2017 restated	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Euro zone	80%	43%	77%	44%
USD zone	8%	29%	7%	27%
GBP zone	3%	5%	3%	5%
CLP (Chilean peso)	12%	12%	14%	14%
HKD (Hong-Kong dollar)	0%	8%	1%	8%
Other currencies	–3%	3%	–2%	2%
Total	**100%**	**100%**	**100%**	**100%**

14.1.2.2 Analysis of currency risk sensitivity

The sensitivity analysis was based on the financial net debt position (including derivative financial instruments), and derivatives designated as net investment hedges at the reporting date. As at December 31, 2018, there was no instrument qualified as a net investment hedge.

Regarding **currency risk**, the sensitivity calculation consists in evaluating the impact in the Consolidated Financial Statements of a plus or minus 10% change in foreign exchange rates compared to closing rates.

Impact on income after the impact of foreign exchange derivatives

Changes in exchange rates against the euro only affect income through gains and losses on liabilities denominated in a currency other than the functional currency of the companies carrying the liabilities on their statement of financial position, and to the extent that these liabilities do not qualify as net investment hedges. A uniform +/-10% change of foreign currencies against euro would generate a gain or a loss of EUR 1 million.

Impact on equity after taking into account foreign exchange derivatives

As at December 31, 2018, there were no financial liabilities (debts and derivatives) qualified as net investment hedges. A uniform variation of plus or minus 10% in exchange rates against the euro would therefore not generate a negative or positive impact on equity in respect of net investment hedges.

14.1.3 Interest rate risk

The Group aims to reduce its financing costs by limiting the impact of interest rate fluctuations on its income statement.

The Group's policy is to diversify net debt interest rate references between fixed and floating rates. The Group's aim is to achieve a balanced interest rate structure for its net debt in the medium term (5 to 15 years). The interest rate mix may change depending on market trends.

The Group therefore uses hedging instruments (particularly swaps), to protect itself from increases in rates in the currencies in which the debt is denominated.

In 2014 and 2015, in order to protect the refinancing of part of its debt, the Group set up nine-year interest rate hedges with deferred departures in 2018. As at December 31, 2018, none of these interest rate hedges were yet active. They were decided and backed by the bond issue carried out on September 17, 2018.

The Group's exposure to interest rate risk is managed centrally and regularly reviewed (generally on a monthly basis) during meetings of the Treasury Committee. Any significant change in the interest rate mix is subject to prior approval by Management.

The Group cost of debt is sensitive to changes in interest rates on all floating-rate debt. The cost of debt is also affected by changes in market value of derivative instruments not classified as hedges under IFRS 9.

The Group's main exposure to interest rate risk arises from loans and borrowings denominated in euro, US dollar, pound sterling, Chilean peso and Hong-Kong dollar, which represented 97% of net debt as of December 31, 2018.

14.1.3.1 Financial instruments by rate type

The breakdown by type of rate of outstanding borrowings and net debt, before and after impact of hedging instruments, is shown in the following tables:

Outstanding borrowings

	December 31, 2018		December 31, 2017 restated	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Floating rate	17%	33%	16%	30%
Fixed rate	74%	58%	75%	61%
Fixed rate indexed to inflation	9%	9%	9%	9%
Total	**100%**	**100%**	**100%**	**100%**

Net debt

	December 31, 2018		December 31, 2017 restated	
(in %)	Before impact of derivatives	After impact of derivatives	Before impact of derivatives	After impact of derivatives
Floating rate	–17%	6%	–17%	2%
Fixed rate	105%	82%	105%	86%
Fixed rate indexed to inflation	12%	12%	12%	12%
Total	**100%**	**100%**	**100%**	**100%**

The inflation-linked debt corresponds exclusively to securities issued by Aguas Andinas in Chile. It involves fixed-rate bonds denominated in Unidad de Fomento (a Chilean monetary adjusted for inflation).

14.1.3.2 Analysis of interest rate risk sensitivity

The sensitivity analysis was based on the net debt position as at the reporting date (including financial instruments with an interest rate component).

For **interest rate risk**, the sensitivity is calculated based on the impact of a rate change of plus or minus 1% compared with year-end interest rates.

Impact on income after taking into account interest rate derivatives

(See Note 1.5.9.3)

A plus or minus 1% change in short-term interest rates (for all currencies) on the nominal amount of floating-rate net debt, inflation-linked debt included, and the floating-rate component of derivatives would have a negative or positive impact of EUR 7.3 million on net interest expense.

A 1% increase in all interest rates (uniform for all currencies) would generate a loss of EUR 0.9 million in the income statement due to the change in fair value of non-qualified derivatives. A 1% decrease in interest rates would a contrario generate a gain of EUR 0.9 million.

Impact on equity after taking into account interest rate derivatives

An increase of 1% in all interest rates (uniform for all currencies) would generate a gain of EUR 3.4 million in equity, linked to the change in fair value for derivatives documented as cash flow hedges and accounted for in the statement of financial position. On the other hand, a decrease of 1% would generate a loss of EUR 3.2 million.

The asymmetrical impacts are attributable to the low short-term interest rates (less than 1%) applicable to certain financial assets and liabilities.

14.1.4 Currency and interest rate risk hedges

The fair values and notional amounts of the financial derivative instruments used to hedge currency and interest rate risks are as follows:

Foreign currency derivatives

	December 31, 2018		December 31, 2017 restated	
(in millions of euros)	Total market value	Total nominal value	Total market value	Total nominal value
Fair-value hedges	(3.8)	359.4	(0.2)	391.8
Cash-flow hedges	0.1	6.9	(0.3)	11.7
Net investment hedges	–	–	0.3	34.9
Derivative instruments not qualifying for hedge accounting	52.3	3,758.2	70.5	3,425.4
Total	**48.6**	**4,124.5**	**70.3**	**3,863.8**

Interest rate derivatives

	December 31, 2018		December 31, 2017 restated	
(in millions of euros)	Total market value	Total nominal value	Total market value	Total nominal value
Fair-value hedges	107.4	2,100.0	106.6	1,700.0
Cash-flow hedges	–	7.1	(12.2)	55.5
Derivative instruments not qualifying for hedge accounting	(2.4)	161.6	(3.1)	143.7
Total	**105.0**	**2,268.7**	**91.3**	**1,899.2**

The market values shown in the table above are positive for an asset and negative for a liability.

The Group defines foreign currency derivatives hedging by firm foreign currency commitments, and instruments transforming fixed-rate debt into floating-rate debt, as fair-value hedges.

Cash-flow hedges correspond mainly to hedges of future operating cash flows in foreign currency and the hedging of floating-rate debt.

Interest rate derivatives not designated as hedges consist of structured instruments, which because of their type and because they do not meet the effectiveness criteria defined in IFRS 9, cannot be qualified as hedges for accounting purposes.

Foreign currency derivatives not designated as hedges provide financial cover for foreign currency commitments. Furthermore, the effect of foreign currency derivatives is almost entirely offset by translation adjustments on the hedged items.

Fair-value hedges

As of December 31, 2018, the net impact of fair value hedges recognized in the income statement, including compensation payments and redemption premium was EUR 1.2 million.

Cash flow hedges

The breakdown by maturity of the market value of the foreign currency and interest rate derivatives designated as cash flow hedges is as follows:

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	> 5 years
Fair value of derivatives by maturity date	(0.1)	–	(0.1)	–	–	–	–

At December 31, 2017 restated *(in millions of euros)*	Total	2018	2019	2020	2021	2022	> 5 years
Fair value of derivatives by maturity date	(12.6)	(0.5)	(0.1)	(0.3)	(2.8)	–	(8.9)

The unrealized gains and losses directly recognized in shareholders' equity, Group share in 2018 amounted to EUR 21.8 million (including impacts on associates).

The ineffective portion of cash-flow hedges recognized in income is nil.

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14.2 Counterparty risk

Through its operational and financial activities, the Group is exposed to the risk of default on the part of its counterparties (customers, suppliers, associates, intermediaries, banks) in the event that they find it impossible to meet their contractual obligations. This risk arises from a combination of payment risk (non-payment of goods or services rendered), delivery risk (non-delivery of goods or services already paid), and replacement risk on defaulting contracts (called Mark-to-Market exposure and corresponding to the risk that replacement terms will be different from the initially agreed terms).

14.2.1 Operating activities

Trade and other receivables

The gross maturity of past-due trade and other receivables is broken down below:

Trade and other receivables *(in millions of euros)*	Past-due non impaired assets at closing date				Impaired assets [a]	Non-impaired and not past-due assets	
	0-6 months	6-12 months	Over one year	Total	Total	Total	Total
At December 31, 2018	316.3	61.8	110.5	488.6	473.1	3,978.4	4,940.1
At December 31, 2017 restated	290.6	49.7	73.9	414.2	397.7	4,211.0	5,022.9

(a) This figure corresponds to the nominal value of trade and other receivables that are partially or fully depreciated.

The ageing of receivables that are past due but not impaired may vary significantly depending on the type of customer with which the Group companies do business (private companies, individuals or public authorities). In accordance with the terms of IFRS 9, since January 1, 2018, the entities of the SUEZ Group have set up non-recovery risk matrices for their trade receivables by homogeneous category of customers, adapted to their local realities, with regard to the default rates observed in the recent past on receivables with a similar credit risk profile. They update the matrices at least once a year and use them to calculate depreciation based on the expected default rates on each of the homogeneous categories of customers (see Note 1.5.9.1).

Other assets

In "Other assets", the proportion of depreciated assets is not material in relation to the total amount of the item. Moreover, the Group does not consider that it is exposed to any counterparty risk on those assets.

14.2.2 Financial activities

The Group's maximum exposure to counterparty risk in its financial activities may be measured in terms of the carrying amount of financial assets excluding equity instrument and the fair value of derivatives on the assets side of the statement of financial position (*i.e.* EUR 8,974.3 million at December 31, 2018, and EUR 9.085,5 million at December 31, 2017 restated).

14.2.2.1 Counterparty risk arising from loans and receivables carried at amortized cost (excluding trade and other receivables)

At December 31, 2017 restated and before the application of IFRS 9, the gross maturity of past-due loans and receivables carried at amortized cost (excluding trade and other receivables) is analyzed below:

Loans and receivables carried at amortized cost (excluding trade and other receivables) *(in millions of euros)*	Past-due non impaired assets at closing date				Impaired assets [a]	Non-impaired and not past-due assets	
	0-6 months	6-12 months	Over one year	Total	Total	Total	Total
At December 31, 2017 restated	–	–	0.2	0.2	97.7	858.9	956.8

(a) This figure corresponds to the nominal value of loans and receivables carried at amortized cost (excluding trade and other receivables) that are partially or fully depreciated.

Loans and receivables carried at amortized cost (excluding trade and other receivables) do not include items relating to impairment EUR 97.7 million and to amortized cost -EUR 0.6 million.

At December 31, 2018, following the application of IFRS 9 and in accordance with the method detailed in Note 1.5.9.1, the counterparty risk of gross maturity and impairment of past-due loans and receivables carried at amortized cost (excluding trade and other receivables) is analyzed below:

Loans and receivables carried at amortized cost (excluding trade and other receivables) *(in millions of euros)*	Not unpaid/ no overdue more than 60 days	Unpaid/overdue 60 days to 180 days	Overdues of more than 180 days	December 31, 2018
Loans, deposits and guarantees – gross	795,6	36,6	12,4	844,6
Loans, deposits and guarantees – impairment	(118,4)	(0,6)	(3,6)	(122,6)

Loans and receivables carried at amortized cost (excluding trade and other receivables) do not include items relating to amortized cost -EUR 1.6 million.

Changes in impairment losses and amortized costs is presented in Note 13.1.2, "Loans and receivables at amortized cost".

14.2.2.2 Counterparty risk arising from investment activities

The Group is exposed to counterparty risk on the investment of its cash surplus (cash and cash equivalents) and through its use of derivative financial instruments. Counterparty risk corresponds to the loss which the Group might incur in the event of counterparties failing to meet their contractual obligations. In the case of derivative instruments, that risk corresponds to positive fair value.

The Group invests the majority of its cash surplus in, and negotiates its financial hedging instruments with, leading counterparties. As part of its counterparty Risk Management policy, the Group has set up management and control procedures that focus on the counterparty's accreditation according to its credit ratings, its financial exposure, as well as objective market factors (Credit Default Swaps, market capitalization), plus an assessment of risk limits.

At December 31, 2018, "Cash and cash equivalents" and derivatives assets were the most significant items subject to counterparty risk. For these items, the breakdown of counterparties by credit rating is as follows:

	December 31, 2018				December 31, 2017 restated			
Counterparty risk arising from investing activities	Total	Investment Grade [a]	Unrated [b]	Non Investment Grade [b]	Total	Investment Grade [a]	Unrated [b]	Non Investment Grade [b]
% of exposure	3,590.4	91%	7%	2%	3,236.6	94%	5%	1%

(a) Counterparties with a minimum Standards & Poor's rating of BBB- or Moody's rating of Baa3.
(b) Most of the two latter types of exposure consisted of consolidated companies with interests or Group companies operating in emerging countries where cash cannot be centralized and is therefore invested locally.

14.3 Liquidity risk

As part of its operating and financial activities, the Group could be exposed to a risk of insufficient liquidity, preventing it from meeting its contractual commitments.

14.3.1 Available cash

The Group's financing policy is based on the following principles:

- diversification of financing sources between the banking and capital markets;
- balanced repayment profile of borrowings.

As of December 31, 2018, the Group's total net cash stood at EUR 3,632.6 million, consisting of cash and cash equivalents of EUR 3,424.1 million, financial assets at fair value through income of EUR 29.2 million, and debt-related derivatives recorded as assets of EUR 179.3 million euros. Almost all surplus cash is invested in short-term bank deposits and interest-bearing accounts.

In addition, at December 31, 2018, the Group specifically had EUR 2,609.8 million in confirmed credit facilities, including EUR 319.1 million already drawn; unused credit facilities therefore totaled EUR 2,290.7 million, EUR 227.0 million of which will be maturing in 2019.

87% of total credit lines and 88% of undrawn facilities were centralized. None of these centralized lines contains a default clause linked to financial ratios or minimum credit ratings.

As of December 31, 2018, bank funding accounted for 7.0% of the outstanding borrowings (excluding bank overdrafts and liability current accounts as those elements do not correspond to sustainable financial resources). Funding from capital markets (bond issues for 84.8% and commercial paper for 5.5%) represented 90.3% of the outstanding borrowings (excluding bank overdrafts and liability current accounts).

Available cash, composed of cash and cash equivalents (EUR 3,424.1 million) and financial assets measured at fair value through income (EUR 29.2 million), net of bank overdrafts and liability current accounts (EUR 928.8 million), amounted to EUR 2,524.5 million at December 31, 2018 *versus* EUR 2,290.4 million at December 31, 2017 restated.

14.3.2 Undiscounted contractual payments

In order to best reflect the current economic circumstances of operations, cash flows related to derivatives recognized as liabilities or assets shown below correspond to net positions. Moreover, the values shown in the table below are positive for a liability and negative for an asset.

Undiscounted contractual payments on outstanding borrowings by maturity and type of lenders are as follows:

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	Beyond 5 years
Bonds issues	9,766.4	844.5	465.2	1,030.7	840.7	575.9	6,009.4
Commercial paper	641.8	641.8					
Draw downs on credit facilities	319.1	31.1				278.0	10.0
Borrowings under finance leases	87.2	33.8	13.2	6.0	5.5	5.1	23.6
Other bank borrowings	484.4	75.6	73.2	50.7	23.7	135.4	125.8
Other borrowings	223.8	79.6	5.9	76.7	5.6	6.1	49.9
Overdrafts and current accounts	928.8	928.8					
Outstanding borrowings	**12,451.5**	**2,635.2**	**557.5**	**1,164.1**	**875.5**	**1,000.5**	**6,218.7**
Financial assets measured at fair value through income	(29.2)	(29.2)	–	–	–	–	–
Cash and cash equivalents	(3,424.1)	(3,424.1)	–	–	–	–	–
Net debt excluding amortized cost and impact of derivative financial instruments	**8,998.2**	**(818.1)**	**557.5**	**1,164.1**	**875.5**	**1,000.5**	**6,218.7**

At December 31, 2017 restated *(in millions of euros)*	Total	2018	2019	2020	2021	2022	Beyond 5 years
Outstanding borrowings	**11,801.6**	**2,038.1**	**1,074.4**	**582.1**	**1,122.1**	**868.8**	**6,116.1**
Financial assets relating to financing, Financial assets measured at fair value through income and Cash and cash equivalents	(3,278.2)	(3,278.2)	–	–	–	–	–
Net debt excluding amortized cost and impact of derivative financial instruments	**8,523.4**	**(1,240.1)**	**1,074.4**	**582.1**	**1,122.1**	**868.8**	**6,116.1**

Undiscounted contractual payments on outstanding borrowings break down as follows by maturity:

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	Beyond 5 years
Undiscounted contractual interest payments on outstanding borrowings	2,228.2	311.4	255.7	249.3	209.2	178.2	1,024.4

At December 31, 2017 restated *(in millions of euros)*	Total	2018	2019	2020	2021	2022	Beyond 5 years
Undiscounted contractual interest payments on outstanding borrowings	2,384.5	319.3	309.9	247.6	238.8	198.9	1,070.0

Undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) recognized in liabilities and assets broke down as follows by maturity (net amounts):

At December 31, 2018 *(in millions of euros)*	Total	2019	2020	2021	2022	2023	Beyond 5 years
Derivatives (excluding commodities)	(103.8)	(23.6)	(28.1)	(33.3)	(23.7)	(9.6)	14.5

At December 31, 2017 restated *(in millions of euros)*	Total	2018	2019	2020	2021	2022	Beyond 5 years
Derivatives (excluding commodities)	(155.5)	(77.3)	(37.9)	(21.7)	(21.8)	(10.5)	13.7

The maturity of the confirmed undrawn credit facilities is as follows:

(in millions of euros)	Total	2019	2020	2021	2022	2023	Beyond 5 years
At December 31, 2018	2,290.7	227.0	165.9	1,575.7	80.0	152.0	90.1

(in millions of euros)	Total	2018	2019	2020	2021	2022	Beyond 5 years
At December 31, 2017 restated	2,614.4	176.2	150.4	165.9	1,595.1	480.0	46.8

Confirmed but unused lines of credit include a EUR 1.5 billion multi-currency club deal (maturing in 2021).

As of December 31, 2018, no counterparty represented more than 5% of confirmed unused credit facilities.

14.4 Equity risk

As of December 31, 2018, equity instruments at fair value held by the Group amounted to EUR 133 million (see Note 13.1.1).

A 10% decrease in the value of the listed securities would have a negative pre-tax impact of around EUR 2.2 million on the Group result.

The Group's portfolio of listed and unlisted equity investments is managed in accordance with a specific investment policy. Reports on the equity portfolio are submitted to Executive Management on a regular basis.

Note 15 Shareholders' equity

15.1 Share capital

	Number of shares			Value *(in millions of euros)*		
	Total	Treasury shares	Outstanding shares	Share capital	Additional paid-in capital	Treasury shares
At December 31, 2016	**564,401,246**	**1,914,796**	**562,486,450**	**2,257.6**	**4,632.3**	**28.6**
Purchase and disposal of treasury shares	–	3,153,117	(3,153,117)			48.4
Delivery of shares from the 2013 Worldwide bonus share allocation plan	1,176,328		1,176,328	4.7	(4.7)	
Allocation to the legal reserve					(0.5)	
Delivery of 2013 performance share plan	338,621		338,621	1.3	(1.3)	
Allocation to the legal reserve					(0.1)	
Capital increase reserved for employees, net of expenses (Sharing 2017)	9,978,030		9,978,030	39.9	78.0	
Allocation to the legal reserve (Sharing 2017)					(4.0)	
Financing of the acquisition of GE Water	47,468,354		47,468,354	189.9	555.7	
Allocation to the legal reserve					(19.0)	
At December 31, 2017 restated	**623,362,579**	**5,067,913**	**618,294,666**	**2,493.4**	**5,236.4**	**77.0**
Purchase and disposal of treasury shares		(1,532,963)	1,532,963			(25.2)
Capital decrease following the completion of the implementation of the employee shareholding plan net of expenses (Sharing 2017)	(2,000,000)		(2,000,000)	(8.0)	(21.2)	
Allocation to the legal reserve					(0.8)	
At December 31, 2018	**621,362,579**	**3,534,950**	**617,827,629**	**2,485.4**	**5,214.4**	**51.8**

15.2 Treasury shares

The tacitly renewable liquidity contract managed by Rothschild & Cie Banque amounts EUR 32.6 million. The aim of this contract is to reduce the volatility of the SUEZ's share price. This contract complies with the professional Ethics Charter drawn up by the *Association française des marchés financiers* (French Financial Markets Association) and approved by the AMF.

As of December 31, 2018, treasury shares amount to 3,534,950 against 5,067,913 as of December 31, 2017 of which 3,267,450 treasury shares acquired under employee share allocation plans and 267,500 under the liquidity contract.

15.3 Other information on premiums and consolidated reserves

Consolidated premiums and reserves, including income for the year (EUR 5,733 million as of December 31, 2018), incorporate the SUEZ legal reserve. In accordance with French law, SUEZ's legal reserve represents 10% of the share capital. This reserve may be distributed to shareholders only in the event of the liquidation of the Company.

15.4 Dividend distribution

As for the 2016 and 2017 financial years, it will be proposed to the SUEZ General Shareholders' Meeting called to approve the financial statements for the year ended December 31, 2018 to pay a dividend of EUR 0.65 per share, representing a total amount of EUR 403.9 million in cash based on the total number of shares at December 31, 2018.

Subject to approval by the Shareholders' Meeting, this dividend will be paid out during the first half of 2019. This dividend is not recognized as liabilities in the financial statements at December 31, 2018 as these financial statements are presented before net income allocation.

15.5 Total gains and losses recognized in equity (Group share)

(in millions of euros)	December 31, 2018	Change	December 31, 2017 restated
Available-for-sale securities [(a)]	–	2.7	(2.7)
Net investment hedges	(158.8)	0.4	(159.2)
Cash-flow hedges (excluding commodities)	6.7	11.3	(4.6)
Commodity cash-flow hedges	(6.6)	(3.5)	(3.1)
Deferred tax on available-for-sale securities and hedges	10.4	(0.5)	10.9
Share of associates on reclassifiable items, net of tax	(28.5)	0.8	(29.3)
Share of joint ventures on reclassifiable items, net of tax	(60.3)	9.1	(69.4)
Translation adjustments	1.6	27.8	(26.2)
Total reclassifiable items	**(235.5)**	**48.1**	**(283.6)**
Actuarial gains and losses	(395.9)	1.8	(397.7)
Deferred tax on actuarial gains and losses	65.9	(32.8)	98.7
Equity instrument [(a)]	(123.6)	(123.6)	–
Deferred tax on equity instrument	0.2	0.2	–
Share of associates on non reclassifiable items, net of tax	(2.0)	2.9	(4.9)
Total non reclassifiable items	**(455.4)**	**(151.5)**	**(303.9)**
Total	**(690.9)**	**(103.4)**	**(587.5)**

(a) IFRS 9 replaces IAS 39 as from January 1, 2018. Available-for-sale financial assets as specified in IAS 39 at December 31, 2017 have been reclassified and measured in accordance with the principles of IFRS 9 detailed in Note 1.2.4.4. Only equity instruments measured through other comprehensive income that are not recyclable remain in this presentation.

The items in the above table are reclassifiable to profit or loss in future periods, with the exception of actuarial gains and losses and related deferred taxes and, since January 1, 2018 with the changes in equity instruments recognised in other comprehensive income.

15.6 Undated Deeply Subordinated Notes

In June 2014, SUEZ issued Undated Deeply Subordinated Notes, also denominated hybrids, of EUR 500 million with an initial fixed coupon of 3%. On March 30, 2015, SUEZ issued another Undated Deeply Subordinated Notes for a total amount of EUR 500 million. The new notes beared interest at a fixed rate of 2.5%, revised for the first time seven years after issuance on the basis of the 5-year swap rate, and then every five years.

On April 19, 2017, SUEZ realized an issue of Undated Deeply Subordinated Notes for a total amount of EUR 600 million, with an initial fixed coupon of 2.875%, revised for the first time seven years after the issue on the basis of the swap rate after 5 years, and then again every five years. This issuance was prepared in order to secure funding for the acquisition of GE Water.

In accordance with the provisions of IAS 32, these notes or hybrid bonds are considered as an instrument of equity rather than a debt in the Group's consolidated accounts as there is no direct or indirect obligation to pay interest (except in the case of a distribution of dividends by the issuer or a redemption of the notes), nor is there any maturity of the final redemption, but only optional redemption dates.

There were no new issues during 2018.

The Group's outstanding hybrid bonds amounted to EUR 1.6 billion as at December 31, 2018.

15.7 Equity management

SUEZ strives to optimize its financial structure on a continuous basis by achieving an optimal balance between net debt and equity as shown in the consolidated statement of financial position. The main aim of the Group in terms of managing its financial structure is to maximize value for shareholders, reduce the cost of capital, and maintain a strong rating while ensuring the desired financial flexibility in order to seize external growth opportunities which will create value. The Group manages its financial structure and makes adjustments in light of changes in economic conditions. The management goals, policies and procedures have remained identical for several fiscal years.

Note 16 Non-controlling interests

The "non-controlling interests" account amounts to EUR 2,600.8 million at December 31, 2018 and primarily includes the contributions of Agbar for EUR 1,015.0 million, SWTS for EUR 702.3 million and entities within SUEZ NWS in China and Hong Kong (42%) for EUR 585.5 million.

Agbar, SWTS and SUEZ NWS contributions respectively amounted to EUR 1,063.1 million, EUR 713.8 million and EUR 424.4 million out of a total of EUR 2,511.4 million at December 31, 2017 restated.

- **Aguas Andinas**

At December 31, 2018 the Agbar Group contribution includes EUR 760.7 million coming from the operational company Aguas Andinas listed on Santiago de Chile (Chile) stock exchange. This company is fully consolidated within SUEZ Group on the basis of a 25.1% interest rate through the following companies:

- IAM company, also listed on Santiago de Chile stock exchange, fully consolidates Aguas Andinas on the basis of a 50.1% interest rate (compared to 56.6% in 2017 before the sale of 6.5% stake on the market in August 2018);
- the Agbar Group fully consolidates the IAM holding company with a 50.1% interest rate;
- finally, SUEZ fully consolidates Agbar Group with a 100% interest rate.

Summarized financial information of Aguas Andinas (at 100%) is presented below. At the date of publication of the Group's Consolidated Financial Statements, the Consolidated Financial Statements of the Aguas Andinas Group as at December 31, 2018 had not yet been published. The condensed statement of financial position as at September 30, 2018 is based on the most recent published (unaudited) data.

Summarized Statement of financial position (at 100%)

(in millions of euros)	September 30, 2018	December 31, 2017
Non-current assets	2,220.5	2,232.7
Current assets	205.8	204.3
of which Cash and cash equivalents	*44.1*	*25.5*
Total assets	**2,426.3**	**2,437.0**
Shareholders' equity, Group share	849.7	871.6
Non-controlling interests	64.1	68.7
Total shareholders' equity	**913.8**	**940.3**
Non-current liabilities	1,272.0	1,175.1
Current liabilities	240.5	321.6
Total shareholders' equity and liabilities	**2,426.3**	**2,437.0**
Closing exchange rate CLP/EUR	763.2	737.3

Summarized Income Statement for the nine first months (at 100%)

(in millions of euros)	September 30, 2018	September 30, 2017
Revenues	520.8	514.8
Operating profit /(loss)	227.6	224.3
Net income – Group share	135.4	139.4
Net income – non-controlling interests	2.7	3.7
Net income	**138.1**	**143.1**
Other comprehensive income (OCI)	–	–
Comprehensive income	**138.1**	**143.1**
Average exchange rate CLP/EUR	750.2	727.7

Dividends (100%)

(in millions of euros)	Dividends related to 2017	Dividends related to 2016
Dividends paid by Aguas Andinas	184.1	186.0

Note 17 Provisions

(in millions of euros)	December 31, 2017 restated [a]	Allowances	Reversals (utilizations)	Reversals (surplus provisions)	Scope effects	Impact of unwinding discount adjustments [b]	Translation adjustments	Other	December 31, 2018
Post-employment benefit obligations and other long-term benefits	793.1	55.5	(92.7)	–	4.6	19.5	4.2	20.9	805.1
Sector-related risks	83.6	1.1	(5.1)	(4.4)	(0.2)	–	–	(14.2)	60.8
Warranties	25.3	13.8	(13.3)	–	–	–	0.2	(4.1)	21.9
Tax risks, other disputes and claims	90.2	16.3	(23.2)	(0.4)	–	–	(0.5)	(2.5)	79.9
Site restoration	543.3	54.3	(78.2)	(0.2)	–	19.7	(3.5)	–	535.4
Restructuring costs	104.3	71.7	(125.3)	(3.7)	(1.6)	–	–	3.7	49.1
Other contingencies	522.0	130.5	(127.4)	(14.2)	(6.0)	3.8	(2.5)	(54.7)	451.5
Total provisions	**2,161.8**	**343.2**	**(465.2)**	**(22.9)**	**(3.2)**	**43.0**	**(2.1)**	**(50.9)**	**2,003.7**

(a) Provisions at December 31, 2017 have been restated to take into account the provisioning of contingent liabilities as part of the finalization of the allocation of the purchase price of GE Water (see Note 2).
(b) The discounting impact on post-employment and other long-term benefits relates to the interest expense calculated on the net amount of pension obligations and the fair value of plan assets, in accordance with IAS 19 revised.

Total provisions decreased by -EUR 158.1 million over the period. This change is mainly due to:

- the net reversal in provisions for restructuring of -EUR 55.2 million following the departures recorded as part of the restructuring plans in France and Spain decided in 2017;
- a reversal for surplus provisions of -EUR 22.9 million, mainly due to provision for warranty reversal and costs contract adjustments in Spain;
- the decrease of provision for risks in investments, of -EUR 22.1 million, classified in sector-related risks;
- the increase of +EUR 43 million corresponding to unwinding discount adjustments mainly related to provisions for site restoration and to provisions for post-employment benefit obligations and other long-term benefits, as well as provisions for onerous contracts, classified as provisions for other contingencies;
- finally, the translation adjustments of -EUR 2.1 million, which are primarily generated by the American and Australian subsidiaries.

The allowances, reversals and the impact of unwinding discount adjustments presented above and linked to discounting impacts are presented as follows in the consolidated income statement for 2018:

(in millions of euros)	(Reversals)/net allowances
Income from operating activities	(141.6)
Other financial income and expenses	43.0
Income tax expense	(3.3)
Total	**(101.9)**

The analysis by type of provisions and the principles used to calculate them are explained below.

17.1 Post-employment benefits and other long-term benefits

Changes for this items are presented in Note 18.

17.2 Sector-related risks

This item primarily includes provisions for risks relating to court proceedings involving the Argentinean contracts and to warranties given in connection with divestments that are likely to be called upon.

17.3 Tax risks, other disputes and claims

This item includes provisions for ongoing disputes involving employees or social security agencies (social security contribution relief, etc.), disputes arising in the ordinary course of business (customer claims, accounts payable disputes), tax adjustments and tax disputes.

17.4 Site restoration

The June 1998 European Directive on waste management introduced a number of obligations regarding the closure and long-term monitoring of landfills. These obligations lay down the rules and conditions incumbent upon the operator (or owner of the site where the operator fails to comply with its obligations) in terms of the design and scale of storage and collection and treatment of liquid (leachates) and gas (biogas) effluents. It also requires provisions for these facilities to be inspected over a 30-year period after closure.

These two types of provisions (rehabilitation and long-term monitoring) are calculated on a case-by-case basis depending on the site concerned. In accordance with the accrual basis of accounting, the provisions are recorded over the period that the site is in operation, *pro rata* to the depletion of landfill capacity (void-space) (matching of income and expenses). Costs to be incurred at the time of a site's closure or during the long-term monitoring period (30 years after a site is shut down within the European Union, 20 years in France starting the application of the ministerial decree of February 15, 2016 with a renewable 5 years monitoring period, and 60 years in Great-Britain) are discounted to present value. An asset is recorded as a counterparty against the provision. It is depreciated in line with the depletion of the landfill capacity or the need for capping, during the period.

The rehabilitation provision calculations (at the time the facility is shut down) depend on whether the capping used is: semi-permeable, semi-permeable with drainage, or impermeable. That choice has a considerable impact on future levels of leachate effluents and therefore on future costs of treating such effluents. Calculating the provision requires an evaluation of the cost of rehabilitating the area to be covered. The provision recorded in the statement of financial position at year-end must cover the costs of rehabilitating the untreated surface area (difference between the fill rate and the percentage of the site's area that has already been rehabilitated). The amount of the provision is reviewed each year based on work completed or still to be carried out.

The calculation of the provision for long-term monitoring depends on the costs linked to the production of leachate and biogas effluents on the one hand, and on the amount of biogas recycled on the other. Biogas recycling represents a source of revenue and is deducted from long-term monitoring expenses. The main expense items arising from long-term monitoring obligations relate to:

- construction of infrastructure (biogas recycling facility, installation of leachate treatment facility) and the demolition of installations used while the site was in operation;
- upkeep and maintenance of the protective capping and of the infrastructure (surface water collection);
- control and monitoring of surface water, underground water and leachates;
- replacement and repair of observation wells (piezometer wells);
- leachate treatment costs;
- biogas collection and processing costs (taking into account any revenues from biogas recycling).

The provision for long-term monitoring obligations that should be recorded in the statement of financial position at year-end depends on the fill rate of the facility at the end of the period, the estimated aggregate costs per year and per unit (based on standard or specific costs), the estimated closure date of the site and the discount rate applied to each site (depending on its residual life).

17.5 Other contingencies

"Other contingencies" mainly includes provisions for miscellaneous employee-related and environment-related litigations and for various business risks. Those provisions include a provision corresponding to the fair value measurement of onerous contracts for an amount of EUR 76.8 million at December 31, 2018 *versus* EUR 87.5 million at December 31, 2017, following the acquisition of WSN by SUEZ R&R Australia in 2010.

Note 18 Post-employment benefit obligations and other long-term benefits

18.1 Description of the main pension plans and related benefits

Most Group companies grant their employees post-employment benefits (pension plans, retirement bonuses, medical coverage, benefits in kind, etc.) as well as other long-term benefits, such as jubilee and other long-service awards.

18.1.1 Main pension plans

In France, employees have defined-contribution retirement plans, such as the basic social security benefits, and supplementary pension schemes. Some employees also have optional retirement plans, some of which are defined-benefit plans through which the employer agrees to pay its employees, or a category of its employees, retirement benefits based on a contractually agreed amount. Thus, the so-called "1991" and "1998" defined-benefit plans at SUEZ, SUEZ Groupe, SUEZ Eau France apply to those companies' senior executives.

At December 31, 2018, the Projected Benefit Obligation (PBO) for this senior executives' plan was EUR 100.0 million, *versus* EUR 103.4 million at December 31, 2017. The duration of the actuarial liability for the senior executives' plans is 22 years. It should be noted that these plans are partially funded (29% of gross debt at December 31, 2018).

All employees also receive a retirement termination benefit in the form of a lump-sum payment on the date of the employee's effective departure. Such indemnities correspond to defined-benefit plans.

Outside France, the main retirement plans and related benefits involve the companies in Canada, in the US and the UK.

In the United States, there are two defined benefit plans: the United Water Resources Inc. Retirement Plan, closed to new employees since January 2010, and the United Water Environmental Services Pension Plan for employees of the unregulated business sector. The latter was closed to non-unionized employees in December 2010. In addition, key executives have a specific retirement plan (SERP). At December 31, 2018, the PBO for the SUEZ Water Inc. defined-benefit pension plans was EUR 422.2 million, *versus* EUR 420.8 million at December 31, 2017. The duration of the actuarial liability for the SUEZ Water Inc. plans is 13 years. It should be noted that these plans are funded up to 75% at December 31, 2018.

In addition, SUEZ Water Inc. commits to support a portion of healthcare costs of retirees. The corresponding actuarial liability amounted to EUR 88.7 million against EUR 94.8 million at 31 December 2017.

The former GE Water entities joined SUEZ by bringing two defined benefit plans in Canada and in the United States: the Pension Plan for Employees of GE Water Canada and the Ionics, Incorporated Retirement Plan. In addition, key executives have a specific retirement plan (Ionics, Incorporated Supplemental Executive Retirement Plan). At December 31, 2018, the PBO for the SUEZ Water Technologies & Solutions defined-benefit pension plans was EUR 175.1 million. The duration of the actuarial liability for the SUEZ Water Technologies & Solutions Water plans is 14 years. These plans are funded up to 69% at December 31, 2018.

Finally, all US subsidiaries offer a 401 (k)-type defined-contribution plan to their employees.

In the United Kingdom, SUEZ R&R UK has several defined-benefit retirement plans, are closed to new hires, except for the Sita Final Salary Pension Scheme. SUEZ R&R UK, as part of its expansion, has acquired various entities throughout the United Kingdom. These entities were most often public companies prior to their acquisition, so their staff was affiliated with the Local Government Pension Schemes (LGPS), which Sita UK must maintain. At December 31, 2018, the PBO for the SUEZ R&R UK retirement plans was EUR 128.7 million, *versus* EUR 141.3 million at December 31, 2017. The duration of the actuarial liability for the SUEZ R&R UK plans is 18 years. It should be noted that these plans are funded up to 93% at December 31, 2018.

Employees hired after the closing date of these plans are covered by a defined-contribution plan, the Sita Stakeholder pension plan.

As mentioned above, defined-benefit plans may be fully or partially funded by contributions to a pension fund (as it is the case in Canada, the US and the UK) or to a dedicated fund managed by an insurance company (France). These funds are fed by contributions made by the Company and, in certain cases, by the employees.

18.1.2 Multi-employer pension plans

Employees of some Group companies are affiliated to multi-employer pension plans. This is especially the case in the Netherlands, where most of the Group's entities are in business activities that make it mandatory to join an industry-wide scheme. These plans spread risk so that financing is assured through payroll-based contributions, calculated uniformly across all affiliated companies. In the Netherlands, multi-employer plans are defined benefit plans. However, the Group recognizes them as defined contribution plans in accordance with IAS 19.

Total contributions of EUR 1.7 million are expected in 2019.

18.1.3 Other post-employment benefit obligations and long-term benefits

In addition to the supplementary pension schemes mentioned above, most Group companies grant their employees long-service awards – benefits corresponding to bonuses paid to employees while they are active, once they have met certain length of service conditions. Moreover, several Group companies agree to cover a portion of expenses incurred by their employees and/or retirees on the occurrence of specific events (illness, etc.), and in addition to amounts paid under defined contribution plans.

These obligations correspond to defined benefit plans. They are presented in the tables below, in "Other post-employment benefits" and "Other long-term benefits".

18.2 Defined benefit plans

18.2.1 Amounts presented in the statement of financial position and the statement of comprehensive income

In accordance with IAS 19, the information presented in the statement of financial position for post-employment and other long-term benefits corresponds to the difference between the present benefit obligation (gross liability) and the fair value of the plan assets. If this difference is positive, a provision is posted (net liability). If the difference is negative, a net asset is posted provided it satisfies the conditions for recognizing a net asset.

Changes in provisions and assets for pensions and related obligations recognized in the statement of financial position can be broken down as follows:

(in millions of euros)	Asset	Liability	Total
Balance at December 31, 2016	**4.3**	**(801.1)**	**(796.8)**
Translation gains and losses	0.6	28.9	29.5
Actuarial gains and losses [a]	1.0	7.0	8.0
Changes in scope of consolidation and other	–	(55.2)	(55.2)
Expense of the period [b]	(0.1)	(22.3)	(22.4)
Contributions	0.1	49.5	49.6
Balance at December 31, 2017 restated	**5.9**	**(793.2)**	**(787.3)**
Translation gains and losses	–	(4.3)	(4.3)
Actuarial gains and losses [a]	1.9	5.9	7.8
Changes in scope of consolidation and other	–	(35.3)	(35.3)
Expense of the period [b]	(0.9)	(51.3)	(52.2)
Contributions	0.6	73.1	73.7
Balance at December 31, 2018	**7.5**	**(805.1)**	**(797.7)**

(a) Actuarial gains and losses on employee benefits.
(b) Including actuarial gains and losses on long-term benefits (particularly long-service awards).

Plan assets and reimbursement rights are presented in the statement of financial position under "Other assets", current and non-current.

The expense for 2018 amounted to -EUR 52.2 million *versus* an expense of -EUR 22.4 million in 2017. The main components of this expense in 2018 are explained in section 18.2.3.

Accumulated actuarial gains and losses recognized in equity amounted -EUR 406.3 million at December 31, 2018, against -EUR 415.9 million at December 31, 2017. They are shown below, excluding translation gains and losses which are presented separately in the statement of comprehensive income.

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Opening balance	**(415.9)**	**(423.7)**
Actuarial gains and (losses) generated during the year [a]	7.8	8.0
Equity-accounted companies and other	1.8	(0.2)
Closing balance	**(406.3)**	**(415.9)**

(a) On employee benefits.

The closing balance of actuarial gains and losses presented above includes actuarial gains and losses recognized in equity-accounted affiliates.

18.2.2 Change in the amount of obligations and plan assets

The table below shows the amount of present benefit obligations and plan assets of the Group SUEZ, the changes to these over the periods concerned, as well as a reconciliation with the amounts recognized in the statement of financial position.

	December 31, 2018				December 31, 2017 restated			
(en millions d'euros)	Pension benefit obligations [a]	Other post-employment benefits [b]	Other long-term benefits [c]	Total	Pension benefit obligations [a]	Other post-employment benefits [b]	Other long-term benefits [c]	Total
Change in Projected Benefit Obligation								
Projected Benefit Obligation at the beginning of the period	**(1,326.3)**	**(249.3)**	**(14.4)**	**(1,590.0)**	**(1,209.3)**	**(262.2)**	**(23.2)**	**(1,494.7)**
Service cost	(48.7)	(5.8)	(1.4)	(55.9)	(34.2)	(6.2)	(1.8)	(42.2)
Interest cost	(34.1)	(7.2)	(0.2)	(41.5)	(29.6)	(7.5)	(0.2)	(37.3)
Contributions paid	(1.5)	–	–	(1.5)	(1.5)	–	–	(1.5)
Amendments	(3.3)	0.9	(1.7)	(4.1)	(0.6)	4.1	(1.2)	2.3
Acquisitions/Disposals of subsidiaries	(0.5)	–	0.3	(0.2)	(170.3)	(0.6)	–	(170.9)
Curtailments/settlements	26.6	2.5	0.5	29.6	20.3	4.9	1.6	26.8
Special terminations	–	–	–	–	0.3	(0.3)	–	–
Financial actuarial gains and losses	36.5	2.7	0.3	39.5	(5.8)	(5.4)	0.5	(10.7)
Demographic actuarial gains and losses	(10.6)	10.2	1.8	1.4	(4.0)	(0.7)	8.5	3.8
Benefits paid	50.0	8.9	1.2	60.1	38.3	8.8	0.7	47.8
Other	(47.2)	(5.6)	(2.8)	(55.6)	70.1	15.8	0.7	86.6
Projected Benefit Obligation at the end of period (A)	**(1,359.1)**	**(242.7)**	**(16.4)**	**(1,618.2)**	**(1,326.3)**	**(249.3)**	**(14.4)**	**(1,590.0)**
Change in fair value of plan assets								
Fair value of plan assets at the beginning of the period	**728.1**	**74.6**	**–**	**802.7**	**618.0**	**79.9**	**–**	**697.9**
Expected return on plan assets	19.2	2.8		22.0	17.8	3.1		20.9
Contributions received	64.2	5.4		69.6	44.1	5.2		49.3
Acquisitions/Disposals of subsidiaries	–	–		–	115.4	–		115.4
Curtailments/settlements	(4.3)	–		(4.3)	(1.9)	–		(1.9)
Actuarial gains and losses	(26.4)	(4.5)		(30.9)	18.6	5.3		23.9
Benefits paid	(45.6)	(8.9)		(54.5)	(37.2)	(8.8)		(46.0)
Other	12.3	3.6		15.9	(46.7)	(10.1)		(56.8)
Fair value of plan assets at the end of period (B)	**747.5**	**73.0**	**–**	**820.5**	**728.1**	**74.6**	**–**	**802.7**
Funded status (A+B)	**(611.6)**	**(169.7)**	**(16.4)**	**(797.7)**	**(598.2)**	**(174.7)**	**(14.4)**	**(787.3)**
Net benefit obligation	**(611.6)**	**(169.7)**	**(16.4)**	**(797.7)**	**(598.2)**	**(174.7)**	**(14.4)**	**(787.3)**
Total liabilities	**(619.0)**	**(169.7)**	**(16.4)**	**(805.1)**	**(604.1)**	**(174.7)**	**(14.4)**	**(793.2)**
Total assets	**7.5**	**–**	**–**	**7.5**	**5.9**	**–**	**–**	**5.9**

(a) Pensions and retirement bonuses.
(b) Medical coverage, gratuities and other post-employment benefits.
(c) Long-service awards and other long-term benefits.

In 2018, the increase of the net liability is explained by the rise of the expense which amounts -EUR 52 million and the increase of the contributions paid by the entities of the Group of around EUR 69 million.

In 2017, the decrease of the net liability was mainly attributable to contributions paid by entities of the Group of around -EUR 48 million and a foreign exchange effect of about -EUR 30 million. These were partially offset by the integration of GE Water which increased the commitment for about EUR 59 million.

18.2.3 Components of cost for the period

The net cost recognized in respect of pensions and other defined benefit obligations in 2018 and 2017 breaks down as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Current service cost	(55.9)	(42.2)
Net interest expense on the net defined benefit liability	(19.5)	(16.4)
Actuarial gains or losses	2.1	9.0
Past service cost	(4.1)	2.3
Gains or losses on pension plan curtailments, terminations and settlements	25.3	24.9
Special terminations	–	–
Total	**(52.2)**	**(22.4)**
of which recognized in current operating income	(32.7)	(6.0)
of which recognized in financial income/(loss)	(19.5)	(16.4)

18.2.4 Funding policy and strategy

When defined benefit plans are funded, the related plan assets are invested through pension funds and/or with insurance companies, depending on the investment practices specific to the country concerned. The investment strategies underlying these defined benefit plans are aimed at striking the right balance between an optimum return on investment and an acceptable level of risk.

These strategies have a twofold objective:

- to maintain sufficient income streams and liquidity to cover pensions and other benefit payments; and
- in a controlled-risk environment, to achieve a long-term return on investment matching the discount rate or, as applicable, at least equal to the future returns required.

When plan assets are invested through pension funds, investment decisions and the allocation of plan assets are the responsibility of the fund manager concerned. For French companies, where plan assets are invested through an insurance company, the fund manager manages the investment portfolio in units of account or euros, and guarantees a rate of return on the related assets. Such diversified funds are characterized by active management benchmarked to composite indices, adapted to the long-term horizon of the liabilities and taking into account the government's eurozone obligations and the shares of the largest companies in and outside the eurozone. In the case of euro funds, the insurer's sole obligation is to ensure a fixed minimum return on plan assets.

The funding of these obligations breaks down as follows:

(in millions of euros)	Present benefit obligation	Fair value of plan assets	Cost of unrecognized past service	Limit on defined benefit assets and supplementary provision	Total net obligation
Underfunded plans	(1,174.5)	778.7	–	–	(395.8)
Overfunded plans	(18.1)	24.0	–	–	5.9
Unfunded plans	(397.4)	–	–	–	(397.4)
Total December 31, 2017 restated	**(1,590.0)**	**802.7**	**–**	**–**	**(787.3)**
Underfunded plans	(1,141.0)	784.4	–	–	(356.6)
Overfunded plans	(28.7)	36.1	–	–	7.4
Unfunded plans	(448.5)	–	–	–	(448.5)
Total December 31, 2018	**(1,618.2)**	**820.5**	**–**	**–**	**(797.6)**

The allocation of plan assets by main asset category breaks down as follows:

	2018	2017
Securities	32%	36%
Bonds	39%	35%
Real Estate	3%	2%
Other (including money market securities)	26%	27%
Total	**100%**	**100%**

The allocation of plan assets by geographical area of investment is as follows:

	Europe	North America	Asia Oceania	Other
Securities	20%	42%	2%	18%
Bonds	66%	38%	85%	0%
Real Estate	2%	4%	0%	0%
Other (including money market securities)	12%	16%	13%	82%
Total	**100%**	**100%**	**100%**	**100%**

18.2.5 Actuarial assumptions

Actuarial assumptions are determined individually per country and company, in association with independent actuaries.

The weighted rates are presented below:

	Pensions		Other post-employment benefits		Long-term benefits		Total benefit obligation	
	2018	2017	2018	2017	2018	2017	2018	2017
Discount rate	2.8%	2.6%	3.2%	3.1%	2.1%	1.4%	2.9%	2.7%
Estimated future increase in salaries	2.7%	2.6%	2.4%	2.4%	2.2%	1.5%	2.7%	2.6%
Inflation rate	2.1%	2.0%	2.2%	2.2%	1.9%	1.8%	2.1%	2.0%
Average remaining working lives of participating employees	13 years	17 years	14 years	15 years	14 years	15 years	13 years	17 years

Discount and salary increase rates are shown including inflation.

18.2.5.1 Discount rate and inflation

The discount rate used is determined by reference to the yield, at the measurement date, of AA corporate bonds with a maturity corresponding to the anticipated term of the obligation.

As for December 31, 2017, the 2018 rates were determined for each currency area (euro, US dollar and pound sterling) from data on AA bond yields (according to Bloomberg and iBoxx) extrapolated to long-term maturities based on the performance of government bonds. A discount rate curve has been used per currency area and has been applied to debt and to the components of the current cost (Service Cost and Net Interest).

According to estimates made by the Group, a change of plus or minus 1% of the discount rate would result in a change in actuarial liabilities of approximately 15%.

Inflation rates were determined for each currency zone. A change in the inflation rate of roughly 1% would result in a change in the actuarial liability of 7%.

18.2.6 Geographical breakdown of obligations

In 2018, the geographical breakdown of the main obligations and the related actuarial assumptions (including inflation) were as follows:

	Euro Zone		United Kingdom		United States		Rest of the World	
(en millions d'euros)	Pensions	Other benefit obligations	Pensions	Other benefit obligations	Pensions	Other benefit obligations	Pensions	Other benefit obligations
Funded status [a]	(394.5)	(104.6)	(9.3)	0.0	(114.9)	(17.7)	(92.9)	(63.8)
Discount rate	1.6%	1.5%	2.7%	0.0%	4.3%	4.3%	3.3%	3.8%
Estimated future increase in salaries	1.8%	1.3%	4.1%	0.0%	3.3%	4.7%	3.4%	2.9%
Inflation rate	1.8%	1.8%	3.1%	0.0%	2.3%	2.5%	1.8%	2.3%
Average remaining working lives of participating employees	17 years	4 years	18 years	0	13 years	7 years	6 years	0

(a) Funded status corresponds to the difference between the present benefit obligation and the fair value of the plan assets.

Concerning "Rest of the world" category, the funded status relating to pension mainly concerns Sweden and Chile, while the funded status relating to the other benefit obligations stems largely from Morocco.

18.2.7 Payments due in 2019

The Group expects to contribute to defined benefit plans in 2019 and to pay benefits for a total approximate amount of EUR 52.1 million.

18.3 Defined contribution plans

In 2018, the Group SUEZ recorded a EUR 51.6 million expense in respect of contributions to Group defined contribution plans. These contributions are recorded under "Personnel costs" in the income statement.

Note 19 Finance lease

The net book value of property, plant and equipment assets under finance lease is broken down according to their nature and presented in property, plant and equipment assets.

At December 31, 2018, the main finance leases entered into by the Group concern SUEZ RV Energie's for incineration plants in France.

The reconciliation between the undiscounted value and the present value of minimum lease payments is as follows:

	Future minimum lease payments at December 31, 2018		Future minimum lease payments at December 31, 2017 restated	
(in millions of euros)	Undiscounted value	Present value	Undiscounted value	Present value
During year 1	36.3	35.3	76.6	76.0
During years 2 to 5 inclusive	37.6	32.5	66.5	59.8
Beyond year 5	29.8	19.7	20.3	13.9
Total future minimum lease payments [a]	**103.7**	**87.5**	**163.4**	**149.7**

(a) Including amortized cost.

The following table provides a reconciliation of maturities of liabilities under finance leases as reported in the statement of financial position (see Note 13.2.1) with undiscounted future minimum lease payments by maturity:

(in millions of euros)	Total	During year 1	During years 2 to 5 inclusive	Beyond year 5
Liabilities under financial lease [a]	87.5	35.3	32.5	19.7
Impact of discounting future repayments of principal and interest	16.2	1.0	5.1	10.1
Undiscounted future minimum lease payments	**103.7**	**36.3**	**37.6**	**29.8**

(a) Including amortized cost.

Note 20 Operating lease

20.1 Information on operating leases – SUEZ lessee

The Group's operating leases relate in particular to real estate, vehicle fleets, construction machinery and office and IT equipment.

The expenses recorded for operating leases in 2018 and 2017 are broken down as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Minimum lease payments	(474.7)	(425.9)
Contingent lease payments	(4.1)	(5.4)
Sub-letting income	–	0.5
Sub-letting expenses	(1.5)	(3.6)
Other operating lease expenses	(27.6)	(28.8)
Total	**(507.9)**	**(463.2)**

The future minimum lease payments under non-cancellable operating leases can be analyzed as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
During year 1	268.1	252.5
During years 2 to 5 inclusive	698.5	638.2
Beyond year 5	372.3	483.4
Total	**1,338.9**	**1,374.1**

20.2 Information on operating leases – SUEZ lessor

These contracts mainly concern desalination plants or mobile units of SUEZ WTS made available to customers.

In 2017, comparable data are not available.

Rental income for the 2018 financial year breaks down as follows:

(in millions of euros)	December 31, 2018
Minimum lease payments	83.3
Contingent lease payments	–

The future minimum payments receivable under non-cancellable operating leases are as follows:

(in millions of euros)	December 31, 2018
During year 1	38.7
During years 2 to 5 inclusive	108.9
Beyond year 5	113.3
Total	**260.9**

Note 21 Share-based payments or cash-based payments

Expenses recognized in respect of share-based payments or cash-based payments are as follows:

(in millions of euros)	Note	(Expense) for the period 2018	2017
Stock-option plans	21.1	–	–
Performance share plans	21.2	(0.9)	(0.1)
Worldwide financial incentive scheme	21.3	–	(0.1)
Employees share issues [a]	21.4	(2.4)	(1.2)
Long-term incentive plan [b]	21.5	(3.7)	5.0
Total		**(6.9)**	**3.6**

(a) Impact of Share Appreciation Rights is presented after hedging by warrants (subject to IFRS 9). Before hedging by warrants, the 2018 impact related to capital increases reserved for employees amounts to -EUR 0.6 million. In 2017 the impact was an expense of -EUR 2.7 million.
(b) The positive impact in 2017 was explained by the reversal of provision following 2014 plan delivery. The expenses related to the amount paid to the beneficiaries are booked in personnel costs (short term benefits). In 2018, this reversal of the provision following the delivery of the 2015 plan represents EUR 11.3 million.

21.1 Stock option plans

21.1.1 Arrangements and grants

Since 2010, no more stock options are granted. The plan issued in December 2010 expired on December 15, 2018. Arrangements relating to this plan are described in 2010 SUEZ Reference Document.

21.1.2 History of current plans in force

SUEZ stock option plans

Plan	Date of the authorizing Shareholders' Meeting	Starting point for exercise of the options	Adjusted Exercise price	Outstanding number of shares at 12/31/2017	Exercised	Granted	Cancelled or Expired	Outstanding number of shares at 12/31/2018	Expiration date	Residual life
12/16/2010	05/26/2009	12/16/2014	14.20	635,738	400		635,338	–	12/15/2018	–
Total				**635,738**	**400**	**–**	**635,338**	**–**		

The average share price for SUEZ in 2018 was EUR 12.19.

In 2018, as for 2017, no expense has been recorded in relation to the SUEZ stock option plans.

21.2 Performance share plans

21.2.1 Arrangements and grants

At its meeting of 25 July 2018, the Board of Directors, pursuant to the authorization of the General Meeting of 17 May 2018, granted two share-based compensation plans to certain of its employees in France and abroad:

- a free performance share allocation plan for France;
- a free allocation of performance units plan abroad.

At the end of the vesting period and subject to the conditions of these plans and the level of achievement of the performance conditions, the beneficiaries of the "Performance Shares" plan will receive SUEZ ordinary shares. With regard to the "Performance Units" plan, each vested Unit entitles the beneficiaries to receive in cash a gross amount equal to the average closing price of the SUEZ share over the 10 trading days preceding the vesting date.

The payment of remuneration is subject to the presence of the beneficiary in the company between the grant date and the vesting date.

The table below summarizes the main features of these two deferred compensation plans:

Specifications		Performance shares	Performance units
Number of beneficiaries	*Beneficiaries A*	324	235
	Beneficiaries B	479	536
Number of instruments granted	*Beneficiaries A*	581,585	365,855
	Beneficiaries B	138,200	152,000
Date of allocation		07/25/2018	07/25/2018
Date of acquisition		09/30/2021	10/31/2021

21.2.2 Internal performance conditions

These two plans are subject to internal performance conditions. If the performance targets are not fully met, the number of shares granted to employees is reduced in accordance with the plan rules. Any such change in the number of shares leads to a reduction in the total expense of the plan, in accordance with IFRS 2. Performance conditions are reviewed at each year-end.

Based on the lists of beneficiaries, beneficiaries A and beneficiaries B, the performance conditions are as follows:

- Beneficiaries A (559 beneficiaries):
  - members of the Executive Committee: two performance conditions apply cumulatively to 100% of total compensation:
    - cumulative EBIT level for the period from 1 January 2018 to 31 December 2020,
    - evolution of SUEZ's Total Shareholder Return over the period from January 1, 2018 to December 31, 2020 compared to the evolution of the Total Shareholder Return of the Euro Stoxx Utilities Index over the same period;
  - Top Executives:
    - a first performance condition (cumulative EBIT level over the period from 1 January 2018 to 31 December 2020) applies to 100% of the total remuneration that may be paid,
    - a second performance condition (Evolution of SUEZ's Total Shareholder Return over the period from January 1, 2018 to December 31, 2020 compared to the evolution of the Total Shareholder Return of the Euro Stoxx Utilities Index over the same period), which is cumulative with the first condition, applies to 50% of the total remuneration that may be paid;
  - other beneficiaries: a performance condition (cumulative EBIT level for the period from 1 January 2018 to 31 December 2020) applies to 100% of the total remuneration that may be paid.

Finally, for all beneficiaries A, the amount of the payment as resulting from the application of the performance conditions may be increased or decreased by 10% depending on the level of the gender parity index in the management (GPI) at 31 December 2020.

According to the social indicator framework deployed within the SUEZ Group as part of the social reporting process, the SUEZ GPI corresponds to the following ratio: number of female executives/total number of executives.

- Beneficiaries B (1,015 beneficiaries): a performance condition linked to the cumulative EBIT level over the period from January 1, 2018 to 31 December 2020 applies to 100% of the total remuneration that may be paid.

The EBIT level is calculated for all beneficiaries, excluding the material impacts of any changes in accounting and tax standards.

21.2.3 Retained assumptions

The fair value of the plans is estimated on the basis of the share price at the grant date, taking into account the following assumptions:

Assumptions	Performance shares	Performance units
Date of allocation	07/25/2018	07/25/2018
Underlying share price on the allocation date	EUR 11.86	EUR 11.86
SUEZ volatility	21.87%	18.05%
Euro volatility STOXX Utilities	16.40%	14.26%
Anticipated dividends from SUEZ	EUR 0.65	EUR 0.65
Anticipated dividends from Euro Stoxx Utilities	EUR 11.46	EUR 13.85
Risk-free rate	1 year: -0.52%	1 year: -0.48%
	2 years: -0.43%	2 years: -0.39%
	3 years: -0.29%	3 years: -0.26%
	4 years: -0.14%	4 years: -0.11%
Employee turnover rate	5%/year	5%/year
Probability of meeting internal performance conditions	100%	100%

The external performance condition was valued using the Monte Carlo method.

The fair value of the performance shares granted in this way results in a total expense of EUR 4.0 million and the fair value of the performance units in an expense of EUR 3.9 million over the term of the plans.

21.2.4 Accounting expenses

	Number of shares granted	Outstanding number of shares at 12/31/2018	Weighted average fair value	(Expense) for the period 2018	2017
March 2013		–		–	(0.1)
July 2018 – Performance shares plan	719,785	719,785	EUR 6.3	(0.5)	–
July 2018 – Performance units plan	517,855	517,855	EUR 8.8	(0.4)	–
Total	**1,237,640**	**1,237,640**		**(0.9)**	**(0.1)**

The cost of the plans is spread over the vesting period with a corresponding charge to shareholders' equity.

21.3 Worldwide incentive scheme

The last global free share allocation plan, issued in January 2013, expired in January 2017. A charge of -EUR 0.1 million was booked in 2017 for this plan.

21.4 Employee share issues

The expense recorded during the period on current plans is as follows:

(in millions of euros)			(Expense) for the period 2018	2017
SUEZ Sharing 2017 plan	Share issue and matching shares in France and SIP	December 2017		(2.5)
SUEZ Sharing 2017 plan	Matching shares – International	December 2017	(0.3)	–
SUEZ Sharing 2017 plan	*Share Appreciation Rights*	December 2017	(1.2)	1.8
SUEZ Sharing 2014 plan	Matching shares – International	July 2014	(0.2)	(0.2)
SUEZ Sharing 2014 plan	*Share Appreciation Rights*	July 2014	(0.6)	(0.3)
Total [a]			**(2.4)**	**(1.2)**

(a) Impact of Share Appreciation Rights is presented after hedging by warrants (subject to IFRS 9). Before hedging by warrants, the expense of the year 2018 related to employee share issue amounts to -EUR 0.6 million. In 2017 the impact was -EUR 2.7 million.

There was no capital increase reserved for employees in 2018. The only impacts on 2018 income statement related to the capital increase plans reserved for employees are the Share Appreciation Rights and the amortization of the international contribution of the Sharing 2017 and Sharing 2014 plans.

The measures relating to the Sharing 2017 and 2014 Plans are described in detail in SUEZ's previous Reference Documents.

21.5 Long-term incentive plan

In 2018, the Group set up two three-year long-term incentive plans linked to the integration and performance of the SUEZ Water Technologies & Solutions (SWTS) business unit for a total allocation of EUR 18.6 million, covering 72 beneficiaries.

- **Plan 1 (68 beneficiaries):**

The performance conditions are based on financial indicators from SWTS' business plan and relate to indicators of organic revenue growth, EBITDA and operating cash flow. Payments are linked to the rate of achievement of performance conditions.

- **Plan 2 (4 beneficiaries):**

The performance conditions are based on financial indicators from WTS' business plan and relate to organic growth, EBITDA and operating cash flow indicators and qualitative indicators related to the integration of SWTS. Payments are based on the rate of achievement of performance conditions.

In addition, there are two SUEZ plans in progress as of December 31, 2018: the first was set up by the Board of Directors on February 28, 2017 and the second by the Board of Directors on February 23, 2016.

During the 2018 financial year, all outstanding long-term compensation plans generated a net expense of EUR 3.7 million (also taking into account the provisioning of social security contributions). This charge includes the reversal of the provision for the 2015 plan, delivered in 2018, whose conditions were met between 46.8% and 54% depending on the category of beneficiaries. The actual expense of EUR 6.3 million was recognized in personnel expenses.

Note 22 Related-party transactions

The purpose of this Note is to present material transactions between the Group and its related parties as defined by IAS 24.

Compensation for key executives is disclosed under Note 23 "Executive compensation". The main subsidiaries (fully consolidated companies) are listed under Note 26 "List of the main consolidated companies at December 31, 2018 and 2017". Only material transactions are described below.

22.1 Transactions with ENGIE and related entities

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Transactions with ENGIE		
Purchases/sales of goods and services	0.5	3.0
Non financial payables	7.1	7.4
Non financial receivables	0.2	0.3
Receivables carried at amortized cost [a]	14.0	14.8
Transactions with companies linked to ENGIE		
Purchases/sales of goods and services	12.8	2.7
Financial incomes	0.5	–
Non financial receivables	23.7	23.2
Non financial payables	0.4	0.7
Financial payables	0.8	–
Borrowings excluding financial instruments	0.7	0.7
Commodity derivatives (Liabilities)	(0.7)	(0.2)

(a) See Note 2.2.1 of the chapter 20 of the 2009 SUEZ Reference Document – Synthetic Argentinean contract.

22.2 Transactions with joint operations, joint ventures and associates

As at December 31, 2018, the net total amount of loans granted to joint ventures and associates entities was EUR 126 million. The main lines are:

- EUR 38 million with joint ventures in water business in Europe;
- EUR 48 million with associates in charge of the commissioning and operation of incinerators in the United Kingdom;
- furthermore, EUR 13 million with a joint venture in Kuwait for the maintenance contract of a water treatment plant.

Note 23 Executive compensation

The Group's Management Committee is composed of eleven members at December 31, 2018. At December 31, 2017, there were nine members in the Management Committee.

Their compensation breaks down as follows:

(in millions of euros)	December 31, 2018	December 31, 2017 restated
Short-term benefits	9.3	8.6
Post-employment benefits [a]	1.6	1.3
Long-term incentive plans [b]	2.3	0.3
Total	**13.2**	**10.2**

(a) Post-employment benefits relate to the SUEZ Group plans only.
(b) Long-term incentive plans: included performance share plans set up in 2018.

Note 24 Legal and arbitration proceedings

Litigation and arbitration

In the normal course of its business, the Group is involved in a certain number of litigation and arbitration with third parties or with the tax administrations of certain countries. Provisions are recorded for such litigation and arbitration when (i) a legal, contractual or constructive obligation exists at the closing date with respect to a third party; (ii) it is probable that an outflow of resources without economic benefits will be necessary to settle the obligation; and (iii) the amount of the said outflow of resources can be estimated in a sufficiently reliable manner. Provisions recorded in respect of the above amounted to EUR 79.9 million as of December 31, 2018 (excluding litigation in Argentina).

There is no other governmental, judicial, or arbitration proceedings of which the Group is aware of, that is suspended or with which it is threatened, likely to have or that has already had, in the past six months, a material impact on the Group's financial position or profitability.

Litigation in Argentina

In Argentina, tariffs applicable to public-service contracts were frozen by the Public Emergency and Exchange Regime Reform Law (Emergency Act) in January 2002, preventing the application of contractual price indexation that would apply in the event of a depreciation of the Argentine peso against the US dollar.

In 2003, SUEZ – now ENGIE – and its co-shareholders in the water concessions for Buenos Aires and Santa Fe filed arbitration proceedings against the Argentinean government, in its capacity as grantor, to enforce the concession agreements' contractual clauses with the International Center for the Settlement of Investment Disputes (ICSID), in accordance with the bilateral Franco-Argentinean investment protection treaties.

These ICSID arbitration proceedings aim at obtaining indemnities to compensate for the loss of value of the investments made since the start of the concession due to the measures adopted by the Argentinean government following the adoption of the abovementioned Emergency Act. The ICSID acknowledged its jurisdiction to rule on the two cases in 2006. At the same time as the ICSID proceedings, the concession-holders Aguas Argentinas and Aguas Provinciales de Santa Fe were forced to file proceedings to cancel their concession agreement with local governments.

However, since the financial situation of the concession-holding companies had deteriorated since the Emergency Act, Aguas Provinciales de Santa Fe announced that it was filing for judicial liquidation at its Shareholders' Meeting on January 13, 2006.

At the same time, Aguas Argentinas applied to file a Concurso Preventivo (similar to a French bankruptcy procedure). As part of these bankruptcy proceedings, a settlement proposal involving the novation of admissible Aguas Argentinas liabilities was approved by creditors and ratified by the bankruptcy court on April 11, 2008. The liabilities are in the process of being settled. The proposal provides for an initial payment of 20% (about USD 40 million) upon ratification and a second payment of 20% in the event of compensation by the Argentinean government. As controlling shareholders, ENGIE and Agbar decided to financially support Aguas Argentinas in making this first payment, upon ratification, and paid USD 6.1 million and USD 3.8 million respectively.

In two decisions dated July 30, 2010, the ICSID recognized the Argentine government's liability in canceling the Buenos Aires and Santa Fe water and wastewater treatment concession contracts. In addition, in June 2011 the ICSID appointed an expert to provide a definitive assessment of the compensation payable for the commercial harm. The reports on the Buenos Aires and Santa Fe concessions were presented by the expert to the ICSID respectively in September 2013 and in April 2014.

Regarding the Buenos Aires concession, ICSID rendered its decision on April 9, 2015 ordering the Argentine Republic to pay Aguas Argentinas shareholders USD 405 million in damages (including USD 367 million to SUEZ and its subsidiaries). In early August 2015, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. The appeal was rejected on May 2017 making ICSID's decision final.

Concerning the Santa Fe concession, in a December 4, 2015 decision, ICSID ordered the Argentine Republic to pay USD 225 million to the shareholders of Aguas Provinciales de Santa Fe as a result of the termination of the concession agreement, and the entire amount was to go to SUEZ and its subsidiaries. In September 2016, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. This recourse was rejected on December, 2018 making this decision irrevocable.

The Group considers that the provisions recorded in the financial statements relating to this litigation are appropriate.

Note 25 Subsequent events

There is no significant subsequent event.

Note 26 List of the main consolidated companies at December 31, 2018 and 2017

Entities presented in the list below cover 80% of the following indicators: Revenues, EBITDA, Net Debt and capital employed.

		% interest		% control		Consolidation methods [a]	
Names	Headquarters address	Dec. 2018	Dec. 2017	Dec. 2018	Dec. 2017	Dec. 2018	Dec. 2017
SUEZ	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
WATER EUROPE							
SUEZ Eau France	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
SUEZ Spain	Edificio D38 – PasseFC Zona Franca 08038 Barcelona – Espagne	100.0	100.0	100.0	100.0	FC	FC
AGUAS ANDINAS	Avenida Presidente Balmaceda 1398, Piso 4, Santiago – Chile	25.1	28.4	50.1	50.1	FC	FC
RECYCLING AND RECOVERY EUROPE							
SUEZ Recycling and Recovery Holdings UK Ltd	Grenfell road, Maidenhead, Berkshire SL6,1ES – United Kingdom	100.0	100.0	100.0	100.0	FC	FC
SUEZ Recycling & Recovery Deutschland GmbH	Industriestrasse 161 D-50999 Köln – Germany	100.0	100.0	100.0	100.0	FC	FC
SUEZ Nederland Holding B.V.	EMster E.N. van Kleffensstraat 10, 6842 CV Arnhem – Netherlands	100.0	100.0	100.0	100.0	FC	FC
SUEZ RV France	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
SUEZ R&R Belgium N.V.	Avenue Charles-Quint 584,7 1082 Berchem, Sainte-Agathe – Belgium	100.0	100.0	100.0	100.0	FC	FC
SOCALUX	Lamesch SA ZI Wolser Nord BP 75 L3201 Bettembourg, Luxembourg	100.0	100.0	100.0	100.0	FC	FC
SUEZ Recycling AB	Kungsgardsleden, 26271 Angelholm – Sweden	100.0	100.0	100.0	100.0	FC	FC
INTERNATIONAL							
SUEZ Recycling & Recovery Pty Ltd	Level 3, 3 Rider Boulevard 2138 Rhodes, NSW – Australia	100.0	100.0	100.0	100.0	FC	FC
ACEA Spa	p.le Ostiense, 2 - 00154 Roma – Italy	23.3	23.3	23.3	23.3	EM	EM
AQUASURE HOLDING Ltd	492 St Kilda Road – level 7 Melbourne, VIC 3004 – Australia	11.7	11.7	11.7	11.7	EM	EM
SUEZ Water Inc.	461 From Road Suite 400, Paramus 07652 New Jersey United States of America	100.0	100.0	100.0	100.0	FC	FC
SUEZ North America Inc	461 From Road Suite 400, Paramus 07652 New Jersey United States of America	100.0	100.0	100.0	100.0	FC	FC

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Names	Headquarters address	% interest Dec. 2018	% interest Dec. 2017	% control Dec. 2018	% control Dec. 2017	Consolidation methods [a] Dec. 2018	Consolidation methods [a] Dec. 2017
INTERNATIONAL							
SUEZ Water Advanced Solutions, LLC	1230 Peachtree Street NE, Suite 1100, Promenade II Building, Atlanta, GA 30309 – United States of America	100.0	100.0	100.0	100.0	FC	FC
The Macao Water Supply Company Limited	718 avenida do Conselheiro, Macao – China	49.3	49.3	58.0	58.0	FC	FC
Sita Waste Services Ltd.	Room 702, 7/F, Lee Garden Two, 28 Yun Ping Road, Causeway Bay, Hong Kong	58.0	58.0	58.0	58.0	FC	FC
SUEZ Polska sp. z o.o.	Zawodzie 5, 02-981 Warszawa – Poland	100.0	100.0	100.0	100.0	FC	FC
LYDEC	48, Boulevard Mohamed Diouri, Casablanca – Morocco	51.0	51.0	51.0	51.0	FC	FC
SUEZ International	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
WATER TECHNOLOGIES & SOLUTIONS – WTS							
SUEZ Treatment Solutions Inc	461 From Rd Ste 400 Paramus, NJ, 07652-3526 United States of America	70.0	70.0	70.0	70.0	FC	FC
SUEZ Water Technologies & Solutions	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	70.0	70.0	70.0	70.0	FC	FC
OTHER							
SUEZ Groupe	Tour CB21, 16 Place de l'Iris, 92040 Paris-La Défense Cedex – France	100.0	100.0	100.0	100.0	FC	FC
Safège	15, rue du Port, 92022 Nanterre – France	100.0	100.0	100.0	100.0	FC	FC

(a) FC: Full consolidation. EM: Equity method of consolidation.

Note 27 Fees of the Statutory Auditors and members of their networks

The accounting firms Ernst & Young and Mazars act as Statutory Auditors for the SUEZ Group.

	Ernst & Young								Mazars							
	2018				2017				2018				2017			
	Ernst & Young and Others		Network		Ernst & Young and Others		Network		Mazars SA		Network		Mazars SA		Network	
(in thousands of euros)	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%	Amount	%
Audit and limited review on the statutory and Consolidated Financial Statements																
SUEZ SA	743	19%	–	–	736	18%	–	–	681	15%	–	–	611	14%	–	–
Fully consolidated subsidiaries and joint operations	2,573	68%	4,720	84%	2,426	61%	4,684	83%	3,669	79%	2,501	94%	3,332	74%	2,459	95%
Other services																
SUEZ SA	118	3%	–	–	184	5%	–	–	69	1%	90	3%	154	3%	88	4%
Fully consolidated subsidiaries and joint operations	381	10%	893	16%	662	17%	991	17%	227	5%	88	3%	377	9%	28	1%
Total	**3,815**	**100%**	**5,613**	**100%**	**4,008**	**100%**	**5,675**	**100%**	**4,646**	**100%**	**2,679**	**100%**	**4,474**	**100%**	**2,575**	**100%**

Other services than account certification providing during the year to SUEZ SA and its controlled entities include primarily the review of GE Water purchase price allocation and verifications of CSR information.

20.2 Statutory Auditors' Report on the Consolidated Financial Statements

This is a translation into English of the Statutory Auditors' Report on the Consolidated Financial Statements of the Company issued in French and it is provided solely for the convenience of English-speaking users.

This Statutory Auditors' Report includes information required by European Regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the information concerning the Group presented in the Management Report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of SUEZ,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meetings, we have audited the accompanying Consolidated Financial Statements of SUEZ for the year ended December 31, 2018.

In our opinion, the Consolidated Financial Statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2018 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2018 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No. 537/2014 or in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

Emphasis of Matter

We draw attention to the matter described in Notes 1.2.4.1, 1.2.4.3 and 1.2.4.4 to the Consolidated Financial Statements relating to the first-time application of IFRS 15 "Revenue from Contracts with Customers" and IFRS 9 "Financial Instruments" standards starting January 1, 2018.

Justification of Assessments – Key Audit Matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the Consolidated Financial Statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the Consolidated Financial Statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the Consolidated Financial Statements.

Purchase price allocation related to GE Water

RISK IDENTIFIED

On September 29, 2017, SUEZ finalized the acquisition of GE Water from General Electric Company. The cash transaction included a final purchase price of EUR 2,886 million In accordance with IFRS 3 revised, the purchase price allocation was completed within twelve months of the acquisition date; based on the estimations related to the determination of the fair value of acquired assets and liabilities, the residual Goodwill amounts to EUR 1,753 million at the transaction date SUEZ engaged an independent advisor to assist in evaluating the main intangible assets and other assets and liabilities of the GE Water Group. The natures and amounts are described in Note 2.1 to the Consolidated Financial Statements. We considered the price purchase allocation to be a key audit matter as this is a significant transaction which requires significant management estimations and judgements regarding the identification and the determination of the fair value of the acquired assets and assumed liabilities.

OUR RESPONSE

We got acquainted with the scope and the extent of the work performed by the SUEZ Group and its independent advisor to identify and determine the fair value of the acquired assets and assumed liabilities. Through the expertise of our valuation specialists, we conducted:

- an analysis of the methodology used by the Group to evaluate the main acquired assets and assumed liabilities of GE Water;
- an examination of the key judgments and assumptions, particularly in the valuation models of intangible assets in relation to the industry practices and the geographical area concerned;
- an analysis of the evidences supporting the existence and the estimation of the main possible assumed liabilities. Finally, we assessed the content of the disclosures in the Notes to the Consolidated Financial Statements regarding this purchase price allocation.

Valuation of goodwill

RISK IDENTIFIED

As at December 31, 2018, the amount of goodwill net value is EUR 5,223.8 million. As indicated in Note 1.5.4.1 to the Consolidated Financial Statements, goodwill is not depreciated but goodwill impairment loss is tested every year, or more frequently when an indication of impairment loss is identified. The methods used to carry out these impairment tests are described in Notes 1.5.6 and 9 to the Consolidated Financial Statements.

Impairment tests require the use of assumptions and estimates whose completion is by nature uncertain, including:

- the projections of the operating cash flows;
- the terminal value determined by applying a long-term growth rate to after-tax cash flows;
- the discount rates based on the characteristics of the concerned operational entities.

The recoverable amount of goodwill is sensible to the fluctuation of these assumptions and estimates. Consequently, we considered the valuation of goodwill as a key audit matter.

OUR RESPONSE

In this context, we performed the verification of the methods applied to carry out these impairment tests and we focused on the significant cash-generating units (CGU) indicated in Note 9.2 to the Consolidated Financial Statements. We reconciled the data used for impairment tests with the medium-term plan (MTP) approved by the Board of Directors. We considered the following underlying assumptions: the projections of operating cash flows prepared over the duration of the MTP and related to operating conditions provided by the Management Committee, specifically the contracts duration carried by the entities of the CGU in question, changes in pricing regulations and future market outlooks; the terminal value for the period over the MTP, calculated by applying a long-term growth rate, comprised between 2% and 3%, depending on the activity, to normalized "free cash flow" in the final year of the projections. We involved in our audit team experts in valuation and performed the verification of discount rates, long-term growth rates and the discount cash flow method to calculate the projections of operating cash flows. Furthermore, we obtained and considered the sensitivity of the analyses conducted by the Group's management, whose results are indicated in Note 9.4 to the Consolidated Financial Statements.

Recoverability of deferred tax assets related to tax loss carry-forwards in the French tax consolidation group

RISK IDENTIFIED

As at December 31, 2018, the deferred tax assets related to tax loss carry-forwards in the statement of the financial position amount to EUR 266 million, including EUR 131 million for the French tax consolidation group. As disclosed in Note 1.4.1.9 to the Consolidated Financial Statements, deferred tax assets are carried on tax loss carry-forwards when it is probable that the future taxable profit will be available to the Group against which the tax loss carry-forwards can be utilized. The likelihood of future taxable profits is estimated by taking into account the existence of temporary taxable differences from the same tax entity and is passed on to the same deadlines towards the tax authority as well as the estimates of future taxable profits. The estimates of taxable profits and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts as included in the medium-term plan (MTP) and, if necessary, on the basis of additional forecasts. The recoverability of deferred tax assets related to tax loss carry-forwards relies in particular on the ability of the French tax consolidation group to achieve these projections of future taxable profits. We thus considered the valuation of these assets as a key audit matter by taking into consideration the inherent uncertainty of the recoverability of deferred tax assets, as at December 31, 2018, related to tax loss carry-forwards in the French tax consolidation group and the management's judgement in this respect. The recoverability of capitalized losses relies in particular on the ability to achieve objectives set out in the budget for the following year and in the MTP for the next four years.

OUR RESPONSE

Our audit approach consisted in analyzing the ability of the French tax consolidation group to use, within a reasonable timescale, the tax loss carry-forwards generated and recognized as deferred tax assets as at December 31, 2018, in particular with regard to the ability to make, on the tax consolidation Group that originated these losses, sufficient future taxable profits. We thus preformed the verification of the methodology chosen by Management to estimate tax-loss carry-forwards that will be utilized by taxable profits.

We analyzed the process of making future taxable profits by:

- considering the setting-up procedure of the MTP that served as a basis for the estimates;
- comparing the taxable income projections with the actual taxable income for the year ended December 31, 2018;
- considering the MTP tax to assess the likelihood of the assumptions underlying the future taxable income forecasts in France;
- comparing the future tax rates applied with the rates applicable under French tax legislation.

We included in our audit team tax specialists who analyzed the tax projections.

Valuation of revenues from water distribution, generated but not metered in the Water Europe operating segment (called *"en compteur"*)

RISK IDENTIFIED

As disclosed in Note 1.4.1.7 to the Consolidated Financial Statements, revenues generated from customers whose consumption is metered during the accounting period are estimated at the reporting date based on historical data, consumption statistics and estimated selling prices. The Group has developed measuring and modelling tools that enable to estimate revenues. We considered measurement of revenues from water distribution, generated but not metered as a key audit matter given the inherent uncertainty relating to the process of evaluating volumes of water distributed but not metered at the reporting date and the evaluation of the corresponding sale price.

OUR RESPONSE

In the context of our audit:

- we got acquainted with the control environment along with the invoicing chain and processes allowing the reliability of estimates on water metered;
- we tested with our information systems experts the key automated controls used to estimate water metered, and we audited the functioning of the computing algorithm;
- we analyzed the reconciliation between estimated volumes made by SUEZ of water consumed and volumes of water distributed over the period;
- we verified the calculation of the price charged for these volumes in relation to contract terms;
- we analyzed the reconciliation made by the Group between estimated volumes and invoiced volumes retrospectively.

Construction contracts accounting

RISK IDENTIFIED

As disclosed in Notes 1.4.1.8 and 1.5.13.3 to the Consolidated Financial Statements, the Group carries out part of their business activities through construction contracts for which revenues and margin are accounted for using the percentage of completion method. For each project, this stage of completion is determined by bringing the costs incurred as at December 31, 2018 to the total estimated costs of the contract. This method aims at keeping the level of expenses incurred and recognize the margin based only on accounted revenues. The determination of revenues and margin relating to construction contracts depends on data at completion forecasted by operational and financial managers. These estimates are reviewed on a quarterly basis or more frequently in the event of any major development as the projects evolve. When the total contract costs may exceed total contract revenues, the expected loss at termination is recognized as an expense immediately. We considered the accounting of revenues relating to construction contracts as a key audit matter given the estimative nature of this process.

OUR RESPONSE

In the context of our work, the procedures set up in the significant subsidiaries in terms of contribution to revenues of construction contracts consisted of:

- testing key controls related to project management process;
- recomputing revenues using the percentage of completion method;
- performing the necessary reconciliations between management reporting data (revenues, costs and margin) and accounting records;
- performing the work program detailed below on a sample of contracts.

We thus analyzed a sample of contracts selected on the basis of the following criteria:

- significant margin contribution for the year; significant fluctuation of data at termination during the period;
- contracts presenting specific significant risks (technical, contractual, geopolitical, etc.).

For each of the contracts selected, our work consisted in:

- meeting with operational and financial managers of the considered contract *(revue d'affaire)* to take note of the operational situation of the project (examination of the significant events during the period, risks assessment, analysis of costs to be committed to complete the project);
- performing reconciliations between costs at termination analyzed during our *revue d'affaire* and costs at termination used for the calculation of the percentage of completion;
- comparing the amounts outlined in the contracts and/or contract amendments to revenues at termination used to determine the revenues to be recorded for the year ended December 31, 2018.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the information pertaining to the Group presented in the Board of Directors' Management Report.

We have no matters to report as to its fair presentation and its consistency with the Consolidated Financial Statements.

We attest that the consolidated non-financial statement provided for by Article L. 225-102-1 of the French Commercial Code *(Code de commerce)* is included in the information pertaining to the Group presented in the Management Report, it being specified that, in accordance with the provisions of Article L. 823-10 of said Code, we have verified neither the fair presentation nor the consistency with the Consolidated Financial Statements of the information contained in this statement which has to be subject to a report by an independent third party.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as Statutory Auditors of SUEZ by your Annual General Meeting held on July 15, 2008 for MAZARS and on December 21, 2007 for ERNST & YOUNG et Autres.

As at December 31, 2018, MAZARS and ERNST & YOUNG et Autres were in the eleventh year and twelfth year of total uninterrupted engagement, which is the eleventh year since securities of the Company were admitted to trading on a regulated market.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the Consolidated Financial Statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of Consolidated Financial Statements that are free from material misstatement, whether due to fraud or error.

In preparing the Consolidated Financial Statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The Consolidated Financial Statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements

Objectives and audit approach

Our role is to issue a report on the Consolidated Financial Statements. Our objective is to obtain reasonable assurance about whether the Consolidated Financial Statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these Consolidated Financial Statements.

As specified in Article L. 823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the Consolidated Financial Statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;

- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the Consolidated Financial Statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the Consolidated Financial Statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the Consolidated Financial Statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation;
- obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the Consolidated Financial Statements. The statutory auditor is responsible for the direction, supervision and performance of the audit of the Consolidated Financial Statements and for the opinion expressed on these Consolidated Financial Statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the Consolidated Financial Statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Courbevoie and Paris-La Défense, February 26, 2019

The Statutory Auditors
French original signed by

MAZARS		ERNST & YOUNG ET AUTRES	
Achour Messas	Dominique Muller	Jean-Pierre Letartre	Stéphane Pédron

20.3 Parent Company financial statements

20.3.1 Balance sheet assets

(in thousands of euros)		Reference in Notes	December 31, 2018 Gross	December 31, 2018 Amortization and depreciation	December 31, 2018 Net	December 31, 2017 Net
Non-current assets						
Intangible assets		Note 1	**30,817.7**	**(813.0)**	**30,004.7**	**30,004.7**
Property, plant and equipment		Note 1	**15.6**	**(3.9)**	**11.7**	**22.2**
Equity interests		Note 1	9,160,781.2	–	9,160,781.2	6,460,781.2
Receivables related to equity interests		Note 2	7,778,750.2	–	7,778,750.2	7,280,143.7
Other financial assets		Note 2	29,261.7	(29.5)	29,232.2	26,724.0
Financial assets		Note 1	**16,968,793.1**	**(29.5)**	**16,968,763.6**	**13,767,648.9**
Non-current assets	I		**16,999,626.4**	**(846.4)**	**16,998,780.0**	**13,797,675.8**
Current assets						
Advances and down payments on orders		Note 2	**26.6**	**–**	**26.6**	**19.0**
Trade and related receivables		Note 2	40,814.6	(4,416.4)	36,398.2	96,386.5
Other receivables		Note 2	101,235.7	–	101,235.7	72,396.9
SUEZ Groupe current account		Note 2	765,879.6	–	765,879.6	3,270,485.9
Accrued income from cash instruments		Note 2	39,850.1	–	39,850.1	35,999.4
Receivables			**947,780.1**	**(4,416.4)**	**943,363.6**	**3,475,268.7**
Cash and cash equivalents			807,741.6	–	807,741.6	808,372.7
Marketable securities		Note 3	51,820.4	(8,941.4)	42,879.0	106,718.7
Cash, cash equivalents & short-term securities			**859,562.0**	**(8,941.4)**	**850,620.6**	**915,091.4**
Deferred income		Note 4	**51,849.4**	**–**	**51,849.4**	**51,047.1**
Bond redemption premiums			**44,509.1**	**–**	**44,509.1**	**48,136.4**
Current assets	II		**1,903,727.1**	**(13,357.8)**	**1,890,369.3**	**4,489,562.6**
Foreign exchange gains/losses	III	Note 9	**11,539.5**	**–**	**11,539.5**	**9,050.8**
Total assets	(I+II+III)		**18,914,893.1**	**(14,204.2)**	**18,900,688.9**	**18,296,289.2**

20.3.2 Balance sheet liabilities

(in thousands of euros)		Reference in Notes	December 31, 2018	December 31, 2017
Shareholders' equity				
Share capital			2,485,450.3	2,493,450.3
Additional paid-in capital			5,215,174.8	5,236,416.9
Legal reserve			248,545.0	249,345.0
Retained earnings			86,764.8	95,992.7
Net income for the year			386,840.8	392,692.9
Shareholders' equity	I	Note 5	**8,422,775.7**	**8,467,897.8**
Provisions for contingencies and losses				
Provisions for contingencies			11,786.4	10,729.4
Provisions for losses			123,019.5	102,671.3
Provisions for contingencies and losses	II	Note 6	**134,805.9**	**113,400.7**
Debt & payables				
Bonds issues			7,824,103.8	7,424,391.4
Bank borrowings			641,834.1	400,000.0
Deeply subordinated notes			1,629,522.6	1,629,522.6
Participating bonds			100.0	–
Current accounts and borrowings from subsidiaries			145,079.6	154,918.3
Financial debt		Notes 7 & 8	**10,240,640.1**	**9,608,832.3**
Trade and related payables			13,616.1	17,523.2
Tax and employee-related debt			20,214.7	14,540.0
Debt on fixed assets and related accounts			11.1	11.9
Accrued expenses on cash instruments			5,264.7	5,081.8
Other liabilities			33,830.1	37,306.3
Operating payables		Note 8	**72,936.7**	**74,463.2**
Debt & payables	III		**10,313,576.8**	**9,683,295.5**
Deferred income	IV	Note 4	**18,376.6**	**22,835.6**
Foreign exchange gains/losses	V	Note 9	**11,153.8**	**8,859.6**
Total liabilities	(I+II+III+IV+V)		**18,900,688.9**	**18,296,289.2**

20.3.3 Income statement

(in thousands of euros)		Reference in Notes	December 31, 2018	December 31, 2017
Provisions of services		Note 10	82,724.6	73,015.7
Other income		Note 10	407.9	39,942.7
Operating grants			14.0	–
Reversal of provisions for stock options and bonus shares		Note 11	–	26,250.3
Reversals of depreciation and amortization, provisions and transferred expenses		Note 11	4,769.2	6,723.6
Operating income			**87,915.7**	**145,932.3**
Other purchases and external expenses			(36,067.8)	(67,150.6)
Taxes and similar			(4,818.1)	(4,250.7)
Wages and salaries			(21,542.3)	(23,128.9)
Payroll taxes			(10,596.4)	(9,655.8)
Provisions for stock options and bonus shares		Note 6	(20,307.2)	(34,026.0)
Allocation to amortization and depreciation			(0.1)	(21.4)
Allocation to other provisions			(13,190.2)	(12,448.1)
Other current management expenses			(640.8)	(1,015.6)
Operating expenses			**(107,162.9)**	**(151,697.1)**
Operating income	I		**(19,247.2)**	**(5,764.8)**
Financial income from equity interests			511,647.6	486,143.2
Other financial income			56,640.3	51,871.1
Other interest and similar income			80,308.9	77,053.0
Gain on disposal of marketable securities			56.4	103.3
Reversals of provisions and transferred expenses			9,050.8	4,160.9
Foreign exchange gains			1,211.5	91.4
Financial income			**658,915.5**	**619,422.9**
Interest and similar expenses			(290,680.9)	(283,373.1)
Allocation to amortization and provisions			(26,368.7)	(14,913.5)
Foreign exchange losses			(826.2)	(55.7)
Financial expenses			**(317,875.8)**	**(298,342.3)**
Net financial income	II	Note 12	**341,039.7**	**321,080.6**
Pre-tax current profit (loss)	III=I+II		**321,792.5**	**315,315.8**
Non-recurring gains from management operations			–	53,071.7
Non-recurring gains from financial transactions			1,317.1	4,427.0
Reversals of provisions and transferred expenses		Note 11	1,558.6	2,962.1
Non-recurring gains			**2,875.7**	**60,460.8**
Non-recurring expenses from management operations			(2,966.1)	(4.6)
Non-recurring expenses from financial transactions			(1,600.0)	(6,886.1)
Allocation to amortization and provisions			(130.0)	(4,520.7)
Non-recurring expenses			**(4,696.1)**	**(11,411.4)**
Non-recurring income	IV	Note 13	**(1,820.4)**	**49,049.4**
Employee profit-sharing	V		**(832.0)**	**(491.5)**
Corporate income tax (tax consolidation gain)	VI	Note 14	**67,700.6**	**28,819.2**
Net income	III+IV+V+VI		**386,840.8**	**392,692.9**

20.3.4 Cash flow statement

(in thousands of euros)	December 31, 2018	December 31, 2017
Net income	386,840.8	392,692.9
Net depreciation, amortization and provisions	23,735.9	12,909.2
Gross cash flow	**410,576.6**	**405,602.1**
Change in net working capital	13,576.2	(11,903.7)
Net cash flow from operations	**424,152.9**	**393,698.4**
Acquisitions of property, plant and equipment and intangible assets	10.4	238.1
Net income from sales of financial assets	–	1.0
Change in related receivables	(500,866.9)	238.2
Change in other financial assets	(2,525.4)	5,570.6
Net cash flow from investments	**(503,381.9)**	**6,047.9**
Dividends paid to shareholders	(401,920.8)	(366,612.8)
Capital increase	–	229,785.5
Increase in premiums and capital reserves	–	640,316.5
Purchase of treasury shares	3,766.8	(50,833.8)
Change in current accounts	(195,393.7)	(2,632,963.6)
Bonds issues	399,766.4	1,350,005.3
Deeply subordinated notes	100.0	600,000.0
Change in other financial debt	241,834.1	(364,000.0)
Purchase/sale of negotiable medium-term notes	30,018.6	1.3
Accrued interest and premiums	426.7	6,565.1
Net cash flow from financing activities	**78,597.9**	**(587,736.5)**
Net change in cash positions	**(631.1)**	**(187,990.2)**
Opening net cash	**808,372.7**	**996,362.9**
Closing net cash	**807,741.6**	**808,372.7**

20.3.5 Highlights for the year

SUEZ SA capital reduction

On February 28, 2018, SUEZ SA canceled 2,000,000 treasury shares, leading to a capital reduction of EUR 30 million.

New bond issue

On September 17, 2018, SUEZ issued a EUR 500 million bond issue with a fixed coupon of 1.625%, maturing on September 17, 2030.

SUEZ Groupe capital increase

On October 29, 2018, SUEZ SA conducted a capital increase for SUEZ Groupe, with retention of preferential subscription rights, for a total of EUR 2.7 billion (including an issue premium of EUR 1.8 billion) by issuing 142,105,263 new ordinary shares with a nominal value of EUR 6 each.

The subscription price of EUR 19 per new share meant that there was an issue premium of EUR 13 per share. The new shares were fully paid up using some of the funds in the current account held by the sole shareholder SUEZ SA, enabling SUEZ Groupe to reduce its debt.

Bond redemption

On November 22, 2018, SUEZ SA redeemed the EUR 100 million bond that had been issued on November 22, 2011, in the context of a private placement with a coupon of 3.080%.

20.3.6 Accounting principles and policies

The annual financial statements for fiscal year 2018 are established in euros pursuant to the general conventions under the General Accounting Plan (GAP) implemented on November 4, 2016, in compliance with regulation 2014-03 of the *Autorité des Normes Comptables* (the French Accounting Standards Authority) and the assessment methods described below.

Financial transactions relating to equity interests and related receivables, in particular impairment and impairment reversals, have been included under non-recurring income instead of under net financial income. Pursuant to Article 120-2 of the GAP, SUEZ considers that this classification, which deviates from the General Accounting Plan, gives a more accurate picture of the income statement, as it allows all gains and losses from disposals to be grouped together with income items related to equity interests under non-recurring income.

The fiscal year spans a 12-month period from January 1 to December 31, 2018.

Intangible assets

Intangible assets are assessed at their purchase or production cost.

Intangible assets are amortized following the straight-line method and the amortization period ranges from 1 to 5 years. This heading includes licenses and trademarks. However, trademarks are acquired for an unlimited term and are not amortized.

Moreover, R&D expenses are booked under charges for the year in which they are incurred.

Property, plant and equipment

Property, plant and equipment are assessed at their purchase cost.

Property, plant and equipment are depreciated following the straight-line method and their depreciation period is based on their useful life, determined according to the expected use of the assets. The useful lives of main asset items are set within the range of 3 to 10 years.

Financial assets

EQUITY INVESTMENTS

Equity investments are long-term in nature and provide the Company with control or significant influence over the issuer, or help it to establish business relations with the issuer.

New investments are recognized at acquisition cost plus directly related external incidental expenses.

Following the change in the tax treatment of equity interest acquisition costs resulting from Article 21 of the French Finance Act of 2007, and based on notice 2007-C of the French National Accounting Council *(Conseil national de la comptabilité* – CNC), SUEZ accounts for the tax deferral of such costs over five years in an account for special depreciation allowances.

In the case of equity interests intended to be held on a long-term basis by SUEZ, a depreciation allowance is made to adjust the acquisition value to their value in use, the estimation of which is primarily based on their intrinsic value, time value, expected cash flows, stock prices, and taking into account potential currency hedges.

With regard to equity interests SUEZ has decided to divest, the book value of such interests is adjusted to their market value if this is lower. If negotiations are underway, this value is determined by reference to the best estimate available.

RECEIVABLES RELATED TO EQUITY INTERESTS

These receivables are loans to companies in which SUEZ holds an equity interest.

Related receivables are recognized at their nominal value. Receivables denominated in a foreign currency are reported using the exchange rate prevailing at the end of the period. In line with the treatment adopted for equity investments, related receivables are written down if the associated risk is higher than the value of the securities and if the securities have already been depreciated.

OTHER FINANCIAL ASSETS

These mainly include mutual funds held by SUEZ under a liquidity contract. A provision may be constituted based on the criteria used for equity investments as described above.

Receivables

Receivables reported within current assets are carried on the balance sheet at their nominal value, with non-payment risk analyzed on a case-by-case basis. Bad debts are depreciated in an amount corresponding to the risk incurred.

Treasury shares

SUEZ treasury shares are recognized on the date of their delivery, at their acquisition cost excluding transaction fees.

Shares intended to be held on a long-term basis, for cancellation or trading purposes, are recognized under financial assets.

Shares acquired as part of buyback programs or a liquidity contract[1] are shown under marketable securities. Shares held as part of stock option and bonus share plans are part of such programs and are therefore also shown under marketable securities.

(1) SUEZ has signed a liquidity contract with an investment service provider. The Company assigns the provider the task of intervening daily on the market to buy and sell SUEZ shares in order to maintain liquidity and bolster the market for the Company's stock on the Paris stock exchange. The amounts paid to this provider are shown under "Other financial assets".

In the case of assigned shares, their cost price is established by allocation category according to the first in-first out (FIFO) method.

When the market value of SUEZ shares classified as marketable securities falls below their acquisition cost, a provision for impairment for an amount equal to the difference is recorded as net financial income (liquidity contract). This market value is measured on the basis of the average closing price in the settlement month.

With regard to SUEZ shares allocated to stock option plans:

- if they relate to an unexercisable plan (where the market price is lower than the strike price) the depreciation posted to provisions under operating income is measured in terms of the average price of all the plans involved;
- if they relate to an exercisable plan (where the market price is higher than the strike price) a provision for expenses is posted to provisions for stock options and bonus shares, under operating income.

In the context of the stock option plans, and as an alternative to holding shares allocated under these plans, SUEZ can acquire share-settled derivatives, which consist of calls subscribed at the start of the plan or after the start date and up to the end of the vesting period for beneficiaries.

A provision is made for stock option plans if, at the end of the reporting period, the share price exceeds the strike price of the call options granted. The provision is made on a straight-line basis over the vesting period and ultimately covers the loss on disposal corresponding to the acquisition value of the securities, less the strike price paid by employees. This provision is recognized in provisions for losses.

In cases where SUEZ hedges its position through call options, the provision includes the premium amount paid.

Marketable securities, excluding treasury shares

Marketable securities are recognized at acquisition cost. If the closing market price is less than their book value, a provision for impairment is recognized for the difference. In the case of listed securities, their market value is measured at the average closing price in the settlement month.

Foreign currency transactions

Income and expenses denominated in foreign currencies are recorded at their equivalent value in euros at the transaction date.

Foreign currency receivables, payables and cash and cash equivalents are translated at the exchange rate prevailing at period-end. Foreign exchange gains and losses are posted to income when they relate to cash and cash equivalents, or to the balance sheet under "Translation adjustments" when they relate to receivables and payables.Unrealized losses are provisioned.

Provisions for contingencies and losses

A provision is established when the Company has a legal or constructive obligation resulting from a past event, and for which it is likely that it will generate an outflow of resources representative of future economic advantages that can be reliably estimated, pursuant to ANC regulation 2014-03 concerning liabilities.

The amount recognized as a provision should be the best estimate of the expenditure required to settle the obligation at the end of the reporting period.

PROVISION FOR BONUS SHARES AWARDED TO EMPLOYEES

In keeping with ANC regulation 2014-03, the provision for employee bonus share plans is made on a straight-line basis over the vesting period for employees, and ultimately covers the loss on disposal equal to the book value of the bonus treasury shares allocated to employees. This provision is recognized in "Provisions for losses" and has an impact on the Company's operating income.

PENSIONS

The actuarial method used is the projected unit credit method. The valuation of Company undertakings regarding retirement, early retirement, severance packages and benefit schemes is based on actuarial valuations. These calculations include mortality assumptions, staff turnover and future salary increases, as well as a discount rate determined according to the yield, at the assessment date, of bonds issued by top-tier companies.

PROVISIONS FOR EQUITY INTEREST RISK

The Company may establish provisions for contingencies if it believes that its commitments exceed assets held or if some of its equity interests harbor risk that may not materialize as an asset impairment.

Financial liabilities

BOND ISSUE PREMIUMS AND COSTS

Bond issues that include a premium are recognized as liabilities on the balance sheet at their total value, including any redemption premium. In return, the latter are recognized as assets on the balance sheet under "redemption premiums" and are amortized on a straight-line basis throughout the life of the bond.

Issue premiums received are deducted from the issue costs. Any difference outstanding is recorded under prepaid income over the term of the bond.

In accordance with the CNC recommendation, bond issuance costs are amortized on a straight-line basis over the lifetime of the contracts concerned. Issuance costs mainly include broker's commissions.

UNDATED DEEPLY SUBORDINATED NOTES

In accordance with Recommendation 28 from the *Ordre des Experts Comptables* (French institute of chartered accountants) issued in October 1994, Undated Deeply Subordinated Notes are classified as financial debt. The issue premium is recorded under assets in the balance sheet and tax-deductible interest paid annually is recognized under financial expenses in the income statement. Issuance costs are amortized over the lifetime of the contracts on a straight-line basis.

Financial and operating instruments

SUEZ participates in the derivatives market to manage and reduce its exposure to interest and exchange rate volatility or to secure the value of certain financial assets. In accordance with the new ANC regulation 2015-05 of July 2, 2015 on the accounting treatment of forward financial instruments and hedging transactions:

- no provisions are made for unrealized losses ascertained at period-end on financial instruments held for hedging purposes by SUEZ and presented in off-balance-sheet commitments;
- gains and losses on interest rate and/or foreign exchange swaps are recognized on a prorata temporis basis in the income statement as financial profit/loss over the lifetime of the underlying assets. Premiums paid for options are recognized on the same basis.

Corporate income tax and tax consolidation

The French tax provision to limit the deductibility of financial expenses (known as the *rabot fiscal)* imposes a 25% cap on the deduction of net financial expenses above EUR 3 million for fiscal years starting January 1, 2014.

SUEZ SA is the Parent Company of a French tax consolidation group created in 2008 and consisting of 114 companies in fiscal year 2018.

20.3.7 Notes to the financial statements

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Note 1 Assets

1. Property, Plant and Equipment and Intangible Assets

Changes in gross values are analyzed as follows:

(in thousands of euros)	December 31, 2017	Increase	Decrease	December 31, 2018
Software	758.4			758.4
Brand	30,004.7			30,004.7
Other	54.6			54.6
Intangible assets	**30,817.7**	**–**	**–**	**30,817.7**
Office equipment	4.5			4.5
Works in progress	21.5	11.1	(21.5)	11.1
Property, plant and equipment	**26.0**	**11.1**	**(21.5)**	**15.6**
Property, plant and equipment and intangible assets	**30,843.7**	**11.1**	**(21.5)**	**30,833.3**

Amortizations and depreciations are analyzed as follows:

(in thousands of euros)	December 31, 2017	Allowances	Reversals	December 31, 2018
Software	758.4			758.4
Other	54.6			54.6
Intangible assets	**813.0**	**–**	**–**	**813.0**
Office equipment	3.8	0.1		3.9
Works in progress	–			–
Property, plant and equipment	**3.8**	**0.1**	**–**	**3.9**
Property, plant and equipment and intangible assets	**816.8**	**0.1**	**–**	**816.9**

The net values of property, plant and equipment and intangible assets are analyzed as follows:

NET INTANGIBLE ASSETS

(in thousands of euros)	Software	Brands	Works in progress	Total intangible assets
December 31, 2017	–	30,004.7	–	30,004.7
December 31, 2018	**–**	**30,004.7**	**–**	**30,004.7**

NET PROPERTY, PLANT AND EQUIPMENT

(in thousands of euros)	Office equipment	Plant and equipment	Works in progress	Total property, plant and equipment
December 31, 2017	0.7	–	21.5	22.2
December 31, 2018	**0.6**	**–**	**11.1**	**11.7**

2. Financial Assets

(in thousands of euros)	December 31, 2017	Increase	Decrease	Impairment	December 31, 2018
Consolidated equity investments [a]	6,460,781.2	2,700,000.0			9,160,781.2
Equity investments	**6,460,781.2**	**2,700,000.0**	**–**	**–**	**9,160,781.2**
Receivables related to equity interests [b]	7,280,143.7	500,866.4	(2,259.9)		7,778,750.2
Other financial assets [c]	26,724.0	14,738.3	(12,242.9)	(17.2)	29,232.2
Other financial assets	**7,306,867.7**	**515,634.7**	**(14,502.8)**	**(17.2)**	**7,807,982.4**
Financial assets	**13,767,648.9**	**3,215,634.7**	**(14,502.8)**	**(17.2)**	**16,968,763.6**

(a) Consolidated equity interests include participation in SUEZ Groupe and Acea.
(b) All receivables related to equity interests concern SUEZ Groupe.
(c) As of December 31, 2018, other financial assets mostly involve sums paid to the investment service provider under the liquidity contract.

In October 2018, SUEZ Groupe conducted a capital increase of EUR 2,700 million offset by part of its current account vis-à-vis SUEZ SA.

Note 2 Maturity of receivables

(in thousands of euros)	Net amount at December 31, 2018	Less than one year	More than one year
Receivables related to equity interests	7,778,750.2	866.4	7,777,883.8
Other financial assets	29,232.2	29,232.2	
Receivables on non-current assets	**7,807,982.4**	**30,098.6**	**7,777,883.8**
Advances and down payments on orders	26.6	26.6	
Trade and related receivables	36,398.2	36,398.2	
Other receivables	101,235.7	101,235.7	
SUEZ Groupe current account	765,879.6	765,879.6	
Accrued income from cash instruments	39,850.1	39,850.1	
Receivables on current assets	**943,390.2**	**943,390.2**	**–**
Total receivables	**8,751,372.6**	**973,488.8**	**7,777,883.8**

"Other receivables" mostly comprise a receivable vis-à-vis the State for EUR 101.2 million. This amount includes the 2018 tax consolidation gain benefiting SUEZ as the Parent Company of the tax group (EUR 70.9 million) and various tax credits from subsidiaries pending refund from the State (EUR 30.1 million), including the Research Tax Credit *(Crédit d'Impôt Recherche* – CIR) and Sponsorship Tax Credit *(Crédit d'Impôt Mécénat)*.

Note 3 Marketable securities

This item includes:

(in thousands of euros)	December 31, 2018	December 31, 2017
Treasury shares held under stock option and bonus share plans	48,468.4	71,067.4
Treasury shares held under the liquidity contract	3,352.0	5,976.3
Medium-term notes	–	30,018.6
Gross amount	**51,820.4**	**107,062.3**
Provisions for impairment of treasury shares held	(8,941.4)	(343.6)
Provisions for impairment	**(8,941.4)**	**(343.6)**
Net carrying amount	**42,879.0**	**106,718.7**

Note 4 Deferred expenses, deferred income, and accruals

Accruals break down as follows:

(in thousands of euros)	December 31, 2017	Increase	Decrease	December 31, 2018
Issuance costs	37,291.4	1,050.0	(7,761.0)	30,580.4
Credit facility set-up fees	1,667.6		(1,489.5)	178.1
Prepaid expenses	12,088.1	12,133.9	(3,131.1)	21,090.9
Deferred expenses	**51,047.1**	**13,183.9**	**(12,381.6)**	**51,849.4**

The bond issue cost increase of EUR 1 million is linked to the issue of a bond for a total amount of EUR 500 million in September 2018. (See section 20.3.5: Highlights for the year)

On September 7, 2018, SUEZ canceled two pre-hedge swaps maturing on December 18, 2027 in their entirety. These liquidations at market price gave rise to payment of two compensation payments by SUEZ in cash totaling EUR 12.1 million.

(in thousands of euros)	December 31, 2017	Increase	Decrease	December 31, 2018
Deferred income	22,835.6	500.0	(4,959.0)	18,376.6
Deferred income	**22,835.6**	**500.0**	**(4,959.0)**	**18,376.6**

Bond issues that include a premium are recognized as liabilities on the balance sheet at their total value, including any redemption premium. In return, the latter are recognized as assets on the balance sheet under "redemption premiums" and are amortized on a straight-line basis throughout the life of the bond.

Issue premiums received are deducted from the issue costs. Any difference outstanding is recorded under prepaid income over the term of the bond.

In accordance with the CNC recommendation, bond issuance costs are amortized on a straight-line basis over the lifetime of the contracts concerned. Issuance costs mainly include broker's commissions.

Accrued expenses and accrued income associated with receivables and payables can be analyzed as follows:

(in thousands of euros)	December 31, 2018	December 31, 2017
Interest on bonds issued	119,627.6	117,615.7
Interest on deeply subordinated notes	29,522.6	29,522.6
Accrued portion of interest expenses	**149,150.2**	**147,138.3**
Uninvoiced trade payables	12,341.1	15,573.8
Tax and employee-related debt	9,518.6	9,461.3
Debt on fixed assets and related accounts	11.1	11.9
Cash instruments	5,264.7	5,081.8
Other liabilities	225.9	225.5
Other accrued expenses	**27,361.4**	**30,354.3**
Accrued expenses	**176,511.6**	**177,492.6**

(in thousands of euros)	December 31, 2018	December 31, 2017
Interest on receivables related to equity interests	4,080.8	3,214.4
Invoices to be issued for trade receivables	14,392.0	41,770.9
Cash instruments	39,850.1	35,999.4
Accrued income	**58,322.9**	**80,984.7**

Note 5 Shareholders' equity

The share capital is fully paid up. Each share confers one vote.

	December 31, 2017	Increase/Reduction	Purchase/Sale	December 31, 2018
Outstanding shares	618,294,666	(2,000,000)	1,532,963	617,827,629
Treasury shares	5,067,913		(1,532,963)	3,534,950
Total number of shares	**623,362,579**	**(2,000,000)**	**–**	**621,362,579**

The change in the number of shares in 2018 results from the Board of Directors' decision on February 28, 2018 to cancel 2,000,000 treasury shares.

As of December 31, 2018, SUEZ holds 3,267,450 treasury shares acquired under employee share plans and 267,500 treasury shares acquired under a liquidity contract for a net book value of EUR 51.8 million, the market value of which was EUR 42.9 million as of December 31, 2018.

Changes in shareholders' equity were as follows:

(in thousands of euros)	Share capital	Issue, contribution & merger premiums	Legal reserve	Other reserves	Retained earnings	Net income for the year	Total
Balance as of December 31, 2017	**2,493,450.3**	**5,236,416.9**	**249,345.0**	**–**	**95,992.7**	**392,692.9**	**8,467,897.8**
2017 net income allocation					392,692.9	(392,692.9)	–
Dividend distributed for fiscal year 2017					(401,920.8)		(401,920.8)
Net income in fiscal year 2018						386,840.8	386,840.8
Capital reduction February 2018	(8,000.0)	(21,242.1)	(800.0)				(30,042.1)
Balance as of December 31, 2018 before allocation of income	**2,485,450.3**	**5,215,174.8**	**248,545.0**	**–**	**86,764.8**	**386,840.8**	**8,422,775.7**

The rights assigned under different plans regarding SUEZ shares progressed as follows over the course of the fiscal year:

1. Stock option plans

There was no new SUEZ stock option plan in 2018.

	Stock option plans	
(number of options)	December 16, 2010 plan	Total
Unexercised rights at January 1, 2018	635,738	635,738
Exercised	(400)	(400)
Canceled or Expired	(635,338)	(635,338)
Unexercised rights as of December 31, 2018	**-**	**-**

2. Bonus share allocation and performance share plans

	Allocation of bonus shares			
	Performance shares	Matching of shares under Sharing arrangement [a]	Matching of shares under Sharing arrangement [a]	
(number of shares)	July 2018	July 2014	December 2017	Total
Shares allocated and undelivered as of January 1, 2018		97,998	140,512	238,510
Allocated	719,785			719,785
Delivered				–
Canceled or Expired	(11,250)			(11,250)
Shares allocated and undelivered as of December 31, 2018	**708,535**	**97,998**	**140,512**	**947,045**

(a) Employer's contribution paid to foreign employees (outside France and the United Kingdom).

A performance share plan was introduced in July 2018. A total of 719,785 rights were created which will be deliverable in October 2021.

As of December 31, 2018, SUEZ holds 3,267,450 treasury shares acquired under employee share plans and 267,500 treasury shares acquired under a liquidity contract.

Taking into account all the current plans (bonus share and performance share plans), the number of beneficiaries and staff turnover assumptions, SUEZ estimates its obligation to deliver shares under different vesting periods to be 947,045 shares.

In addition to the continuous service condition, some plans are subject to internal performance conditions. If the performance targets have not been met fully, the number of shares granted to employees is reduced in accordance with the plan rules.

Note 6 Provisions

(in thousands of euros)	December 31, 2017	Allocation	Reversal (Utilization)	December 31, 2018
Provisions for contingencies	**10,729.4**	**11,666.4**	**(10,609.4)**	**11,786.4**
Provisions for operating disputes	–	130.0	–	130.0
Provisions for foreign exchange losses	9,050.8	11,536.4	(9,050.8)	11,536.4
Provisions for restructuring	1,558.6		(1,558.6)	0.0
Provisions for personnel disputes	120.0			120.0
Provisions for losses	**102,671.3**	**21,916.2**	**(1,568.0)**	**123,019.5**
Pension provisions and similar	6,562.0	1,609.0	(1,568.0)	6,603.0
Provisions for bonus share plans and stock option plans	96,109.3	20,307.2		116,416.5
Total	**113,400.7**	**33,582.6**	**(12,177.4)**	**134,805.9**
Income statement classification:				
Operating income		21,916.2	(1,568.0)	
Net financial income		11,536.4	(9,050.8)	
Non-recurring income		130.0	(1,558.6)	
Total		**33,582.6**	**(12,177.4)**	

The foreign exchange loss provision covers the unrealized loss linked to receivables relating to equity interests contracted with SUEZ Groupe for GBP 245.7 million subscribed in 2011. See Note 9 "Translation adjustments".

The breakdown of the change in the provision for pensions and similar benefits is included in Note 16, "Post-employment benefits".

Note 7 Financial debt

(in thousands of euros)	Position as of December 31, 2018	Position as of December 31, 2017
Bonds (nominal amount)	7,704,476.2	7,306,775.7
Bank borrowings and debt (nominal amount)	641,834.1	400,000.0
Deeply subordinated notes (nominal amount)	1,600,000.0	1,600,000.0
Participating bond	100.0	–
Current accounts and borrowings from subsidiaries	145,079.6	154,918.3
Borrowings	**10,091,489.9**	**9,461,694.0**
Accrued portion of interest expenses	149,150.2	147,138.3
Other financial debt	**149,150.2**	**147,138.3**
Total financial debt	**10,240,640.1**	**9,608,832.3**

The change in financial debt corresponds principally to:

- the implementation of a bond issue of EUR 500 million over 12 years;
- the redemption of a bond launched on November 22, 2011 for a nominal amount of EUR 100 million;
- the EUR 241.8 million increase in outstanding commercial paper classified as "Bank borrowings and debt".

Note 8 Maturity of debt and payables

(in thousands of euros)	Gross amount as of December 31, 2018	In 2019	From 2020 to end of 2023	In 2024 and beyond
				Due date
Bonds (nominal amount)	7,704,476.2	800,000.0	2,450,000.0	4,454,476.2
Bank borrowings and debt (nominal amount)	641,834.1	641,834.1		
Deeply subordinated notes (nominal amount)	1,600,000.0			1,600,000.0
Participating bond	100.0	49.4	50.6	
Current accounts and borrowings from subsidiaries	145,079.6	145,079.6		
Other financial debt [a]	149,150.2	149,150.2		
Financial debt	**10,240,640.1**	**1,736,113.3**	**2,450,050.6**	**6,054,476.2**
Trade and related payables	**13,616.1**	**13,616.1**		
Tax and employee-related debt	**20,214.7**	**20,214.7**		
Debt on fixed assets and related accounts	11.1	11.1		
Accrued expenses on cash instruments	5,264.7	5,264.7		
Other	33,830.1	33,830.1		
Other liabilities	**39,094.8**	**39,094.8**	**–**	**–**
Total	**10,313,576.8**	**1,809,050.0**	**2,450,050.6**	**6,054,476.2**

(a) Includes the accrued portion of interest expenses and bank overdrafts (see Note 7).

Breakdown of bond issues (nominal amount):

(in thousands of euros)	Amount as of December 31, 2018	Issue date	Maturity date	Rate
Public placements				
(in thousands of euros)	800,000.0	4/8/2009	4/8/2019	6.250%
(in thousands of euros)	500,000.0	7/22/2009	7/22/2024	5.500%
(in thousands of euros)	750,000.0	6/24/2010	6/24/2022	4.125%
(in thousands of euros)	750,000.0	5/17/2011	5/17/2021	4.078%
(in thousands of euros) [a]	279,476.2	12/2/2011	12/2/2030	5.375%
(in thousands of euros)	500,000.0	10/8/2013	10/9/2023	2.750%
(in thousands of euros) [b]	350,000.0	2/27/2014	2/27/2020	0.000%
(in thousands of euros)	500,000.0	5/19/2016	5/19/2028	1.250%
(in thousands of euros)	500,000.0	4/3/2017	4/3/2025	1.000%
(in thousands of euros)	700,000.0	4/3/2017	4/3/2029	1.500%
(in thousands of euros)	500,000.0	9/21/2017	9/21/2032	1.625%
(in thousands of euros)	500,000.0	9/10/2015	9/10/2025	1.750%
(in thousands of euros)	500,000.0	9/17/2018	9/17/2030	1.625%
Private placements				
(in thousands of euros) [c]	250,000.0	6/8/2009	6/8/2027	1.904%
(in thousands of euros)	100,000.0	3/25/2013	3/25/2033	3.300%
(in thousands of euros)	100,000.0	4/5/2013	4/6/2020	1.747%
(in thousands of euros)	75,000.0	5/21/2014	5/21/2029	2.000%
(in thousands of euros)	50,000.0	6/30/2015	7/1/2030	2.250%
Total	**7,704,476.2**			

(a) GBP 250 million.
(b) "OCEANE" bond.
(c) Coupon of 5.20% until 2017, then 1.904% until maturity in 2027.

Breakdown of deeply subordinated notes (nominal amount):

(in thousands of euros)	Amount as of December 31, 2018	Issue date	Maturity date	Rate
Deeply subordinated notes	500,000.0	6/23/2014	perpetual	3.000%
Deeply subordinated notes	500,000.0	3/30/2015	perpetual	2.500%
Deeply subordinated notes	600,000.0	4/19/2017	perpetual	2.875%
Total	**1,600,000.0**			

Note 9 Translation adjustments

The following translation adjustments were recognized as a result of the revaluation of receivables and debt denominated in foreign currencies at the exchange rate prevailing on December 31, 2018:

(in thousands of euros)	Unrealized loss	Unrealized gain
Translation adjustments on:		
► Receivables related to equity interests	11,308.1	
► Bonds		11,153.8
► Bank borrowings and debts	228.3	
Total	**11,536.4**	**11,153.8**

The foreign exchange exposure, established in accordance with the accounting principles described in section 20.3.6, "Accounting principles and policies", highlights the following as of December 31, 2018:

- an unrealized loss of EUR 11,308,100 linked to fluctuations in the pound sterling relating to the associated debt incurred with SUEZ Groupe for GBP 245.7 million. This unrealized loss has been provisioned in full;
- a net unrealized gain of EUR 11,153,800 linked to fluctuations in the pound sterling relating to the bond issue of GBP 250 million subscribed in 2011;
- an unrealized loss of EUR 228,300 linked to fluctuations in the US dollar relating to commercial paper issued in 2018.

Note 10 Services and other income

Services amounting to EUR 82.7 million correspond principally to services billed to SUEZ Groupe and to the billing of licensing fees for the SUEZ brand.

Note 11 Reversals of depreciation and amortization, provisions and transferred expenses

(in thousands of euros)	December 31, 2018	December 31, 2017
Transferred expenses	**3,201.2**	**5,954.6**
Bond issuance costs	275.2	131.8
Costs related to capitalization transactions	-	2,860.7
Charges related to insurance	72.1	-
Severance payment costs	2,853.9	2,962.1
Reversal of provisions for stock options and bonus shares	**-**	**26,250.3**
Reversals of provisions for restructuring risks	**1,558.7**	**2,962.1**
Other	**1,568.0**	**769.0**
Financial	**9,050.8**	**4,160.9**
Total	**15,378.7**	**40,096.9**

Expenses relating to bond issues and credit line set-up fees are recognized as assets in the balance sheet and amortized over the lifetime of these instruments. They correspond to fees paid to intermediaries for setting up these instruments.

Severance payment costs totaling EUR 2.8 million correspond to wage and salary costs generated in connection with the voluntary redundancy scheme decided in 2017.

The reversal of the financial provision of EUR 9 million is due to the reversal of the provision for foreign currency losses set up in 2017 for EUR 9 million on the bond for GBP 250 million.

Note 12 Net financial income (loss)

(in thousands of euros)	December 31, 2018	December 31, 2017
Dividends received	511,647.6	486,143.2
Interest on receivables related to equity interests	56,640.3	51,871.1
Interest on current accounts	7,401.4	4,494.8
Interest on cash instruments	40,455.4	40,560.8
Other interest and similar income	(258,172.4)	(251,272.4)
Foreign exchange gain/(loss)	385.3	35.7
Net financial provisions	(17,317.9)	(10,752.6)
Total	**341,039.7**	**321,080.6**

Dividends received in 2018 of EUR 511.6 million correspond to the dividends paid by:

- SUEZ Group in the amounts of EUR 42 million representing the undistributed balance in 2017, EUR 224.7 million for the interim dividend in 2018, and EUR 230.3 million for a special dividend in 2018;
- Acea in the amount of EUR 14.6 million in 2017.

Interest on receivables associated with equity interests and on current accounts correspond to interest paid by SUEZ Groupe.

The foreign exchange result is composed of gains and losses realized in the settlement of currency transactions.

Other interest and similar income relate mainly to interest expense on bonds.

Net financial provisions of -EUR -17.3 million involve:

- a provision for currency exchange losses of -EUR 11.3 million related to the issue in GBP;
- a provision for currency exchange losses of -EUR 0.2 million related to commercial papers in USD;
- amortizations of issue premiums linked to bonds for -EUR 6.2 million;
- a provision for depreciation of treasury shares for -EUR 8.6 million;
- the reversal of the provision for foreign exchange losses set up in 2017 for EUR 9.0 million related to the issue in GBP.

Note 13 Non-recurring income

Non-recurring income can be analyzed as follows:

(in thousands of euros)	December 31, 2018	December 31, 2017
Non-recurring income from management operations	(112.2)	53,067.1
Non-recurring restructuring expenses	(2,853.9)	(2,962.1)
Allowances and reversals of provisions for restructuring	1,558.6	(1,558.7)
Miscellaneous allowances and reversals of provisions	(130.0)	–
Gain/(loss) from disposal of treasury shares	(103.7)	503.0
Other	(179.2)	–
Total	**(1,820.4)**	**49,049.4**

The reversal of provisions for restructuring corresponds to the reversal of the provision made within the scope of the voluntary redundancy plan launched in 2017. The redundancies conducted in 2018 have resulted in costs of EUR 2.8 million recognized under non-recurring restructuring expenses.

The non-recurring income from management operations in 2017 of EUR 53 million corresponds to the reimbursement by the French State of the 3% contribution on dividends paid between 2013 to 2017, including default interest.

Note 14 Corporate income tax and tax consolidation

(in thousands of euros)	December 31, 2018	December 31, 2017
Tax consolidation gain/(loss) for the fiscal year	70,935.2	40,854.5
Adjustment of prior fiscal year gain/(loss)	(2,872.2)	(2,060.7)
Additional tax on dividends	–	(10,998.4)
Corporate income tax and additional taxes	(362.4)	1,023.8
Tax income (expense) for the fiscal year	**67,700.6**	**28,819.2**

Deferred tax position

The future tax liability position is the result of timing differences between the tax and accounting treatment of SUEZ revenues or expenses only:

(in thousands of euros)	December 31, 2018	December 31, 2017
Tax loss carried forward (base) (1)	**453,777.0**	**363,390.0**
Issue costs for deeply subordinated notes	4,571.0	5,860.0
Increase in future tax liabilities (base) (2)	**4,571.0**	**5,860.0**
Provisions for non-deductible contingencies and losses	9,054.0	6,682.0
Other non-deductible provisions	937.0	538.0
Non-deductible provisions in the year of their recognition	**9,991.0**	**7,220.0**
Difference between book value and tax value of marketable securities	9,068.0	453.0
Other	**9,068.0**	**453.0**
Credits for future tax liabilities (base) (3)	**19,059.0**	**7,673.0**
Total: (1)-(2)+(3)	**468,265.0**	**365,203.0**

The sum of these timing differences is EUR 468.2 million, which represents a theoretical net tax liability of EUR 161.2 million calculated based on the tax rate applicable in France as of December 31, 2018 (34.43%).

Note 15 Off balance sheet commitments

Financial commitments given

Regarding its net debt position, SUEZ applies a policy of optimization of financing costs using several types of financial derivatives (interest rate swaps and options) depending on market conditions.

	Notional at December 31, 2018						
(in thousands of euros)	Under one year	One to five years	Six to ten years	Over ten years	Total	Fair value of derivatives as December 31, 2018	Notional as December 31, 2017
Interest rate swap							
► Fixed-rate payer/floating-rate receiver	350,000.0	600,000.0	900,000.0	150,000.0	2,000,000.0	72,105.9	1,600,000.0
► Floating-rate payer/fixed-rate receiver	50,000.0				50,000.0	(484.7)	350,000.0
Total	**400,000.0**	**600,000.0**	**900,000.0**	**150,000.0**	**2,050,000.0**	**71,621.2**	**1,950,000.0**

The fair value of EUR 71.6 million represents the market value of derivatives in place on December 31, 2018.

Other financial commitments given

(in thousands of euros)	December 31, 2018	Maturity End of 2019	2020 to 2023	2024 and beyond
Financing commitments				
Securities, endorsements and guarantees given to subsidiaries	11,213.0			11,213.0
Total	**11,213.0**	**–**	**–**	**11,213.0**

Financial commitments received

(in thousands of euros)	December 31, 2018	Maturity End of 2019	2020 to 2023	2024 and beyond
Credit facilities confirmed and unused	1,805,000.0		1,805,000.0	
Total	**1,805,000.0**	**–**	**1,805,000.0**	**–**

Operational commitments given

(in thousands of euros)	December 31, 2018	Maturity End of 2019	2020 to 2023	2024 and beyond
Operational commitments				
Securities, endorsements and guarantees given to subsidiaries	10,789.0		8,000.0	2,789.0
Total	**10,789.0**	**–**	**8,000.0**	**2,789.0**

SUEZ has given guarantees to the government of Hong Kong for the operation of several landfills.

Note 16 Post-employment benefits

SUEZ has granted post-employment benefits to its employees (retirement pensions, lump-sum retirement payments, medical coverage, benefits in kind), as well as other long-term benefits (long-service awards).

Overview of commitments

(in thousands of euros)	December 31, 2017	Current service cost	December 31, 2018
Pensions [a]	6,562.0	41.0	6,603.0
Total	**6,562.0**	**41.0**	**6,603.0**

(a) Pensions and retirement bonuses.

Calculation of pensions and other employee benefit obligations

Pensions and other employee benefit obligations are the difference between the present value of future benefits and any unrecognized past service cost.

The current value of future benefits is determined according to the projected unit method.

The main assumptions used in calculating pensions and other similar commitments are as follows:

- long-term inflation rate: 1.75%;
- mortality tables: tables by generation.

The current value of future benefits calculated according to this method is EUR 6.6 million as of December 31, 2018.

Note 17 Personnel

As of December 31, 2018, personnel breaks down as follows:

	December 31, 2018	December 31, 2017
Operational staff	13	11
Supervisory staff	17	18
Management staff	146	134
Total	**176**	**163**

Note 18 Related-party transactions

(in thousands of euros)	Related companies
Equity investments	8,857,390.3
Receivables related to equity interests	7,778,750.2
Trade and related receivables	38,279.5
Current accounts	145,079.6
Current account overdrafts	765,879.6
Trade and related payables	462.9
Interest on receivables related to equity interests	56,640.3
Interest on current account overdrafts	7,401.4

The items presented above exclusively correspond to relations with SUEZ Groupe.

Note 19 Subsidiaries and equity interests

(in thousands of euros) Business name	Share capital	Reserves and retained earnings	% of capital held as of December 31, 2018	Book value of securities held as of December 31, 2018 Gross	Provision	Revenues for previous fiscal year	Net profit/loss in previous fiscal year	Previous fiscal year reporting date	Currency
A – Detailed disclosures information concerning equity interests with a gross value in excess of 1% of SUEZ's capital									
1. Subsidiaries (over 50% capital held by SUEZ)									
SUEZ Groupe SAS Tour CB21 16, place de l'Iris 92040 Paris-La Défense, France SIREN: 410 118 608	3,371,215	25,545	100%	8,857,390	0	139,998	338,880	Dec-18	EUR
2. Equity interests (between 10% and 50% capital held by SUEZ)									
ACEA S.P.A Piazzale Ostiense, 2 00154 Rome, Italy	1,098,899	173,376	10.85%	303,391	0	180,937	226,579	Dec-17	EUR
B – Disclosures concerning other subsidiaries and equity interests									
1. Subsidiaries									
None									
2. Equity interests									
None									

As figures for 2018 are not available for ACEA S.P.A, the information shown relates to 2017.

Note 20 Compensation of Board of directors members and Chief Executive Officer

The gross compensation paid to the Chief Executive Officer in 2018 was EUR 1,541,700.

The members of the Board of Directors receive Directors' fees. The maximum annual amount was set by the Shareholders' Meeting of May 22, 2014 at EUR 700,000.

Note 21 Subsequent events

No significant events occurred after the closure of the accounts on December 31, 2018.

Five-year financial summary

	2018	2017	2016	2015	2014
Capital at year end					
Share capital *(in euros)*	2,485,450,316	2,493,450,316	2,257,604,984	2,170,573,872	2,160,935,316
Number of shares issued	621,362,579	623,362,579	564,401,246	542,643,468	540,233,829
Operations and profit/loss for the fiscal year *(in thousands of euros)*					
Provision of services excluding taxes	82,724.6	73,015.7	70,608.0	36,065.4	8,832.3
Income before tax, employee profit sharing, amortization and depreciation, and provisions	367,790.7	399,093.2	373,041.6	192,161.0	431,808.5
Employee profit-sharing	(832.0)	(491.5)	(1,043.4)	(588.4)	
Corporate income tax expense	67,700.6	28,819.2	76,996.6	56,729.0	61,236.0
Net income	386,840.8	392,692.9	462,534.3	208,402.0	429,077.3
Dividend paid [(a)]	401,920.8	366,612.8	352,647.0	350,324.3	329,336.0
Earnings per share *(in euros)*					
Earnings after tax, employee profit sharing and before amortization and depreciation and provisions	0.70	0.69	0.80	0.46	0.91
Net income	0.62	0.63	0.82	0.38	0.79
Dividend paid per share	0.65	0.65	0.65	0.65	0.65
Personnel					
Average workforce throughout the fiscal year	176	163	152	142	32
Payroll cost *(in thousands of euros)*	21,542.3	23,128.9	16,650.2	18,691.7	7,268.5
Amount paid for company benefits (social security and Pension Plan contributions, etc.) *(in thousands of euros)*	10,596.4	9,655.8	7,164.1	9,106.0	14,053.0

(a) Excluding treasury shares.

Realizable and available assets and liabilities falling due within one year

(in thousands of euros)	December 31, 2018	December 31, 2017
Realizable assets		
Fixed assets	**30,098.6**	**29,938.4**
Receivables related to equity interests	866.4	3,214.4
Other financial assets	29,232.2	26,724.0
Current assets	**943,390.2**	**3,475,287.7**
Trade and related receivables	36,398.2	96,386.5
Advances and down payments on orders in progress	26.6	19.0
Other receivables, including cash instruments	906,965.4	3,378,882.2
Cash and cash equivalents/Marketable securities	**850,620.6**	**915,091.4**
Total realizable assets	**1,824,109.4**	**4,420,317.5**
Current liabilities		
Financial debt	**1,736,113.3**	**802,056.6**
Bank borrowings and debts	1,441,834.1	500,000.0
Borrowings and miscellaneous financial debts [a]	294,279.2	302,056.6
Operating payables	**72,936.7**	**74,463.1**
Trade and related payables	13,616.1	17,523.2
Tax and employee-related debt	20,214.7	14,540.0
Debt on fixed assets and related accounts	11.1	11.9
Other payables, including cash instruments	39,094.8	42,388.1
Total current liabilities	**1,809,050.0**	**876,519.7**
Realizable assets – current liabilities	**15,059.4**	**3,543,797.8**
(a) Including bank overdrafts.	0.0	0.0

Maturity of trade payables and receivables (Art. D. 441-4 & L. 441-6-1)

In accordance with the provisions of Articles D. 441-4 and L. 441-6-1 (arising from the LME [French law on the modernization of the economy] No. 2008-776 of August 4, 2008) of the French Commercial Code, we hereby indicate the breakdown, in accordance with the provisions established by the Decree of March 20, 2017, of the maturity of trade payables and receivables, and present the invoices received and issued but which remain unpaid at the closing date of the fiscal year and whose term has expired:

	Article D. 441 I.-1°: Invoices received but unpaid at the closing date of the fiscal year whose term has expired					Article D. 441 I.-2°: Invoices issued but not settled at the closing date of the fiscal year whose term has expired				
Figures are expressed in thousands of euros	1 to 30 days	31 to 60 days	61 to 90 days	91 days and over	Total (1 day and over)	1 to 30 days	31 to 60 days	61 to 90 days	91 days and over	Total (1 day and over)
(A) Late payment bands.										
Number of invoices concerned					103					243
Total value of invoices concerned incl. tax	295.2	979.7	0.0	0.0	1,274.9	6,180.5	9,802.8	0.0	10,323.2	26,306.4
Percentage of total amount of purchases including tax for the fiscal year	0.7%	2.3%	0.0%	0.0%	2.9%					
Percentage of revenues incl. tax for the fiscal year						6.2%	9.9%	0.0%	10.4%	26.5%
(B) Invoices excluded from (A) relating to disputed or non-recognized debts and receivables.										
Number of invoices excluded					None					None
Total value of invoices excluded					None					None
(C) Reference payment terms used (contractual or legal term – Article L. 441-6 or Article L. 443-1 of the French Commercial Code).										
Reference payment terms used for the calculation of late payments	Legal terms: 60 days net from the invoice date in accordance with the LME (French law on the modernization of the economy) of August 4, 2008					Legal terms: 60 days net from the invoice date in accordance with the LME (French law on the modernization of the economy) of August 4, 2008				

As of December 31, 2018, 98% of trade receivables are intragroup receivables. Trade payables are primarily non-Group payables.

20.4 Statutory Auditors' Report on the Parent Company financial statements

This is a translation into English of the Statutory Auditors' Report on the Consolidated Financial Statements of the Company issued in French and it is provided solely for the convenience of English-speaking users.

This Statutory Auditors' Report includes information required by European Regulation and French law, such as information about the appointment of the Statutory Auditors or verification of the information concerning the Group presented in the Management Report.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

To the Annual General Meeting of SUEZ,

Opinion

In compliance with the engagement entrusted to us by your Annual General Meetings, we have audited the accompanying financial statements of SUEZ for the year ended December 31, 2018.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company as at December 31, 2018 and of the results of its operations for the year then ended in accordance with French accounting principles.

The audit opinion expressed above is consistent with our report to the Audit Committee.

Basis for Opinion

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the *Statutory Auditors' Responsibilities for the Audit of the Financial Statements* section of our report.

Independence

We conducted our audit engagement in compliance with independence rules applicable to us, for the period from January 1, 2018 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5 (1) of Regulation (EU) No. 537/2014 or in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors.

Justification of Assessments – Key Audit Matters

In accordance with the requirements of Articles L. 823-9 and R. 823-7 of the French Commercial Code *(Code de commerce)* relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the financial statements.

Valuation of equity securities and related receivables

RISK IDENTIFIED

As at December 31, 2018, the equity securities amounted to EUR 9,161 million for both gross and net values and are composed of SUEZ's interest in the companies SUEZ Groupe and ACEA. The related receivables to these securities amounted to EUR 7,779 million and exclusively concern SUEZ Groupe. As indicated in the Note to the financial statements "Accounting rules and methods – Fixed financial assets – Equity securities", the equity securities book value, for which the Company is part of a sustainable holding logic, is brought back to its value in use if it is lower than the initial value. The value in use is assessed in particular by reference to the intrinsic value, to the yield value, to the expected cash flows, to the stock market prices and by taking into account any currency hedges. As indicated in the Note to the financial statements "Accounting rules and methods – Financial fixed assets – Receivables related to equity securities", relating to the equity securities valuation, the related receivables are, if applicable, depreciated when the risk is higher than the value of the securities and that the securities have already been depreciated. We have considered that the valuation of equity securities and related receivables to be a key audit matter given both the significant importance in the Company's accounts and the judgment required to assess the value in use of the securities.

OUR RESPONSE

As part of our audit of the financial statements, our work consisted mainly in:

- obtaining an understanding of the valuations made by the Company of the methods used and of the underlying assumptions;
- examining the arithmetical accuracy of the values in use applied by SUEZ;
- assessing the value in use (equity securities and related receivables) based on SUEZ Groupe's implicit valuation;
- assessing the value in use of ACEA's securities compared to its market value.

Specific Verifications

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations.

Information provided in the Management Report and in the Other Documents with respect to the financial position and the financial statements Provided to the shareholders

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the Board of Directors' Management Report and in the other documents with respect to the financial position and the financial statements provided to the shareholders.

We attest that the information relating to payment terms referred to in Article D. 441-4 of the French Commercial Code *(Code de commerce)* is fairly presented and consistent with the financial statements.

Report on Corporate Governance

We attest that the Board of Directors' Report on Corporate Governance sets out the information required by Articles L. 225-37-3 and L. 225-37-4 of the French Commercial Code *(Code de commerce)*.

Concerning the information given in accordance with the requirements of Article L. 225-37-3 of the French Commercial Code *(Code de commerce)* relating to remunerations and benefits received by the directors and any other commitments made in their favor, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from controlling and controlled companies. Based on this work, we attest the accuracy and fair presentation of this information.

With respect to the information relating to items that your Company considered likely to have an impact in the event of a public purchase offer or exchange, provided pursuant to Article L. 225-37-5 of the French Commercial Code *(Code de commerce)*, we have agreed these to the source documents communicated to us. Based on our work, we have no observations to make on this information.

Other information

In accordance with French law, we have verified that the required information concerning the identity of the shareholders and holders of the voting rights has been properly disclosed in the Management Report.

Report on Other Legal and Regulatory Requirements

Appointment of the Statutory Auditors

We were appointed as Statutory Auditors of SUEZ by your Annual General Meeting held on July 15, 2008 for MAZARS and on December 21, 2007 for ERNST & YOUNG et Autres.

As at December 31, 2018, MAZARS was in the eleventh year of total uninterrupted engagement and ERNST & YOUNG et Autres was in the twelfth year of total uninterrupted engagement, which was the eleventh year since securities of the Company were admitted to trading on a regulated market.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with French accounting principles and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The financial statements were approved by the Board of Directors.

Statutory Auditors' Responsibilities for the Audit of the Financial Statements

Objectives and audit approach

Our role is to issue a report on the financial statements. Our objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As specified in Article L. 823-10-1 of the French Commercial Code *(Code de commerce)*, our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- identifies and assesses the risks of material misstatement of the financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control;
- evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the financial statements;
- assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein;
- evaluates the overall presentation of the financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.

Report to the Audit Committee

We submit a report to the Audit Committee which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the financial statements of the current period and which are therefore the key audit matters that we are required to describe in this report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) No. 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L. 822-10 to L. 822-14 of the French Commercial Code *(Code de commerce)* and in the French Code of Ethics *(Code de déontologie)* for Statutory Auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Courbevoie and Paris-La Défense, February 26, 2019

The Statutory Auditors
French original signed by

MAZARS		ERNST & YOUNG ET AUTRES	
Achour Messas	Dominique Muller	Jean-Pierre Letartre	Stéphane Pédron

20.5 Dividend distribution policy

A dividend of EUR 0.65 per share, for a total amount of EUR 401.6 million[1], will be proposed to the SUEZ Shareholders' Meeting to approve the financial statements for the fiscal year ending December 31, 2018. Subject to approval by the Shareholders' Meeting, this dividend will be paid during the first half of 2019.

20.6 Legal and arbitration proceedings

20.6.1 Competition and industry concentration

No judgment was pronounced against the Group by a court or an authority in relation to competition during fiscal year 2018. In addition, the Group is aware of no proceedings pending before such court or authority likely to have or to have had, during the last twelve months, significant effects on the Group's financial position or profitability.

20.6.2 Litigation and arbitration

In the normal course of its business, the Group is involved in a certain number of litigation and arbitration with third parties or with the tax administrations of certain countries. Provisions are recorded for such litigation and arbitration when (i) a legal, contractual or constructive obligation exists at the closing date with respect to a third party; (ii) it is probable that an outflow of resources without economic benefits will be necessary to settle the obligation; and (iii) the amount of the said outflow of resources can be estimated in a sufficiently reliable manner. Provisions recorded in respect of the above amounted to EUR 79.9 million as of December 31, 2018 (excluding litigation in Argentina).

There is no other governmental, judicial, or arbitration proceedings of which the Group is aware of, that is suspended or with which it is threatened, likely to have or that has already had, in the past six months, a material impact on the Group's financial position or profitability.

Litigation in Argentina

In Argentina, tariffs applicable to public-service contracts were frozen by the Public Emergency and Exchange Regime Reform Law (Emergency Act) in January 2002, preventing the application of contractual price indexation that would apply in the event of a depreciation of the Argentine peso against the US dollar.

In 2003, SUEZ – now ENGIE – and its co-shareholders in the water concessions for Buenos Aires and Santa Fe filed arbitration proceedings against the Argentinean government, in its capacity as grantor, to enforce the concession agreements' contractual clauses with the International Center for the Settlement of Investment Disputes (ICSID), in accordance with the bilateral Franco-Argentinean investment protection treaties.

These ICSID arbitration proceedings aim at obtaining indemnities to compensate for the loss of value of the investments made since the start of the concession due to the measures adopted by the Argentinean government following the adoption of the abovementioned Emergency Act. The ICSID acknowledged its jurisdiction to rule on the two cases in 2006. At the same time as the ICSID proceedings, the concession-holders Aguas Argentinas and Aguas Provinciales de Santa Fe were forced to file proceedings to cancel their concession agreement with local governments.

However, since the financial situation of the concession-holding companies had deteriorated since the Emergency Act, Aguas Provinciales de Santa Fe announced that it was filing for judicial liquidation at its Shareholders' Meeting on January 13, 2006.

At the same time, Aguas Argentinas applied to file a Concurso Preventivo (similar to a French bankruptcy procedure). As part of these bankruptcy proceedings, a settlement proposal involving the novation of admissible Aguas Argentinas liabilities was approved by creditors and ratified by the bankruptcy court on April 11, 2008. The proposal provides for an initial payment of 20% (about USD 40 million) upon ratification and a second payment of 20% in the event of compensation by the Argentinean government. As controlling shareholders, ENGIE and Agbar decided to financially support Aguas Argentinas in making this first payment, upon ratification, and paid USD 6.1 million and USD 3.8 million respectively.

In two decisions dated July 30, 2010, the ICSID recognized the Argentine government's liability in canceling the Buenos Aires and Santa Fe water and wastewater treatment concession contracts. In addition, in June 2011 the ICSID appointed an expert to provide a definitive assessment of the compensation payable for the commercial harm. The reports on the Buenos Aires and Santa Fe concessions were presented by the expert to the ICSID respectively in September 2013 and in April 2014.

Regarding the Buenos Aires concession, ICSID rendered its decision on April 9, 2015 ordering the Argentine Republic to pay Aguas Argentinas shareholders USD 405 million in damages (including USD 367 million to SUEZ and its subsidiaries). In early August 2015, the Republic of Argentina petitioned an *ad hoc* ICSID

(1) Based on the outstanding number of shares as of December 31, 2018.

committee to render this decision invalid. The appeal was rejected on May 2017 making ICSID's decision final.

Concerning the Santa Fe concession, in a December 4, 2015 decision, ICSID ordered the Argentine Republic to pay USD 225 million to the shareholders of Aguas Provinciales de Santa Fe as a result of the termination of the concession agreement, and the entire amount was to go to SUEZ and its subsidiaries. In September 2016, the Republic of Argentina petitioned an *ad hoc* ICSID committee to render this decision invalid. The appeal was rejected on December 2018 making ICSID's decision final.

The Group considers that the provisions recorded in the financial statements relating to this litigation are appropriate.

20.7 Significant change in the financial or business situation

Please see section 10.5.2 "Expected sources of financing", and chapter 20.1, Note 25 "Subsequent events", of this Reference Document.

21 additional information

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21.1 General information on share capital

21.1.1 Amount of share capital as of December 31, 2018

As of December 31, 2018, the Company's share capital amounted to EUR 2,485,450,316. It consisted of 621,362,579 shares with a par value of EUR 4 each.

As of December 31, 2017, the Company's share capital amounted to EUR 2,493,450,316. It consisted of 623,362,579 shares with a par value of EUR 4 each.

The Company shares are fully subscribed and paid up, and all belong to the same class.

21.1.2 Non-equity instruments

None.

21.1.3 Shares held by the Company or on its behalf

This chapter contains information to be included in accordance with Article L. 225-211 of the French Commercial Code and to be disclosed in the description of the share buyback program pursuant to Article 241-2 of the French Financial Markets Authority *(Autorité des marchés financiers* – AMF) General Regulations.

AUTHORIZATION FOR THE COMPANY TO PURCHASE ITS OWN SHARES (SHAREHOLDERS' MEETING OF MAY 17, 2018)

Resolution 16 of the Combined Shareholders' Meeting of May 17, 2018 (i) terminated the unused portion of the authorization granted to the Board of Directors by Resolution 10 of the Combined Shareholders' Meeting of May 10, 2017, and (ii) authorized the Company to trade in its own shares, and delegated full powers to the Board of Directors to implement this authorization, including the power to subdelegate, under the following terms and conditions and according to the following objectives:

Conditions:

- maximum authorized purchase price per share: EUR 25;
- maximum ownership: 10% of share capital;
- securities: shares traded on the Euronext Paris Stock Exchange.

Objectives:

- to ensure liquidity and promote the Company's shares on the secondary market through an investment service provider acting independently, under a liquidity contract concluded in accordance with the Ethics Charter accepted by the AMF; or
- to subsequently cancel all or part of the shares thus purchased under the conditions set forth in Article L. 225-209 of the French Commercial Code, as part of a capital reduction that would be decided or authorized by the Shareholders' Meeting; or
- to allocate or sell shares, with or without a discount, to employees or former employees and/or to Corporate Officers or former Corporate Officers of the Company and/or companies affiliated with it or which will be affiliated with it, under the conditions and in accordance with applicable regulations, particularly following the exercise of existing stock options or allotment of existing bonus shares as part of company or inter-company savings plans, under the conditions provided by law (in particular Articles L. 3332-18 *et seq.* of the French Labor Code) or as part of shareholder plans governed by the laws of other countries; or
- to hedge securities that grant entitlement to the Company's shares; said shares to be delivered at the time of exercise of the rights attached to the securities, either through redemption, conversion, exchange, presentation of a warrant or by any other means of allocation of Company shares; or
- more generally, to pursue any other goal that is or becomes authorized by law or regulations, or engage in any market practice that is or becomes approved by the market regulators, provided that the Company's shareholders are formally notified thereof *via* a press release.

On May 17, 2018, the Board of Directors subdelegated to the Chief Executive Officer the power to implement this authorization granted by the Shareholders' Meeting of the same date, in accordance with the objectives authorized by Resolution 16 of that meeting.

TRANSACTIONS DURING FISCAL YEAR 2018 AND BALANCE OF TREASURY SHARES AS OF DECEMBER 31, 2018

Under the liquidity contract

The Company entered into a liquidity contract with Rothschild & Cie Banque on August 9, 2010. Under this liquidity contract, in 2018 the Company acquired 4,993,459 shares for a total value of EUR 61,819,004, at an average share price of EUR 12.38, and sold 5,125,959 shares for a total value of EUR 64,404,645, at an average share price of EUR 12.56. As of December 31, 2018, the liquidity contract covered the following resources: 267,500 shares and EUR 29,214,099. The liquidity contract has terms that provide for its suspension or termination in the event of a takeover bid as defined by Article 5 of AMF decision No. 2018-01 (suspension in the event of a takeover bid) and in the event of a securities transaction affecting the Company's securities. As of the date of this document, the trading platform used to set up the liquidity contract is Euronext Paris.

Outside the liquidity contract:

- the Company reallocated 2,000,000 treasury shares from the employee and Corporate Officer allocation objective to the cancellation objective, then canceled these 2,000,000 shares on February 28, 2018;
- the Company purchased 600,000 treasury shares (0.1% of the Company's share capital) for an average unit value of EUR 12.42;
- the Company also delivered 463 treasury shares to Group employees for stock purchase option plans set up in 2010 and the bonus share plan.

Balance as of December 31, 2018

Number of shares	
Purchased	5,593,459 [a]
Sold	5,125,959 [b]
Transferred	463 [c]
Canceled	2,000,000
Average price *(in euros)*	
Purchase	12.38
Sale	12.56
Number of treasury shares held	3,534,950
Percentage of capital held	0.57%
Value of the portfolio [d] *(in euros)*	51,820,362

(a) 4,993,459 shares were purchased under the liquidity contract and 600,000 shares were purchased outside the liquidity contract during fiscal year 2018.
(b) All of the shares sold during fiscal year 2018 were related to the liquidity contract set up by the Company.
(c) All the treasury shares used were transferred as part of the bonus share plans and a share purchase option plan.
(d) Share value assessed at purchase price.

As of December 31, 2018, the Company held 3,534,950 shares, including 267,500 under the liquidity contract and 3,267,450 for the objective of allocation to the employees and Corporate Officers, amounting to 0.57% of the Company's share capital, with a market value of EUR 40.76 million (spot price as of December 31, 2018) and a purchase price of EUR 51.82 million.

TRANSACTIONS BETWEEN JANUARY 1 AND FEBRUARY 18, 2019

Between January 1, 2019 and February 18, 2019, the Company acquired 131,468 of its own shares in the amount of EUR 1,469,315, *i.e.*, at an average price per share of EUR 11.176, under the sole liquidity contract. During the same period, the Company sold 43,968 of its own shares under the sole liquidity contract, for a total value of EUR 500,391 at an average price per share of EUR 11.381, and delivered no treasury shares as part of the bonus share allocation plans. On February 18, 2019, the Company held 0.58% of its share capital, *i.e.*, 3,622,450 shares, including 355,000 shares held under the liquidity contract and 3,267,450 shares held for the objective of allocation to employees and Corporate Officers.

DESCRIPTION OF THE SHARE BUYBACK PROGRAM FOR SUBMISSION TO THE COMBINED SHAREHOLDERS' MEETING OF MAY 14, 2019

Pursuant to Articles 241-1 to 241-3 of the AMF General Regulations, the purpose of this section is to outline the objectives and conditions of the Company's share buyback program, to be submitted to the Combined Shareholders' Meeting of May 14, 2019.

21.1.3.1 Breakdown by objective of the shares held as of February 18, 2019

On February 18, 2019, the Company held 0.58% of its share capital, *i.e.*, 3,622,450 shares, including 3,267,450 shares assigned to the objective of allocation to employees and Corporate Officers (including the hedging of bonus shares) and 355,000 shares held under the liquidity contract.

21.1.3.2 Main characteristics of the program

The potential main characteristics of this program are described below:

- securities concerned: SUEZ shares (ISIN code: FR0010613471);
- maximum capital buyback percentage authorized by the Shareholders' Meeting: 10%;
- maximum number of shares that can be purchased based on the share capital as of December 31, 2018 : 62,136,257 shares;
- maximum authorized purchase price per share: EUR 25.

21.1.3.3 Objectives of the share buyback program

The objectives pursued by the Company in connection with this share buyback program are set forth below:

- to ensure liquidity and promote the Company's shares on the secondary market through an investment service provider acting independently under a liquidity contract; or
- to subsequently cancel all or part of the shares thus purchased under the conditions set forth in Article L. 225-209 of the French Commercial Code, as part of a capital reduction that would be decided or authorized by the Shareholders' Meeting; or
- to implement the allocation or transfer of shares to employees or former employees and/or Corporate Officers or former Corporate Officers of the Company and/or companies affiliated with it or which will be affiliated with it, in France and/or outside of France, as provided by Article L. 225-180 of the French Commercial Code, particularly in the context of any stock option plans, any bonus share plans, any employee shareholding plans, or any form of compensation practiced by the Company, specifically under the relevant provisions of the French Commercial Code and/or French Labor Code, or French or foreign laws and regulations, and for any hedges set up for such transactions and related commitments of the Company, under the conditions laid down by the market regulators and at the

times that the Board of Directors or the person acting on behalf of the Board of Directors deems appropriate; or

- to hedge securities that grant entitlement to the Company's shares, with said shares to be delivered when the rights attached to these securities are exercised, either through redemption, conversion, exchange, presentation of a warrant or by any other means of allocation of Company shares; or
- more generally, to pursue any other goal that is or becomes authorized by law or regulations, or engage in any market practice that is or becomes approved by the market regulators, provided that the Company's shareholders are formally notified thereof *via* a press release.

21.1.3.4 Terms and conditions

A) MAXIMUM PORTION OF CAPITAL THAT MAY BE ACQUIRED AND HELD AND MAXIMUM AMOUNT PAYABLE BY THE COMPANY

The maximum portion of capital acquired and held by the Company may not exceed 10% of the Company's share capital, for a maximum total of EUR 1,553,406,425 based on the share capital as of December 31, 2018, consisting of 621,362,579 shares.

B) DURATION OF THE SHARE BUYBACK PROGRAM

Pursuant to the resolution to be proposed at the Shareholders' Meeting on May 14, 2019, the share buyback program may be implemented for 18 months from the date of the Shareholders' Meeting, *i.e.*, until November 14, 2020.

21.1.4 Other equity instruments

On February 27, 2014, the Company issued 19,052,803 zero-coupon bonds convertible into and/or exchangeable for new and/or existing shares (known as "OCEANE" bonds in France) maturing on February 27, 2020, with a nominal amount of EUR 350 million. The nominal value of an OCEANE bond was set at EUR 18.37, representing an issue premium of 30% compared to the reference price of the SUEZ share.

The OCEANE bonds will be redeemed on February 27, 2020 either at par value *via* a cash payment, or *via* the issue of new and/or existing shares and, if applicable, a cash payment, at the Company's discretion. The OCEANE bonds will entitle holders to the allotment of new and/or existing SUEZ shares at the rate of one share per OCEANE bond, subject to any subsequent adjustments.

21.1.5 Authorizations and delegations of authority granted by the Shareholders' Meeting

See chapter 16.4 of this Reference Document.

21.1.6 Options or agreements concerning the Company's share capital

None.

21.1.7 History of the share capital

Date	Type of transaction	Share capital before transaction *(in euros)*	Premium *(in euros)*	Shares issued/ canceled	Par value *(in euros)*	Cumulative number of shares	Share capital after transaction *(in euros)*
March 23, 2016	Capital increase by contribution in kind [a]	2,170,573,872	22,968,888	1,757,778	4	544,401,246	2,177,604,984
September 21, 2016	Capital increase by contribution in kind [b]	2,177,604,984	223,390,971	20,000,000	4	564,401,246	2,257,604,984
January 19, 2017	Capital increase [c]	2,257,604,984	N/A	1,176,328	4	565,577,574	2,262,310,296
March 28, 2017	Capital increase [d]	2,262,310,296	N/A	338,621	4	565,916,195	2,263,664,780
May 24, 2017	Capital increase [e]	2,263,664,780	560,126,577.20	47,468,354	4	613,384,549	2,453,538,196
December 19, 2017	Capital increase [f]	2,453,538,196	81,087,880	9,978,030	4	623,362,579	2,493,450,316
February 28, 2018	Capital reduction [g]	2,493,450,316	22,042,096.47	2,000,000	4	621,362,579	2,485,450,316

(a) Issue of 1,757,778 new shares carried out as part of ENGIE's contribution to the Company of all the shares comprising the capital of SUEZ IP, representing a capital increase of EUR 30 million (including EUR 7,031,112 in par value and EUR 22,968,888 in share premium account).
(b) Issue of 20,000,000 new shares carried out as part of Caltagirone's contribution to the Company of 10.85% of the shares comprising the capital of ACEA, representing a capital increase of EUR 303,390,971 (including EUR 80 million in par value and EUR 223,390,971 in share premium account).
(c) Capital increase due to the issue of new shares delivered after the vesting period to beneficiaries of the bonus share plan of January 17, 2013 outside of France, Italy and Spain.
(d) Capital increase due to the issue of new shares delivered after the vesting period to beneficiaries of the performance share plan of March 27, 2013 outside of France, Belgium and Spain.
(e) Issue of 47,468,354 new shares representing a capital increase of EUR 749,999,993.20, including EUR 189,873,416 in par value and EUR 560,126,577.20 in share premiums, carried out as part of the acquisition of GE Water.
(f) Capital increase due to the subscription of 9,978,030 new shares as part of the SUEZ Group "Sharing 2017" employee share issue.
(g) Capital reduction due to the Company's cancellation of 2,000,000 treasury shares.

21.2 Memorandum of association and bylaws

This section summarizes the main provisions of the Company's bylaws and Internal Regulations.

21.2.1 Purpose of the Company

The Company's purpose is set out in Article 3 of the Company bylaws.

The purposes of the Company are as follows, in all countries and by all means:

1. the provision, in any form whatsoever, of all services connected to the environment, and in particular:
   - all services for the production, transportation and distribution of water, for all domestic, industrial, agricultural or other needs and uses, on behalf of local public authorities or private individuals,
   - all wastewater treatment services, including the disposal of sludge of domestic, industrial, or other origin,
   - all services that may directly or indirectly concern the collection, sorting, treatment, recycling, incineration, and recovery of all types of waste, by-products and residues, and generally any activity or venture related to waste management,
   - the creation, acquisition, operation or divestment of all transport and road haulage services,
   - the creation, purchase, sale, leasing, rental, management, installation and operation of any facility relating to waste management, and
   - generally, all services on behalf of local public authorities, private entities and residential customers connected with the above;
2. on an ancillary basis, the production, distribution, transportation, utilization, management and development of energy in all its forms;
3. the study, setup and completion of all projects, services, and public or private works on behalf of any local public authorities, private entities or residential customers; the preparation and awarding of all contracts of any type whatsoever relating to those projects and works;
4. the acquisition of equity interests by obtaining shares, interests, bonds and other corporate securities, existing or to be created in the future, *via* subscription, purchase, contribution, exchange or any other means, and the capacity to dispose of such interests;
5. the acquisition, purchase, transfer and operation of any patent, trademark, model, patent license or process;
6. the granting of any guarantee, first-call guarantee and other surety to any Group company or entity in the course of their business, as well as the financing or refinancing of their activities;

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7. the subscription of any borrowing or, more generally, utilization of any type of financing, specifically *via* the issue or, as the case may be, the subscription of debt securities or financial instruments, in order to finance or refinance the Company's business activity; and
8. more generally, all industrial, financial and commercial transactions and transactions involving movable assets or real estate that may be connected directly or indirectly to one of the purposes specified above or any other similar or connected purpose or a purpose that might benefit and develop the Company's business.

21.2.2 Provisions relating to governance and management bodies

21.2.2.1 Board of Directors

A) INTERNAL REGULATIONS OF THE BOARD OF DIRECTORS

In 2008, the Board of Directors of the Company adopted a set of Internal Regulations to define the Board's operating procedures and those of its Committees. The Internal Regulations have been revised several times since they were initially adopted to take changes in applicable governance rules into account.

B) COMPOSITION OF THE BOARD OF DIRECTORS (ARTICLE 10 OF THE BYLAWS)

The Company is administered by a Board of Directors consisting of no less than three and no more than 18 members, except as otherwise provided for by law.

Two Directors representing employees may be appointed under the terms provided in Article L. 225-27-1 of the French Commercial Code. The Shareholders' Meeting also appoints a Director representing employee shareholders, pursuant to the provisions of Article L. 225-23 of the French Commercial Code. These Directors are not taken into account when determining the minimum and maximum number of Directors provided above.

Directors are appointed, re-elected, and dismissed in compliance with applicable legal and regulatory provisions.

Directors are appointed for a four-year term. Nevertheless, a Director who is appointed to replace another whose term of office has not expired will only remain on the Board for the remainder of his/her predecessor's term.

Each Director must hold at least 2,000 shares, except under conditions as stipulated by the law or regulations.

The number of Directors who have reached the age of 70 may not, at any time, exceed one third of the total number of Directors in office. If the number of Directors is not exactly divisible by three, then the resulting figure is rounded up.

Except in the case of termination of the employment contract (of an Executive Director), or resignation, dismissal or death, a Director's term ceases at the close of the Ordinary Shareholders' Meeting that approved the financial statements for the preceding fiscal year, held during the year that Director's term of office expires.

C) CHAIRMAN OF THE BOARD OF DIRECTORS (ARTICLE 11 OF THE BYLAWS)

The Board of Directors appoints a Chairman from among its members. The Chairman may propose that the Board of Directors be able to appoint one or more members to the position of Vice Chairman.

Regardless of the period of the appointment, the Chairman's term of office expires no later than the close of the Ordinary Shareholders' Meeting that approved the financial statements for the preceding fiscal year, held after the date on which the Chairman reaches the age of 70.

The Board is chaired by the Chairman, or in his absence, a Director chosen by the Board of Directors at the start of the meeting.

The Chairman of the Board organizes and manages the Board's work and reports on it to the Shareholders' Meeting. The Chairman ensures that the Company's governing bodies function correctly and, in particular, that the Directors are fit to carry out their duties.

D) FUNCTIONING OF THE BOARD OF DIRECTORS (ARTICLES 1 AND 2 OF THE BOARD OF DIRECTORS' INTERNAL REGULATIONS)

The functioning of the Board of Directors is described in Articles 1 and 2 of the Internal Regulations, which are reproduced below.

Article 1 of the Internal Regulations – Meetings

1. The Board of Directors meets as often as the interests of the Company and the legal and regulatory provisions require, and at least once a quarter. Notices of meetings may be circulated by the Board Secretary or the General Secretary, and are sent *via* letter, fax or e-mail, or conveyed verbally.
2. Meetings may be conducted in any manner, including by video conference or teleconference, subject to the restrictions and conditions laid down in the applicable regulations. Directors who participate in a Board meeting in the manner cited above are deemed to be present for the purposes of calculating the quorum and voting majority, subject to the restrictions envisaged in the applicable regulations.
3. Any Director, under his/her own responsibility, may delegate by proxy to another Director the ability to vote on his/her behalf. The proxy must be in writing and carry the signature, which may be electronic, of the Director assigning the proxy. The proxy must state the date of the meeting to which it applies. A Director may only assign a proxy to another Director. Each Director may only represent one colleague at the same meeting. The Director receiving the proxy may participate in the Board meeting in person or, where applicable, by video conference or teleconference.
4. The content of the minutes of each meeting are sufficient proof, vis-à-vis third parties, of the number of Directors in office, their presence in person or by video conference or teleconference, or their representation by proxy. If the Chairman of the Board of Directors finds that the videoconferencing or teleconferencing technology fails to operate properly, the Board may validly deliberate and/or continue solely with the members present in person, provided that quorum conditions are satisfied.

5. Meetings are held at the head office at Tour CB21, 16, place de l'Iris, 92040 Paris-La Défense Cedex, France, or at any other place indicated in the Notice of Meeting.

Article 2 of the Internal Regulations – Registers and minutes

1. An attendance register is kept at the Company's head office and is signed by the members of the Board of Directors attending the meeting, in their own name or on behalf of other members of the Board they represent. In accordance with the provisions of applicable laws and regulations, any proxies granted by letter or, if need be, by fax or e-mail, are attached to the attendance register. The attendance register for Board meetings must state which Directors, if any, participated by video conference or teleconference, and which conferencing method they used.
2. The Chairman submits the minutes of the previous meeting (s) to the Board for approval. The minutes must report the occurrence of any technical incident that disrupted the normal operation of the meeting.

In an emergency or if necessary, the exact wording of the minutes on a particular issue may, at the Chairman's request, be decided at the meeting, so that the Company can use it in a communication to third parties.

Every Director is entitled to request and receive a copy of the minutes of any Board meeting.

Extracts from the minutes used for court proceedings must be certified as true copies by the Chairman of the Board, the Chief Executive Officer, the General Secretary, or the Board Secretary.

E) MEETING OF THE BOARD OF DIRECTORS AND DELIBERATIONS (ARTICLE 12 OF THE BYLAWS)

The Chairman calls the Directors to meetings of the Board of Directors, which are held at the head office or at any other location indicated by the author of the Notice of Meeting. If the Board has not met for at least two months, then at least one third of the Board members may ask the Chairman to call a meeting on a specific agenda. The Chief Executive Officer may also request that the Chairman call a Board meeting on a specific agenda.

Notices of meetings may be issued by any means, including verbally.

A legal quorum and majority is required for the Board to make decisions. In the event of a tied vote, the meeting Chairman has the casting vote.

The Board appoints a person to act as secretary, who need not be a member of the Board.

At the Chairman's request, senior executives may attend Board meetings in an advisory capacity.

F) POWERS OF THE BOARD OF DIRECTORS (ARTICLE 14 OF THE BYLAWS)

The Board of Directors determines the key Company strategies and supervises their implementation. Without prejudice to the powers expressly attributed to Shareholders' Meetings and within the limits of the Company's purpose, the Board deals with all issues concerning the management of the Company and settles relevant matters through its deliberations.

The Board of Directors monitors and supervises activities as it deems appropriate. The Company Chairman or Chief Executive Officer must forward to each Director the documents and information they require to carry out their duties.

G) COMPENSATION OF DIRECTORS (ARTICLE 16 OF THE BYLAWS)

The Shareholders' Meeting may award a fixed annual amount in Directors' fees for the Board of Directors, which amount shall remain the same until further notice.

Members of the Board of Directors may also be awarded other compensation from time to time, in the circumstances and under the conditions set forth by law.

21.2.2.2 General Management

A) CHIEF EXECUTIVE OFFICER (ARTICLE 17 OF THE BYLAWS)

The Chairman of the Board of Directors, or another person appointed by the Board of Directors from among its members with the title of Chief Executive Officer, takes responsibility for the General Management of the Company. In accordance with the bylaws, the decision of the Board of Directors as to which of the above two persons should take responsibility for the General Management of the Company is made by majority vote of the Directors present or represented, after consultation with the Chairman of the Board and the Chief Executive Officer.

Shareholders and third parties are informed of this decision in accordance with the regulations in force.

The Chief Executive Officer holds the most extensive powers to act, under all circumstances, on behalf of the Company. The Chief Executive Officer exercises these powers within the limit of the Company's purpose and without prejudice to the powers expressly granted by law to the Shareholders' Meetings and the Board of Directors.

Regardless of the period of the appointment, the Chief Executive Officer's term of office expires no later than the close of the Ordinary Shareholders' Meeting that approved the financial statements for the preceding fiscal year, held during the year in which the Chief Executive Officer reaches the age of 68.

In the event that the Chief Executive Officer ceases to be a Director during his/her term of office, he/she will remain as Chief Executive Officer until the expiry of the term of his/her appointment by the Board of Directors.

When the Company's General Management is in the hands of the Chairman of the Board of Directors, the provisions of law and the bylaws relating to the Chief Executive Officer apply to the Chairman of the Board of Directors.

B) EXERCISE OF AUTHORITY BY THE CHIEF EXECUTIVE OFFICER (ARTICLE 4 OF THE BOARD OF DIRECTORS' INTERNAL REGULATIONS)

The limitations on the powers of the Chief Executive Officer are described in Article 4 of the Internal Regulations and stated in chapter 16.4 of this Reference Document.

21.2.3 Rights, privileges and restrictions attached to shares

RIGHTS ATTACHED TO SHARES (ARTICLE 8 OF THE BYLAWS)

Each share, regardless of its class, grants an entitlement to a share in the ownership of Company assets and the liquidating dividend, in proportion to the share capital it represents, taking into account whether capital is amortized or paid up, as the case may be.

All shares comprising current or future share capital, regardless of their class, will always be taxed on an equal footing. Consequently, any taxes and duties that may be owed for any reason as a result of total or partial repayment of the par value of those shares, either during the life of the Company or at the time of liquidation, will be spread among all shares making up the share capital at the time of these repayments, so that all current or future shares entitle their owners to the same actual benefits and the right to receive the same net sum, after taking into account the non-amortized par value of the shares and rights to those shares, where applicable.

Without prejudice to the laws governing the right to vote at Shareholders' Meetings and the shareholders' right to information, shares are indivisible for the Company. Therefore, co-owners will be represented at the Shareholders' Meeting by one of them, or by a single proxy, to be appointed by the courts in the event of a dispute.

When, in order to exercise a right, a shareholder must hold several securities of a particular type or class, the holder will be personally responsible for gathering the required number or for buying or selling the necessary number of shares.

21.2.4 Terms and conditions for amending shareholders' rights

None.

21.2.5 Shareholders' Meetings

A) PARTICIPATION IN SHAREHOLDERS' MEETINGS (ARTICLES 20, 21 AND 22 OF THE BYLAWS)

All shareholders may attend Shareholders' Meetings in person or through a proxy, regardless of the number of shares held. Attendance is subject to proof of identity and registration of the shares in their name or in the name of the authorized intermediary listed under the shareholder's account, by midnight Paris time on the second business day prior to the meeting, either in the register of shares held by the Company or in the register of bearer shares held by an authorized intermediary.

Meetings are held at the head office of the Company, at any other location within the same *département* (French administrative jurisdiction) or in a neighboring *département*.

Shareholders' Meetings are chaired by the Chairman of the Board of Directors or, in the Chairman's absence, by a Director specially appointed for this purpose by the Board of Directors. Failing this, the meeting elects its own Chairman.

The function of teller shall be carried out by the two shareholders who hold, either themselves or by proxy, the highest number of voting rights, provided they are present and accept such duties. The committee thus formed appoints a secretary, who need not be a shareholder.

B) VOTING RIGHTS (ARTICLE 23 OF THE BYLAWS)

The voting rights attached to shares are equal to the proportion of the share capital they represent, and each share grants an entitlement to one vote (except where voting rights are restricted under current regulations or the Company bylaws). In line with the provisions of Article L. 225-123, paragraph 3 of the French Commercial Code, the Shareholders' Meeting of May 12, 2015 voted to retain the principle that one share confers the right to one vote.

At Ordinary and Extraordinary Shareholders' Meetings, the usufructuary holds the voting rights attached to usufruct shares.

All shareholders may have a postal vote in accordance with the conditions and in the manner set by current legal and regulatory provisions. These provisions also provide that shareholders may submit their proxy and postal ballot form either in paper format or, if stipulated by the Board of Directors in the Notice of Meeting, electronically.

21.2.6 Provisions to delay, postpone or prevent a change of control of the Company

The bylaws contain no provisions likely to delay, postpone or prevent a change of control of the Company.

21.2.7 Statutory thresholds

FORM OF SECURITIES

Fully paid-up shares can be held as registered or bearer shares, at the discretion of the shareholder.

REGISTRATION OF SHARES

Shares and all other securities issued by the Company are posted to their owners' accounts, in accordance with the applicable legal and regulatory provisions.

Where shares are in certificate form, the Board of Directors may grant authority to any person, even a person outside the Company, to sign such certificates.

IDENTIFICATION OF SHARES

In accordance with current legal and regulatory provisions, the Company may require, at any time, that the clearing agent provide the name, and if a legal entity, the corporate name, nationality, and address of holders of shares which grant an entitlement, immediatly or in the future, to a right to vote at Company Shareholders' Meetings, as well as the number of shares held by each and, where applicable, any restrictions to which they may be subject.

NOTIFICATIONS TO BE MADE TO THE COMPANY

Any individual or legal entity that either alone or in concert comes to hold or ceases to hold a fraction of the share capital or voting rights of 1% or more, and then, above this threshold, any multiple of 1% up to a threshold of 33% of the share capital or voting rights, is required to notify the Company, by registered letter with acknowledgment of receipt, within five business days of crossing one of these thresholds, stating the total number of shares they hold directly, indirectly or jointly. To determine these thresholds, account will also be taken of shares held indirectly and of quasi-shares as defined in the provisions of Articles L. 233-7 *et seq.* of the French Commercial Code.

If one of these thresholds is crossed within five business days before the date of a Company Shareholders' Meeting, the above-mentioned notification will be made at the latest before the meeting's committee certifies the accuracy of the attendance register, in a manner that ensures that the Company receives it before certifying attendance.

Any individual or legal entity that either alone or in concert comes to hold a fraction of the share capital or voting rights of 10%, 15%, 20%, 25% or more, is required to notify the Company, by registered letter with acknowledgment of receipt, within five business days of crossing one of these thresholds, of the objectives that the individual or legal entity intends to pursue over the next six months, pursuant to Article L. 233-7 of the French Commercial Code.

To the fullest extent permitted by law, failure to comply with the above provisions is sanctioned by the withdrawal of voting rights in respect of the undeclared shares that exceed the fraction at any Shareholders' Meeting held starting from the time the threshold is exceeded and not reported, and until a period of two years has elapsed from the date on which the proper notification is given as provided above. Nevertheless, this sanction will only apply if one or more shareholders holding at least 5% of the Company's share capital so request.

21.2.8 Specific provisions governing changes to the share capital

There are no specific provisions governing changes to the share capital stricter than the law.

22 significant contracts

The most significant contracts, other than contracts entered into in the normal course of business, are described in chapters 6 and 18 of this Reference Document. These include the following contracts:

- Shareholders' Agreement signed between SUEZ Groupe SAS, SUEZ (Asia) Limited, Beauty Ocean Ltd and NWS Holdings Limited, relating to SUEZ NWS Limited (previously Sino French Holdings (Hong Kong) Limited (see section 6.5.4.2);
- Shareholders' Agreement entered into by SUEZ Groupe SAS, Cofely (the successor of Elyo), Fipar Holding and Al Wataniya in December 2004, related to Lydec (see section 6.5.4.3 (a));
- Master agreement signed on July 17, 2014 between SUEZ, Agbar and Criteria Caixa related to the contribution by Criteria Caixa of its 24.14% indirect interest in Agbar, to be compensated in part by issuing 22 million new Company shares; the Company shares held by Criteria Caixa are subject to a four-year lock-up period, *i.e.* until September 2018;
- Agreement signed in June 2015 between Chongqing Suyu Business Development Company Limited (joint venture between SUEZ and New World Services) and Chongqing Water Assets Management Co. Ltd concerning the Derun Environment company for the purpose of creating a major player in the water and waste sector in China;
- Agreement signed in July 2016 between SUEZ and various companies belonging to Caltagirone's Group, related to their contribution of a 10.85% stake in the company, ACEA, compensated by issuing 20 million new Company shares subject to a four-year lock-up period, *i.e.* until September 2020; and
- Shareholders' Agreement signed on September 22, 2017 between SUEZ, SUEZ Groupe SAS and Caisse de Dépôt et Placement du Québec, related to SUEZ Water Technologies and Solutions, a company integrating the industrial water assets of GE Water and SUEZ Eau Industrielle (see section 6.5.5 and Note 2 of section 20.1.6).

23 information from third parties, statements of experts and declarations of interest

None.

24 documents available to the public

24.1 Consultation of documents

Corporate documents relating to the Company are made available to shareholders in accordance with current legislation and may be consulted on the Company's website at the following address: https://www.suez.com, as well as at the Company's head office, Tour CB21, 16 place de l'Iris, 92040 Paris-La Défense Cedex, France, under applicable legal and regulatory conditions.

Reference Documents filed with the AMF for 2016, 2017 and 2018, the interim financial reports, and quarterly financial information may be consulted on the Company's website (at https://www.suez.com under "Finance", "Financial publications").

In addition, the regulatory information set out in Article 221-1 of the AMF General Regulations may be consulted on the Company's website (at https://www.suez.com, under "Finance", "Analysts and investors", "Regulated information").

PERSON IN CHARGE OF INFORMATION

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24.2 Financial reporting calendar

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SCHEDULE OF FINANCIAL COMMUNICATION

Presentation of annual results: February 27, 2019
Annual Shareholders' Meeting: May 14, 2019
Results for the first half of 2019: July 26, 2019

25 information on equity interests

Information concerning companies in which the Company holds a part of the share capital which could have a significant impact on the assessment of its assets, its financial position, or its income is provided in chapters 6 and 7, and in Note 26, chapter 20.1 of this Reference Document.

26 combined shareholders' meeting of May 14, 2019

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26.1 Agenda

Resolutions to be submitted to the Ordinary Shareholders' Meeting

1. Approval of the Company financial statements for the fiscal year ended December 31, 2018
2. Approval of the Consolidated Financial Statements for the fiscal year ended December 31, 2018
3. Allocation of the net income for the fiscal year ended December 31, 2018 and setting of the dividend
4. Renewal of the term of office of Ms. Isabelle Kocher as Director
5. Renewal of the term of office of Ms. Anne Lauvergeon as Director
6. Renewal of the term of office of Mr. Nicolas Bazire as Director
7. Appointment of Mr. Bertrand Camus as Director
8. Appointment of Ms. Martha J. Crawford as Director
9. Vote on the elements of compensation due or awarded for fiscal year 2018 to Mr. Gérard Mestrallet, Chairman of the Board of Directors
10. Vote on the compensation policy for fiscal year 2019, for the period from January 1, 2019 to May 14, 2019 of the Chairman the Board of Directors, Mr. Gérard Mestrallet
11. Vote on the compensation policy for fiscal year 2019, for the period from May 14, 2019 to December 31, 2019 of the Chairman of the Board of Directors, Mr. Jean-Louis Chaussade
12. Vote on the elements of compensation due or awarded for fiscal year 2018 to Mr. Jean-Louis Chaussade, Chief Executive Officer
13. Vote on the compensation policy for fiscal year 2019, for the period from January 1, 2019 to May 14, 2019 of the Chief Executive Officer, Mr. Jean-Louis Chaussade
14. Vote on the compensation policy for fiscal year 2019, for the period from May 14, 2019 to December 31, 2019 of the Chief Executive Officer, Mr. Bertrand Camus
15. Approval of related-party commitments granted in favor of Mr. Bertrand Camus, Chief Executive Officer, relating to a severance pay and in consideration of a non-compete commitment
16. Approval of related-party commitments granted in favor of Mr. Bertrand Camus, Chief Executive Officer, relating to a supplementary defined-contribution Pension Plan and continuation of the insurance and health care plans granted to SUEZ employees
17. Authorization to be granted to the Board of Directors to trade in the Company's shares

Resolutions to be submitted to the Extraordinary Shareholders' Meeting

18. Authorization to be granted to the Board of Directors to reduce the Company's share capital by canceling treasury shares
19. Delegation of authority to be granted to the Board of Directors to increase the share capital by issuing shares or securities granting access to the share capital to the benefit of members of savings plans, with waiver of the shareholders' preferential subscription rights in favor of the latter
20. Delegation of authority to be granted to the Board of Directors to increase the share capital, with waiver of the shareholders' preferential subscription rights in favor of the class (es) of named beneficiaries, as part of the implementation of the SUEZ Group international shareholding and savings plans
21. Authorization to be granted to the Board of Directors to proceed to the allocation of bonus shares in favor of the employees or Corporate Officers subscribing to a Group shareholding plan
22. Delegation of powers for formalities

26.2 Board of Directors' Report

Twenty-two resolutions have been submitted for your approval. Seventeen resolutions are to be submitted to the Ordinary Shareholders' Meeting and five resolutions to the Extraordinary Shareholders' Meeting.

Presentation of the resolutions to be submitted to the Ordinary Shareholders' Meeting

(RESOLUTIONS 1 AND 2)

Approval of the annual and Consolidated Financial Statements for the fiscal year ended December 31, 2018

The Shareholders' Meeting is asked to approve the Company's financial statements for the fiscal year ended December 31, 2018, as well as the transactions reflected in those statements.

These financial statements show a net profit of EUR 386,840,767.26.

The Shareholders' Meeting is also asked to approve the Consolidated Financial Statements for the fiscal year ended December 31, 2018, which show a net profit, Group share, of EUR 334.9 million, as well as the transactions reflected in those statements.

(RESOLUTION 3)

Allocation of the net income for the fiscal year ended December 31, 2018 and dividend

Distributable income as of December 31, 2018 amounts to EUR 473,605,477.75, and consists of the net income for the 2018 fiscal year of EUR 386,840,767.26, in addition to the previous retained earnings of EUR 86,764,710.49.

Note that, in accordance with Article L. 232-10 of the French Commercial Code, no allocation to the legal reserve has been proposed, as it currently represents 10% of the share capital.

The Board of Directors proposes that the Shareholders' Meeting set the dividend for the 2018 fiscal year at EUR 0.65 per share, representing a total pay-out (based on 621,362,579 shares comprising the Company's share capital as of December 31, 2018) of EUR 403,885,676.35.

The Board of Directors has decided to allocate the distributable income of EUR 473,605,477.75 as follows:

EUR 0.65 dividend per share for fiscal year 2018	EUR 403,885,676.40
Retained earnings	EUR 69,719,801.40

The Board of Directors draws your attention to the fact that the final amount to be paid out will take into account the number of existing shares and the number of treasury shares held by the Company at the time the dividend is paid out which, in accordance with Article L. 225-210 of the French Commercial Code, have no entitlement to the dividend.

When the dividend is paid out to individuals residing in France for tax purposes, it is subject to a single flat-rate deduction at source, applied to the gross amount, of 30%, comprising social security contributions at the overall rate of 17.2%, and a flat-rate income tax of 12.8% (unless they have chosen the annual option for the application of the progressive tax scale to investment incomes).

The ex-dividend date is May 20, 2019, with a payment date on May 22, 2019.

(RESOLUTIONS 4 TO 8)

Composition of the Board of Directors

In 2018, the Appointments and Governance Committee implemented the succession process for Gérard Mestrallet, in his capacity as Chairman of the Board of Directors, and Jean-Louis Chaussade, in his capacity as Chief Executive Officer, whose respective terms will come to an end after the Shareholders' Meeting on May 14, 2019. Following the selection process, the Board of Directors decided to appoint Jean-Louis Chaussade as Chairman of the Board of Directors from May 14, 2019, and Bertrand Camus as Chief Executive Officer from this same date, subject to his appointment as Director at the Shareholders' Meeting on May 14, 2019.

Also note that the terms of office of Valérie Bernis, Isabelle Kocher, Anne Lauvergeon, Nicolas Bazire and Lorenz d'Este as Directors will come to an end after the Shareholders' Meeting on May 14, 2019.

As Valérie Bernis and Lorenz d'Este did not seek the renewal of their terms of office as Director, the Board of Directors decided to propose the following to the Shareholders' Meeting under Resolutions 4 to 8:

- the renewal, for a four-year term, *i.e.* until after the Shareholders' Meeting that will be called to approve the financial statements for the fiscal year ending December 31, 2022, of Isabelle Kocher's term of office as Director (Resolution 4).

  The Board has particularly appreciated Isabelle Kocher's contributions to its work and the work of the Strategy Committee, of which she is a member, and believes that the renewal of her term of office is in the interests of the Board and the Company, especially given her expertise and skills. Isabelle Kocher offers her expertise as Chief Executive Officer of ENGIE, a global industrial group in the energy and services sector and the reference shareholder of the Company. Isabelle Kocher also has in-depth knowledge of SUEZ's activities, acquired through her various experiences within the Group.

  In addition, the Board looked at her rate of attendance at meetings of the Board and the Strategy Committee, which was 88% overall in 2018, demonstrating her commitment to the Board's and the Strategy Committee's work;
- the renewal, for a four-year term, *i.e.* until after the Shareholders' Meeting that will be called to approve the financial statements for the fiscal year ending December 31, 2022, of Anne Lauvergeon's term of office as Director (Resolution 5).

The Board noted that Anne Lauvergeon's experience and expertise has allowed her to contribute significantly to the Board's and the Committees' work. The Board also particularly noted her considerable dedication throughout 2018, during which she attended 26 meetings of the Board, the Appointments and Governance Committee, which she chairs, and the Compensation Committee, of which she is a member. Anne Lauvergeon had a global attendance rate of 96%. She therefore played a key role in the succession process for the Chief Executive Officer implemented in 2018.

Lastly, the Board checked that Anne Lauvergeon continues to meet all the independence criteria set out in the AFEP-MEDEF Code;

- the renewal, for a four-year term, *i.e.* until after the Shareholders' Meeting that will be called to approve the financial statements for the fiscal year ending December 31, 2022, of Nicolas Bazire's term of office as Director (Resolution 6).

  The Board of Directors judged that the renewal of Nicolas Bazire's term of office was in the interests of the Company given his significant contribution since the Company's IPO to the work of the Board and the committees of which he is a member (Audit and Financial Statements Committee, Strategy Committee and Appointments and Governance Committee), and his in-depth knowledge of the Group's activities, the markets in which it operates, and the challenges that it faces, acquired during his term of office. In 2018, when there was particularly intense activity due to the succession process for the Corporate Officers, he attended 27 meetings of the Board and its committees, with a global attendance rate of 84%.

  The Board noted that, as of the Shareholders' Meeting in 2020, Nicolas Bazire will no longer meet the independence criterion based on time spent as a Director, as he will then have been a Company Director for 12 years. In this context, Nicolas Bazire and Guillaume Pepy have agreed to resign when they no longer qualify as independent Directors.

The complete biographies and information relating to the Directors the renewal of whose terms of office is proposed appear in the 2019 Notice of Meeting and chapter 14 of the 2018 Reference Document;

- appoint Bertrand Camus as a Director, for a four-year term, *i.e.* until after the Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022 (Resolution 7).

  On the recommendation of the Appointments and Governance Committee, Bertrand Camus was unanimously appointed Chief Executive Officer by the Board of Directors, at its meeting on December 20, 2018, effective from May 14, 2019, when the term of office of Jean-Louis Chaussade will come to an end, subject to his appointment as Director at the Shareholders' Meeting, in accordance with the Company's bylaws.

  The Board wished to appoint a senior executive from within the Group to lead SUEZ in the next stages of its development and believed that Bertrand Camus's long operational experience working for the Group, after having successively managed its North American activities and the Water activity in France and the Africa, Middle East and Asia-Pacific zones as Senior Executive Vice-President, combined with his strong knowledge of the environmental activities, are strong advantages when it comes to accelerating the Group's strategy and leading its transformation;

- appoint Martha J. Crawford as a Director, for a four-year term, *i.e.* until after the Shareholders' Meeting called to approve the financial statements for the fiscal year ending December 31, 2022 (Resolution 8).

  The Board of Directors proposes to appoint Martha J. Crawford, since she met all the criteria of the Board of Directors' diversity policy, as follows:

  - maintaining gender balance on the Board;
  - reinforcing the Board of Directors' skills in the areas of innovation and Research and Development, one of the primary areas the SUEZ Directors identified as needing reinforcement in the recent Board self-assessments. Martha J. Crawford has held several executive R&D roles in large groups including L'Oréal, Air Liquide, and AREVA. She also worked at the OECD as an environmental performance expert. Martha J. Crawford is currently Professor on the faculty of Harvard Business School, where she focuses on Social and Environmental Responsibility;
  - working to make the Board more international: Martha J. Crawford has double French and American nationality, and the Board considers that knowledge of the US markets would be an added advantage given the Group's strong presence in the United States;
  - maintaining the independence rate on the Board. The Board conducted the necessary diligences to check that Martha J. Crawford had no conflict of interest and could be qualified as independent with respect for the criteria in the AFEP-MEDEF Code.

  Finally, the Board ensured that Martha J. Crawford would be fully available to participate actively and regularly in the Board's work, since she only serves on the Board of one other listed company (Altran Technologies).

The complete biographies and information relating to the Directors whose appointment is proposed appear in the 2019 Notice of Meeting.

As a result, subject to the approval of Resolutions 4 to 8 at the Shareholders' Meeting on May 14, 2019, the Board of Directors will be made up of 19 members, including:

- 8 Independent Directors *i.e.* 50% of its members (not counting Directors appointed on the proposal of employees and employee shareholders, in accordance with the recommendations of the AFEP-MEDEF Code);
- 8 women, *i.e.* 42% of its members (or 7 women, *i.e.* 41% of its members, not counting Directors appointed on the proposal of employees, in line with the proportion required by law);
- 6 Directors of foreign nationality, *i.e.* 31.6% of its members, with 5 different foreign nationalities represented.

(RESOLUTION 9 TO 16)

Compensation of Corporate Officers ("Say on Pay"), including the presentation of information about the related-party commitments granted in favor of Bertrand Camus

In accordance with Article L. 225-37-2 of the French Commercial Code, the principles and criteria for determining, dividing and allocating the fixed, variable and exceptional elements comprising the total compensation and benefits of all kinds of each Corporate Officer of the Company for their offices of Chairman of the Board of Directors and Chief Executive Officer must be submitted to the Shareholders' Meeting for approval.

Furthermore, in accordance with Article L. 225-100 of the French Commercial Code, the elements of compensation and benefits of all kinds due or awarded for the fiscal year ended to each Corporate Officer of the Company must also be submitted to the shareholders for voting, the payment of the components of variable and exceptional compensation being subject to approval at the Shareholders' Meeting.

Jean-Louis Chaussade's term of office as Chief Executive Officer comes to an end on May 14, 2019. On December 20, 2018, the Board appointed Bertrand Camus as Chief Executive Officer, from May 14, 2019, subject to his appointment as Director. The compensation policy applicable to the Chief Executive Officer is therefore subject, in 2019, to two separate resolutions, the first for the period from January 1 to May 14, 2019, and the second for the period from May 14 to December 31, 2019.

Gérard Mestrallet's term of office as Chairman also comes to end on May 14, 2019. The Board has appointed Jean-Louis Chaussade as Chairman of the Board of Directors, from May 14, 2019. The compensation policy applicable to the Chairman is therefore subject to two separate resolutions, the first for the period from January 1 to May 14, 2019, and the second for the period from May 14 to December 31, 2019.

Given the changes to the Company's governance referred to above, the following will be submitted to the shareholders for voting, under Resolutions 9 to 16:

- the elements of compensation due or awarded for fiscal year 2018 to Gérard Mestrallet, Chairman of the Board of Directors;
- the compensation policy of the Chairman of the Board of Directors, Gérard Mestrallet, for fiscal year 2019, for the period from January 1, 2019 to May 14, 2019;
- the compensation policy of the Chairman of the Board of Directors, Jean-Louis Chaussade, for fiscal year 2019, for the period from May 14, 2019 to December 31, 2019;
- the elements of compensation due or awarded for fiscal year 2018 to Jean-Louis Chaussade, Chief Executive Officer;
- the compensation policy of the Chief Executive Officer, Jean-Louis Chaussade, for fiscal year 2019, for the period from January 1, 2019 to May 14, 2019;
- the compensation policy of the Chief Executive Officer, Bertrand Camus, for fiscal year 2019, for the period from May 14, 2019 to December 31, 2019;
- the related-party commitments granted by the Company in favor of Bertrand Camus.

The shareholders are reminded that all of the information relating to the compensation of the Company's Corporate Officers is presented in the Corporate Governance Report referred to in Article L. 225-37 of the French Commercial Code, and appears in chapter 15 of the Company's 2018 Reference Document.

COMPENSATION OF THE CHAIRMAN OF THE BOARD OF DIRECTORS

1. Vote on the elements of compensation due or awarded for fiscal year 2018 to Gérard Mestrallet, Chairman of the Board of Directors (Resolution 9)

The Shareholders' Meeting is asked to approve the fact that no compensation was paid by the Company to Gérard Mestrallet during fiscal year 2018, apart from the attendance fees awarded to him for that fiscal year, which amounted to EUR 53,055.

2. Vote on the compensation policy for the Chairman of the Board of Directors, Gérard Mestrallet, for the period from January 1 to May 14, 2019 (Resolution 10)

The compensation policy for the Chairman of the Board of Directors was determined in 2014 by the Board of Directors, on the recommendation of the Compensation Committee. It has remained unchanged since that date and was renewed for the period from January 1 to May 14, 2019.

The Chairman of the Board of Directors, whose duties are described in chapter 16.4 of the Company's 2018 Reference Document, does not, therefore, receive any compensation for his office aside from attendance fees, which are awarded to him in accordance with the distribution rules set by the Board of Directors, on the recommendation of the Compensation Committee, and have also remained unchanged since fiscal year 2014.

The Chairman of the Board of Directors receives the following attendance fees:

- a fixed annual portion of EUR 15,000, applicable to each Director;
- a variable portion of EUR 4,000 per attendance of a Board meeting;
- a variable portion of EUR 4,000 per attendance of a meeting of the Strategy Committee, of which he is the Chairman.

Note that a reduction in the attendance fee amount, according to attendance rate, is applied if the annual budget of EUR 700,000 set by the Shareholders' Meeting is exceeded, and that the Board of Directors may decide to share out the unpaid balance, according to each Director's participation rate, if the balance has not been completely used.

The Chairman of the Board of Directors receives no other element of compensation or benefits from the Company.

The Shareholders' Meeting is therefore asked to approve the compensation policy of the Chairman of the Board of Directors, Gérard Mestrallet, for the period from January 1 to May 14, 2019, as described above.

3. **Vote on the compensation policy for the Chairman of the Board of Directors, Jean-Louis Chaussade, for the period from May 14 to December 31, 2019 (Resolution 11)**

In the context of Jean-Louis Chaussade's appointment as Chairman of the Board, effective on May 14, 2019, the Board of Directors defined a new compensation policy applicable as of May 14, 2019, on the Compensation Committee's recommendation.

This policy was adapted based on studies and analyses by independent experts, to be in line with observed market practices within comparable companies that separate the CEO and Chairman roles. This compensation policy includes annual gross fixed compensation of EUR 250,000. The Chairman of the Board of Directors may also benefit from the use of a company car.

The Chairman of the Board of Directors does not receive attendance fees. In accordance with the recommendations of the AFEP-MEDEF Code, the Chairman does not receive any elements of variable compensation.

The Shareholders' Meeting is therefore asked to approve the compensation policy for the Chairman of the Board of Directors, Jean-Louis Chaussade, for the period from May 14 to December 31, 2019, as described above.

COMPENSATION OF THE CHIEF EXECUTIVE OFFICER

The compensation policy recommended by the Compensation Committee for the Chief Executive Officer has been drawn up by the Board of Directors, in accordance with the principles for determining compensation for executive and Corporate Officers set out in the AFEP-MEDEF Code. The principles governing this compensation policy, as described below, were reviewed by the Board of Directors at its meeting on February 26, 2019, given the appointment of a new Chief Executive Officer from May 14, 2019. The Board of Directors decided that a distinction should be made between the compensation policy applicable to the Chief Executive Officer for the period from January 1 to May 14, 2019, and for the period from May 14 to December 31, 2019, particularly to take into account the difference in the personal situations of the current Chief Executive Officer, who claimed benefits under his retirement plans in 2014, and the future Chief Executive Officer.

The Board of Directors and the Compensation Committee determine the compensation policy of the Chief Executive Officer on the basis of the following principles:

- comparability and competitiveness: the Compensation Committee makes recommendations and proposals and submits them to the Board of Directors, drawing on studies and analyses of the market practices of comparable companies carried out by independent experts;
- balance: the Compensation Committee and the Board of Directors ensure that there is a proper balance between the elements comprising the total short- and long-term compensation of the Chief Executive Officer;
- alignment with the interests of shareholders: the Compensation Committee ensures that the compensation awarded to the Chief Executive Officer is determined in a manner consistent with the Group's financial, strategic, environmental and corporate performance. A significant share of total compensation is subject to achieving performance conditions, for both long- and short-term compensation;
- stability: the compensation policy must be sustainable as the criteria determining this compensation are only reviewed after long intervals. This policy may be adjusted, however, if this is necessary to adapt to changes in the objectives adopted by the Group, or in the event of a major operation with a significant impact on the Group's scope. The compensation policy of the Chief Executive Officer is also reviewed by the Board of Directors in the event of the succession of the Chief Executive Officer. The Board of Directors in this case carries out an overall analysis of the executive officer's situation and provides its opinion on all of the elements of his compensation (fixed, annual variable and long-term variable compensation, supplementary retirement plans, severance pay, etc.), taking into account the existing practices within the Company and the individual compensation awarded to the executive officer in the past.

1. Vote on the elements of compensation due or awarded for fiscal year 2018 to Jean-Louis Chaussade, Chief Executive Officer (Resolution 12)

Under Resolution 12, the Shareholders' Meeting is asked to approve the following elements of compensation due or awarded for fiscal year 2018 to Jean-Louis Chaussade, Chief Executive Officer:

Elements of compensation due or awarded for fiscal year 2018	Amount or value	Presentation
Fixed compensation	EUR 750,000	This is the gross fixed compensation for fiscal year 2018, unchanged since 2009. Since August 1, 2014, the date of liquidation of his pension rights, the amount of the pension paid to Jean-Louis Chaussade under mandatory retirement plans (EUR 110,749 for fiscal year 2018) has been deducted from the amount of the fixed compensation paid by the Company.
Annual variable compensation	EUR 666,415	At its meeting on February 26, 2019, on the recommendation of the Compensation Committee, the Board of Directors adopted the annual variable compensation for Jean-Louis Chaussade for fiscal year 2018, which amounts to EUR 666,415, or 88.86% of his fixed compensation (*versus* EUR 541,098 for fiscal year 2017). Note that Jean-Louis Chaussade was not present when the Board of Directors decided on his compensation. Jean-Louis Chaussade's variable compensation may represent between 0% and 145% of his fixed compensation and has been determined on the basis of: ► quantifiable criteria previously set by the Board of Directors in February 2018, based on the 2018 budget. These criteria account for 75% of the overall weighting of the variable portion and are related to EBIT (20%), free cash flow (20%), ROCE (10%), and TSR (25%); and ► qualitative criteria, which account for 25% of the overall weighting of the variable portion and relate to Health and Safety results, the implementation of the Group's transformation plan and the implementation of the strategy (profitable growth and asset rotation). The payment of this annual variable compensation is subject to approval at the Shareholders' Meeting on May 14, 2019.
Deferred variable compensation	N/A	Jean-Louis Chaussade is not entitled to deferred variable compensation.
Long-term variable compensation	N/A	The Board of Directors decided, at the request of Jean-Louis Chaussade, during its meeting on February 28, 2018, not to pay him any long-term variable compensation for fiscal year 2018.
	EUR 351,000 paid	At its meeting on January 14, 2015, the Board of Directors decided to award Jean-Louis Chaussade long-term variable compensation for fiscal year 2015, of a maximum amount of EUR 750,000, or 100% of his annual fixed compensation, providing, as the case may be, for a cash payment in 2018, subject to the achievement of two cumulative performance conditions: ► an internal performance condition based on the Group's cumulative Recurring Net Income from 2015 to 2017; ► a market performance condition based on the level of SUEZ's Total Shareholder Return (TSR) compared to the average TSR of the companies comprising the DJ Euro Stoxx Utilities index over the period from January 1, 2015 to December 31, 2017. As these two conditions were achieved respectively, at 104.9% for the internal condition and 97% for the external condition, the Chief Executive Officer was paid an amount of EUR 351,000 in 2018, *i.e.* 46.8% of the maximum amount initially awarded.

Éléments de la rémunération due ou attribuée au titre de l'exercice 2018	Montants ou valorisation	Présentation
Exceptional compensation	Nothing paid in 2018 (IFRS value in the financial statements: EUR 1,478,826)	The Board of Directors decided, at its meeting on February 28, 2018, to award Jean-Louis Chaussade exceptional compensation linked to the acquisition of the GE Water activity, of a target amount equal to twice his fixed compensation, *i.e.* EUR 1,500,000, which may be increased to a maximum of EUR 1,650,000 if the objectives set are exceeded, subject to the achievement of the following performance conditions, assessed over an 18-month period between October 1, 2017 and March 31, 2019: ► a performance condition relating to quantifiable criteria, accounting for 80% of the overall weighting, based on the organic growth of the new WTS business unit (20%), its EBITDA (32%) and its operating cash flow (28%); ► a performance condition relating to qualitative criteria, accounting for 20% of the overall weighting, linked to the integration process (change management, consistency within the teams, growth and development of the Group's revenue with industrial clients, and acceleration of the Group's transformation thanks to the integration of GE Water). The achievement of these performance conditions will be reviewed in 2019 by the Board of Directors, the payment of this compensation being subject to approval at the Shareholders' Meeting called to approve the 2019 financial statements.
Stock options, performance shares or any other item relating to long-term compensation	N/A	No allocation was made during fiscal year 2018.
Attendance fees	N/A	Jean-Louis Chaussade does not receive attendance fees.
Value of benefits of all kind	EUR 10,373	Jean-Louis Chaussade has a company car.
Severance pay	N/A	Jean-Louis Chaussade is not entitled to severance pay in the event of the termination of his office.
Compensation due under a non-compete clause	N/A	Jean-Louis Chaussade is not entitled to compensation under a non-compete clause.
Healthcare plan	EUR 5,180	Jean-Louis Chaussade is covered by the Company's current mandatory Group healthcare plan.
Supplementary retirement plan	No payments	Jean-Louis Chaussade was covered by the Group's supplementary retirement plans applicable to SUEZ employees: a mandatory Group defined-contribution plan under Article L. 441-1 of the French Insurance Code and a supplementary variable Group defined-benefit retirement plan. Jean-Louis Chaussade decided to liquidate all of his retirement plans as of August 1, 2014, including the Group defined-contribution and defined-benefit retirement plans. He did, however, decide to waive any pension payments under these supplementary plans until his current duties as Chief Executive Officer come to an end. The annual pension resulting from the Group supplementary retirement plans to be paid to Jean-Louis Chaussade (once he is no longer Chief Executive Officer) will be EUR 280,304, or 19.7% of his 2018 annual compensation (including fixed and variable compensation payable by the Company).

2. Vote on the compensation policy of the Chief Executive Officer, Jean-Louis Chaussade, for the period from January 1 to May 14, 2019 (Resolution 13)

Given that Jean-Louis Chaussade's term of office comes to an end on May 14, 2019, the Board of Directors, on the recommendation of the Compensation Committee, has defined a specific compensation policy for this period composed of the following elements:

- **annual fixed compensation** (including the pension paid under retirement plans) determined according to the senior executive's experience and seniority and market practices for comparable positions.

  This fixed compensation has been maintained at an annual gross amount of EUR 750,000 (including the pension received under the CNAV retirement plan and the AGIRC-ARRCO plans) and will be prorated until May 14, 2019;

- **annual variable compensation**, which serves as a source of motivation and as a reward for achievement of the Company's annual financial and non-financial objectives. The main characteristics of this annual variable compensation are as follows:

  – amount: between 0% and 145% of fixed annual compensation, as the achievement of set objectives corresponds to a variable portion equivalent to 80% of fixed compensation,

  – conditions of award: based on the achievement, during the fiscal year, of quantifiable objectives (which account for 75%), *i.e.* financial criteria or criteria related to the change in the share price, set in line with the objectives and forecasts communicated to the financial market by the Group and that can be verified by the public, and qualitative objectives (which account for 25%). The nature of these objectives, as well as their expected level of achievement, are determined at the beginning of each year.

  For the 2019 fiscal year, the performance criteria applied, which will be assessed by the Board of Directors based on the Company's Consolidated Financial Statements approved at December 31, 2019, are as follows:

  – quantifiable criteria: accounting for 75% of the overall weighting of the variable portion, related to EBIT (20%), the free cash flow (20%), ROCE (10%) and the Total Shareholder Return (25%), and

  – qualitative objectives: accounting for 25% of the overall weighting of the variable portion, related to the managerial transition and Health and Safety results.

  The annual variable compensation amount that may be awarded for each of the quantifiable criteria is calculated as follows:

	Minimum	Target objective	Maximum	Remarks
Quantifiable criteria	Amount equal to 0 if less than 80% of the target objective is achieved.	Amount equal to 80% if 100% of the target objective is achieved.	Amount equal to 145% if 120% of the target objective is achieved.	Linear calculation between milestones.

  The amount determined in accordance with these performance criteria will be prorated to take into account the actual period for which Jean-Louis Chaussade will serve as Chief Executive Officer in the 2019 fiscal year.

  In accordance with Article L. 225-100 of the French Commercial Code, the payment of annual variable compensation is subject to approval at the annual Shareholders' Meeting called to approve the 2019 financial statements.

The Chief Executive Officer benefits from a company car and from the Group healthcare plan for Company employees. He is not entitled to long-term compensation for 2019, as he is close to the end of his term of office as Chief Executive Officer.

3. Vote on the compensation policy for the Chief Executive Officer, Bertrand Camus, for the period from May 14 to December 31, 2019 (including information about related-party commitments made in favor of Bertrand Camus) (Resolutions 14 to 16)

In the context of Bertrand Camus' appointment as Chief Executive Officer, effective on May 14, 2019 (subject to the approval of his appointment as Director at the Shareholders' Meeting), the Board of Directors, on the Compensation Committee's recommendation, has defined a new compensation policy applicable as of May 14, 2019. This policy has been adapted to ensure a better alignment between the Chief Executive Officer's interests and the interests of shareholders, firstly by increasing the weighting of long-term compensation and the obligation to invest and to own shares, and secondly by increasing the portion of compensation subject to the achievement of performance conditions (the Chief Executive Officer's fixed compensation has however not changed since 2009). This policy also takes into account the interested party's personal situation (including his age, seniority within the Company and experience) and draws on studies and analyses by independent experts on the market practices of comparable companies, to define a competitive compensation policy that allows the Group to retain or attract high-level executives.

In accordance with the principles defined above, the Chief Executive Officer's compensation is comprised of the following elements:

Elements linked to the assumption of the role of Chief Executive Officer

- **Welcome bonus**: according to the AFEP-MEDEF Code, the Chief Executive Officer cannot be granted a welcome bonus if he has been chosen from among the senior executives already working for the Group.

  Bertrand Camus will not therefore receive a bonus following his appointment as Chief Executive Officer.

- **Employment contract**: the Chief Executive Officer, in accordance with the recommendations of the AFEP-MEDEF Code, decided to end his employment contract by resigning. His resignation will take effect subject to his appointment to the Board at the Shareholders' Meeting on May 14, 2019 and the consequent assumption of his role as Chief Executive Officer.

He will not receive any compensation following the termination of his employment contract.

Elements of compensation linked to the performance of the duties of Chief Executive Officer

- **Fixed annual compensation** aimed at attracting and retaining highly experienced senior executives by means of a competitive and coherent compensation plan. This is calculated taking into account the Chief Executive Officer's experience, seniority and market practices for comparable positions. It is intended to be stable, only changing over relatively long periods or following significant changes in the Group's scope.

  For 2019, on the recommendation of the Compensation Committee, the Board of Directors decided, at its meeting on February 26, 2019, in accordance with these principles, to keep the Chief Executive Officer's fixed compensation at EUR 750,000 (it has not been changed since 2009). This amount will be prorated in 2019 given that Bertrand Camus will begin his term of office as Chief Executive Officer on May 14, 2019.

- **Variable annual compensation**, which serves as a source of motivation and as a reward for the achievement of the Company's annual financial and non-financial objectives and whose main characteristics are as follows:
  - amount: between 0% and 150% of annual fixed compensation, as the achievement of set objectives corresponds to a variable portion equivalent to 100% of fixed compensation;
  - conditions of award: based on the achievement of quantifiable diverse, demanding, precise, predetermined objectives that are aligned with the challenges facing the Company, its strategy and shareholders' interests (which account for 75%), *i.e.* financial criteria set in line with the objectives and forecasts communicated to the financial market by the Group and that can be verified by the public, or that are linked to the Group's corporate social responsibility commitments, or based on the achievement of qualitative objectives (which account for 25%).

  The annual variable compensation that may be awarded for each of the quantifiable criteria is calculated as follows, the trigger threshold being changed from 80% to 85% of the target objective:

	Minimum	Target objective	Maximum	Remarks
Quantifiable criteria	Amount equal to 0 if less than 85% of the target objective is achieved.	Amount equal to 100% if 100% of the target objective is achieved.	Amount equal to 150% if 120% of the target objective is achieved.	Linear calculation between milestones.

  The nature of these objectives, as well as their expected level of achievement, are determined at the beginning of each year.

  For 2019, on the recommendation of the Compensation Committee, the Board of Directors decided, at its meeting on February 26, 2019, in accordance with these principles, to include a criterion linked to the Group's corporate social responsibility commitments, measured according to quantifiable criteria, due to the strategic nature of these commitments and the Group's capacity to set predetermined objectives in these areas. It accordingly set performance criteria applicable to the Chief Executive Officer's annual variable compensation as follows, the financial criteria being in line with the indicators used for the outlooks communicated to the market:
  - quantifiable criteria, accounting for 75% of the overall weighting of the variable portion, related to the Group's EBIT (20%), free cash flow (20%), revenue (10%), Total Shareholder Return (15%) and Health and Safety results (10%), and
  - qualitative criteria, accounting for 25% of the overall weighting of the variable portion, related, firstly, to the managerial transition and, secondly, to the proposing of the Company's strategy and project and the management of their implementation.

  The rate of achievement of the performance criteria will be assessed by the Board of Directors at its meeting to approve SUEZ's 2019 Consolidated Financial Statements. The amount determined will be prorated based on the actual period during which Bertrand Camus served as Chief Executive Officer.

  In accordance with Article L. 225-100 II of the French Commercial Code, the payment of annual variable compensation is subject to approval at the annual Shareholders' Meeting called to approve the 2019 financial statements.

- **Long-term variable compensation**, aimed at retaining the Chief Executive Officer and at ensuring that his interests are aligned with the interests of the Company and its shareholders. The main characteristics of this compensation are as follows:
  - nature: the compensation is entirely linked to the change in the Company's share price and may take the form of performance units (variable compensation in cash whose amount is indexed to the share price) or performance shares,
  - amount: the value of the Chief Executive Officer's long-term variable compensation cannot exceed 50% of the Chief Executive Officer's total compensation (sum of the fixed compensation, the annual variable compensation and the value of the long-term variable compensation awarded),
  - performance conditions: this variable long-term compensation is fully subject to the achievement of two performance conditions, assessed over a minimum period of three years. The first "internal" performance condition is established based on a financial indicator audited and disclosed by the Company, in line with the forecasts and/or objectives published by the Group, as well as the Group's budget and medium-term plan (EBIT for the most recent long-term variable compensation plans introduced). The second "external" performance condition allows an assessment of the Company's performance compared to a group of comparable companies (for example through the average change in the Company's Total Shareholder Return (TSR) over a three-year period, compared to the change in the TSR of the Euro Stoxx Utilities index over the same period). A non-financial performance condition related to the Group's corporate social responsibility policy is also included,
  - presence condition: the awarding of long-term variable compensation is subject to a condition of working for the Company for at least three years. This means that, if the Chief Executive Officer leaves before he has met the presence condition, his entitlements under the long-term

compensation plans will be lost, unless the Chief Executive Officer retires, in which case the entitlements will be maintained in their entirety, but will still be subject to performance conditions. If he leaves following a forced departure due to a change of control or strategy, his entitlements will be prorated according to the length of his presence within the Group, but will still be subject to performance conditions,

– obligation to own shares: the Chief Executive Officer has undertaken to hold 25% of his vested performance shares until the end of his term of office, or to reinvest 25% of the total performance units that he effectively receives in shares, until the number of registered shares held by the Chief Executive Officer is equal to twice his fixed compensation. Finally, the Chief Executive Officer has agreed not to engage in hedging transactions with respect to the performance shares or stock options that he receives from the Company.

For 2019, on the recommendation of the Compensation Committee, the Board of Directors decided, at its meeting on February 26, 2019, to award this long-term variable compensation in the form of performance units, *i.e.* a cash payment whose amount is determined by the change in the share price. The award itself, and the related performance conditions, will be decided on by the Board of Directors during the third quarter, after the Chief Executive Officer has effectively assumed his role.

- **Exceptional compensation**: in accordance with Article 24.3.4 of the AFEP-MEDEF Code, the Board of Directors may decide to award exceptional compensation to the Chief Executive Officer, solely in circumstances entailing a significant change in the Group's scope. Payment of this exceptional compensation is in this case entirely subject to the achievement of performance conditions.

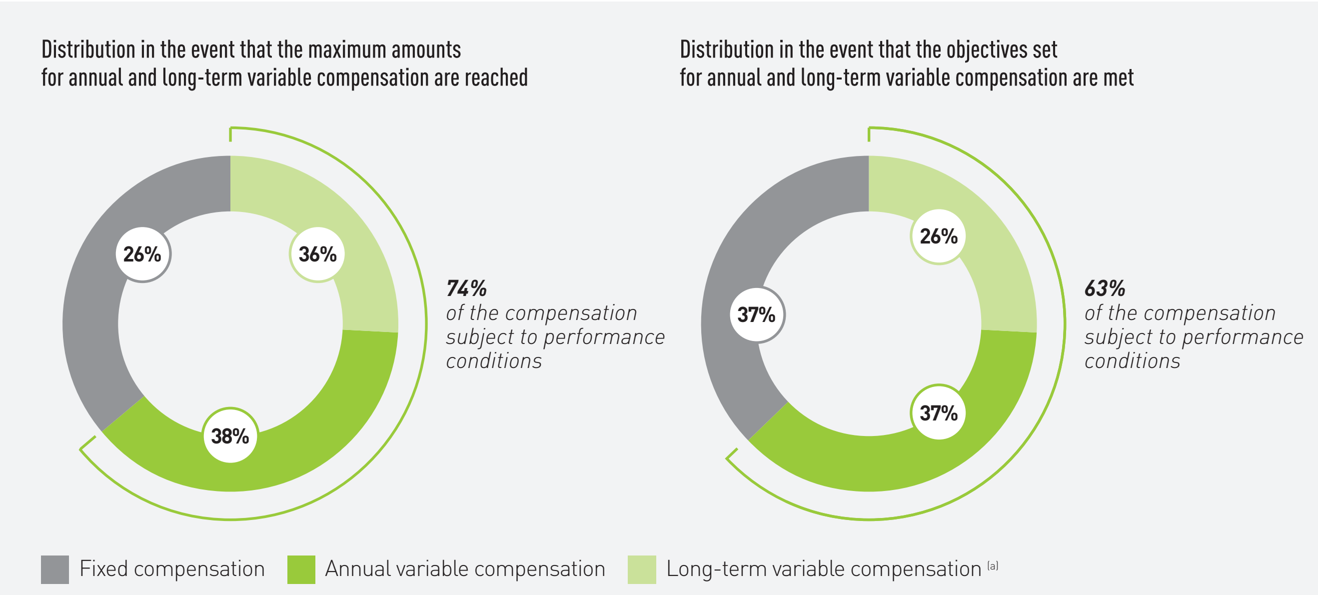
  Since the Company's IPO in 2008, the Board of Directors has therefore only awarded exceptional compensation once, in connection with the acquisition of the GE Water activity in 2017. Also note that, in accordance with Article L. 225-100 of the French Commercial Code, the payment of exceptional compensation must be approved at the annual Shareholders' Meeting.

- **Benefits in kind**: the Chief Executive Officer enjoys the use of a company car.

  If this compensation policy is approved by the shareholders, in accordance with Articles L. 225-38 *et seq.* of the French Commercial Code, the commitments granted in favor of the Chief Executive Officer concerning Group healthcare and insurance plans are also subject to approval at the same Shareholders' Meeting under Resolution 16 on the approval of related-party commitments made in favor of Bertrand Camus, subject to the approval of Bertrand Camus's appointment to the Board under Resolution 7 of this meeting.

  The Chief Executive Officer does not receive attendance fees.

  The weighting of the fixed, annual variable and long-term variable elements (excluding exceptional compensation) in the total compensation of the Chief Executive Officer is as follows:



(a) Valuation at the date of allocation.

Elements linked to the termination of the Chief Executive Officer's office or subsequent to the serving of his term

- **Severance pay** that may be awarded taking into account the Chief Executive Officer's personal situation on the date that he assumes his role.

  The Board of Directors, having noted the termination of Bertrand Camus's employment contract, and therefore the loss of the legal and contractual arrangements existing under his contract in the event of dismissal, decided, at its meeting on February 26, 2019, to award Bertrand Camus severance pay should he leave his office as Chief Executive Officer following a forced departure, particularly due to dismissal or resignation linked to a change in control of the Company or a change of its strategy.

No severance pay would be due in the following cases:

- if the departure occurred less than two years after the Chief Executive Officer's term of office took effect or in the event of resignation, except if the departure results from a change in the Company's control or a change of strategy,
- in the event of a change of function within the SUEZ Group,
- in case of departure, no matter what the form, for willful or serious misconduct (*faute grave ou lourde*),
- if the Chief Executive Officer was eligible for retirement at the time of his departure,
- if the Chief Executive Officer had exceeded the age limit for serving as Chief Executive Officer, or
- in the event of death.

The total severance pay is capped at two years' fixed and annual variable compensation, with the variable compensation based on the average of the two last annual variable compensations paid to the Chief Executive Officer.

Severance pay may also only be paid after the Board of Directors has acknowledged the achievement of the performance conditions, assessed on the date the Chief Executive Officer's term of office ends. These performance conditions correspond to the rates of achievement of the quantifiable criteria set at the start of each fiscal year by the Board of Directors for the calculation of the Chief Executive Officer's annual variable compensation.

If the average amount obtained by the Chief Executive Officer in application of the quantifiable criteria for the three fiscal years preceding his departure is greater than or equal to the target annual variable compensation, 100% of the severance pay will be due to the Chief Executive Officer. If the average amount (average for the three fiscal years preceding the departure) is between 90% and 100% (excluded) of the target level, 70% of the severance pay will be due to the Chief Executive Officer. If the average amount (average for the three fiscal years preceding the departure) is less than 90% (excluded) of the target level, no severance pay will be due. If the Chief Executive Officer leaves before the end of the third fiscal year, achievement of the performance condition will only be assessed for one or two fiscal years depending on the duration of his term of office.

Note that, in accordance with Articles L. 225-38 and L. 225-40 to L. 225-42-1 of the French Commercial Code, the commitments made in favor of the Chief Executive Officer concerning severance pay are also subject to approval at this Shareholders' Meeting under Resolution 15, subject to the approval of Bertrand Camus's appointment to the Board under Resolution 7 of this meeting.

- **A non-compete commitment** that could be introduced with respect to the Chief Executive Officer to protect the Company's legitimate interests given the duties performed by the Chief Executive Officer and the strategic and confidential information to which he has access as a result.

  The Board of Directors decided, at its meeting on February 26, 2019 in exchange for a commitment by Bertrand Camus not to practice, for a period of two years from the end of his term of office as Chief Executive Officer, no matter why the term of office came to an end, either directly or indirectly, an activity that competes with the activities of the Company and the SUEZ Group's companies, to award him compensation equal to one year's compensation (fixed and variable compensation, with the variable compensation being based on the average of the two last annual variable compensations paid to the Chief Executive Officer), paid in 24 equal and successive monthly installments.

  In accordance with the AFEP-MEDEF Code, the total severance pay and indemnity due under a non-compete commitment may under no circumstances exceed two years' compensation (fixed and variable compensation, with the variable compensation based on the average of the two last annual variable compensations paid to the Chief Executive Officer). If the Board decided to implement the non-compete commitment, the total severance pay would be capped at one year's compensation.

  The indemnity due under a non-compete commitment will not be paid, under any circumstances, if the Chief Executive Officer retires or is over 65 years old at the end of his term as Chief Executive Officer.

  In addition, the Board of Directors will have the possibility of renouncing implementation of this non-compete commitment on the Chief Executive Officer's departure, in which case no indemnity will be due.

  Note that, in accordance with Articles L. 225-38 and L. 225-40 to L. 225-42-1 of the French Commercial Code, the commitments made in favor of the Chief Executive Officer concerning indemnity due under a non-compete commitment are also subject to approval at this Shareholders' Meeting under Resolution 15, subject to the approval of Bertrand Camus's appointment to the Board under Resolution 7 of this meeting.

- **A retirement plan**: the Chief Executive Officer may benefit from a retirement plan introduced by the Company.

  Since 2006, Bertrand Camus has benefited, under his employment contract, from a Group defined-benefit retirement plan, under Article L. 137-11 of the French Social Security Code, applicable to Company employees, which has allowed him to accrue potential entitlements and which is maintained if the interested party ends their career at the Company. The termination of Bertrand Camus's employment contract, to which he has committed subject to his appointment to the Board at the Shareholders' Meeting on May 14, 2019, will result in the permanent waiving of the benefit of the entitlements accrued under this plan.

  The Board of Directors examined the cost of maintaining the benefit of this plan for the Chief Executive Officer. Following this examination, it judged that the introduction of another optional, defined-contribution retirement plan is in the Company's interests, as the cost of this plan is significantly lower than the cost of the current defined-benefit plan, but is still competitive for the beneficiary.

  The Board of Directors, during its meeting on February 26, 2019, therefore decided that the Chief Executive Officer would benefit from this optional defined-contribution retirement plan introduced by the Company, governed by the provisions of Article 82 of the French General Tax Code, which guarantees the beneficiary additional retirement benefits or a cash sum upon the beneficiary's retirement. Under this framework, the Company will pay an annual amount, linked to the Group's performance, corresponding to 30% of the Chief Executive Officer's fixed compensation and annual variable compensation, on the understanding that this amount will be paid in cash by the Company, half to the insurer in charge of managing the plan and half to the Chief Executive Officer due to the taxation applicable given the immediate taxation on payments made into this new plan.

  If the payments made by the Company in connection with the defined-contribution retirement plan do not ensure that the Chief Executive Officer receives a pension equal to the pension that he would have benefited from if he was still a beneficiary of the defined-benefit plan (subject to him ending his career at the Company), this change allows the Chief Executive Officer to accrue definite entitlements and the Company to make savings of an estimated 47% (if the cost of the two plans is compared until the age at which the Chief Executive Officer might retire).

Note that, in accordance with Articles L. 225-38 *et seq.* of the French Commercial Code, the commitments made in favor of the Chief Executive Officer concerning this defined-contribution retirement plan are also subject to approval at this Shareholders' Meeting under Resolution 16, subject to the approval of Bertrand Camus's appointment to the Board under Resolution 7 of this meeting.

All of the commitments presented above in connection with the Group healthcare and insurance plans applicable to SUEZ employees, and the termination of the Chief Executive Officer's office or arrangements subsequent to the serving of his term, are presented in detail in the Statutory Auditors' Report on related-party agreements and commitments included in this section of the 2018 Reference Document.

The shareholders are also asked to take note of this Report, under Resolution 16, bearing in mind that only one related-party agreement previously approved at a Shareholders' Meeting, as cited in the said Report, was continued during fiscal year 2018.

(RESOLUTION 17)

Authorization to be granted to the Board of Directors to trade in the Company's shares

The Shareholders' Meeting on May 17, 2018 authorized the Company, under Resolution 16, to trade in its own shares for an 18-month period.

As of December 31, 2018, the Company held 3,534,950 treasury shares, *i.e.* 0.57% of the share capital. Details of the use of this delegation granted to the Board of Directors in 2018 are set out in section 16.4.8 of the 2018 Reference Document.

As the currently valid authorization expires in November 2019, you are asked to cancel the unused portion of this authorization and renew the Board of Directors' authorization to trade in the Company's own shares for an 18-month period.

The terms and conditions of this new authorization, which are the same as those applicable to the authorization granted by the Shareholders' Meeting in 2018, are as follows:

- maximum purchase price per share: EUR 25;
- maximum number of shares purchased: 10% of the share capital;
- maximum holding: 10% of the share capital;
- maximum acquisition value: EUR 1,553,406,425.

This new authorization would allow the Company to trade in its own shares, except in the event of a public offering of the Company's shares. The objectives of this buyback program, set in accordance with the regulations, would be the following:

- to ensure the liquidity and promote the secondary market for the Company's shares through an investment services provider acting independently under a liquidity contract; or
- to subsequently cancel all or part of the shares thus purchased under the conditions laid down in Article L. 225-209 of the French Commercial Code, as part of a capital reduction that would be decided on or authorized by the Shareholders' Meeting; or
- to implement the allocation or disposal of shares to employees or former employees and/or Corporate Officers or former Corporate Officers of the Company and/or companies affiliated with it, or which may be affiliated with it in the future, in France and/or outside of France, as provided by Article L. 225-180 of the French Commercial Code, particularly in the context of any stock option plans, any bonus share plans, any employee shareholding plans, or any form of compensation practiced by the Company, specifically under the relevant provisions of the French Commercial Code and/or French Labor Code, or French or foreign laws and regulations, and for any hedges set up for such transactions and related commitments of the Company, under the conditions approved by the market authorities and at the times that the Board of Directors or the person acting on behalf of the Board of Directors deems appropriate; or
- to hedge securities that grant entitlement to the Company's shares; said shares to be delivered at the time of exercise of the rights attached to these securities, either through redemption, conversion, exchange, presentation of a warrant or by any other means of allocation of Company shares; or
- in general, to pursue any other goal that is or might become authorized by law or the regulations, or engage in any market practice that is or might become accepted by financial market regulators, provided Company shareholders are notified thereof.

Presentation of the resolutions to be submitted to the Extraordinary Shareholders' Meeting

(RESOLUTION 18)

Reduction of the Company's share capital through the cancellation of treasury shares held by the Company

The Shareholders' Meeting on May 17, 2018, in Resolution 17, authorized the Board of Directors to reduce the Company's share capital by canceling treasury shares.

This authorization was not used by the Board of Directors during fiscal year 2018.

The Shareholders' Meeting is asked to terminate the authorization granted by the Shareholders' Meeting on May 17, 2018, and to grant the Board of Directors a new authorization, under similar conditions, for a 26 month-period, in order to reduce the Company's share capital by canceling some or all of the shares that the Company acquires as part of a share buyback program (including the program proposed to this Shareholders' Meeting under Resolution 17), up to a limit of 10% of its share capital per 24-month period.

(RESOLUTIONS 19 TO 21)

Employee shareholding

The delegations of authority described in Resolutions 19 and 20 are intended to renew delegations that were previously granted to the Board of Directors by the Shareholders' Meeting on May 17, 2018, some of which will expire in November 2019, in connection with the development of employee shareholding at Group level, by giving the Board the option to carry out additional employee shareholding transactions whenever it considers it appropriate to do so. Resolution 21 is intended to renew the authorization granted to the Board of Directors by the shareholders on May 17, 2018 to allocate bonus shares to employees and Corporate Officers who subscribe to a Group employee shareholding plan.

These three resolutions would be renewed under the same conditions as those approved at the Shareholders' Meeting on May 17, 2018.

The Board of Directors in fact wishes to pursue its policy of employee shareholding in order to:

- make employees fully-fledged partners of the Group;
- pay special attention to value creation as one of the meeting points between the interests of shareholders and the interests of employees;
- allow employees to be involved in the choices made by the shareholders through annual decisions.

As of December 31, 2018, employee shareholders held 3.73% of the Company's share capital.

Capital increase reserved for members of savings plans with waiver of the preferential subscription rights for the benefit of the latter (Resolution 19)

The Shareholders' Meeting on May 17, 2018, under Resolution 24, delegated its authority to the Board of Directors for a 26-month period to increase the Company's share capital, while waiving the preferential subscription rights, such increase to be reserved for members of the Company savings plan (s) in place within the SUEZ Group.

This delegation was not used by the Board of Directors during fiscal year 2018.

You are asked to renew this delegation of authority for a further 26-month period, the maximum nominal amount of the capital increases likely to be carried out under this delegation remaining unchanged at EUR 50 million, *i.e.* around 2% of the Company's share capital at December 31, 2018.

Note that this maximum nominal amount will count against the nominal cap of EUR 497 million as provided for in Resolution 28 of the Shareholders' Meeting on May 17, 2018.

The issue price of new shares or securities granting access to the Company's share capital will be at least 80% of the Company's average opening share price on Euronext Paris for the 20 trading sessions preceding the date on which the decision was made to set the opening date of the subscription period for the share capital increase reserved for members of a company savings plan (the "Reference Price").

This delegation authorizes the Board of Directors to freely allocate to the above-mentioned beneficiaries, in addition to shares or securities granting access to the Company's share capital to be subscribed for in cash, shares or securities granting access to share capital to be issued or that has already been issued, as a substitute for all or part of the discount based on the Reference Price and/or a matching contribution, on the understanding that the overall benefit created by this allocation may not exceed the legal or regulatory limits pursuant to Articles L. 3332-18 *et seq.* and L. 3332-11 *et seq.* of the French Labor Code.

Capital increase with waiver of the preferential subscription rights for the benefit of categories of designated beneficiaries, as part of the implementation of the SUEZ Group's worldwide shareholding and savings plans (Resolution 20)

The Shareholders' Meeting on May 17, 2018, under Resolution 25, delegated its authority to your Board of Directors to increase the share capital, while waiving the preferential subscription rights, on one or more occasions, in favor of all entities whose sole purpose is to subscribe for, hold and dispose of shares or other financial instruments to facilitate access to the Company's share capital for the Group's international employee shareholders; this delegation of authority is for a maximum nominal amount of EUR 12 million over an 18-month period.

The shareholders are asked to renew this delegation of authority, which was not used and expires in November 2019, for a further 18-month period. The maximum nominal amount of the capital increases that may be carried out pursuant to this delegation remains unchanged at EUR 12 million, or about 0.48% of the Company's share capital as of December 31, 2018. Note that the maximum nominal amount shall be counted against the nominal cap of EUR 497 million as provided for in Resolution 28 of the Shareholders' Meeting on May 17, 2018.

The shareholders are also asked to approve the waiving of shareholders' preferential subscription rights applicable to the corresponding shares issued and to reserve subscription rights for the following categories of beneficiaries:

a) employees and Corporate Officers of foreign companies belonging to the SUEZ Group and linked to the Company under the conditions set out in Article L. 225-180 of the French Commercial Code and Article L. 3344-1 of the French Labor Code;

b) mutual funds (UCITS) or other incorporated or unincorporated employee shareholding entities invested in the Company's shares whose unitholders or shareholders consist of persons mentioned in point (a) above;

c) any banking establishment or subsidiary of such an establishment acting at the Company's request for the purpose of setting up a shareholding or savings plan for the benefit of the persons mentioned in point (a) above.

To this end, it is proposed that the Board of Directors be authorized to select said entities.

The issue price of new shares would be equal to the price of shares issued as part of a capital increase for employees who are members of a company savings plan, pursuant to Resolution 19 of this Shareholders' Meeting, and may not be less than 80% of the average opening share price over the 20 trading days preceding the date of the decision that sets the opening date of the subscription period.

Authorization to be granted to the Board of Directors to allocate bonus shares to employees or Corporate Officers who subscribe to a Group employee shareholding plan (Resolution 21)

The Shareholders' Meeting on May 17, 2018, under Resolution 26, authorized the Board of Directors to allocate bonus shares to employees and/or Corporate Officers of the Company and/or companies and entities related directly or indirectly to the Group under the provisions of Article L. 225-197-2 of the French Commercial Code, who subscribe to a Group employee shareholding plan, which would be implemented as part of a capital increase reserved for them and carried out in application of Resolutions 19 and/or 20 of this Shareholders' Meeting or as part of a sale of existing shares reserved for subscribers to one of the Group's savings plans (or of any other delegation of the same kind subsequently granted by the Shareholders' Meeting).

You are asked, under the terms described below, to renew this authorization which, in accordance with the provisions of Articles L. 225-129 *et seq.* and L. 229-197-1 *et seq.* of the French Commercial Code, would enable the Board of Directors to set up bonus share allocation plans for employees and Corporate Officers eligible for an employee shareholding plan who subscribe to such a plan. Matching contributions are often made for persons who subscribe to employee shareholding plans, and it may be necessary that such matching contributions take the form of bonus share allocations, especially outside of France.

Allocation conditions

These shares would not be subject to performance conditions because their allocation is the result of an investment by employees or Corporate Officers in a shareholding plan. In contrast, the Board of Directors must make the allocation of shares subject to a condition of presence within the Group, except in extremely special cases.

Allocation cap

The number of bonus shares that may be allocated may not exceed 0.05% of the Company's share capital as assessed on the day the Board of Directors decides to allocate the shares.

Note that the maximum nominal amount of the capital increases that may be carried out will be counted against the overall cap on capital increases of EUR 497 million, as determined by Resolution 28 of the Shareholders' Meeting on May 17, 2018.

Duration

The Shareholders' Meeting is asked to approve this authorization to the Board of Directors for a 26-month period.

Vesting and holding periods

The allocation of Company shares to their beneficiaries will be final after a minimum vesting period of one year for all or part of the shares allocated, and after a minimum mandatory holding period of one year, with the understanding that for allocated shares for which the vesting period is set at two years, the mandatory minimum holding period of the shares may be eliminated, so that said shares can be freely transferred from the date of their definitive allocation.

Overview of the financial delegations proposed to the Combined Shareholders' Meeting on May 14, 2019

N°	Purpose	Duration	Cap	Implementation method
19.	Issue reserved for subscribers to one of the savings plans with waiver of the preferential subscription rights	26 months	EUR 50 million (*i.e.* 2% of the share capital), such use to be counted against the maximum overall cap of EUR 497 million as defined at the Shareholders' Meeting on May 17, 2018 (hereinafter the "Overall Cap")	Maximum discount: 20%
20.	Issue reserved for the implementation of the SUEZ Group's worldwide shareholding and savings plans	18 months	EUR 12 million (*i.e.* 0.48% of the share capital), such use to be counted against the Overall Cap	Maximum discount: 20%
21.	Allocation of bonus shares under an employee shareholding plan	26 months	0.05% of the share capital, with the amount counted against the Overall Cap	–

(RESOLUTION 22)

Delegation of powers for formalities

The Shareholders' Meeting is asked to authorize any holder of an original, copy or extract of the minutes of the Shareholders' Meeting to carry out all the formal procedures related to the Shareholders' Meeting on May 14, 2019.

Feel free to contact the Board of Directors for any further information or explanations you might need.

The Board of Directors

26.3 Statutory Auditors' Report on related party agreements and commitments

This is a translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the Annual General Meeting of SUEZ,

In our capacity as Statutory Auditors of your Company, we hereby present to you our report on related party agreements and commitments.

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements and commitments indicated to us, or that we may have identified in the performance of our engagement, as well as the reasons justifying why they benefit the Company. We are not required to give our opinion as to whether they are beneficial or appropriate or to ascertain the existence of other agreements and commitments. It is your responsibility, in accordance with Article R. 225-31 of the French Commercial Code *(Code de commerce)*, to assess the relevance of these agreements and commitments prior to their approval.

We are also required, where applicable, to inform you in accordance with Article R. 225-31 of the French Commercial Code *(Code de commerce)* of the continuation of the implementation, during the year ended December 31, 2018, of the agreements and commitments previously approved by the Annual General Meeting.

We performed those procedures which we deemed necessary in compliance with professional guidance issued by the French Institute of Statutory Auditors *(Compagnie nationale des Commissaires aux comptes)* relating to this type of engagement. These procedures consisted in verifying the consistency of the information provided to us with the relevant source documents.

Agreements and commitments submitted for approval to the Annual General Meeting

AGREEMENTS AND COMMITMENTS AUTHORIZED AND CONCLUDED DURING THE YEAR ENDED DECEMBER 31, 2018

We hereby inform you that we have not been notified of any related party agreements or commitments, authorized and concluded during the year ended December 31, 2018, to be submitted to the Annual General Meeting for approval in accordance with Article L. 225-40 of the French Commercial Code *(Code de commerce)*.

AGREEMENTS AND COMMITMENTS AUTHORIZED AFTER CLOSING

We have been notified of the following related party agreements and commitments, which received prior authorization from your Board of Directors after closing.

With Mr Bertrand Camus, in his capacity as Chief Executive Officer, under suspensive condition of his Chief Executive Officer's mandate validation, following the Annual General Meeting of May 14, 2019

1) Severance Pay

Nature and purpose

The Board of Directors decided to grant a severance pay in favor of the Chief Executive Officer during its meeting of February 26, 2019.

Conditions

The characteristics of the severance pay are as follows:

- the amount of severance pay: is capped at two years' fixed and annual variable remuneration, the variable remuneration to be considered for the calculation of this severance pay correspond to the average of the two-last annual variable remunerations actually paid to the Chief Executive Officer. If the annual variable remuneration of 2019 is taken in the calculation, the target annual variable remuneration will apply;
- the trigger event: the severance pay will be due when the Chief Executive Officer's term of office ends, if it is the result of a forced resignation, in whatever form, in particular if this departure is the result of a change in control (if the departure occurs in the year following the change in control) or a change of strategy.

  Severance pay can only be paid after the Board of Directors has acknowledged the achievement of the performance conditions, evaluated on the date the Chief Executive Officer's term of office ends.

  This compensation will not be paid in the following cases:

  - if the departure occurs less than two years after the Chief Executive Officer's term of office takes effect or in the event of resignation, except if the departure results from a change in the Company's control or a change of strategy,
  - in the event of a change of function within the SUEZ Group,
  - in case of departure, no matter what the form, for willful or serious misconduct *(faute grave ou lourde)*,
  - if the Chief Executive Officer is eligible for retirement at the time of his departure,
  - if the Chief Executive Officer has exceeded the age limit for serving as Chief Executive Officer, or
  - in the event of death;
- performance conditions: Severance pay can only be paid if the Chief Executive Officer meets the performance conditions related to the level of achievement of the quantifiable performance criteria set at the beginning of each fiscal year by the Board of Directors for calculating the Chief Executive Officer's annual variable compensation.

  If the average amount obtained by the Chief Executive Officer in application of the quantifiable criteria for the three fiscal years preceding his departure is greater than or equal to the target annual variable compensation, 100% of the severance pay will be due to the Chief Executive Officer. If the average amount (average for the three fiscal years preceding the departure) is between 90% and 100% (excluded) of the target level, 70% of the severance pay will be due to the Chief Executive Officer. If the average amount (average for the three fiscal years preceding the departure) is less than 90% (excluded) of the target level, no severance pay will be due. If the Chief Executive Officer leaves before the end of the third fiscal year, achievement of the performance conditions will only be evaluated for one or two fiscal years depending on the duration of his term of office.

This commitment will be subject to approval at the Shareholders' Meeting on May 14, 2019.

Reasons justifying why the Company benefits from this agreement

Your Board of Directors gave the following reason:

This commitment was decided by the Board of Directors as part of an overall review of the remuneration policy applicable to the Chief Executive Officer in order to take into consideration his personal situation (age, experience, seniority within the Group, level of responsibility) and, based on the practices and levels of remuneration observed in listed companies of comparable size (turnover, number of employees or Market capitalization), in order to have a competitive compensation policy, allowing the Company to retain or attract high-level executives within the Group. The Board of Directors decided to grant this severance pay after having noted that the commitment of the CEO to end his employment contract (subject to his appointment as Director by the Shareholders' Meeting) would make him lose the legal and contractual arrangements existing under his employment contract in the event of dismissal.

2) Non-compete commitment

Nature and purpose

During its meeting of February 26, 2019, the Board of Directors decided to grant an indemnity to Mr Bertrand Camus in compensation for a non-compete commitment he took.

Conditions

In exchange for the commitment not to practice, for a period of two years from the end of his term of office as Chief Executive Officer, no matter why the term of office came to an end, either directly or indirectly, an activity that competes with the activities of the Company and the SUEZ Group's companies, the Chief Executive Officer may receive an indemnity equal to one year's compensation (fixed and annual variable compensation, with the variable compensation based on the average of the two last annual variable compensations paid to the Chief Executive Officer), paid in 24 equal and successive monthly installments.

The indemnity will not be paid if the Chief Executive Officer retires or is over 65 years old at the end of his mandate as Chief Executive Officer. In addition, the Board of Directors will have the opportunity to waive the implementation of this non-compete commitment at the time of the Chief Executive Officer's departure, hence no compensation will be due.

Moreover, the total severance pay and non-compete indemnity may under no circumstances exceed two years' compensation of the Chief Executive Officer (fixed and variable compensation, the variable compensation being based on the average of the Chief Executive Officer's annual variable compensation for the last two years). Hence, if the Board of Directors decided to implement the non-compete commitment, the severance pay would be capped at one year's compensation.

This commitment will be subject to approval at the Shareholders' Meeting on May 14, 2019.

Reasons justifying why the Company benefits from this agreement

Your Board of Directors gave the following reason:

This commitment was decided by the Board of Directors as part of an overall review of the remuneration policy applicable to the Chief Executive Officer in order to take into consideration his personal situation (age, experience, seniority within the Group, level of responsibility) and, based on the practices and levels of remuneration observed in listed companies of comparable size (turnover, number of employees or Market capitalization), in order to have a competitive compensation policy, allowing the Company to retain or attract high-level executives within the Group.

Moreover, this commitment allows to protect the Company's legitimate interests due to the functions carried out by the Chief Executive Officer and the strategic and confidential information he has access to under this framework.

3) Supplementary Pension Plan (Article 82)

Nature and purpose

The Board of Directors decided during its meeting of February 26, 2019, that the Chief Executive Officer will benefit from an optional defined contribution pension scheme set up by the Company, governed by the provisions of Article 82 of the French General Tax Code *(Code Général des Impôts)*, which guarantees the beneficiary to have an additional retirement pension or capital when it asserts its retirement rights.

Conditions

The Company shall pay an annual amount, related to the Group's performance, corresponding to 30% of the fixed remuneration and the annual variable remuneration paid to the Chief Executive Officer. This amount will be paid in cash by the Company for half to the insurer in charge of managing the Pension Plan and for the other half to the Chief Executive Officer considering the taxation at the beginning of this new regime.

This commitment will be subject to approval at the Shareholders' Meeting on May 14, 2019.

Reasons justifying why the Company benefits from this agreement

Your Board of Directors gave the following reason:

This commitment was decided by the Board of Directors as part of an overall review of the remuneration policy applicable to the Chief Executive Officer in order to take into consideration his personal situation (age, experience, seniority within the Group, level of responsibility) and, based on the practices and levels of remuneration observed in listed companies of comparable size (turnover, number of employees or Market capitalization), in order to have a competitive compensation policy, allowing the Company to retain or attract high-level executives within the Group.

Moreover, the setting up of this Pension Plan is in the benefits of the Company to the extent that the cost of this plan, under the conditions defined above, is significantly lower than the current one, while staying competitive for the beneficiary, who, by ending his employment contract, will permanently waive the benefit of the entitlements accrued under the current plan.

4) Benefit in kind – health and welfare costs

Nature, purpose and conditions

The Board of Directors decided during its meeting of February 26, 2019 to continue to provide the Chief Executive Officer with the collective health and welfare costs applicable to SUEZ employees, plan from which Mr Bertrand Camus benefits actually in the framework of his employment contract.

This commitment will be subject to approval at the Shareholders' Meeting on May 14, 2019.

Reasons justifying why the Company benefits from this agreement

Your Board of Directors gave the following reason:

This commitment was decided by the Board of Directors as part of an overall review of the remuneration policy applicable to the Chief Executive Officer in order to take into consideration his personal situation (age, experience, seniority within the Group, level of responsibility) and, based on the practices and levels of remuneration observed in listed companies of comparable size (turnover, number of employees or Market capitalization), in order to have a competitive compensation policy, allowing the Company to retain or attract high-level executives within the Group.

Agreements and commitments previously approved by the Annual General Meeting

AGREEMENTS AND COMMITMENTS APPROVED IN PRIOR YEARS, WHICH CONTINUED TO BE PERFORMED DURING THE YEAR ENDED DECEMBER 31, 2018

In accordance with Article R. 225-30 of the French Commercial Code *(Code de commerce)*, we have been notified that the implementation of the following agreements and commitments, which were approved by the Annual General Meeting in prior years, continued during the year ended December 31,2018.

With Criteria Caixa

Person concerned

Mr Jean-Louis Chaussade, Director of Criteria Caixa and Chief Executive Officer and Director of your Company.

Nature and purpose

"Master Agreement" entered into between Agbar, Criteria Caixa and your Company.

Conditions

The Board of Directors of your Company authorized during its July 17, 2014 meeting that a framework agreement be concluded at that same date between your Company, Agbar and Criteria Caixa, which provides for the following elements:

- the transfer by Criteria Caixa of its 24.26% stake in HISUSA in counterpart to the issuance of EUR 22 million new shares of your Company and a EUR 298,574 million cash amount, subsequent to the execution of a contribution agreement and the delivery of an independent auditors' report confirming the valuation of the contribution and the fairness of this value with the proposed remuneration (completed on September 17, 2014);
- the acquisition by Criteria Caixa from Agbar of a 15% stake in Aïgues de Barcelona, E.M. De Gestiò Del Cicle Integral de l'Aigua, S.A., 85% of which washeld by Agbar at the time the agreement was entered into and 15% of which is currently held by the Barcelona Metropolitan Area (completed in 2014);
- the acquisition by Criteria Caixa of a 14.50% stake in Aguas de Valencia, S.A. from your subsidiary SUEZ Groupe (completed in 2014);
- the cooptation by the Board of Directors of your Company of a director designated by Criteria Caixa, as soon as the latter holds 5% of your Company's share capital. During its October 29, 2014 meeting, your Board of Directors coopted Mr Isidro Fainé Casas and appointed him as a member of the Strategy Committee;
- the commitment for Criteria Caixa to increase its interest in the share capital of your Company up to 7%;
- the obligation for Criteria Caixa to keep its shares for a period of four years from the realization of the contribution.

Courbevoie and Paris-La Défense, March 20, 2019

The Statutory Auditors
French original signed by

MAZARS		ERNST & YOUNG ET AUTRES	
Achour Messas	Dominique Muller	Jean-Pierre Letartre	Stéphane Pedron

26.4 Statutory Auditor's Reports

This is a free translation into English of a report issued in French and it is provided solely for the convenience of English-speaking users. This report should be read in conjunction with and construed in accordance with French law and professional standards applicable in France.

26.4.1 Statutory Auditors' Report on the reduction in capital (Resolution 18)

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with Article L. 225-209 of the French Commercial Code *(Code de commerce)*, in respect of the reduction in capital by the cancellation of repurchased shares, we hereby report on our assessment of the terms and conditions of the proposed reduction in capital.

Your Board of Directors requests that it be authorized, for a period of twenty-six months starting on the date of the present Shareholders' Meeting, to proceed with the cancellation (on one or more occasions) of shares the Company was authorized to repurchase, representing an amount not exceeding 10% of its total share capital by a period of twenty-four months, in compliance with the Article mentioned above.

We have performed the procedures which we considered necessary in accordance with professional guidance issued by the French national auditing body *(Compagnie nationale des Commissaires aux comptes)* for this type of engagement. The procedures consisted in verifying that the terms and conditions for the proposed reduction in capital, which should not compromise equality among the shareholders, are fair.

We have no matters to report on the terms and conditions of the proposed reduction in capital.

Courbevoie and Paris-La Défense, March 15, 2019

The Statutory Auditors
French original signed by

MAZARS		ERNST & YOUNG ET AUTRES	
Achour Messas	Dominique Muller	Jean-Pierre Letartre	Stéphane Pédron

26.4.2 Statutory Auditors' Report on the issue of shares or other equity securities giving access to the capital reserved for members of company savings schemes (Resolution 19)

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with Articles L. 228-92 and L. 225-135 *et seq.* of the French Commercial Code *(Code de commerce)*, we hereby report on the proposal to authorize your Board of Directors to decide whether to proceed with the issue of shares or other equity securities giving access to the capital of the Company, with cancellation of preferential subscription rights, reserved to members of one or several company savings schemes (or to any other plan whose members would be entitled to a reserved share capital increase under equivalent conditions in accordance with Articles L. 3332-18 *et seq.* of the French Labor Code *(Code du travail)* which could be implemented within the Group comprised of your Company and the French or foreign entities included in the scope of consolidation of its financial statements, in application of Article L. 3344-1 of the French Labor Code *(Code du travail)*, an operation upon which you are called to vote.

The maximum nominal amount of the increases in capital that may be achieved may not exceed EUR 50,000,000 and will be allocated against the global maximum nominal amount of EUR 497,000,000 mentioned in the 28th resolution of the Combined Shareholders' Meeting of May 17, 2018.

The maximum nominal amount of the debt securities that may be issued will be allocated against the maximum global nominal amount of EUR 3,000,000,000 mentioned in the 28th resolution of the Combined Shareholders' Meeting of May 17, 2018.

This operation is submitted for your approval in accordance with Articles L. 225-129-6 of the French Commercial Code *(Code de commerce)*, and L. 3332-18 *et seq.* of the French Labor Code *(Code du travail)*.

Your Board of Directors proposes that, on the basis of its report, it be authorized for a period of twenty-six months from the date of the present meeting, to decide on whether to proceed with an issue and to cancel your preferential subscription rights to the shares and marketable securities to be issued. If applicable, it shall determine the final conditions of these operation.

It is the responsibility of the Board of Directors to prepare a report in accordance with Articles R. 225-113 *et seq.* of the French Commercial Code *(Code de commerce)*. Our role is to report on the fairness of the financial information taken from the accounts, on the proposed cancellation of the preferential subscription rights and on other information relating to the issue provided in this report.

We have performed the procedures which we considered necessary to comply with the professional guidance issued by the French national auditing body *(Compagnie nationale des Commissaires aux comptes)* for this type of engagement. These procedures consisted in verifying the information relating to the operation provided in the Board of Directors' Report and the methods used to determine the issue price of the equity securities to be issued.

Subject to a subsequent examination of the conditions for any issue decided, we have no matters to report as to the methods used to determine the issue price for the equity securities to be issued provided in the Board of Directors' Report.

As the final conditions of the issue have not yet been determined, we cannot report on these conditions and, consequently, on the proposed cancellation of preferential subscription rights.

In accordance with Article R. 225-116 of the French Commercial Code *(Code de commerce)*, we will issue a supplementary report, if applicable, when your Board of Directors has exercised this authorization for the issue of shares and equity securities giving access to other equity securities or for the issue of marketable securities giving access to equity securities to be issued.

Courbevoie and Paris-La Défense, March 15, 2019

The Statutory Auditors
French original signed by

MAZARS

Achour Messas   Dominique Muller

ERNST & YOUNG ET AUTRES

Jean-Pierre Letartre   Stéphane Pédron

26.4.3 Statutory Auditors' Report on the issue of shares or marketable securities reserved for a category of defined beneficiaries for the purposes of implementing international shareholding and savings schemes of the SUEZ Group with cancellation of preferential subscription rights (Resolution 20)

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with Articles L. 228-92 and L. 225-135 *et seq.* of the French Commercial Code *(Code de commerce)*, we hereby report on the proposal to authorize your Board of Directors to decide whether to proceed with the issue of shares or other equity securities giving access to the capital, with cancellation of preferential subscription rights, reserved to (a) employees and officers of foreign subsidiaries of the SUEZ Group within the scope of Article L. 225-180 of the French Commercial Code *(Code de commerce)*, and Article L. 3344-1 of the French Labor Code *(Code du travail)*; (b) and/or UCITS or other entities, incorporated or otherwise, engaged in employee stock ownership and invested in the Company's shares, the members of which are amongst the persons mentioned under (a) of the present paragraph; (c) and/or any bank (or subsidiary thereof) acting at your Company's request for the purposes of implementing a shareholding or savings scheme for the benefit of persons mentioned under (a) of the present paragraph, an operation upon which you are called to vote.

The maximum nominal amount of the increases in capital that may be achieved may not exceed EUR 12,000,000 and will be allocated against the global maximum nominal amount of EUR 497,000,000 mentioned in the 28th resolution of the Combined Shareholders' Meeting of May 17, 2018.

The maximum nominal amount of the debt securities that may be issued will be allocated against the maximum global nominal amount of EUR 3,000,000,000 mentioned in the 28th resolution of the Combined Shareholders' Meeting of May 17, 2018.

Your Board of Directors proposes that, on the basis of its report, it be authorized for a period of eighteen months from the date of the present meeting to decide whether to proceed with an issue and to cancel your preferential subscription rights to the shares and marketable securities to be issued. If applicable, it shall determine the final conditions of these operations.

It is the responsibility of the Board of Directors to prepare a report in accordance with Articles R. 225-113 *et seq.* of the French Commercial Code *(Code de commerce)*. Our role is to report on the fairness of the financial information taken from the accounts, on the proposed cancellation of the preferential subscription rights and on other information relating to the issue provided in this report.

We have performed the procedures which we considered necessary to comply with the professional guidance issued by the French national auditing body *(Compagnie nationale des Commissaires aux comptes)* for this type of engagement. These procedures consisted in verifying the information relating to the operation provided in the Board of Directors' Report and the methods used to determine the issue price of the equity securities to be issued.

Subject to a subsequent examination of the conditions for any issue decided, we have no matters to report as to the methods used to determine the issue price for the equity securities to be issued provided in the Board of Directors' Report.

As the final conditions of the issue have not yet been determined, we cannot report on these conditions and, consequently, on the proposed cancellation of preferential subscription rights.

In accordance with Article R. 225-116 of the French Commercial Code *(Code de commerce)*, we will issue a supplementary report, if applicable, when your Board of Directors has exercised this authorization for the issue of shares and equity securities giving access to other equity securities or for the issue of marketable securities giving access to equity securities to be issued.

Courbevoie and Paris-La Défense, March 15, 2019

The Statutory Auditors
French original signed by

MAZARS		ERNST & YOUNG ET AUTRES	
Achour Messas	Dominique Muller	Jean-Pierre Letartre	Stéphane Pédron

26.4.4 Statutory Auditors' Report on the free allocation of existing shares or shares to be issued in the framework of a company savings scheme (Resolution 21)

To the Shareholders,

In our capacity as Statutory Auditors of your Company and in compliance with Article L. 225-197-1 of the French Commercial Code *(Code de commerce)*, we hereby report on the proposed free allocations of existing shares or shares to be issued for the benefit of employees and/or officers of the Company, or of affiliated companies or other groupings (as provided for by Article L. 225-197-2 of the French Commercial Code), subscribing to a company savings scheme implemented in particular for the purpose of a reserved share capital increase as provided for under the 19th and/or 20th resolutions of the present Shareholders' Meeting, or of an allocation of existing shares reserved for the benefit of members of a company savings scheme or an equivalent scheme outside France, an operation upon which you are called to vote.

The total number of free shares liable to be allocated under the present authorization may not exceed 0.05% of your Company's share capital as of the date of the Board of Directors' allocation. The maximum nominal amount of the issues of shares liable to occur as a result of the present authorization will be allocated against the maximum global nominal amount of EUR 497,000,000 mentioned in the 28th resolution of the Combined Shareholders' Meeting of May 17, 2018.

Your Board of Directors proposes, on the basis of its report, that it be authorized for a period of twenty-six months from the date of the present meeting to allocate, for free, existing shares or shares to be issued.

It is the responsibility of the Board of Directors to prepare a report on the operation envisaged. Our role is to report on the information relating to the operation provided in their report.

We have performed those procedures which we considered necessary to comply with the professional guidance issued by the French national auditing body *(Compagnie nationale des Commissaires aux comptes)* for this type of engagement. These procedures consisted in verifying the compliance with the law of the bases for the operation and other information provided in the Board of Directors' Report relating to the operation.

We have no matters to report on the information provided in the Board of Directors' Report relating to the proposed free allocation of shares.

Courbevoie and Paris-La Défense, March 15, 2019

The Statutory Auditors
French original signed by

MAZARS		ERNST & YOUNG ET AUTRES	
Achour Messas	Dominique Muller	Jean-Pierre Letartre	Stéphane Pédron

26.5 Text of the draft resolutions

Resolutions to be submitted to the Ordinary Shareholders' Meeting

RESOLUTION 1

(The purpose of this resolution is to approve the Company financial statements for the fiscal year ended December 31, 2018)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report on the annual financial statements for the fiscal year ended December 31, 2018, hereby approves the Company's financial statements for that fiscal year, including the balance sheet, income statement and notes as presented to it, and the transactions reflected in these financial statements and summarized in these reports, and showing a net income of EUR 386,840,767.26.

In application of Article 223-*quater* of the French General Tax Code, the Shareholders' Meeting hereby approves the total amount of the expenses and charges specified in Article 39.4 of the French General Tax Code of EUR 11,500 for the fiscal year 2018, it being specified that no taxes were borne with regards to said expenses and charges.

RESOLUTION 2

(The purpose of this resolution is to approve the Consolidated Financial Statements for the fiscal year ended December 31, 2018)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report on the Consolidated Financial Statements for the fiscal year ended December 31, 2018, hereby approves the Consolidated Financial Statements for that fiscal year, including the balance sheet, income statement and notes as presented to it, and the transactions reflected in these financial statements and summarized in these reports.

RESOLUTION 3

(The purpose of this resolution is to approve the allocation of the net income for the fiscal year ended December 31, 2018 and determination of the dividend)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, and having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report on the Company's financial statements for the fiscal year ended December 31, 2018:

- notes that the distributable income, consisting of net income for the fiscal year, amounts to EUR 386,840,767.26, to which are added previous retained earnings of EUR 86,764,710.49, amounting to a total of EUR 473,605,477.75; and
- resolves to allocate the distributable income of EUR 473,605,477.75 as follows:

Distributable income:	
Net income for fiscal year 2018	EUR 386,840,767.26
Retained earnings from previous year	EUR 86,764,710.49
Distributable income	**EUR 473,605,477.75**

Proposed allocation:	
EUR 0.65 dividend per share for fiscal year 2018	EUR 403,885,676.35
Retained Earnings	EUR 69,719,801.40

For information only, equity items after dividend payment:	
Share capital	EUR 2,485,450,316.00
Legal reserve	EUR 248,545,031.60
Additional paid-in capital	EUR 5,215,174,735.67
Retained earnings for fiscal year 2018	EUR 69,719,801.40

The Shareholders' Meeting therefore sets the dividend at EUR 0.65 per share.

The amount of EUR 403,885,676.35 is based on the number of SUEZ shares outstanding as of December 31, 2018, *i.e.* 621,362,579 shares, and the final amount paid will take into account the number of treasury shares held by the Company at the time the dividend is paid, which, in accordance with Article L. 225-210 of the French Commercial Code, do not have dividend rights. As a result, when the dividend is paid, the dividend corresponding to treasury shares held by the Company will be allocated to retained earnings.

When the dividend is paid out to individuals residing in France for tax purposes, it is subject to a single flat-rate deduction at source, applied to the gross amount, of 30%, comprising social security contributions at the overall rate of 17.2%, and a flat-rate income tax of 12.8% (unless they have chosen the annual option for the application of the progressive tax scale to investment incomes).

The ex-dividend date will be on May 20, 2019 with a payment date on May 22, 2019.

In accordance with Article 243-*bis* of the French General Tax Code, the Shareholders' Meeting acknowledges the dividend amounts paid in the last three fiscal years:

(in EUR)	Dividend paid per share	Total dividend distributed
Fiscal year 2015	0.65	352,718,254.20
Fiscal year 2016	0.65	366,612,815.40
Fiscal year 2017	0.65	401,920,823.85

For individuals residing in France for tax purposes, these dividends were eligible for the 40% tax allowance under Article 158-3-2° of the French General Tax Code automatically for the fiscal years 2015 and 2016 and upon option for dividends paid in respect of the fiscal year 2017.

RESOLUTION 4

(The purpose of this resolution is to renew the term of office of Ms. Isabelle Kocher as Director)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report, noting that Ms. Isabelle Kocher's term of office as Director expires at the end of this Shareholders' Meeting, resolves to renew her mandate for a term of four (4) years expiring at the close of the Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2022.

RESOLUTION 5

(The purpose of this resolution is to renew the term of office of Ms. Anne Lauvergeon as Director)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report, noting that Ms. Anne Lauvergeon's term of office as Director expires at the end of this Shareholders' Meeting, resolves to renew her mandate for a term of four (4) years expiring at the close of the Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2022.

RESOLUTION 6

(The purpose of this resolution is to renew the term of office of Mr. Nicolas Bazire as Director)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report, noting that Mr. Nicolas Bazire's term of office as Director expires at the end of this Shareholders' Meeting, resolves to renew his mandate for a term of four (4) years expiring at the close of the Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2022.

RESOLUTION 7

(The purpose of this resolution is to appoint Mr. Bertrand Camus as Director)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report, decides to appoint Mr. Bertrand Camus as Director for a term of four (4) years, to expire at the close of the Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2022.

RESOLUTION 8

(The purpose of this resolution is to appoint Ms. Martha J. Crawford as Director)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report, decides to appoint Ms. Martha J. Crawford as Director for a term of four (4) years, to expire at the close of the Shareholders' Meeting called to approve the financial statements for the fiscal year ending on December 31, 2022.

RESOLUTION 9

(The purpose of this resolution is to approve the elements of compensation due or awarded for fiscal year 2018 to Mr. Gérard Mestrallet, Chairman of the Board of Directors)

Pursuant to Article L. 225-100 of the French Commercial Code, the Shareholders' Meeting acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, hereby approves the elements of compensation and the benefits of all kinds due or awarded for the fiscal year 2018 to Mr. Gérard Mestrallet, Chairman of the Board of Directors, as presented in the Corporate Governance Report stipulated by Article L. 225-37 of said Code and in section 15.1.6 of the Company's 2018 Reference Document.

RESOLUTION 10

(The purpose of this resolution is to approve the compensation policy for fiscal year 2019, for the period from January 1, 2019 to May 14, 2019 of the Chairman of the Board of Directors, Mr. Gérard Mestrallet)

Having reviewed the Corporate Governance Report stipulated by Article L. 225-37 of the French Commercial Code, the Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the principles and criteria for determining, dividing and allocating the elements comprising the total compensation for the period from January 1, 2019 to May 14, 2019 of the Chairman of the Board of Directors as presented in section 15.1.1 of the Company's 2018 Reference Document.

RESOLUTION 11

(The purpose of this resolution is to approve the compensation policy for fiscal year 2019, for the period from May 14, 2019 to December 31, 2019 of the Chairman of the Board of Directors, Mr. Jean-Louis Chaussade)

Having reviewed the Corporate Governance Report stipulated by Article L. 225-37 of the French Commercial Code, the Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the principles and criteria for determining, dividing and allocating the elements comprising the total compensation for the period from May 14, 2019 to December 31, 2019 of the Chairman of the Board of Directors as presented in section 15.1.1 of the Company's 2018 Reference Document.

RESOLUTION 12

(The purpose of this resolution is to approve the elements of compensation due or awarded for fiscal year 2018 to Mr. Jean-Louis Chaussade, Chief Executive Officer)

Pursuant to Article L. 225-100 of the French Commercial Code, the Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, hereby approves the elements of compensation and the benefits of all kinds due or awarded for fiscal year 2018 to Mr. Jean-Louis Chaussade, Chief Executive Officer, as presented in the Corporate Governance Report stipulated by Article L. 225-37 of said Code and as set out in section 15.1.6 of the Company's 2018 Reference Document.

RESOLUTION 13

(The purpose of this resolution is to approve the compensation policy for fiscal year 2019, for the period from January 1, 2019 to May 14, 2019 of the Chief Executive Officer, Mr. Jean-Louis Chaussade)

Having reviewed the Corporate Governance Report stipulated by Article L. 225-37 of the French Commercial Code, the Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional elements comprising the total compensation and benefits of all kinds for the period from January 1, 2019 to May 14, 2019 of the Chief Executive Officer as presented in section 15.1.1 of the Company's 2018 Reference Document, due to him because of his term of office.

RESOLUTION 14

(The purpose of this resolution is to approve the compensation policy for fiscal year 2019, for the period from May 14, 2019 to December 31, 2019 of the Chief Executive Officer, Mr. Bertrand Camus)

Having reviewed the Corporate Governance Report stipulated by Article L. 225-37 of the French Commercial Code, the Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, approves the principles and criteria for determining, distributing and allocating the fixed, variable and exceptional elements comprising the total compensation and benefits of all kinds for the period from May 14, 2019 to December 31, 2019 of the Chief Executive Officer as presented in section 15.1.1 of the Company's 2018 Reference Document, due to him because of his term of office.

RESOLUTION 15

(The purpose of this resolution is to approve the related-party commitments granted in favor of Mr. Bertrand Camus, Chief Executive Officer, relating to a severance pay and in consideration of a non-compete commitment)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Special Report on the agreements and commitments governed by Articles L. 225-38 and L. 225-40 to L. 225-42-1 of the French Commercial Code, approves, subject to the approval of Mr. Bertrand Camus' appointment as Director pursuant to Resolution 7 submitted to this Shareholders' Meeting, and to the approval of the compensation policy as set out in Resolution 14 submitted to this Shareholders' Meeting, the commitments granted by the Company in favor of Mr. Bertrand Camus, Chief Executive Officer, relating to a severance pay that may be paid in the event of the termination under certain circumstances of his duties as Chief Executive Officer and in consideration of a non-compete commitment, as presented in the Statutory Auditors' Special Report referred to above (included in chapter 26.3 of the Company's 2018 Reference Document).

RESOLUTION 16

(The purpose of this resolution is to approve the related-party commitments granted in favor of Mr. Bertrand Camus, Chief Executive Officer, relating to a supplementary defined-contribution Pension Plan and continuation of the insurance and health care plans granted to SUEZ employees)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Special Report on the agreements and commitments governed by Articles L. 225-38 *et seq.* of the French Commercial Code, of which it takes note of the conclusion, approves, subject to the approval of Mr. Bertrand Camus' appointment as Director pursuant to Resolution 7 submitted to this Shareholders' Meeting, and to the approval of the compensation policy as set out in Resolution 14 submitted to this Shareholders' Meeting, the commitments granted by the Company in favor of Mr. Bertrand Camus, Chief Executive Officer, relating to a supplementary defined-contribution Pension Plan and continuation of the insurance and health care plans granted to SUEZ employees, as presented in the Statutory Auditors' Special Report referred to above (included in chapter 26.3 of the Company's 2018 Reference Document).

RESOLUTION 17

(The purpose of this resolution is to authorize the Company to trade its own shares)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Ordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report, and in compliance with the provisions of the French Commercial Code, specifically Articles L. 225-209 *et seq.* thereof, the directly applicable provisions of Regulation (EC) no. 596/2014 of April 16, 2014, the provisions of the General Regulation of the French Financial Market Authority, and market practices permitted by the French Financial Market Authority, authorizes the Board of Directors, with the option to subdelegate as permitted by law, to purchase the Company's shares or have them purchased in order to:

- ensure the liquidity and promote the secondary market for the Company's shares through an investment services provider acting independently under a liquidity contract; or
- subsequently cancel all or part of the shares thus purchased under the conditions and limitations of Article L. 225-209 of the French Commercial Code, as part of a capital reduction that would be resolved or authorized by the Shareholders' Meeting; or

- implement the allocation or disposal of shares to employees or former employees and/or Corporate Officers or former Corporate Officers of the Company and/or companies affiliated with it, or which will be affiliated with it, in France and/or outside of France, as provided by Article L. 225-180 of the French Commercial Code, particularly in the context of any stock option plans, any bonus share plans, any employee shareholding plan, or any form of compensation practiced by the Company, specifically under the relevant provisions of the French Commercial Code and/or French Labor Code, or French or foreign laws and regulations, and for any hedges set up for such transactions and related commitments of the Company, under the conditions approved by the market authorities and at the times that the Board of Directors or the person acting on behalf of the Board of Directors deems appropriate; or
- hedge securities granting entitlement to the Company's shares, which shares are to be delivered at the time of exercise of the rights attached to securities granting entitlement to the allocation of the Company's shares, either through redemption, conversion, exchange, presentation of a warrant or by any other means of allocation of Company shares; or
- more generally, pursue any other goal that is or becomes authorized by law or regulations, or engage in any market practice that is or becomes approved by financial market regulators, provided that the Company's shareholders are formally notified thereof *via* a press release.

Share purchase volumes are subject to the following limits:

- the number of shares acquired during the term of the share buyback program must not exceed 10% of the shares of the Company's share capital, at any time, on the understanding that this percentage applies to a share capital adjusted according to transactions impacting it and performed after this Shareholders' Meeting and, with respect to the special case of shares acquired under a liquidity contract, the number of shares used to calculate the 10% limit corresponds to the number of shares purchased, less the number of shares resold during the term of the authorization;
- the number of shares that the Company holds at any time must not exceed 10% of the shares of the Company's share capital on the relevant date, on the understanding that this percentage applies to share capital that has been adjusted according to transactions impacting it that are performed after this Shareholders' Meeting.

The Shareholders' Meeting resolves that the maximum purchase price per share is set at EUR 25 (or the equivalent value of this amount on the date of acquisition in any other currency), excluding acquisition cost.

Consequently, on an indicative basis and pursuant to Article R. 225-151 of the French Commercial Code, the Shareholders' Meeting sets the maximum number of shares that may be purchased at 62,136,257 and the maximum overall amount allocated to the above-mentioned authorized share buyback program at EUR 1,533,406,425 calculated on the basis of the Company's share capital as of December 31, 2018, consisting of 621,362,579 shares.

Shares may be purchased, sold, exchanged or transferred on one or more occasions by any means, except for the sale of put options under the conditions approved by the market authorities, at all times in accordance with current legal provisions. However, if a third party has filed a public tender offer for the Company's shares, the Board of Directors may not, during the offer period, implement this resolution without prior authorization of the Shareholders' Meeting.

The Shareholders' Meeting grants the Board of Directors, with the ability to subdelegate as permitted by law and the Company's bylaws, in the event of a change in the nominal value of the share, an increase in share capital through the incorporation of reserves, bonus shares allocation, stock splits or reverse splits, distribution of reserves or any other assets, share capital amortization or any other transactions involving shareholders' equity, and the power to adjust the aforementioned maximum purchase price to take the impact of such transactions on the share price into account.

The Shareholders' Meeting grants full powers to the Board of Directors, including the option to subdelegate as permitted by law and the Company's bylaws, to implement this authorization, in particular to determine the timeliness of launching a share buyback program and to specify, if necessary, the terms and procedures for carrying out the share buyback program, and specifically to submit any market order, enter into any agreements, particularly in view of keeping records of purchases and sales of shares, carry out any formalities and make statements to any bodies, including the French Financial Market Authority, and, in general, to do whatever is necessary.

The Shareholders' Meeting also grants full powers to the Board of Directors, including the option to subdelegate as permitted by law and the Company's bylaws and within the legal and regulatory limits concerned, to make any permitted reallocations of the purchased shares in accordance with one or more objectives of the share buyback program, or to sell them, on the stock market or over-the-counter, it being understood that such allocations and sales may involve shares repurchased under previous authorizations.

This authorization is granted for a term of eighteen (18) months from the date of this Shareholders' Meeting. It supersedes, as of today, all previous authorizations having the same purpose, and therefore any unused portion of the previous authorization granted to the Board of Directors under Resolution 16 of the Combined Shareholders' Meeting of May 17, 2018.

The Shareholders' Meeting Notes that, in accordance with applicable laws and regulations, if the Board of Directors uses this delegation, it must report to the next Ordinary Shareholders' Meeting on how it has used the authorizations granted under this resolution.

Resolutions to be submitted to the Extraordinary Shareholders' Meeting

RESOLUTION 18

(The purpose of this resolution is to authorize the Board of Directors to reduce the Company's share capital by canceling treasury shares)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report, in accordance with Articles L. 225-209 *et seq.* of the French Commercial Code:

1. authorizes the Board of Directors to reduce the Company's share capital, on one or more occasions, in the proportions and at the times it considers appropriate, by canceling all or some of the shares acquired by the Company, in accordance with Resolution 17 submitted to this Shareholders' Meeting, or as part of a previous share buyback program authorization granted previously or subsequently by a Shareholders' Meeting, up to a maximum of 10% of the Company's share capital (as may be adjusted to take into account any transactions on the Company's share capital after the date of this Shareholders' Meeting) per 24-month period, on the understanding that this percentage will be calculated on the date of the Board of Directors' decision to reduce the share capital;
2. grants full powers to the Board of Directors, including the option to sub-delegate under conditions provided by law and the Company's bylaws, to:
   - decide on the share capital reduction (s),
   - determine the final amount, specify the terms and conditions thereof, and record its completion,
   - allocate the difference between the book value of the canceled shares and their nominal amount to all items corresponding to reserves and premiums,
   - amend the bylaws accordingly,
   - carry out all publications and formalities, and
   - in general, do whatever is necessary;
3. decides that this authorization supersedes, as of today, all previous authorizations having the same purpose, and therefore any unused portion of the previous authorization granted to the Board of Directors by the Combined Shareholders' Meeting of May 17, 2018, under Resolution 17.

This authorization is granted for a term of twenty-six (26) months as of the date of this Shareholders' Meeting.

RESOLUTION 19

(The purpose of this resolution is to delegate authority to the Board of Directors to increase the Company's share capital by issuing shares or securities granting access to the share capital to the benefit of members of savings plans, with waiver of the preferential subscription rights, in favor of the latter)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report, in accordance (i) with the provisions of Articles L. 225-129, L. 225-129-2 to L. 225-129-6, L. 225-138, L. 225-138-1, L. 228-91 and L. 228-92 of the French Commercial Code, and (ii) with those of Articles L. 3332-18 *et seq.* of the French Labor Code:

1. delegates its authority to the Board of Directors, including the power to subdelegate under conditions provided by law and the Company's bylaws, to increase the share capital on one or more occasions, in the proportions and at the times it considers appropriate, by issuing shares or securities granting access to the Company's share capital, reserved for members of one or more company savings plans (or another plan that would provide for the possibility to reserve for its members a capital increase under equivalent conditions under Articles L. 3332-18 *et seq.* of the French Labor Code), which would be put in place within a Group consisting of the Company and other French or foreign companies within the scope of consolidation of the financial statements under Article L. 3344-1 of the French Labor Code;
2. resolves that such authorization specifically excludes the issuance of preferred shares and securities granting access to preferred shares;
3. decides that the total nominal amount of capital increases that may be carried out pursuant to this delegation shall not exceed the nominal cap of EUR 50 million (*i.e.* as of December 31, 2018, about 2% of the share capital), or the counter-value of this amount, with the understanding that this maximum nominal amount will be counted towardthe overall nominal cap of EUR 497 million as set out in Resolution 28 of the Combined Shareholders' Meeting of May 17, 2018;
4. decides that the maximum nominal amount of securities representing debt securities or similar securities granting access to the Company's share capital that may be issued under this delegation will count toward the overall nominal cap of EUR 3 billion as set out in Resolution 28 of the Combined Shareholders' Meeting of May 17, 2018;
5. notes that this delegation automatically includes, for the benefit of the holders of the securities issued under this delegation and granting access to the Company's share capital, a waiver by shareholders of their preferential subscription rights for shares to which these securities will immediately or in the future grant entitlement;
6. decides that the issue price of new shares or securities granting access to the Company's share capital will be determined under the conditions set forth in Articles L. 3332-18 *et seq.* of the French Labor Code and will be equal to at least 80% of the Company's average quoted share price on Euronext Paris for the 20 trading sessions preceding the date on which the decision is made to set the opening day of the subscription period of the share capital increase reserved for members of a company savings plan of the SUEZ Group (the "Reference Price"); however, the Shareholders' Meeting expressly authorizes the Board of Directors, if it considers it appropriate, to reduce or eliminate the aforementioned discount, within the authorized legal and regulatory limits, in order to comply with locally applicable legal, accounting, tax and corporate systems;

7. authorizes the Board of Directors to freely allocate to the above-mentioned beneficiaries, in addition to shares or securities granting access to the Company's share capital to be subscribed for in cash, shares or securities granting access to share capital to be issued or already issued, as a substitution for all or part of the discount based on the Reference Price and/or as a company contribution, with the understanding that this allocation may not exceed the legal or regulatory limits pursuant to Articles L. 3332-18 *et seq.* and L. 3332-11 *et seq.* of the French Labor Code;
8. authorizes the Board of Directors, under the conditions of this delegation, to sell shares to members of a company savings plan as provided in Article L. 3332-24 of the French Labor Code, with the understanding that the shares sold at a discount in favor of the members of one or more company savings plans referred to in this resolution will be counted against the cap mentioned in paragraph 3 above, up to the nominal value of the shares thus sold;
9. resolves that the Board of Directors will have full powers to implement this delegation, with the power to subdelegate as permitted by law, within the limitations and the conditions specified above, specifically to:
   - in accordance with the legal conditions, determine the list of companies for which members of one or more company savings plans may subscribe for shares or securities granting access to the Company's share capital thus issued and benefit from shares or securities granting access to the Company's share capital, which are allocated free of charge,
   - resolve that the subscriptions may be made directly by the beneficiaries who are members of an employee savings plan, or through a company mutual fund or other structures or companies that are acceptable under applicable legal or regulatory provisions,
   - determine the conditions, including seniority, that beneficiaries of capital increases must meet,
   - set the opening and closing dates of the subscription period,
   - determine the maximum number of shares or securities granting access to capital that may be subscribed by each beneficiary,
   - set the amounts of issues that will be performed by virtue of this delegation of authority, and in particular determine the issue price, dates, deadlines, terms and conditions for subscribing, paying, discharging, and holding the securities (even retroactively), the reduction rules applicable in cases of oversubscription, as well as the other terms and conditions of issuance, within the legal and regulatory limitations in force,
   - in the event of an allocation of bonus shares or securities granting access to the share capital, to set the nature, characteristics and number of shares or securities granting access to the share capital to be issued, the number to be allocated to each beneficiary, and to determine the dates, deadlines, terms and conditions for allocating these shares or securities granting access to the share capital within the legal and regulatory limitations in force, and specifically to choose either to substitute all or a part of the allocation of these shares or securities granting access to the share capital with the aforementioned Reference Price-based discounts, or to attribute the counter-value of those shares towards the total amount of the contribution, or combine these two options,
   - in the event that new bonus shares are issued, to allocate, where relevant, profits or issue premiums in the amounts necessary to release said shares to the reserves,
   - acknowledge the completion of the share capital increases up to the amount of the subscribed shares (following any reduction in the event of oversubscription),
   - deduct, if applicable, the capital increase expenses from the corresponding premiums collected and withhold the necessary sums from this amount to bring the legal reserve to one tenth of the new share capital resulting from these capital increases,
   - enter into agreements, carry out transactions directly or indirectly through an agent, including formalities arising from the capital increases and amending the bylaws accordingly, and generally to enter into any agreement with the specific purpose of ensuring the successful conclusion of intended issues, to carry out all measures, decisions and formalities necessary for the issue, listing and financial servicing of the shares issued by virtue of this delegation, and to permit the exercise of the rights attached thereto or arising from the capital increases carried out;
10. decides that this delegation supersedes, as of today, all previous delegations having the same purpose, and therefore any unused portion of the previous authorization granted to the Board of Directors by the Combined Shareholders' Meeting of May 17, 2018, under Resolution 24;
11. acknowledges that, in accordance with applicable laws and regulations, if the Board of Directors uses this delegation it must report to the next Ordinary Shareholders' Meeting on how it has used the authorizations granted under this resolution.

This delegation is granted for a term of twenty-six (26) months from the date of this Shareholders' Meeting.

RESOLUTION 20

(The purpose of this resolution is to delegate authority to the Board of Directors to increase the Company's share capital, with waiver of the shareholders' preferential subscription rights in favor of a class or classes of beneficiaries as part of the implementation of the SUEZ Group worldwide employee shareholding and savings plans)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report, in accordance with the provisions of Articles L. 225-129, L. 225-129-2 to L. 225-129-6 and L. 225-138 of the French Commercial Code:

1. delegates its authority to the Board of Directors to increase the Company's share capital on one or more occasions, in the proportions and at the times it considers appropriate, by issuing shares or securities granting access to the Company's share capital reserved for the class of beneficiaries defined in paragraph 7 below;
2. resolves that such authorization specifically excludes the issuance of preferred shares and securities granting access to preferred shares;
3. decides that the total nominal amount of capital increases that may be carried out pursuant to this delegation shall not exceed the nominal cap of EUR 12 million (*i.e.* as of December 31, 2018, about 0.48% of the share capital), or the counter-value of this amount, with the understanding that this maximum nominal amount will be counted toward the overall nominal cap of EUR 497 million as set out in Resolution 28 of the Combined Shareholders' Meeting of May 17, 2018;

4. decides that the maximum nominal amount of securities representing debt securities or similar securities granting access to the Company's share capital that may be issued under this delegation will count toward the overall nominal cap of EUR 3 billion as set out in Resolution 28 of the Combined Shareholders' Meeting of May 17, 2018;
5. notes that this delegation automatically includes, for the benefit of the holders of the securities issued under this resolution and granting access to the Company's share capital, a waiver by shareholders of their preferential subscription rights applicable to the shares to which these securities will immediately or in the future grant entitlement;
6. decides that the amount of each employee's subscriptions may not exceed the limits that will be provided by the Board of Directors pursuant to this delegation, and, in the event of excess employee subscriptions, these will be reduced pursuant to the rules defined by the Board of Directors;
7. decides to cancel shareholders' preferential subscription rights to any shares issued pursuant to this resolution and to reserve the right to subscribe the said shares to the category of beneficiaries that meet the following criteria:
   a) employees and Corporate Officers of foreign companies belonging to the SUEZ Group related to the Company under the conditions set out in Article L. 225-180 of the French Commercial Code and Article L. 3344-1 of the French Labor Code, in order to allow them to subscribe for the Company's share capital on economically equivalent terms to what is offered to members of one or more company savings plans as part of a capital increase pursuant to Resolution 19 of this Shareholders' Meeting, and/or
   b) mutual funds (UCITS) or other incorporated or unincorporated entities of employee shareholding invested in Company shares whose unitholders or shareholders consist of the persons mentioned in letter (a) to this paragraph, and/or
   c) any banking establishment or subsidiary of such an establishment acting at the Company's request for the purpose of setting up a shareholding or savings plan for the benefit of the persons mentioned in letter (a) to this paragraph, provided that the authorized person's subscription in accordance with this resolution is necessary or beneficial in allowing the above-mentioned employees or Corporate Officers to benefit from employee shareholding or savings plans with economic benefits equivalent or similar to the plans enjoyed by other SUEZ Group employees;
8. decides that the issue price of the shares or securities granting access to the Company's share capital will be set by the Board of Directors and may be (a) under the same conditions as those set out in Articles L. 3332-18 *et seq.* of the French Labor Code, the subscription price being equal to at least 80% of the Company's average quoted share price on Euronext Paris over the 20 trading days preceding the day that the decision is made to set the opening price for subscriptions under this resolution, or (b) equal to the price of the shares issued as part of the capital increase benefiting the employee members of a company savings plan, pursuant to Resolution 19 of this Shareholders' Meeting, and will be at least equal to the Reference Price (as this term is defined in Resolution 19 of this Shareholders' Meeting).

   However, the Shareholders' Meeting expressly authorizes the Board of Directors, if it considers it appropriate, to reduce or cancel the aforementioned discount, particularly to take into account locally applicable legal, accounting, tax and social provisions. For the specific requirements of an offer made to the beneficiaries mentioned in 7 (a) above who are residents in the United Kingdom, as part of a share incentive plan, the Board of Directors may also resolve that the subscription price of new shares or securities granting access to the share capital to be issued by the Company under this plan be equal to the lower of (i) the Euronext Paris opening share price of the reference period used to set the share price for the plan; or (ii) the closing share price of the same reference period, the start and end dates of this reference period being determined under applicable local regulations. This price will include no discount on the reference share price;
9. decides that the Board of Directors may, with the power to subdelegate as permitted by law, determine the subscription options that will be offered to employees in each relevant country, in accordance with local legal restrictions, and may choose the countries from among those in which the Group has subsidiaries within the Company's financial consolidated scope pursuant to Article L. 3344-1 of the French Labor Code, as well as the subsidiaries whose employees will be eligible to participate in the transaction;
10. decides that the amount of the share capital increase or of each share capital increase will be limited, if necessary, to the amount of each subscription received by the Company, while adhering to applicable legal and regulatory provisions;
11. resolves that the Board of Directors will have full powers to implement this delegation, with the power to subdelegate as permitted by law, within the limits and the conditions specified above, specifically to:
    - decide upon the list of beneficiaries, without shareholders' preferential subscription rights, within the category defined above, as well as the number of shares or securities granting access to the Company's share capital to be subscribed for by those beneficiaries, or by each beneficiary,
    - set the opening and closing dates of the subscription period,
    - determine the maximum number of shares or securities granting access to capital that may be subscribed by each beneficiary,
    - set the amounts of issues that will be performed by virtue of this delegation of authority, and determine in particular the issue price, dates, deadlines, terms and conditions for subscribing, paying, discharging, and holding the securities (even retroactively), the reduction rules applicable in cases of oversubscription, as well as the other terms and conditions of issuance, within the legal and regulatory limits in force,
    - note the completion of the capital increases up to the amount of the subscribed shares or securities granting access to the Company's share capital (after any reduction in the event of oversubscription),
    - if necessary, allocate the fees for the share capital increases to the resulting premiums and withhold the necessary sums from this amount to bring the legal reserve to one tenth of the new share capital resulting from these share capital increases, and
    - enter into agreements, conduct transactions directly or indirectly through an agent, including carrying out the formalities arising from the capital increases and amending the bylaws accordingly, and generally to enter into any

agreement with the specific purpose of ensuring the successful conclusion of intended issues, to carry out all measures, decisions and formalities necessary for the issue, and conduct listing and financial servicing of the shares issued by virtue of this delegation, and to permit the exercise of the rights attached thereto or arising from the capital increase carried out;

12. decides that this delegation supersedes, as of today, all previous delegations having the same purpose, and therefore any unused portion of the previous authorization granted to the Board of Directors by the Combined Shareholders' Meeting of May 17, 2018, under Resolution 25;

13. acknowledges that, in accordance with applicable laws and regulations, if the Board of Directors uses this delegation it must report to the next Ordinary Shareholders' Meeting on how it has used the authorizations granted under this resolution.

This delegation is granted for a term of eighteen (18) months from the date of this Shareholders' Meeting.

RESOLUTION 21

(The purpose of this resolution is to authorize the Board of Directors to allocate bonus shares as part of a SUEZ employee shareholding plan)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, after having deliberated and reviewed the Board of Directors' Report and the Statutory Auditors' Report:

1. authorizes the Board of Directors, pursuant to the provisions of Articles L. 225-197-1 to L. 225-197-6 of the French Commercial Code, to carry out, on one or more occasions, free allocation of existing shares or shares to be issued by the Company in favor of employees and/or Corporate Officers of the Company and/or of companies or directly or indirectly affiliated entities, under the conditions set forth in Article L. 225-197-2 of the French Commercial Code, who subscribe to a Group employee shareholding plan, which would be implemented under a capital increase reserved for them and carried out in application of Resolutions 19 and/or 20 of this Shareholders' Meeting, or under any similar resolution subsequently granted by the Company's Shareholders' Meeting, or as part of a sale of existing shares reserved for subscribers to one of the Group's savings plans or an equivalent plan outside of France;

2. resolves that such authorization specifically excludes the issuance of preferred shares and securities granting access to preferred shares;

3. resolves that the total number of bonus shares that may be allocated under this authorization must not exceed 0.05% of the share capital as determined on the day that the allocation decision is made by the Board of Directors, and that the maximum nominal amount of the share capital increases that may be carried out under this authorization will count toward the overall nominal cap of EUR 497 million as set out in Resolution 28 of the Combined Shareholders' Meeting of May 17, 2018;

4. resolves that the allocation of shares of the Company to their beneficiaries will be final after a vesting period of a minimum of one year and must be subject to the beneficiaries remaining within the Group according to the terms and conditions established by the Board of Directors. The mandatory holding period for which the beneficiaries must hold the allocated shares will be set at a minimum of one year, starting from the date the shares are fully vested. For allocated shares for which the vesting period is set at two years, the mandatory minimum holding period may be waived to allow the shares to be freely tradable from the date they are fully vested;

5. resolves that, in the event of the incapacity of a beneficiary corresponding to the classification under Category 2 or 3 as set forth in Article L. 341-4 of the French Social Security Code, the final allocation of shares shall occur immediately, and in the event of the death of the beneficiary, his/her heirs may request the final allocation of shares within six months of said death;

6. resolves that the existing shares that may be allocated pursuant to this resolution must be acquired by the Company, either pursuant to Article L. 225-208 of the French Commercial Code or, as the case may be, as part of a share buyback program pursuant to the provisions of Article L. 225-209 of the French Commercial Code;

7. acknowledges that, in the event of an allocation of new bonus shares, this authorization will imply, as and when the allocation of said shares is finalized, a share capital increase by incorporating reserves, profits or share premiums for the beneficiaries of said shares and the corresponding waiving of shareholders' preferential subscription rights to said shares in favor of the beneficiaries of said shares;

8. grants the Board of Directors full powers within the limitations set forth above, with the power to subdelegate as permitted by law, to implement this delegation, and specifically to:

   – determine if the bonus shares are shares to be issued or existing shares,
   – determine the number of shares allocated to each beneficiary it will have identified,

- set the conditions and, if necessary, the criteria for allocating shares, specifically the minimum vesting period and the minimum holding period,
- increase, as the case may be, the share capital by incorporating reserves, profits or issue premiums so as to carry out the issuance of bonus shares,
- allocate shares to the persons mentioned in Article L. 225-197-1 II of the French Commercial Code, subject to the conditions in Article L. 225-197-6 of said Code and, with regard to the shares thus allocated, either (i) resolve that the bonus shares granted shall not be sold by the interested parties before they resign from their duties; or (ii) set the quantity of bonus shares granted that they must hold as registered shares until they resign from their duties,
- as the case may be, provide for the option to postpone the dates of the final allocation of shares and, for the same period, the mandatory term for holding said shares (such that the minimum holding period remains unchanged),
- as the case may be, adjust the number of allocated bonus shares needed to preserve the rights of beneficiaries, based on potential operations on the Company's share capital under the circumstances provided for in Article L. 225-181 of the French Commercial Code. It is specified that the shares allocated pursuant to such adjustments will be deemed to have been allocated on the same day as shares allocated initially,
- determine the dates and terms of the allocations, and generally carry out all necessary provisions and enter into any agreements to bring the allocations considered to their proper conclusion.

The Board of Directors may also implement any other new legal provisions that may arise during the period of validity of this authorization, the application of which does not require an express decision of the Shareholders' Meeting;

9. decides that this delegation supersedes, as of today, all previous delegations having the same purpose, and therefore any unused portion of the previous delegation granted to the Board of Directors by the Combined Shareholders' Meeting of May 17, 2018, under Resolution 26.

This delegation is granted for a term of twenty-six (26) months from the date of this Shareholders' Meeting.

RESOLUTION 22

(The purpose of this resolution is the delegation of powers for formalities)

The Shareholders' Meeting, acting in accordance with the quorum and majority requirements for Extraordinary Shareholders' Meetings, authorizes any person holding an original, copy or extract of the minutes of this meeting to carry out all necessary filings and formalities.

G glossary

Biological recovery	Method of treating organic waste by composting it or turning it into methane.
Biomechanical recovery	Process in which waste is treated by mechanically isolating certain parts and treating others biologically. Includes several types of mechanical and biological processes, which may be combined in several ways depending on the desired results. Enables the separation of different fractions contained in waste into potentially reusable fractions and/or which can be treated biologically.
BOT (Build-Operate-Transfer) Contract	Contract under which a private company is responsible for project financing and for the design, construction and operation of the site for a fixed period, after which the property is transferred to the co-contractor.
Composting	A biologic process consisting of the conversion and recycling of organic materials including sewage sludge and organic waste of biologic origin into compost, a product that is stable and rendered hygienic and is rich in humic acids that are used to enhance agricultural processes.
DB (Design-Build) Contract	A building contract for a system for delivering the finished product. The design and construction of the project are carried out by one and the same entity known as the design-builder or design-build-contractor.
DBO (Design-Build-Operate) Contract	Contract under which a private company is responsible for the design, construction and operation of a site.
EMAS – Environmental, Management and Audit System	Certificate based on ISO 14001 certification and an environmental declaration certified by European inspectors, approved by the European Commission and published.
End-of-Life Vehicle	An end-of-life vehicle is a vehicle transferred by its owner to a third party for destruction. The vehicles involved are private cars, vans and three-wheeled scooters.
Energy recovery	Use of combustible waste as a means of producing energy, by direct incineration with or without other combustible matter, or by any other process, but with heat recovery. Energy recovery consists in using the calorific energy of waste by burning it and recovering that energy in the form of heat or electricity. The process can be carried out at an incineration plant or a cement works.
Energy recovery units	Another name for energy-recovering incinerators.
EPC (Engineering, Procurement and Construction)	Turnkey contracts where contractors provide engineering, design and completion services for a project.
ISO 14001	International standard aimed at verifying a company's procedural organization and methods of the organizational units, as well as the efficient set-up of an environmental policy and related environmental objectives.
Leachate	Water that percolates through the waste stored in landfills and becomes bacteriologically and chemically charged. By extension, this term is also used for water that has come into contact with waste.

Membrane	A kind of filter or sieve that retains particles of different sizes depending on its type and the diameter of its holes.
Natura 2000 Zones	Aiming to conserve biological diversity and promote landscapes, the European Union has embarked, since 1992, on establishing a network of ecological zones known as Natura 2000, which preserve species and natural habitats while taking the human, economic, cultural and regional activities that exist in those zones into account.
O&M (Operations and Maintenance)	Type of contract where management is delegated for the operation and maintenance of facilities as well as for certain renewal projects, excluding investments for initial capital expenditure.
PFI – Private Finance Initiative	Financing mechanism which appeared in Great Britain in 1992, whereby a private company finances the design and construction of a project usually assigned to a public authority, and then ensures its management by signing a PPP contract.
PPP – Public-Private Partnership	Financing mechanism by which the local authority calls upon private service providers to finance and manage installations that provide or contribute to the provision of a public service.
Process water	Water used by industries for the operation of technical facilities or to manufacture products.
Public service contract	Public service contracts are a form of management contract under which a public entity entrusts management of a public service to a company for a fixed period. The company is paid directly by customers and finances all or part of the investments in plant renewal (leasing contract) and in new plants (concession). The terms of concession contracts are generally longer (10 to 30 years) than those of leasing contracts (10 to 20 years) in view of the need for the operator to amortize the newly built installation works.
RDF – Refuse-Derived Fuel	Solid fuel produced through sorting household waste to extract non-combustible materials and compact combustible materials.
Relevant revenues	Revenues generated by "relevant" activities. In fact, certain activities within the scope of financial consolidation may not be considered relevant for environmental reporting purposes due to their core activity. The financial holding company, and commercial, broking, trading, marketing and sales activities are not considered relevant.
Single stream	Type of waste collection system where recyclable waste is collected from users in a single stream, which is subsequently separated in recycling centers.
Skid	In membrane technology, a platform comprising a frame, potentially on rails, on which an installation assembly is placed. Enables access to a system which can be moved and transported immediately, without dismantling it.
Sludge	Residue obtained following the treatment of effluent. Sludge consists of water and dry material. Properties of sludge vary widely depending on their origin. They depend on the nature of the effluent and the type of treatment applied.
Soil amendment/ conditioning	Process aimed at improving the physical properties of soil by incorporating material which, without being a fertilizer, alters and improves the nature of the soil. Sand, clay, lime or organic material, are all conditioners.

Stadtwerke	Term of German origin used for a municipal company belonging to a German town, the purpose of which is to manage certain public services, particularly energy, water and transport.
Treatment plant sludge	All residues from the biological activity of microorganisms living in treatment plants and transforming the material carried by wastewater so that it can be extracted. They consist mainly of water, mineral salts and organic matter.
WEEE – Waste electrical and electronic equipment	Electrical and electronic equipment includes all devices or components operating on electric or electromagnetic current (whether powered by electrical outlets or by batteries). These include, for example, **household electrical goods or white products** (cooking appliances, refrigerators, heaters, vacuum cleaners, etc.); **audiovisual equipment or brown products** (radios, television sets, camcorders, video recorders, hi-fi equipment, etc.); and **office and computer equipment, or gray products** (computers, printers, scanners, telephones, etc.).

N note on methodology

Operating data	Most of the operating data contained in this document were calculated on the basis of a scope of consolidation that includes fully integrated companies.
Population served by collection activities	The population served by the Group's collection activities corresponds to the number of residents served by traditional collection, to which is added the number of residents served by selective collection (a conventional collection operation and a selective collection operation that serve the same individual can thus be added together). This involves estimates (the number of residents served by the Group's collection activities has not been counted).
Human Resources	The number of Group employees corresponds to the number of salaried employees in SUEZ and its fully consolidated subsidiaries. Employees of companies consolidated by proportional consolidation or the equity method (for example employees of Group subsidiaries in China or Mexico) are therefore not included in the total Group workforce on that basis; the employee counts mentioned for them are thus in addition to that total. As soon as a company enters into the scope of consolidation through full consolidation, 100% of its employee data is included, regardless of the percentage of share capital held.

T concordance table

This Reference Document includes all the elements from the Management Report of the Company and of the Group for the year 2018, as required in particular by Articles L. 225-100, L. 232-1, L. 225-100-1, L. 225-102-1, L. 225-102-4 and L. 225-37 of the French Commercial Code (FCC). The Management Report was approved by the Board of Directors of the Company on February 26, 2019.

Mentions relating to the Management Report	Article	Reference Document section
I. ACTIVITY OF THE COMPANY AND ITS SUBSIDIARIES AND/OR CONTROLLED COMPANIES, AND OUTLOOK		
Status and business of the Group	L. 232-1-II, L. 233-6, and L. 233-26 (FCC)	Section 6
Income from the Group's business: financial situation and performance indicators	L. 225-100-1, I-2 and L. 233-6 para. 2 (FCC)	Sections 9, 20.1 and 20.3
Objective and exhaustive analysis of business development, the Company's income and financial situation and, specifically, its debt position in terms of business volume and complexity	L. 225-100-1, I-1, L. 232-1, L. 233-6 and L. 233-26 (FCC)	Sections 6, 9, 10, 20.1 and 20.3
Analysis of key non-financial performance indicators relating to the Company's specific business and particularly information relating to environmental or employee issues	L. 225-100-1, I-2 (FCC)	Sections 6.8 and 17
Foreseeable development of the Company's situation and future outlook	L. 232-1-II and L. 233-26 (FCC)	Sections 6.3.4 and 13
Important events occurring between the closing date of the fiscal year and publication of this document	L. 232-1-II and L. 233-26 (FCC)	Sections 20.1.6, Note 25 and 20.7
Main risks and uncertainties	L. 225-100-1, I-3 (FCC)	Section 4
Price, credit, liquidity, cash flow risks: indication of the Company's exposure to these risks and indications of the Company's objectives and policy regarding the Company's management of financial risks	L. 225-100-1, I-6 (FCC)	Sections 4.1.3 and 4.2.5
Financial risks linked to climate change and the measures taken by the Company	L. 225-100-1, I-4 (FCC)	Sections 4.1.1 and 6.8.2.2
Internal control and Risk Management procedures implemented by the Company	L. 225-100-1, I-5 (FCC)	Section 4.3
Research and development activities	L. 232-1-II and L. 233-26 (FCC)	Section 11
II. PRESENTATION AND INCLUSION OF THE FINANCIAL STATEMENTS IN THE MANAGEMENT REPORT		
Changes made to the presentation of the annual financial statements or the valuation methods selected	L. 123-17, L. 232-5 (FCC) and 120-2 GAP	Section 20.3
Amount of non-tax deductible expenses, total amount of sumptuary expenditures and the corresponding tax and reintegration into taxable income of certain general expenses by total number or expense category	Article 223 *quater* and 223 *quinquies* of the French General Tax Code (CGI)	Section 20.3
Income for the fiscal year and proposed allocation of that income	–	Sections 20.3, 20.5 and 26
Amount of dividends paid during the last three fiscal years	Article 243 *bis* CGI	Section 26.5
Maturity of trade payables	L. 441-6-1 and D. 441-4 (FCC)	Section 20.3.7, Note 21
Amount of intercompany loans granted	L. 511-6 of the French Monetary and Financial Code	Section 7.3
III. SUBSIDIARIES AND INTERESTS		
Status of interests acquired in companies whose headquarters are on French soil	Article L. 233-6, para. 1 (FCC)	Sections 20.1, Note 28 and 20.3
IV. SHAREHOLDING AND SHARE CAPITAL		
Name of the companies controlled and proportion of the share capital the latter hold in the Company (treasury shares)	L. 233-13 (FCC)	Sections 18.1 and 21.1
Identity of individuals or corporate entities owning over 1/20, 1/10, 3/20, 1/5, 1/4, 1/3, 1/2, 2/3, 18/20 or 19/20 of the share capital or voting rights at Shareholders' Meetings	L. 233-13 (FCC)	Sections 18.1, 18.2 and 18.3
Purchase and disposal of treasury shares	L. 225-211 (FCC)	Section 21.1.3
Employee profit-sharing in the share capital	L. 225-102 (FCC)	Sections 17.3 and 18.1

Mentions relating to the Management Report	Article	Reference Document section
Summary of transactions made by the Corporate Officers and their relatives during the year (Article L. 621-18-2 of the French Monetary and Financial Code and Article 223-26 of the AMF General Regulation)	L. 621-18-2 of the French Monetary and Financial Code and 223-26 of the AMF General Regulation	Section 18.5
Share disposals to adjust reciprocal shareholdings	R. 233-19 para. 2 (FCC)	N/A
Potential adjustments for equity instruments in the event of share buybacks or financial transactions	R. 228-90, R. 228-91 and R. 225-138 (FCC)	N/A
V. STOCK OPTIONS AND BONUS SHARE ALLOCATIONS		
Stock options and bonus share allocations	L. 225-185, L. 225-180, L. 225-184 and L. 225-197-1 (FCC)	Sections 15.1, 17.3, and 20.1 Note 23
VI. COMPANY AND ENVIRONMENTAL INFORMATION		
Non-financial performance statement	L. 225-102-1, R. 225-105 and R. 225-105-1 (FCC)	Sections 6.8
Vigilance plan and its report	L. 225-102-4 (FCC)	Section 6.8.3
VII. BOARD OF DIRECTORS' REPORT ON CORPORATE GOVERNANCE	L. 225-37 para. 6 (FCC)	Sections 16.4 and 26
VIII. MISCELLANEOUS INFORMATION		
Summary of resolutions submitted at the Shareholders' Meeting	–	Section 26
Injunctions or financial sanctions for anti-competitive practices issued by the Anti-Trust Authority	L. 464-2-I para. 5 (FCC)	Section 20.6
IX. STATUTORY AUDITORS		
Mandates awarded to the Statutory Auditors	–	Section 2
X. DOCUMENTS TO BE ANNEXED TO THE MANAGEMENT REPORT AND/OR TO BE CIRCULATED TO SHAREHOLDERS		
Income statement for the last five fiscal years	R. 225-102 (FCC)	Section 20.3
Statutory Auditors' Report on the Parent Company financial statements including information on corporate governance	L. 225-35, L. 823-9, L. 823-10, L. 823-11, L. 823-12 and R. 823-7 (FCC)	Section 20.4
Statutory Auditors' Report on the Parent Company non-financial performance statement	L. 225-105-2 (FCC)	Section 6.8.6
Statutory Auditors' reasonable assurance report on a selection of consolidated information	–	Section 6.8.7
Inventory of marketable securities held in portfolios at the end of the fiscal year	–	Sections 20.3.7 Notes 5 and 18

Notes

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