2017
Management report and Annual consolidated financial statements

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01 MANAGEMENT REPORT

1 SUMMARY OF THE GROUP'S RESULTS

Income statement and cash flow statement data for the year ended December 31, 2016 have been restated following the classification of ENGIE E&P International as "Discontinued operations" as of May 11, 2017 *(see Note 4.1.1 "Disposal of the exploration-production business" to the consolidated financial statements*). A reconciliation of the reported data with the restated comparative data is presented in Note 30 "Restatement of 2016 comparative data" to the consolidated financial statements.

ENGIE delivered robust results and strong organic growth in 2017, driven notably by the positive impacts of the Lean 2018 performance program.

Revenues increased by 0.3% on a reported basis to €65.0 billion and by 1.7% on an organic basis compared with 2016. Reported growth was affected by changes in the scope of consolidation (€583 million negative impact) due mainly to the disposal of the merchant power generation assets in the United States, Poland and the United Kingdom. This was partially offset by the acquisition of Keepmoat Regeneration which designs, builds, refurbishes and regenerates residential buildings, and a negative foreign exchange effect of €300 million, chiefly related to fluctuations in the pound sterling. Organic revenue growth was driven by an increase in volumes and prices on commodities sold in the gas midstream business in Europe and LNG business in Asia, an improved performance by the thermal power generation plants in Europe and Australia, the impact of new assets commissioned and price rises in Latin America, and the impact of the 2016 price revisions in the infrastructure business in France. These positive developments were partially offset by a fall in sales of natural gas to business customers in France and by a decrease in hydro renewable energy generation in France.

EBITDA amounted to €9.3 billion, down 1.8% on a reported basis but up a sharp 5.3% on an organic basis. The reported fall was due to changes in the scope of consolidation (€677 million negative impact), due mainly to the disposal of the merchant power generation assets in the United States in June 2016 and February 2017 and the disposal of Paiton in Indonesia at end-2016, coupled with the recognition in EBITDA as of 2017 of the nuclear contribution in Belgium (€142 million negative impact). These negative impacts were partially offset by a positive foreign exchange effect related notably to the Brazilian real. The organic growth in EBITDA was driven by revenue-related developments (excluding the gas midstream and LNG businesses), plus the impacts of the Lean 2018 performance program. This reflects the positive performance from the Group's growth drivers (5.0%), namely the contracted renewable and thermal power generation, infrastructure and customer-service solutions businesses.

Current operating income after share in net income of entities accounted for using the equity method decreased by 6.4% on a reported basis and increased by 5.0% on an organic basis to €5.3 billion. The organic growth in EBITDA was mitigated by higher depreciation expense following the increase of Belgian nuclear power plant dismantling provisions recognized at end-2016 against an asset.

Net income Group share relating to continued operations amounted to €1.2 billion for the year ended December 31, 2017, representing a significant improvement on 2016. This improvement takes into account (i) lower impairment losses (net of tax), (ii) gains on the disposal of the thermal merchant power plant assets in the United States, Poland and the United Kingdom, as well as on the disposal of a non-consolidated interest in Petronet LNG in India and the residual interest in NuGen in the United Kingdom, and (iii) a reduction in the cost of debt and current income taxes. These items were partially offset by (i) the negative impacts of fair value adjustments to hedges of commodity purchases and sales, (ii) charges to restructuring provisions, and (iii) the initial non-recurring accounting impact relating to the change in the accounting treatment of long-term gas supply contracts, a power exchange contract as well as to the identification of a series of transport and storage capacities contracts corresponding to onerous contracts, as a result of a change in their management environment.

Net income Group share amounted to €1.4 billion for 2017. It includes €0.2 billion of net income Group share from ENGIE E&P International activities classified as "Discontinued operations".

Net recurring income Group share relating to continued operations amounted to €2.4 billion for the year ended December 31, 2017, down 2.4% compared with 2016. The fall in current operating income after share in net income of companies accounted for using the equity method was partially offset by an improvement in recurring net financial income/(loss) and tax income/(loss).

Net recurring income Group share amounted to €2.7 billion, showing an improvement compared with the previous year. It includes €0.3 billion of net recurring income Group share from ENGIE E&P International activities classified as "Discontinued operations".

Cash flow from operations amounted to a sound €8.3 billion, representing a €1.3 billion decline, however, compared with 2016. This performance reflected the negative impact of changes in the scope of consolidation, higher restructuring and dispute settlement costs, and a less favorable change in working capital due mainly to gas inventories in France.

Net debt stood at €22.5 billion, down €2.3 billion compared with December 31, 2016, mainly due to (i) cash flow from operations (€8.3 billion), (ii) the impacts of the portfolio rotation program (€4.8 billion), including the completion of the disposal of the thermal merchant power plant portfolio in the United States, Poland and the United Kingdom, the disposal of interests in Opus Energy and NuGen in the United Kingdom, the classification of the Loy Yang B coal-fired power plant in Australia under "Assets held for sale", the disposal of a 25% interest in Elengy (through the transfer of 100% of Elengy to GRTgaz) and the disposal of an interest in Petronet LNG in India, and (iii) a favorable exchange rate effect (€0.7 billion). These items were partially offset by (i) gross investments in the period (€9.3 billion), and (ii) dividends paid to ENGIE SA shareholders (€2.0 billion) and to non-controlling interests (€0.6 billion). Net debt also improved thanks to the impact of the recovery from the French State of the 3% tax on dividends (€0.4 billion).

2 OUTLOOK

Since 2016, the Group is committed to a 3 year transformation plan aiming at creating value and at improving the Group's risk profile. This plan is based on **3 main programs**:

- the **portfolio rotation program** (€15 billion net debt impact targeted over 2016-2018). The Group has announced to date **€13.2 billion** of disposals (i.e. more than 90% of total program), of which **€11.6 billion already closed** (1);

- the **investment program** (€14.3 billion (2) growth capex over 2016-2018). The Group has announced to have **invested and secured €13.9 billion** (i.e. more than 97% of total program) of which **€10.2 billion have been closed**;

- the **Lean 2018 performance plan**. The Group decided to raise **its 2018 target by €100 million**, for a total of **€1.3 billion of net gains** expected at the EBITDA level by 2018. At end December 2017, €947 million of cumulated net gains were recorded at the EBITDA level, which is higher than the initial cumulated target of €850 million. The entire revised program has already been identified.

For 2018, the Group anticipates **a net recurring income Group share excluding E&P and LNG between €2.45 and €2.65 billion (3), in strong organic growth compared to 2017**. This guidance is based on an indicative range for EBITDA of €9.3 to 9.7 billion, **also growing strongly organically**.

For the 2018 period, the Group anticipates:

- a **net debt/EBITDA ratio** below or equal to 2.5x; and
- an «A» category credit rating.

For fiscal year **201**7, the Group confirms the payment of a €0.70 per share dividend, payable in cash.

For fiscal year **2018**, the Group announces a new dividend policy, with **a dividend increased to €0.75 per share (+7.1%)** payable in cash.

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(1) In November 2017, ENGIE announced it had signed with Total an agreement for the sale of its upstream and midstream Liquefied Natural Gas (LNG) activities, that should be closed during 2018. In 2018, ENGIE closed the disposal of the E&P International activity and of Loy Yang B coal-fired power plant in Australia.

(2) Net of DBSO proceeds; excluding Capex related to E&P and upstream / midstream LNG (including Touat and Cameron) for €0.3 billion and Corporate Capex for €0.2 billion.

(3) These targets and this indication, excluding E&P and LNG contributions, assume average weather conditions in France, full pass through of supply costs in French regulated gas tariffs, no significant accounting changes except for IFRS 9 and IFRS 15, no major regulatory and macro-economic changes, commodity price assumptions based on market conditions as of December 31, 2017 for the non-hedged part of the production, and average foreign exchange rates as follows for 2018: €/$: 1.22; €/BRL: 3.89, and without significant impacts from disposals not already announced.

3 CONSOLIDATED REVENUES AND EARNINGS

In millions of euros	Dec. 31, 2017	Dec 31, 2016 [(1)]	% change (reported basis)	% change (organic basis)
Revenues	65,029	64,840	+0.3%	+1.7%
EBITDA	9,316	9,491	-1.8%	+5.3%
Net depreciation and amortization/Other	(4,044)	(3,855)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	5,273	5,636	-6.4%	+5.0%

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Consolidated **revenues** for the year ended December 31, 2017 amounted to €65.0 billion, up 0.3% compared with the previous year. On an organic basis (excluding changes in the scope of consolidation and foreign exchange impacts), revenues grew by 1.7%. Adjusted for the adverse trend in temperatures in France, which were milder than in 2016, organic growth was 1.9%.

Changes in the scope of consolidation had a net negative impact of €583 million, arising mainly from the disposal of hydro and thermal merchant power generation assets in the United States (€836 million negative impact), Poland (€440 million negative impact) and the United Kingdom (€93 million negative impact), partially offset by the acquisition of Keepmoat Regeneration (€473 million positive impact). Exchange rates had a negative €300 million impact on revenues, mainly reflecting the depreciation of the pound sterling against the euro.

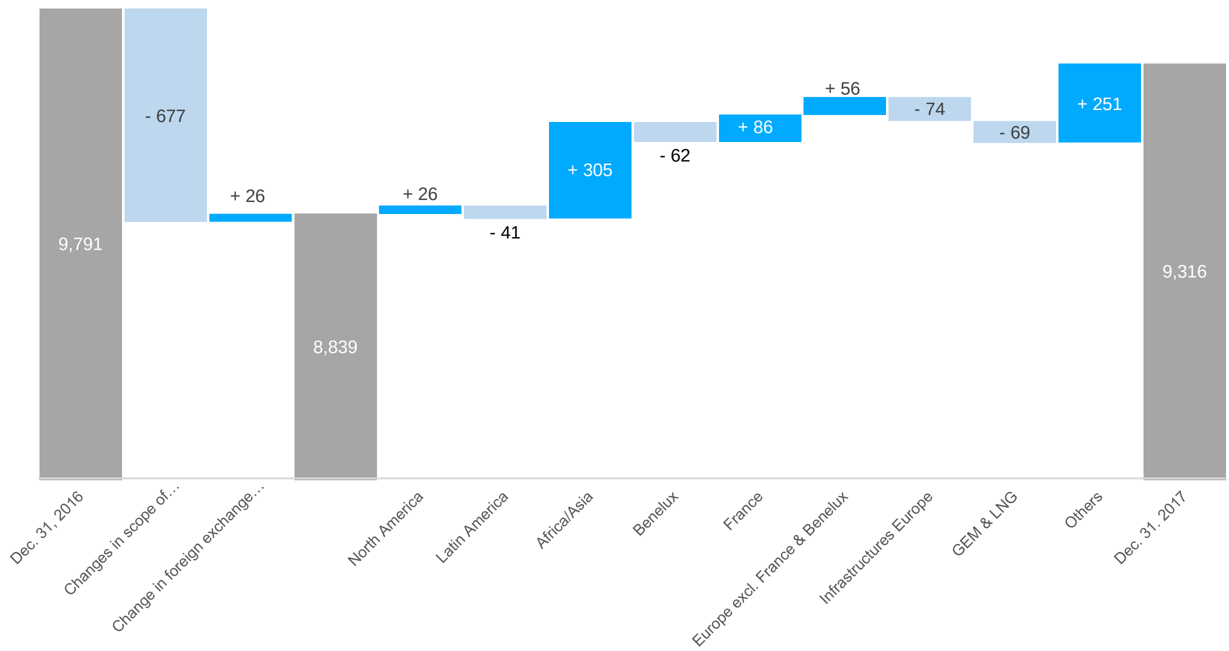
Organic revenue growth was driven by an increase in commodity volumes sold in the midstream business in Europe, an improved performance by the thermal power generation plants in Europe and Australia, the impact of new assets commissioned and price rises in Latin America, and the impact of the 2016 price revisions in the regulated infrastructure business in France. These positive developments were partially offset by a fall in sales of natural gas to business customers in France and by a decrease in hydro renewable energy generation in France.

Organic revenues by segment were (i) up in GEM & LNG, Latin America, Infrastructures Europe, Europe excluding France and Benelux, and Africa/Asia, (ii) stable in France, (iii) down slightly in North America and Benelux, and (iv) down significantly in the Other segment.

EBITDA declined by 1.8% to €9.3 billion over the year. Excluding the impact of changes in the scope of consolidation and exchange rates, EBITDA increased by 5.3%.

EBITDA TRENDS

In millions of euros



Changes in the scope of consolidation had a negative impact of €677 million due mainly to the disposal of hydro and thermal merchant power generation assets in the United States (€329 million negative impact) and Paiton in Indonesia (€156 million negative impact), coupled with the recognition in EBITDA as of 2017 of the nuclear contribution in Belgium (€142 million negative impact). Exchange rates had a positive €26 million impact, mainly due to the appreciation of the Brazilian real against the euro.

On an organic basis, EBITDA was up 5.3% to €477 million. The increase reflects the positive performance from the Group's growth drivers [(1)] which benefitted from (i) the Lean 2018 performance program, (ii) the commissioning of new assets notably in Latin America, and (iii) a good performance from the customer solution business particularly thanks to the development of services. These positive factors were partially offset by (i) the impact of a provision reversal in Brazil in 2016, (ii) the strong decrease in hydro renewable energy generation volumes in France, and (iii) an adverse temperature effect in the gas infrastructure and retail businesses in France. Furthermore, the performance in merchant activities was stable over the period as positive price and volume effects in thermal power generation activities in Europe and Australia were offset by the decrease in captured prices and in the nuclear power generation activity, particularly in Belgium.

Organic EBITDA performance varied significantly between segments:

- in North America, organic EBITDA was up sharply thanks to a good performance from the services businesses coupled with cost savings under the Lean 2018 program, despite a weaker performance from the remaining power generation activities;
- in Latin America, organic EBITDA contracted slightly, mainly due to the positive impact of a provision reversal in 2016 in Brazil, partially offset by the commissioning of new assets in Mexico and Peru, positive price revisions in Mexico and Argentina, and an improvement in the contribution of hydroelectric power activities in Brazil;

(1) Contracted renewable and thermal power generation, infrastructure and customer-service solutions businesses.

- in Africa/Asia, organic EBITDA reflects a very strong performance as growth drivers benefitted mainly from the commissioning of the Az-Zour North power plant in Kuwait and the successful closing of the Fadhili power plant contract in Saudi Arabia, the solid performance of retail businesses notably in Australia, and from higher margins in the gas distribution business in Thailand. These factors were partially offset by lower availability of assets in Thailand and Turkey and higher taxes for entities accounted for using the equity method in Oman and Saudi Arabia. Moreover, regarding merchant activities, the power generation business in Australia benefitted from the increase in prices and volumes;

- in Benelux, the organic decrease in EBITDA was mainly due to merchant activities as the nuclear power generation business was impacted by a decline in captured electricity sale prices and the non-scheduled shutdown of Tihange 1, Tihange 2 and Doel 3. These impacts were partially offset by a good performance in growth drivers from the service, gas and electricity sales businesses, and renewable power generation businesses, as well as cost savings under the Lean 2018 program;

- in France, the improvement in EBITDA, relating to the renewable power and customer-service solution businesses, was due to higher electricity volumes in the retail segment, margins from DBSO [1] activities (in the wind and solar farms sectors) and a good performance from the network business. These impacts were partially offset by a decrease in hydro energy generation, lower volumes and margins in the retail gas business, as well as an adverse temperature effect in France;

- EBITDA trends in Europe excluding France & Benelux reflect the strong performance from growth drivers. This is mainly due to an improvement in margins and volumes in the gas and electricity retail businesses in the United Kingdom, the gas services and distribution businesses, and cost savings under the Lean 2018 performance program;

- in Infrastructures Europe, the organic decrease in EBITDA stemmed from lower storage capacity sales in France, the negative impact of price revisions in the transport business and the adverse trend in temperatures in France;

- in GEM & GNL, EBITDA was down compared with 2016, mainly in merchant activities due to negative price impacts, less significant revisions to gas supply conditions in 2017 than in 2016 and gas supply difficulties in the south of France in January 2017 during the cold spell. These negative impacts were partially offset by price revisions to LNG supply contracts entered into in 2017, coupled with cost savings under the Lean 2018 performance program;

- in the Other segment, strong organic growth in EBITDA was driven mainly by a good performance from gas fired thermal power generation in Europe (merchant activity) and from BtoB electricity sales in France (customer-service solutions). Moreover, EBITDA benefitted from cost savings under the Lean 2018 program, notably at corporate level.

Current operating income after share in net income of entities accounted for using the equity method amounted to €5.3 billion, up 5.0% on an organic basis compared with 2016, for the same reasons as those given above for EBITDA. Depreciation expense for the year was higher than the previous year following the three-yearly review of Belgian nuclear power plant dismantling costs at end-2016.

(1) Develop, Build, Share and Operate.

4 REPORTABLE SEGMENT BUSINESS TRENDS

4.1 North America

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	2,934	3,814	-23.1%	-1.8%
EBITDA	169	475	-64.3%	+18.3%
Net depreciation and amortization/Other	(50)	(45)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	120	430	-72.2%	+23.6%

Revenues for the North America segment totalled €2,934 million, down 23.1% on a reported basis primarily due to the disposal in the merchant generation fleet. Revenues were down 1.8% on an organic basis, driven by a contraction in supply business and less favorable PPA renewals on the remaining fleet. This was partly mitigated by higher services revenues.

Electricity sales decreased from 65.8 TWh to 41.3 TWh primarily as a consequence of the disposal of the merchant assets.

EBITDA totalled €169 million, down 64.3% on a reported basis and up 18.3% organically. The organic improvement resulted from a stronger performance by the services businesses combined with corporate cost savings. These impacts were partially offset by the weaker performance of the remaining fleet.

Current operating income after share in net income of entities accounted for using the equity method amounted to €120 million, down 72.2% on a reported basis but up 23.6% on an organic basis, due to the movements in EBITDA mentioned above plus slightly lower net depreciation and amortization charges.

4.2 Latin America

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	4,511	4,075	+10.7%	+8.3%
EBITDA	1,711	1,696	+0.9%	-2.4%
Net depreciation and amortization/Other	(433)	(412)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	1,278	1,284	-0.5%	-4.3%

Revenues for the Latin America segment totalled €4,511 million, representing a 10.7% increase on a reported basis benefiting from the appreciation of the Brazilian real as well as from an 8.3% organic increase.

In Brazil, revenues increased thanks to the commissioning of the Santa Monica wind complex and higher prices, partly driven by poor hydrology. In Mexico, revenues benefited from a distribution tariff increase and the commissioning of the Pánuco (gas power plant) in October 2016. Chile was positively impacted by power price indexation (despite lower volumes) and higher demand for regasification. Argentina benefited from distribution tariff increases in October 2016 and in April and December 2017. In Peru, the commissioning of ChilcaPlus (May 2016) and Nodo Energetico (October 2016) helped to offset the lower demand and the loss of PPAs with high margins.

Electricity sales remained stable at 59.3 TWh, while gas sales decreased by 1.6 TWh to 28.9 TWh.

EBITDA totalled €1,711 million, up 0.9% on a reported basis, positively impacted by the appreciation of the Brazilian real and down 2.4% on an organic basis. The slight organic decrease is due to a significant one-off 2016 provision reversal in Brazil, partially offset by the factors mentioned for revenue, as well as better overall results in the spot market in Brazil, the recognition of a PPA cancellation penalty in Peru, the commissioning of the Los Ramones (gas transport pipeline in Mexico, July 2016) and significant cost savings under the Lean 2018 performance program.

Current operating income after share in net income of entities accounted for using the equity method amounted to €1,278 million, down 4.3% on an organic basis primarily due to changes in EBITDA, and higher depreciation from the commissioning of assets in Brazil, Peru and Mexico.

4.3 Africa/Asia

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	**3,984**	**3,804**	**+4.7%**	**+6.5%**
EBITDA	**1,323**	**1,162**	**+13.8%**	**+30.5%**
Net depreciation and amortization/Other	(256)	(239)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**1,067**	**923**	**+15.6%**	**+34.7%**

Revenues for the Africa/Asia segment totalled €3,984 million, up 4.7% on a reported basis and 6.5% organically. The contribution of the services activities of an Australian company acquired in 2016 was partially offset by a negative foreign exchange effect due to the weakening of the US dollar against the euro and the sale of the Meenakshi coal-fired power plant in India in September 2016. The organic increase resulted mainly from higher market prices in Australia, which positively impacted the generation fleet, and from higher sales volumes in the Australian retail business and the successful closing of the Fadhili power plant contract in Saudi Arabia. These positive impacts were partially offset by major maintenance planned in Thailand, lower power plant availability and a decrease in gas prices in Turkey.

Electricity sales decreased by 6.1 TWh to 44.9 TWh, mainly due to the closure of the Hazelwood coal-fired power plant in Australia at the end of the first quarter and to the sale of the Meenakshi power plant.

EBITDA totalled €1,323 million, up 13.8% on a reported basis, mainly due to the positive impact of the Tabreed (district cooling networks) acquisition in the United Arab Emirates in September 2017, offsetting the sale of the Paiton coal-fired power plant in December 2016. The 30.5% organic increase mainly reflects the improved performance of the generation and retail businesses in Australia, higher margins for gas distributor PTT NGD in Thailand, the commissioning of the Az-Zour North power plant in Kuwait, the impact of the successful closing of the Fadhili contract in Saudi Arabia and the positive settlement of claims in the Middle East. This performance was partially offset by lower power plant availability in Thailand and Turkey, and the impact of tax increases on the results of our associates in Oman and Saudi Arabia.

Current operating income after share in net income of entities accounted for using the equity method amounted to €1,067 million, up 34.7% on an organic basis for the same reasons as those stated above for EBITDA.

4.4 Benelux

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	**8,865**	**9,044**	**-2.0%**	**-1.9%**
EBITDA	**551**	**755**	**-26.9%**	**-8.2%**
Net depreciation and amortization/Other	(561)	(383)		
CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**(9)**	**371**	**-102.5%**	**-64.3%**

Revenues for the Benelux segment amounted to €8,865 million, down 2.0% compared with 2016. This decrease mainly reflects a fall in volumes sold in the BtoB segment in Belgium and the impact of lower commodity prices on the retail business. The services businesses, supported by buoyant performances in Belgium, delivered 5.1% revenue growth.

In Belgium and Luxembourg, electricity sales totalled 37.9 TWh, down 0.9 TWh on 2016. In the Netherlands, electricity sales amounted to 9.8 TWh, representing an increase of 1.4 TWh.

Natural gas sales rose by 0.2 TWh to 49.4 TWh at December 31, 2017.

EBITDA amounted to €551 million, down 8.2% on an organic basis compared with 2016, due to a decline in captured electricity sale prices and the lower availability of nuclear power plants following the non-scheduled shutdown of Tihange 1, Tihange 2 and Doel 3. These impacts were partially offset by a good performance from the services businesses and gas and electricity sales activities, coupled with cost savings under the Lean 2018 program. Apart from the above-mentioned factors driving the decrease, the 26.9% decline in reported EBITDA was also impacted by the recognition of the nuclear contribution in EBITDA as of January 1, 2017. The contribution for the year amounted to €142 million.

Current operating income after share in net income of entities accounted for using the equity method fell in line with EBITDA and was also adversely affected by an increase in depreciation expense resulting from an increase in the amount of dismantling assets recognized at end-2016 following the three-yearly review of nuclear provisions.

4.5 France

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)	% change (reported basis)	% change (organic basis)
Revenues	**16,659**	**20,332**	**-18.1%**	**+0.1%**
EBITDA	**1,475**	**1,315**	**+12.2%**	**+6.6%**
Net depreciation and amortization/Other	(593)	(620)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**882**	**695**	**+26.9%**	**+12.8%**

(1) 2016 revenues and EBITDA including the BtoB activity (E&C), which was transferred to the Other segment at January 1, 2017.

Volumes sold

In TWh	Dec. 31, 2017	Dec. 31, 2016 (1)	% change (reported basis)
Gas sales	94.7	102.6	-7.7%
Electricity sales	34.3	34.2	+0.0%

(2) Gas and electricity sales for 2016 do not include E&C (see section 3.9).

France climatic adjustment

In TWh	Dec. 31, 2017	Dec. 31, 2016	Total change in TWh
Climate adjustment volumes (negative figure = warm climate, positive figure = cold climate)	(0.3)	1.6	(1.9)

Revenues for the France segment totalled €16,659 million, down 18.1% on a reported basis and up 0.1% on an organic basis. The reported fall was due to the transfer of the BtoB gas and electricity sales activity (E&C) from the France segment to the Other segment. The slight organic increase resulted from higher revenues from the services businesses, offset by lower hydro power generation.

Natural gas sales excluding the transfer of E&C fell by 7.9 TWh, including 6.0 TWh following the loss of retail customers due to competitive pressure and 1.9 TWh related to the temperature effect. Electricity sales excluding the transfer of E&C inched up 0.1 TWh, chiefly due to the increase in electricity volumes sold in the retail segment, which was offset by the decrease in hydro power generation.

EBITDA totalled €1,475 million, up 6.6% on an organic basis due to higher electricity volumes sold in the retail segment, margins from DBSO activities [1] in the wind and solar farm sectors and a good performance from the network business despite a significant decrease in hydro power generation and the loss of individual gas customers.

Current operating income after share in net income of entities accounted for using the equity method amounted to €882 million, up 12.8% on an organic basis.

4.6 Europe excluding France & Benelux

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	**8,848**	**8,118**	**+9.0%**	**+4.0%**
EBITDA	**655**	**612**	**+7.0%**	**+9.7%**
Net depreciation and amortization/Other	(216)	(202)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**439**	**410**	**+7.2%**	**+17.0%**

Revenues for the Europe excluding France & Benelux segment totaled €8,848 million, representing organic growth of 4.0%, driven mainly by positive price and volume effects in the gas and electricity retail businesses in the United Kingdom and growth in the services businesses. Besides this organic growth, the negative exchange rate impact on the pound sterling was more than offset by the contribution of Keepmoat Regeneration, acquired in late April 2017, to revenues.

Electricity sales amounted to 30.3 TWh, representing an increase of 0.6 TWh [2] compared with 2016. Gas sales increased by 2.9 TWh to 71.1 TWh, notably driven by favorable weather conditions in Romania.

EBITDA totaled €655 million, representing an increase of 9.7% on an organic basis, mainly due to an improvement in margins and volumes in the gas and electricity retail businesses in the United Kingdom, the services and gas distribution businesses, and cost savings under the Lean 2018 performance program.

Current operating income after share in net income of entities accounted for using the equity method rose 17% to €439 million on an organic basis, in line with EBITDA growth.

4.7 Infrastructures Europe

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	**3,488**	**3,267**	**+6.8%**	**+6.9%**
Total revenues (incl. intra-group transactions)	**6,712**	**6,762**	**-0.7%**	
EBITDA	**3,384**	**3,459**	**-2.1%**	**-2.2%**
Net depreciation and amortization/Other	(1,444)	(1,390)		
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**1,940**	**2,068**	**-6.2%**	**-6.2%**

Revenues for the Infrastructures Europe segment, including intra-Group transactions, amounted to €6,712 million, representing a slight 0.7% decline due, for France, to lower storage capacity sales, the annual revision of regasification and transport infrastructure tariffs (4.6% increase on April 1, 2016 and 3.1% decrease on April 1, 2017), and the impact of unfavorable temperatures on the gas distribution business, partially offset by short-term transport capacity sales in

(1) *Develop, Build, Share and Operate.*

(2) *Includes Cogeneration Italy sales of 0.5 TWh in contrast to reported data at December 31, 2016.*

Germany. The overall impact of revisions to distribution infrastructure tariffs in France was positive (2.8% increase on July 1, 2016 and 2.05% decrease on July 1, 2017).

The contribution to Group **revenues** was €3,488 million, up 6.8% on 2016. The improved contribution essentially reflects the growth in distribution and transport activities for third parties in France. Transport revenues were also on the rise in Germany.

EBITDA amounted to €3,384 million, down 2.1% on the previous year, mainly reflecting the change in total revenues.

Current operating income after share in net income of entities accounted for using the equity method came in at €1,940 million for the period, down 6.2% on 2016, with a rise in net depreciation and amortization charges resulting from the commissioning of new assets by GRTgaz (including Arc de Dierrey at end-2016) and GRDF (notably the new communicating "smart" meters).

4.8 GEM & LNG

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	% change (reported basis)	% change (organic basis)
Revenues	**9,391**	**8,981**	**+4.6%**	**+4.9%**
EBITDA	**(82)**	**3**	**NA**	**NA**
Net depreciation and amortization/Other	(55)	(77)		
CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**(137)**	**(74)**	**-85.2%**	**-52.9%**

GEM & LNG's contribution to Group **revenues** for the year ended December 31, 2017 amounted to €9,391 million, up 4.9% on an organic basis year on year. Growth was driven by an increase in the volumes and prices of commodities sold in the midstream gas business in Europe and the LNG business in Asia.

EBITDA was a negative €82 million, down on 2016 due mainly to negative price effects, less significant revisions to gas supply conditions in 2017 than in 2016 and gas supply difficulties in the south of France in January 2017. These impacts were partially offset by the positive impact of an LNG supply contract prices revision in 2017, coupled with cost savings under the Lean 2018 performance program.

The business incurred a **current operating loss after share in net income of entities accounted for using the equity method** of €137 million in 2017, representing a deterioration on both a reported and an organic basis, in line with EBITDA trends.

4.9 Other

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)	% change (reported basis)	% change (organic basis)
Revenues	**6,347**	**3,405**	**+86.4%**	**-9.4%**
EBITDA	**128**	**15**	**NA**	**NA**
Net depreciation and amortization/Other	(436)	(487)		
CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**(308)**	**(472)**	**+34.8%**	**+59.1%**

(1) 2016 revenues and EBITDA excluding the BtoB activity (E&C), which was transferred to the Other segment at January 1, 2017.

Volumes sold

In TWh	Dec. 31, 2017	Dec 31, 2016 (1)	% change (reported basis)
Gas sales in France	42.3	51.5	-17.8%
Electricity sales in France	46.1	45.2	+2.0%

(1) Gas and electricity sales for 2016 include E&C which was transferred to the Other segment at January 1, 2017.

France climatic adjustment

In TWh	Dec. 31, 2017	Dec. 31, 2016	Total change in TWh
Climate adjustment volumes (negative figure = warm climate, positive figure = cold climate)	(0.1)	0.5	(0.6)

The Other segment comprises the activities of the Generation Europe, Tractebel, GTT and Other business units, with the Other business unit encompassing Solairedirect and the Group's holding and corporate activities, which notably include the entities centralizing the Group's financing requirements and the equity-accounted contribution of SUEZ. As of January 1, 2017, the Other segment also includes BtoB gas and electricity sales activities (E&C) in France, previously accounted for in the France segment.

Revenues totalled €6,347 million, up 86% on a reported basis and down 9.4% on an organic basis. The reported increase mainly reflects the internal transfer of the E&C business on January 1, 2017, partially offset by the disposal in 2017 of the thermal power generation business in Poland and the United Kingdom. The organic decrease stemmed from a fall in natural gas sales to business customers in France due to the loss of customers and from the shutdown of the Rugeley power plant in the United Kingdom in June 2016, partially offset by an improved performance from gas-fired power plants in Europe, particularly in France and Belgium, driven by an increase in captured electricity sale prices.

Natural gas sales fell by 9.2 TWh, comprising a negative 0.6 TWh temperature effect and a negative 8.6 TWh impact due to competitive pressure. ENGIE's share of the BtoB market has fallen from 25% to 21% at end-2016. Electricity sales were up 0.9 TWh to 46.1 TWh, benefiting from higher generation at gas-fired power plants in Europe and the continuous push to gain market share for electricity in the BtoB segment in France. These improvements were partially offset by the disposal of thermal assets in Poland in March 2017 and in the United Kingdom in October 2017, and the shutdown of the Rugeley power plant in June 2016.

EBITDA totalled €128 million, up on both a reported and an organic basis compared with 2016, mainly due to a good performance from the thermal power generation business in Europe following the increase in captured margins. Gains in market share for electricity in the BtoB segment in France and improved risk management were partially offset by the loss of gas market share.

Current operating loss after share in net income of entities accounted for using the equity method was a negative €308 million for the period, representing an improvement on both a reported and an organic basis, in line with EBITDA.

5 OTHER INCOME STATEMENT ITEMS

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 [(1)]	% change (reported
Current operating income after share in net income of entities accounted for using the equity method	**5,273**	**5,636**	**-6.4%**
Mark to market on commodity contracts other than trading instruments	(307)	1,279	
Impairment losses	(1,317)	(4,035)	
Restructuring costs	(671)	(450)	
Changes in scope of consolidation	752	544	
Other non-recurring items	(911)	(850)	
Income/(loss) from operating activities	**2,819**	**2,124**	**+32.7%**
Net financial income/(loss)	(1,296)	(1,321)	
Income tax benefit/(expense)	425	(481)	
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**1,948**	**322**	
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**290**	**(158)**	
NET INCOME/(LOSS)	**2,238**	**163**	**NA**
Net income/(loss) Group share	**1,423**	**(415)**	
of which Net income/(loss) relating to continued operations, Group share	*1,226*	*(304)*	
of which Net income/(loss) relating to discontinued operations, Group share	*196*	*(111)*	
Non-controlling interests	**815**	**579**	
of which Non-controlling interests relating to continued operations	*722*	*626*	
of which Non-controlling interests relating to discontinued operations	*93*	*(47)*	

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Income from operating activities amounted to €2,819 million in 2017, representing an increase compared with 2016, mainly due to (i) lower impairment losses in 2017, (ii) gains on asset disposals and available-for-sale securities, partially offset by (iii) the negative impact of fair value adjustments to commodity hedges, (iv) the fall in current operating income after share in net income of companies accounted for using the equity method, (v) higher restructuring costs, and (vi) the initial non-recurring accounting impact relating to the change in the accounting treatment of long-term gas supply contracts, a power exchange contract as well as to the identification of a series of transport and storage capacities contracts corresponding to onerous contracts, as a result of new management environment (GEM business unit).

Income from operating activities was also affected by:

- changes in the fair value of commodity derivatives relating to operating items, which had a negative impact of €307 million on income from operating activities (reflecting transactions not eligible for hedge accounting), compared with a positive impact of €1,279 million in 2016. The impact for the period results chiefly from negative overall price effects on these positions, combined with the net negative impact of unwinding positions with a positive market value at December 31, 2016;

- net impairment losses of €1,317 million, compared with €4,035 million the previous year.
  At December 31, 2017, the Group recognized net impairment losses of €481 million against goodwill, €788 million against property, plant and equipment and intangible assets, and €48 million against financial assets and investments in entities accounted for using the equity method. These impairment losses related mainly to the Infrastructures Europe (storage), Other (primarily the Generation Europe business unit), and the Africa/Asia, France and North America reportable segments. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share was a negative €1,146 million. These impairment losses are described in Note 8.2 "Impairment losses" to the consolidated financial statements.
  In 2016, the Group recognized net impairment losses of €1,690 million against goodwill, €2,201 million against property, plant and equipment and intangible assets, and €144 million against financial assets and investments in entities accounted for using the equity method. These impairment losses related mainly to the Benelux, GEM & LNG, France and North America reportable segments;

- restructuring costs of €671 million (compared with €450 million the previous year), mainly including costs related to the Lean 2018 performance program on the Group's corporate activities;

- changes in the scope of consolidation, which had a positive impact of €752 million, mainly including gains on the disposal of the thermal merchant power plant portfolio in the United States for €540 million, the Group's entire 38.10% residual interest in NuGen for €93 million, a power plant portfolio in the United Kingdom for €61 million and the Polaniec power plant in Poland for €57 million (*see Note 4.1*);

- other non-recurring items representing a loss of €911 million, mainly including (i) the initial non-recurring accounting impact (negative 1,243 million) relating to the change in the accounting treatment of long-term gas supply contracts, a power exchange contract as well as to the identification of a series of transport and storage capacities contracts corresponding to onerous contracts, as a result of new management environment (*see Note 8.5*), and (ii) the €349 million gain on the disposal of the Group's 10% interest in Petronet LNG in India.

The **net financial loss** was stable and amounted to €1,296 million in 2017, compared with €1,321 million the previous year (*see Note 9*).

The **income tax benefit** for 2017 amounted to €425 million (€481 million expense in 2016). It includes an income tax benefit of €1,531 million arising on non-recurring income statement items (versus €843 million in 2016), mainly relating to (i) tax rate changes in France, in the United States and other non-recurring measures (€479 million), (ii) the impact of the recovery from the French State of the 3% tax on dividends (€359 million) and (iii) to the initial non-recurring accounting impact of the change in the accounting treatment of certain BU GEM contracts mentioned above (€298 million). Adjusted for these non-recurring items, the effective recurring tax rate was 29.3%, lower than the 2016 rate of 36.1% notably due to the recognition in EBITDA as of 2017 of the nuclear contribution in Belgium as well as to the repeal of the 3% tax on dividends in France.

Net income relating to continued operations attributable to non-controlling interests amounted to €722 million, compared with €626 million in 2016. The increase is due to improved operating income, particularly in Asia/Pacific, and to reversals of impairment losses in the United Kingdom, whose impacts were mitigated by the recognition in 2016 of a capital gain on the disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN) in Chile.

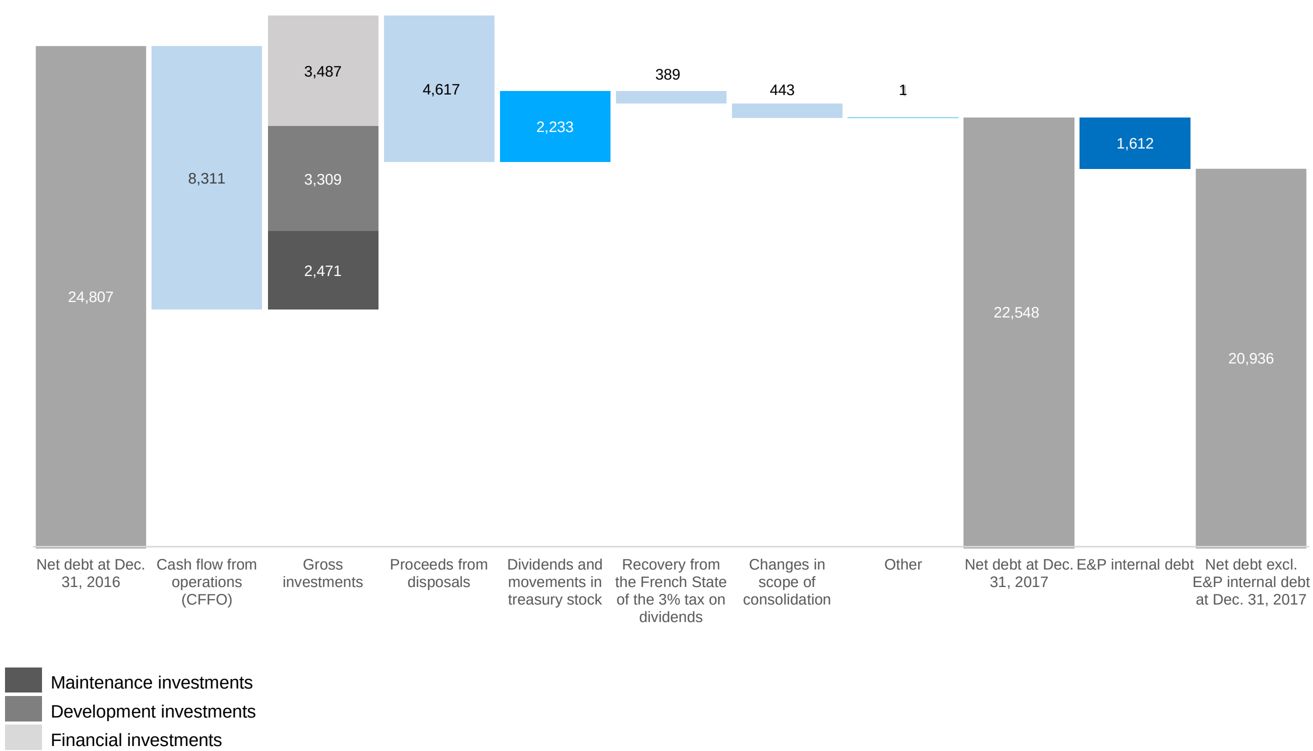
6 CHANGES IN NET DEBT

Net debt stood at €22.5 billion, down €2.3 billion compared with December 31, 2016, mainly due to (i) cash flow from operations (€8.3 billion), (ii) the impacts of the portfolio rotation program (€4.8 billion), including the completion of the disposal of the thermal merchant power plant portfolio in the United States, Poland and the United Kingdom, the disposal of an interest in Opus Energy and the residual interest in NuGen in the United Kingdom, the classification of the Loy Yang B coal-fired power plant in Australia under "Assets held for sale", the disposal of a 25% interest in Elengy (through the transfer of 100% of Elengy to GRTgaz) and the disposal of an interest in Petronet LNG in India, and (iii) a favorable exchange rate effect (€0.7 billion). These items were partially offset by (i) gross investments in the period (€9.3 billion), and (ii) dividends paid to ENGIE SA shareholders (€2.0 billion) and to non-controlling interests (€0.6 billion). Net debt also improved thanks to the impact of the recovery from the French State of the 3% tax on dividends (€0.4 billion).

Net debt excluding internal E&P debt amounted to €20,936 million compared with €23,080 million at December 31, 2016.

Changes in net debt break down as follows:

In millions of euros



The net debt (excluding internal E&P debt) to EBITDA ratio came out at 2.25 at December 31, 2017.

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Net debt (excluding internal E&P debt)	20,936	23,080
EBITDA	9,316	9,491
NET DEBT/EBITDA RATIO	**2.25**	**2.43**

The economic net debt (excluding internal E&P debt) to EBITDA ratio came out at 3.90 at December 31, 2017.

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Economic net debt (excluding internal E&P debt)	36,362	38,399
EBITDA	9,316	9,491
ECONOMIC NET DEBT/EBITDA RATIO	**3.90**	**4.05**

6.1 Cash flow from operations (CFFO)

Cash flow from operations amounted to a sound €8.3 billion, representing a €1.3 billion decline, however, compared with 2016. This performance reflected negative changes in the scope of consolidation, higher restructuring and dispute settlement costs, and a less favorable change in working capital due mainly to gas inventories in France.

6.2 Net investments

Gross investments during the period amounted to €9,267 million and included:

- financial investments for €3,487 million, relating notably to (i) the acquisition of a 40% interest in Tabreed in the United Arab Emirates (€657 million), Keepmoat Regeneration in the United Kingdom (€392 million) and Icomera in Sweden (€119 million), (ii) the concession agreements won for the Jaguara and Miranda hydro power plants in Brazil (€686 million), (iii) payments for the capital increases subscribed in SUEZ (€244 million), Cameron LNG (€135 million) and the joint venture in charge of the 50-year energy management contract with the University of Ohio in the United States (€125 million), (iv) the financing of the Nord Stream 2 pipeline project (€298 million), and (v) a €78 million increase in Synatom investments;

- development investments totaling €3,309 million, including (i) €1,294 million invested in the Latin America segment to build thermal power plants and develop hydro power plants, as well as wind and photovoltaic farms, in Brazil and Chile, (ii) €739 million invested in the Infrastructures Europe segment (blending projects and development of the natural gas transportation network in France), (iii) €522 million invested in the France segment (mainly in renewable projects), and (iv) €292 million to develop Solairedirect's photovoltaic projects mainly in India and France;

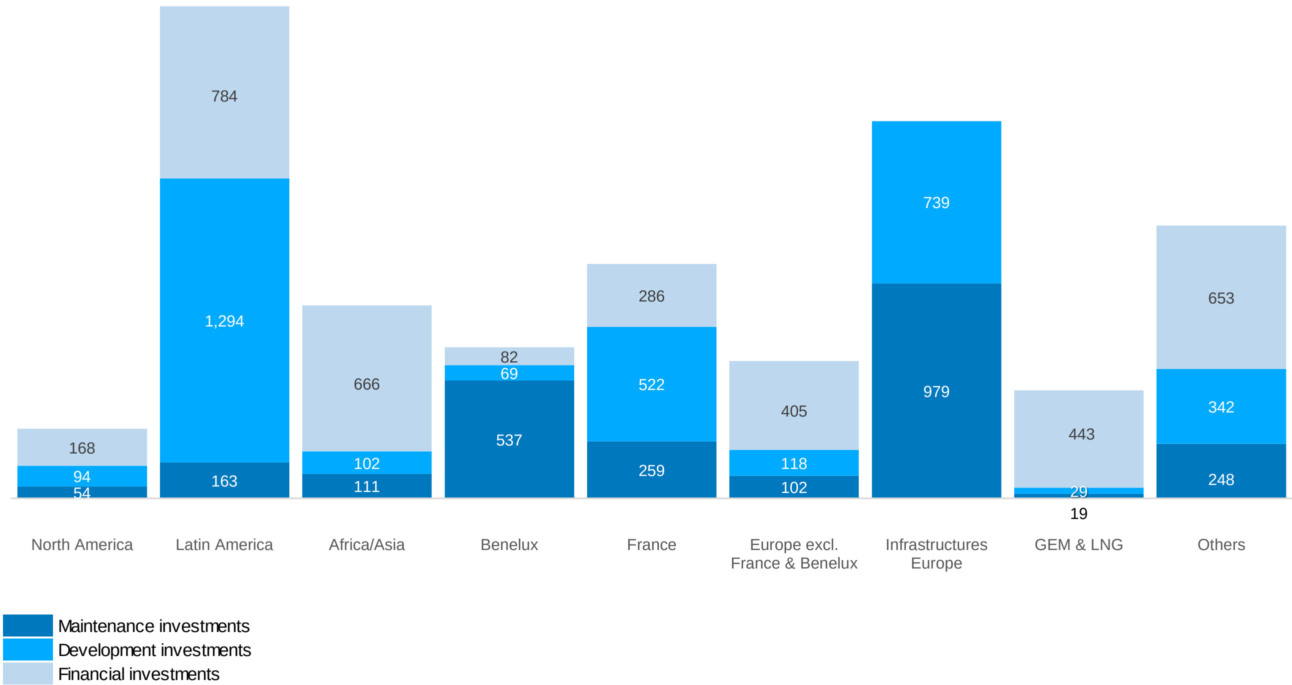
- maintenance investments for an amount of €2,471 million.

Disposals represented a cash amount of €4,617 million, mainly including the Group's disposal of its thermal merchant power plant assets in the United States for €3,085 million, the Polaniec power plant in Poland for €292 million, the Group's 10% interest in Petronet LNG in India for €436 million, a power plant portfolio in the United Kingdom for €232 million, a 25% interest in Elengy (through the transfer of 100% of Elengy to GRTgaz) for €202 million, a 30% interest in Opus Energy in the United Kingdom for €122 million and the 38.10% residual interest in NuGen for €122 million.

Taking into account changes in the scope of consolidation for the period relating to acquisitions and disposals of subsidiaries (€443 million negative impact), the impact on net debt of investments net of proceeds from disposals amounted to €4,208 million.

Capital expenditure breaks down as follows by segment:

In millions of euros



6.3 Dividends and movements in treasury stock

Dividends and movements in treasury stock (including the impact of the recovery from the French State of the 3% tax on dividends) during the period amounted to €2,622 million and included:

- €2,049 million in dividends paid by ENGIE SA to its shareholders, which corresponds to the balance of the 2016 dividend (€0.50 per share for shares with rights to an ordinary dividend or €0.60 per share for shares with rights to a dividend mark-up) paid in May 2017 and to an interim dividend (€0.35 per share) paid in October 2017;
- dividends paid by various subsidiaries to their non-controlling shareholders in an amount of €642 million, the payment of interest on hybrid debt for €144 million, withholding tax and movements in treasury stock.

6.4 Net debt at December 31, 2017

Excluding amortized cost but including the impact of foreign currency derivatives, at December 31, 2017 a total of 80% of net debt was denominated in euros and 14% in US dollars.

Including the impact of financial instruments, 86% of net debt is at fixed rates.

The average maturity of the Group's net debt is 10.6 years.

At December 31, 2017, the Group had total undrawn confirmed credit lines of €13.4 billion.

7 OTHER ITEMS IN THE STATEMENT OF FINANCIAL POSITION

In millions of euros	Dec. 31, 2017	Dec. 31, 2016	Net change
Non-current assets	**92,171**	**98,905**	**(6,734)**
of which goodwill	*17,285*	*17,372*	*(88)*
of which property, plant and equipment and intangible assets, net	*57,528*	*64,378*	*(6,851)*
of which investments in entities accounted for using the equity method	*7,409*	*6,624*	*785*
Current assets	**58,161**	**59,595**	**(1,434)**
of which assets classified as held for sale	*6,687*	*3,506*	*3,181*
Total equity	**42,577**	**45,447**	**(2,870)**
Provisions	21,768	22,208	(440)
Borrowings	33,467	36,950	(3,482)
Other liabilities	52,520	53,895	(1,375)
of which liabilities directly associated with assets classified as held for sale	*3,371*	*300*	*3,071*

The carrying amount of **property, plant and equipment and intangible assets** was €57.5 billion, down €6.9 billion on December 31, 2016. The decrease was primarily the result of the impact of the classification of exploration-production activities as "Discontinued operations" and of the Loy Yang B coal-fired power plant in Australia under "Assets held for sale" (€5.3 billion negative impact) (*see Note 4.1.1*), depreciation and amortization charges (€4.2 billion negative impact), translation adjustments (€1.9 billion negative impact), impairment losses (€1.0 billion negative impact) and changes in the scope of consolidation (€0.6 billion negative impact), partially offset by capital expenditure during the period (€6.2 billion positive impact).

Goodwill was stable at €17.3 billion, mainly due to the acquisition of Keepmoat Regeneration (€0.5 billion positive impact), non-controlling interests in La Compagnie du Vent (€0.1 billion positive impact), Icomera (€0.1 billion positive impact) and EV-Box (€0.1 billion positive impact), offset by impairment losses (€0.5 billion negative impact) and translation adjustments (€0.4 billion negative impact).

Total **equity** amounted to €42.6 billion, a decrease of €2.9 billion compared with December 31, 2016. The decrease stemmed mainly from the payment of the cash dividend (€2.7 billion negative impact, including €2.0 billion of dividends paid by ENGIE SA to its shareholders and €0.7 billion paid to non-controlling interests) and other items of comprehensive income (€2.5 billion negative impact, chiefly relating to movements in translation adjustments as a result of items recycled to profit or loss from other comprehensive income on the disposal of the thermal merchant power plant portfolio in the United States and the depreciation of the US dollar against the euro), partially offset by net income for the period (€2.2 billion positive impact).

Provisions amounted to €21.7 billion, a decrease of €0.4 billion compared with December 31, 2016. This decrease stems mainly (€1.3 billion) from the impact of the classification of exploration-production activities as "Discontinued operations" on May 11, 2017 (*see Note 4.1.1*), partially offset by provisions for onerous contracts relating to storage and transport capacity reservation contracts (*see Note 8.5*).

At December 31, 2017, assets and liabilities reclassified to "**Assets classified as held for sale**" and "**Liabilities directly associated with assets classified as held for sale**" correspond to exploration-production activities following their classification as discontinued operations in the Group's consolidated financial statements and the Loy Yang B power plant in Australia, and at December 31, 2016, to the thermal merchant power plant portfolio in the United States and the Polaniec power plant in Poland, which were sold in the first half of 2017 (*see Note 4.1*).

8 PARENT COMPANY FINANCIAL STATEMENTS

The figures provided below relate to the financial statements of ENGIE SA, prepared in accordance with French GAAP and applicable regulations.

Revenues for ENGIE SA in 2017 totaled €20,585 million, up 15% compared to 2016 due mainly to the impact of the increase in electricity sales.

The net operating loss was €1,358 million in 2017 versus €1,252 million in 2016 due to the combined effect of higher electricity sales offset by a lower margin on gas sales, mainly further to a loss of customers, and the reduction in overheads thanks to the Group's cost savings program.

The Company reported net financial income of €3,849 million compared with €1,294 million in 2016. The sharp increase is due to dividends received from subsidiaries (€4,214 million compared with €2,043 million in 2016) and in particular Electrabel, which paid a €1,641 million dividend in the form of a contribution of Electrabel France shares, and GRDF, which paid a €1,007 million dividend, including the reimbursement of issue premiums for €738 million.

Net non-recurring expenses amounted to €2,072 million, chiefly due to the combined effect of additions to amortization of securities net of reversals (negative €1,538 million), provisions for the restructuring of the workforce and real estate (negative €113 million), penalties paid on the early redemption of bonds (negative €93 million), offset by the capital gain generated on the sale of the Elengy shares to GRTgaz (positive €73 million) and the reversal of the provision for price increases (positive €43 million).

The income tax benefit amounted to €1,001 million compared to a benefit of €672 million in 2016. The difference is chiefly due to the repayment by the State of the 3% tax on dividends (€422 million) after it was declared invalid by the Constitutional Council.

Net income for the year came out at €1,421 million.

Shareholders' equity amounted to €37,191 million at end-2017 versus €37,976 million at December 31, 2016, reflecting the dividend payout, the impact of the first-time application of ANC Regulation No. 2015-05 on financial instruments (negative €144 million) and 2017 net income.

At December 31, 2017, net debt stood at €34,254 million, and cash and cash equivalents totaled €8,862 million (of which €6,185 relating to subsidiaries' current accounts).

Information relating to payment deadlines

Pursuant to the application of Article D441-4 of the French Commercial Code, companies whose annual financial statements are certified by a statutory Auditor must publish information regarding supplier and client payment deadlines. The purpose is to demonstrate that there is no significant failure to respect settlement deadlines.

Information relating to supplier and client payment deadlines mentioned in Article D.441-4 of the French Commercial Code

	Article D. 441 I.- 1°: Invoices received, unpaid and overdue at the reporting date						Article D. 441 I.- 2°: Invoices issued, unpaid and overdue at the reporting date					
In millions of euros	**0 days (indicative)**	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days or more**	**Total (1 day or more)**	**0 days (indicative)**	**1 to 30 days**	**31 to 60 days**	**61 to 90 days**	**91 days or more**	**Total (1 day or more)**
(A) By aging category												
Number of invoices	-					718	-					5,479,406
Aggregate invoice amount (incl. VAT)	-	9.5	1.1	0.3	3.3	14.3	-	166.0	53.5	30.0	413.2	662.9
Percentage of total amount of purchases (incl. VAT) for the period	-	0.04%	0.01%	0.00%	0.01%	0.06%						
Percentage of total revenues (incl. VAT) for the period							-	0.68%	0.22%	0.12%	1.70%	2.73%
(B) Invoices excluded from (A) relating to disputed or unrecognized receivables and payables												
Number of excluded invoices	67						149					
Aggregate amount of excluded invoices	84.9						73.9					
(C) Standard payment terms used (contractual or legal terms - Article L. 441-6 or Article L. 443-1 of the French Commercial Code)												
Payment terms used to calculate late payments	Legal payment terms: 60 days						Contractual payment terms: 14 days Legal payment terms: 30 days					

02 CONSOLIDATED FINANCIAL STATEMENTS

INCOME STATEMENT

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016 (1)
Revenues	7.1	65,029	64,840
Purchases	-	(36,740)	(36,620)
Personnel costs	7.2	(10,082)	(9,996)
Depreciation, amortization and provisions	7.3	(3,736)	(4,223)
Other operating expenses	-	(11,077)	(10,407)
Other operating income	-	1,441	1,291
CURRENT OPERATING INCOME	**7**	**4,835**	**4,884**
Share in net income of entities accounted for using the equity method	3	437	752
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**-**	**5,273**	**5,636**
Mark-to-market on commodity contracts other than trading instruments	8.1	(307)	1,279
Impairment losses	8.2	(1,317)	(4,035)
Restructuring costs	8.3	(671)	(450)
Changes in scope of consolidation	8.4	752	544
Other non-recurring items	8.5	(911)	(850)
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**8**	**2,819**	**2,124**
Financial expenses	-	(2,122)	(2,210)
Financial income	-	827	889
NET FINANCIAL INCOME/(LOSS)	**9**	**(1,296)**	**(1,321)**
Income tax benefit/(expense)	10	425	(481)
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**-**	**1,948**	**322**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**-**	**290**	**(158)**
NET INCOME/(LOSS)	-	2,238	163
Net income/(loss) Group share	**-**	**1,423**	**(415)**
of which Net income/(loss) relating to continued operations, Group share	-	*1,226*	*(304)*
of which Net income/(loss) relating to discontinued operations, Group share	-	*196*	*(111)*
Non-controlling interests	**-**	**815**	**579**
of which Non-controlling interests relating to continued operations	-	*722*	*626*
of which Non-controlling interests relating to discontinued operations	-	*93*	*(47)*
BASIC EARNINGS/(LOSS) PER SHARE (EUROS)	**11**	**0.53**	**(0.23)**
of which Basic earnings/(loss) relating to continued operations per share	-	*0.45*	*(0.19)*
of which Basic earnings/(loss) relating to discontinued operations per share	-	***0.08***	***(0.05)***
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)	**11**	**0.53**	**(0.23)**
of which Diluted earnings/(loss) relating to continued operations per share	-	*0.45*	*(0.19)*
of which Diluted earnings/(loss) relating to discontinued operations per share	-	***0.08***	***(0.05)***

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF COMPREHENSIVE INCOME

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2017 Owners of the parent	Dec. 31, 2017 Non-controlling interests	Dec. 31, 2016 (1)	Dec. 31, 2016 Owners of the parent (1)	Dec. 31, 2016 Non-controlling interests (1)
NET INCOME/(LOSS)		2,238	1,423	815	163	(415)	579
Available-for-sale securities	15	(379)	(381)	2	146	144	2
Net investment hedges	16	327	327	-	(86)	(86)	-
Cash flow hedges (excl. commodity instruments)	16	393	378	15	(250)	(260)	10
Commodity cash flow hedges	16	6	18	(11)	(30)	27	(57)
Deferred tax on items above	10	(184)	(184)	-	123	102	21
Share of entities accounted for using the equity method in recyclable items, net of tax		13	13	-	108	108	-
Translation adjustments		(2,583)	(2,209)	(374)	402	255	147
Recyclable items relating to discontinued operations, net of tax	4	(177)	(124)	(53)	(276)	(193)	(83)
TOTAL RECYCLABLE ITEMS		**(2,583)**	**(2,162)**	**(421)**	**137**	**97**	**40**
Actuarial gains and losses	19	96	93	2	(677)	(633)	(44)
Deferred tax on actuarial gains and losses	10	(97)	(92)	(4)	52	52	-
Share of entities accounted for using the equity method in non-recyclable items from actuarial gains and losses, net of tax		32	32	-	(50)	(49)	-
Non-recyclable items relating to discontinued operations, net of tax		7	5	2	3	2	1
TOTAL NON-RECYCLABLE ITEMS		**38**	**38**	**-**	**(672)**	**(628)**	**(44)**
TOTAL COMPREHENSIVE INCOME/(LOSS)		(307)	(701)	394	(371)	(946)	575

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under “Discontinued operations” on May 11, 2017 (see Note 30 “Restatement of 2016 comparative data”).

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF FINANCIAL POSITION

ASSETS

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016
Non-current assets			
Goodwill	12	17,285	17,372
Intangible assets, net	13	6,504	6,639
Property, plant and equipment, net	14	51,024	57,739
Available-for-sale securities	15	2,656	2,997
Loans and receivables at amortized cost	15	2,976	2,250
Derivative instruments	15	2,948	3,603
Investments in entities accounted for using the equity method	3	7,409	6,624
Other assets	25	567	431
Deferred tax assets	10	803	1,250
TOTAL NON-CURRENT ASSETS		**92,171**	**98,905**
Current assets			
Loans and receivables at amortized cost	15	599	595
Derivative instruments	15	7,378	9,047
Trade and other receivables, net	15	20,311	20,835
Inventories	25	4,155	3,656
Other assets	25	8,492	10,692
Financial assets at fair value through income	15	1,608	1,439
Cash and cash equivalents	15	8,931	9,825
Assets classified as held for sale	4	6,687	3,506
TOTAL CURRENT ASSETS		**58,161**	**59,595**
TOTAL ASSETS		**150,332**	**158,499**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

LIABILITIES

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016
Shareholders' equity		36,639	39,578
Non-controlling interests	2	5,938	5,870
TOTAL EQUITY	**17**	**42,577**	**45,447**
Non-current liabilities			
Provisions	18	18,428	19,461
Long-term borrowings	15	25,292	24,411
Derivative instruments	15	2,980	3,410
Other financial liabilities	15	32	200
Other liabilities	25	1,009	1,203
Deferred tax liabilities	10	5,220	6,775
TOTAL NON-CURRENT LIABILITIES		**52,960**	**55,461**
Current liabilities			
Provisions	18	3,340	2,747
Short-term borrowings	15	8,176	12,539
Derivative instruments	15	8,720	9,228
Trade and other payables	15	16,432	17,075
Other liabilities	25	14,756	15,702
Liabilities directly associated with assets classified as held for sale	4	3,371	300
TOTAL CURRENT LIABILITIES		**54,795**	**57,591**
TOTAL EQUITY AND LIABILITIES		**150,332**	**158,499**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF CHANGES IN EQUITY

In millions of euros	Number of shares	Share capital	Additional paid-in capital	Consolidated reserves	Deeply-subordinated perpetual notes	Changes in fair value and other	Translation adjustments	Treasury stock	Shareholders' equity	Non-controlling interests	Total
EQUITY AT DECEMBER 31, 2015	**2,435,285,011**	**2,435**	**32,506**	**5,479**	**3,419**	**(928)**	**990**	**(822)**	**43,078**	**5,672**	**48,750**
Net income/(loss)				(415)					(415)	579	163
Other comprehensive income/(loss)				(628)		(209)	306		(531)	(3)	(535)
TOTAL COMPREHENSIVE INCOME/(LOSS)				**(1,044)**	**-**	**(209)**	**306**	**-**	**(946)**	**575**	**(371)**
Employee share issues and share-based payment				37					37	-	37
Dividends paid in cash				(2,397)					(2,397)	(507)	(2,903)
Purchase/disposal of treasury stock				(72)				61	(11)	-	(11)
Coupons of deeply-subordinated perpetual notes					(146)				(146)	-	(146)
Transactions between owners				(37)					(37)	20	(17)
Transactions between owners within entities accounted for using the equity method				6					6	-	6
Share capital increases/decreases subscribed by non-controlling interests									-	81	81
Other changes				(7)					(7)	27	20
EQUITY AT DECEMBER 31, 2016	**2,435,285,011**	**2,435**	**32,506**	**1,967**	**3,273**	**(1,137)**	**1,296**	**(761)**	**39,578**	**5,870**	**45,447**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

In millions of euros	Number of shares	Share capital	Additional paid-in capital	Consolidated reserves	Deeply-subordinated perpetual notes	Changes in fair value and other	Translation adjustments	Treasury stock	Shareholders' equity	Non-controlling interests	Total
EQUITY AT DECEMBER 31, 2016	**2,435,285,011**	**2,435**	**32,506**	**1,967**	**3,273**	**(1,137)**	**1,296**	**(761)**	**39,578**	**5,870**	**45,447**
Net income/(loss)				1,423					1,423	815	2,238
Other comprehensive income/(loss)				38		223	(2,384)		(2,124)	(421)	(2,545)
TOTAL COMPREHENSIVE INCOME/(LOSS)				**1,460**	**-**	**223**	**(2,384)**	**-**	**(701)**	**394**	**(307)**
Employee share issues and share-based payment				37					37	-	37
Dividends paid in cash (see Note 17.2.3)				(2,049)					(2,049)	(680)	(2,729)
Purchase/disposal of treasury stock (see Note 17.1.2)				(19)				(122)	(140)	-	(140)
Coupons of deeply-subordinated perpetual notes (see Note 17.2.1)					(144)				(144)	-	(144)
Transactions between owners				60					60	131	191
Transactions between owners within entities accounted for using the equity method				(3)					(3)	(1)	(4)
Share capital increases/decreases subscribed by non-controlling interests									-	226	226
Other changes				1			-		1	(3)	(2)
EQUITY AT DECEMBER 31, 2017	**2,435,285,011**	**2,435**	**32,506**	**1,455**	**3,129**	**(915)**	**(1,088)**	**(883)**	**36,639**	**5,938**	**42,577**

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

STATEMENT OF CASH FLOWS

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016 (1)
NET INCOME/(LOSS)		**2,238**	**163**
- Net income/(loss) relating to discontinued operations		290	(158)
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS		**1,948**	**322**
- Share in net income of entities accounted for using the equity method		(437)	(752)
+ Dividends received from entities accounted for using the equity method		466	457
- Net depreciation, amortization, impairment and provisions		6,203	9,252
- Impact of changes in scope of consolidation and other non-recurring items		(1,096)	(724)
- Mark-to-market on commodity contracts other than trading instruments		307	(1,279)
- Other items with no cash impact		44	40
- Income tax expense		(425)	481
- Net financial income/(loss)		1,296	1,321
Cash generated from operations before income tax and working capital requirements		**8,305**	**9,117**
+ Tax paid		(894)	(896)
Change in working capital requirements	**25.1**	**1,251**	**1,842**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUED OPERATIONS		**8,662**	**10,063**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**647**	**111**
CASH FLOW FROM OPERATING ACTIVITIES		**9,309**	**10,174**
Acquisitions of property, plant and equipment and intangible assets	5.5	(5,779)	(5,290)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	5.5	(690)	(411)
Acquisitions of investments in entities accounted for using the equity method and joint operations	5.5	(1,446)	(208)
Acquisitions of available-for-sale securities	5.5	(258)	(391)
Disposals of property, plant and equipment, and intangible assets		90	153
Loss of controlling interests in entities, net of cash and cash equivalents sold		3,203	983
Disposals of investments in entities accounted for using the equity method and joint operations		283	1,457
Disposals of available-for-sale securities		538	767
Interest received on financial assets		83	12
Dividends received on non-current financial assets		170	142
Change in loans and receivables originated by the Group and other	5.5	(838)	30
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUED OPERATIONS		**(4,645)**	**(2,756)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**(512)**	**(899)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES		**(5,157)**	**(3,655)**
Dividends paid (2)		(2,871)	(3,155)
Recovery from the French State of the 3% tax on dividends		389	-
Repayment of borrowings and debt		(7,738)	(4,752)
Change in financial assets at fair value through income		(181)	(257)
Interest paid		(745)	(817)
Interest received on cash and cash equivalents		100	137
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings		(156)	(236)
Increase in borrowings		6,356	2,904
Increase/decrease in capital		224	(9)
Hybrid issue of subordinated perpetual notes		-	-
Purchase and/or sale of treasury stock		(140)	(11)
Changes in ownership interests in controlled entities	5.5	1	(26)
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUED OPERATIONS		**(4,761)**	**(6,222)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS		**36**	**188**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES		**(4,725)**	**(6,034)**
Effects of changes in exchange rates and other relating to continued operations		(294)	169
Effects of changes in exchange rates and other relating to discontinued operations		(10)	(12)
TOTAL CASH FLOW FOR THE PERIOD		**(877)**	**642**
Reclassification of cash and cash equivalents relating to discontinued operations		(16)	-
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD		**9,825**	**9,183**
CASH AND CASH EQUIVALENTS AT END OF PERIOD		**8,931**	**9,825**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

(2) The line "Dividends paid" includes the coupons paid to the owners of the deeply subordinated perpetual notes for an amount of €144 million at December 31, 2017 and €146 million at December 31, 2016.

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

03 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

ENGIE SA, the parent company of the Group, is a French s*ociété anonyme* with a Board of Directors that is subject to the provisions of Book II of the French Commercial Code (*Code de Commerce*), as well as to all other provisions of French law applicable to French commercial companies. It was incorporated on November 20, 2004 for a period of 99 years.

It is governed by current and future laws and by regulations applicable to *sociétés anonymes* and its bylaws.

The Group is headquartered at 1 place Samuel de Champlain, 92400 Courbevoie (France).

ENGIE shares are listed on the Paris, Brussels and Luxembourg stock exchanges.

On March 7, 2018, the Group's Board of Directors approved and authorized for issue the consolidated financial statements of the Group for the year ended December 31, 2017.

NOTE 1 ACCOUNTING STANDARDS AND METHODS

1.1 Accounting standards

Pursuant to European Regulation (EC) 809/2004 on prospectuses dated April 29, 2004, financial information concerning the assets, liabilities, financial position, and profit and loss of ENGIE has been provided for the last two reporting periods (ended December 31, 2016 and 2017). This information was prepared in accordance with European Regulation (EC) 1606/2002 "on the application of international accounting standards" dated July 19, 2002. The Group's consolidated financial statements for the year ended December 31, 2017 have been prepared in accordance with IFRS Standards as published by the International Accounting Standards Board and endorsed by the European Union [(1)].

The accounting standards applied in the consolidated financial statements for the year ended December 31, 2017 are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2016, except for those described in § 1.1.1 below.

1.1.1 IFRS Standards, amendments or IFRIC Interpretations applicable in 2017

- Amendments to IAS 7 – *Statement of Cash Flows*: *Disclosure initiative*.
- Amendments to IAS 12 – *Income Taxes*: *Recognition of deferred tax assets for unrealized losses*.
- Annual Improvements to IFRS Standards 2012-2014 Cycle [(2)] [(3)].

These amendments have no significant impact on the Group's consolidated financial statements. Note 15.3.2 shows the reconciliation between the net debt and the cash flows used in financing activities (amendments to IAS 7).

(1) Available on the European Commission's website: http://ec.europa.eu/internal_market/accounting/ias/index_en.htm.
(2) These standards and amendments have not yet been adopted by the European Union.
(3) The improvements of this cycle relating to IFRS 12 are applicable as from 2017, the others as from 2018.

1.1.2 IFRS Standards, amendments or IFRIC Interpretations effective in 2018 and that the Group has elected not to early adopt

1.1.2.1 IFRS 9 – *Financial instruments* and IFRS 15 - *Revenue from Contracts with Customers*

IFRS 9 – *Financial Instruments*

In July 2014, the IASB launched a new standard on financial instruments. IFRS 9 encompasses the following three main phases:

- **Classification and measurement of financial assets and liabilities**
  Under the new standard, financial assets are to be classified on the basis of their nature, their contractual cash-flow characteristics and their related business model.

- **Impairment**
  IFRS 9 sets out the principles and guidance to apply in order to measure and recognize the expected credit losses of financial assets, loan commitments and financial guarantees.

- **Hedge accounting**
  The new standard aims to better align hedge accounting with risk management by establishing a risk management principles–based approach.

ENGIE has decided not to early adopt IFRS 9 and to apply it entirely as from January 1, 2018. In accordance with IFRS 9 transition provisions, the retrospective method will be applied to the classification and measurement of financial assets and liabilities as well as to impairment while the prospective method will be applied to hedge accounting. Options available for the initial application of the standard have no significant impact for the Group.

Progress made within the dedicated project has allowed to adapt IT processes and tools, to set up guidance to make it easier to understand the new principles thus ensuring consistent application throughout the Group.

The main impact on the consolidated financial statements are synthesized as follows for each of the three phases of the new standard:

- **Classification and measurement of financial assets and liabilities**
  The main impact concerns the reclassification of financial assets currently presented under IAS 39 as “available-for-sale securities” and measured at fair value though other comprehensive income. Under IFRS 9, these are presented as follows at December 31, 2017:

In millions of euros	**IAS 39**	**IFRS 9 classification**
Available-for-sale securities	2,656	
Equity instruments at fair value through other comprehensive income		734
Equity instruments at fair value through income		392
Debt instruments at amortized cost		
Debt instruments at fair value through other comprehensive income		884
Debt instruments at fair value through income		617
Liquid debt instruments relating to cash investments and measured at fair value through income		29

- **Impairment**
  The main impact is an increase of the amount of impairment post-transition, due to recognizing expected credit losses for risk credit as from the initial recognition of receivables, or as from the time when loan commitments are made or financial guarantees given. The main items concerned are trade receivables (additional write-downs of €191 million at December 31, 2017 out of a total gross value of €19,993 million) and long-term receivables (additional write-downs of €22 million at December 31, 2017 out of a total gross value of €2,925 million).

We expect post-transition recurring results to be mainly impacted by significant changes in the credit rating of our counterparties, for example in the event of financial crisis.

- **Hedge accounting**
  The Group is mainly concerned by aspects related to debt risk-related hedge accounting.

  The principles relating to hedge accounting have not been substantially modified by the new standard.

Applying IFRS 9 has a negative impact of €235 million on equity at December 31, 2017(including an impact a negative impact of €53 million on investments in entities accounted for using the equity method).

IFRS 15 – *Revenues from Contracts with Customers*

In May 2014, the IASB has launched a new standard on revenue recognition. Under IFRS 15, revenue is recognized when the customer obtains control of goods or services promised in the contract, for the amount of consideration to which an entity expects to be entitled in exchange for said promised goods or services. In addition, this standard requires disclosure on the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.

IFRS 15 is mandatorily applicable as from 2018. The Group has decided not to early apply it and opted for the full retrospective method with the comparative information being restated at the date of initial application.

Launched in 2014, the Group project has highlighted the issues likely to have an impact on how revenue is recognized in the different activities of the Group encompassing many businesses as well as various types of contracts.

The work carried out so far by the Group has led to the identification of three issues having an impact on consolidated revenue:

- In certain countries where the Group acts as energy provider without being in charge of its distribution, the analysis under IFRS 15 may lead to recognizing only energy sales as revenue. In some situations, the accounting treatment under IFRS 15 will lead to a decrease in revenue corresponding to the distribution part, without any impact on the energy margin however since the related expenses are decreased accordingly. At December 31, 2017, the revenue concerned amounts to €3,803 million. Operating expenses are decreased by the same amount.

  The countries that are most concerned are Belgium (for the distribution of gas and electricity as well as for the transportation of electricity) and France (for the distribution of electricity). If this has no impact at Group level for gas in France, there is however an impact on the revenue breakdown per reportable segment: the revenue on gas distribution will no longer be recognized by the provider (in the France reportable segment) but by the distributor (in the Europe Infrastructures reportable segment). At December 31, 2017, this revenue amounts to €1,957 million.

- Commodities sales/purchases transactions which are within the scope of IFRS 9 – *Financial Instruments*, are not within the scope of IFRS 15. The related sales of these transactions resulting in a physical delivery of the underlying will thus be presented on a line separate from that showing the IFRS 15 revenue. At December 31, 2017, this revenue amounts to €5,723 million.

- Given that the new standard provides more guidance on how to recognize revenue, notably depending on how the performance obligations identified are satisfied, the timing of revenue recognition and margin profile has been modified for certain contracts.

  Applying IFRS 15 mainly effects contracts for the operation and maintenance of power plants or the provision of production capacities. This can lead to an increase in contract liabilities reflecting the discrepancy between the price received and the completion of the services.

  As a consequence, applying IFRS 15 has a negative impact of circa €219 million on equity at December 31, 2017 whereas the impact of the timing of revenue recognition for these contracts is not significant given their term.

There are other impacts which are less significant and concern notably the reclassification of some trade receivables to contract assets.

Summary of the main impacts expected from IFRS 9 and IFRS 15 on the income statement and equity at December 31, 2017

The main impacts expected from applying IFRS 9 and IFRS 15 on the comparative income statement at December 31, 2017 are summarized below:

In millions of euros	Dec. 31, 2017 published	IFRS 9 Impacts	IFRS 15 Impacts	Dec. 31, 2017 restated
Revenues	65,029	-	(4,093)	60,936
Current operating income after share in net income of entities accounted for using the equity method	5,273	(23)	(39)	5,211
Income/loss from operating activities	2,819	(27)	(39)	2,753
Net financial income/(loss)	(1,296)	(101)	(11)	(1,408)
Income tax expense	425	37	11	473
NET INCOME/(LOSS)	2,238	(92)	(38)	2,108
Of which net recurring income	3,550	(120)	(38)	3,392
Net income/(loss) Group share	**1,423**	**(80)**	**(23)**	**1,320**
Of which net recurring income Group share	2,662	(122)	(23)	2,517

The impacts shown above have been determined in accordance with the provisions of IFRS 9.7.2.1. As a consequence, the impact relating to financial assets that were derecognized in 2017 has been determined under IAS 39 and not IFRS 9.

The impact relating to this specific transition provision will be presented as a non-recurring item in the comparative income statement at December 31, 2017 to ensure consistency with the 2018 consolidated financial statements in which all financial assets, without any exception, will be treated under IFRS 9.

Please find below a summary of the impact of IFRS 9 and IFRS 15 on equity at December 31, 2017:

In millions of euros	Dec. 31, 2017 published	IFRS 9 Impacts	IFRS 15 Impacts	Dec. 31, 2017 restated
Total equity	42,577	(235)	(219)	42,123
Shareholders' equity	36,639	(224)	(132)	36,283

1.1.2.2 Other IFRS Standards, amendments or IFRIC Interpretations

- Amendments to IFRS 2 – *Share-based payments: Classification and measurement of share-based payments transactions* [1].
- IFRIC 22 – *Foreign Currency Transactions and Advance Consideration* [1].
- Annual Improvements to IFRS Standards 2014-2016 Cycle [1] [2].

The impact of the application of these standards, amendments or interpretations is currently being assessed.

(1) These standards and amendments have not yet been adopted by the European Union.
(2) The improvements of this cycle relating to IFRS 12 are applicable as from 2017, the others as from 2018.

1.1.3 IFRS Standards, amendments or IFRIC Interpretations effective after 2018

1.1.3.1 IFRS 16 – *Leases*

In January 2016, the IASB has issued a new standard on leases. Under the new standard, all lease commitments will be recognized on the face of the statement of financial position, without distinguishing between operating leases and finance leases.

Progress has been made in 2017 regarding the initial application of this standard at January 1, 2019.

While the stage of identifying leases throughout the Group is nearing an end (this phase is continuous so as to complete the Group database), the analyses under the new standard are ongoing (identifying a lease, assessing the term of the lease, measuring and determining the discount rates, etc.).

We expect to finalize the impact of the transition under the modified retrospective approach in 2018.

The main impact we expect on the consolidated statement of financial position is an increase in the “right-of-use assets” on the assets side and an increase of the lease liabilities on the liabilities side, regarding leases where the Group acts as lessee and which are currently qualified as “operating leases”. They concern mainly real estate, LNG tankers as well as vehicles. Commitments relating to these contracts are shown in off-balance sheet commitments (see *Note 21*).

In the consolidated income statement, reversal of the rental expenses of these “operating leases” will lead to an increase in EBITDA and in depreciation and financial expenses.

Specific work is still being carried out to implement IT developments, notably to have an IFRS 16-compliant management tool able to deal with processing a large number of leases.

1.1.3.2 Other IFRS Standards, amendments or IFRIC Interpretations

- IFRIC 23 – *Uncertainty over income tax treatments* (1).
- IFRS 17 – *Insurance contracts* (1).
- Amendments to IFRS 9 – *Financial Instruments: Prepayment features with negative compensation* (1).
- Amendments to IAS 28 – *Investments in Associates and Joint Ventures: Long-term interests in Associates and Joint Ventures* (1).
- Annual Improvements to IFRS Standards 2015-2017 Cycle (1).

The impact of the application of these standards, amendments or interpretations is currently being assessed.

1.1.4 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 consolidated equity at January 1, 2004;

(1) These standards and amendments have not yet been adopted by the European Union.

- 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 Measurement and presentation basis

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 IAS 39.

1.2.1 Assets or groups of assets held for sale

In accordance with IFRS 5 - *Non-Current Assets Held for Sale and Discontinued Operations*, assets or groups of assets held for sale are presented separately on the face of the statement of financial position, at the lower of their carrying amount and fair value less costs to sell.

Assets are classified as "held for sale" when they are available for immediate sale in their present condition, their sale is highly probable within twelve months from the date of classification, management is committed to a plan to sell the asset and an active program to locate a buyer and complete the plan has been initiated. To assess whether a sale is highly probable, the Group takes into consideration among other items, indications of interest and offers received from potential buyers and specific risks in the execution of certain transactions.

Assets or group of assets are presented as discontinued operations in the Group consolidated financial statements when they are classified as "held for sale" and represent a separate major line of business under IFRS 5.

1.3 Use of estimates and judgment

Developments in the economic and financial environment prompted the Group to step up its risk oversight procedures and include an assessment of these risks in measuring financial instruments and performing impairment tests. The Group's estimates used in business plans and determination of discount rates used in impairment tests and for calculating provisions take into account the environment and the important market volatility.

Accounting estimates are made in a context which remains sensitive to energy market developments, therefore making it difficult to apprehend medium-term economic prospects.

1.3.1 Estimates

The preparation of consolidated financial statements requires the use of estimates and assumptions to determine the value of assets and liabilities and contingent assets and liabilities at the reporting date, as well as income 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 in preparing the Group's consolidated financial statements relate mainly to:

- measurement of the fair value of assets acquired and liabilities assumed in a business combination *(see Note 4)*;
- measurement of the recoverable amount of goodwill, other intangible assets and property, plant and equipment *(see § 1.4.4 and 1.4.5)*;
- measurement of provisions, particularly for back-end of nuclear fuel cycle, dismantling obligations, disputes, pensions and other employee benefits *(see § 1.4.15)*;
- financial instruments *(see § 1.4.11)*;
- measurement of revenue not yet metered, so called un-metered revenue *(see § 1.3.1.6)*;
- measurement of recognized tax loss carry-forwards *(see Note 10.3)*.

1.3.1.1 Measurement of the fair value of assets acquired and liabilities assumed in a business combination

The key assumptions and estimates used to determine the fair value of assets acquired and liabilities assumed include the market outlook for the measurement of future cash flows and the applicable discount rates.

These assumptions reflect management's best estimates.

1.3.1.2 Recoverable amount of goodwill, other intangible assets and property, plant and equipment

The recoverable amount of goodwill, other intangible assets and property, plant and equipment is based on estimates and assumptions, regarding in particular the expected market outlook and changes in the regulatory framework, which are used for the measurement of cash flows, whose sensitivity varies depending on the activity, and the determination of the discount rate. Any changes in these assumptions could have a material impact on the measurement of the recoverable amount and could result in adjustments to the impairment losses to be recognized.

The key assumptions used in the impairment tests on the main goodwill CGUs are as follows:

- **Benelux CGU**

  The cash flow projections for the Benelux CGU are based on a large number of key assumptions, such as the long-term prices for fuel and CO_2, expected trends in gas and electricity demand and in electricity prices, the market outlook and changes in the regulatory environment (especially concerning nuclear capacities in Belgium and the extension of drawing rights agreements for French nuclear plants). The key assumptions also include the discount rate used to calculate the value in use of this goodwill CGU.

- **GRDF CGU**

  The cash flow projections are drawn up based on the tariff for public natural gas distribution networks (known as "ATRD 5"), which entered into effect for a period of four years on July 1, 2016, and on the overall level of investments agreed by the French Energy Regulation Commission (*Commission de Régulation de l'Énergie* – CRE) as part of its decision on the ATRD 5 tariff. The terminal value calculated at the end of the medium-term business plan corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2023. The RAB is the value assigned by the regulator to the assets operated by the distributor.

- **France BtoC CGU**

  The main assumptions and key estimates primarily include the discount rates, expected trends in gas and electricity demand in France, changes in the Group's market share and sales margin forecasts.

- **France Renewable Energy CGU**

  The main key assumptions, notably include the prospects of renewing the hydropower concession agreements in France, expected trends in electricity sales prices and discount rates.

- **Generation Europe CGU**

  The main assumptions and key estimates used are based on capacity payment mechanisms, expected trends in electricity demand and price forecasts for CO_2, fuel and electricity, as well as on discount rate levels.

- **Storengy CGU**

  In France, the cash flow projections are drawn up based on the tariff for storage facilities agreed by the French Energy Regulation Commission (*Commission de Régulation de l'Énergie* – CRE) as part of its decision on the regulation of these activities which retroactively entered into effect as from January 1, 2018. The terminal value calculated at the end of the medium-term business plan corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2023.

In Germany, the key assumptions are based on forecast capacity sales which depend on changes in market conditions, and particularly on seasonal natural gas spreads.

1.3.1.3 Estimates of provisions

Factors having a significant influence on the amount of provisions, and particularly, but not solely, those relating to the back-end of nuclear fuel cycle and to the dismantling of nuclear facilities, as well as those relating to the dismantling of gas infrastructures in France, include:

- cost forecasts (notably the retained scenario for the reprocessing and storage of radioactive nuclear fuel consumed) *(see Note 18.2)*;
- the timing of expenditure (notably, for nuclear power generation activities, the timetable for reprocessing radioactive nuclear fuel consumed and for dismantling facilities as well as the timetable for the end of gas operations regarding the gas infrastructure businesses in France) *(see Notes 18.2 and 18.3)*;
- and the discount rate applied to cash flows.

These factors are based on information and estimates deemed to be relevant by the Group at the current time.

The modification of certain factors could lead to a significant adjustment of these provisions.

1.3.1.4 Pensions

Pension commitments are measured on the basis of actuarial assumptions. The Group considers that the assumptions used to measure its obligations are relevant and documented. However, any change in these assumptions could have a significant impact on the resulting calculations.

1.3.1.5 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 significant impact on the resulting calculations. These valuation techniques mainly concern valuation methods of the flexibility of long-term contract prices and volumes. Specific modeling adjustments are taken into account to address the use of poorly observable variables.

1.3.1.6 Revenue

Revenue generated from types of customers whose energy consumption is metered during the accounting period, particularly customers supplied with low-voltage electricity or low-pressure gas, is estimated at the reporting date based on historical data, consumption statistics and estimated selling prices. For sales on networks used by a large number of grid operators, the Group is allocated a certain volume of energy transiting through the networks by the grid managers. The final allocations are sometimes only known several months down the line, which means that revenue figures are only an estimate.

However, the Group has developed measuring and modeling tools allowing it to estimate revenue with a satisfactory degree of accuracy and subsequently ensure that risks of error associated with estimating quantities sold and the related revenue can be considered as not significant. In France, un-metered revenue (“gas in the meter”) is calculated using a direct method taking into account customers’ estimated consumption since the last metering not yet billed. These estimates are in line with the volume of energy allocated by the grid managers over the same period. The average price is used to measure the “gas in the meter”. The average price used takes account of the category of customer and the age of the delivered unbilled “gas in the meter”. The portion of unbilled revenue at year-end varies according to the assumptions about volume and average price.

1.3.1.7 Measurement of recognized tax loss carry-forwards

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that taxable profit will be available against which the tax loss carry-forwards can be utilized. The probability that taxable profit will be available against which the unused tax losses can be utilized, is based on taxable temporary differences relating to the same taxation authority and the same taxable entity and estimates of future taxable profits. These estimates 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.

1.3.2 Judgment

As well as relying on estimates, Group management also makes judgments to define the appropriate accounting policies to apply to certain activities and transactions, particularly when the effective IFRS Standards and IFRIC Interpretations do not specifically deal with the related accounting issues.

In particular, the Group exercised its judgment in determining the nature of control, the classification of arrangements which contain a lease, the recognition of acquisitions of non-controlling interests prior to January 1, 2010 and the identification of “own use” contracts, as defined by IAS 39, within non-financial purchase and sale contracts (electricity, gas, etc.).

Entities for which judgment on the nature of control has been exercised are listed in Note 2 "Main subsidiaries at December 31, 2017" and Note 3 "Investments in entities accounted for using the equity method".

In accordance with IAS 1, the Group’s current and non-current assets and 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.

1.4 Accounting methods

1.4.1 Scope and methods of consolidation

Controlled entities (subsidiaries)

Controlled entities (subsidiaries) are fully consolidated in accordance with IFRS 10 – *Consolidated Financial Statements*. An investor (the Group) controls an entity and therefore must consolidate it as a subsidiary, if it has all the following:

- the ability to direct the relevant activities of the entity;
- rights to variable returns from its involvement with the entity;
- the ability to use its power over the entity to affect the amount of the investor’s return.

Investments in Associates and Joint Ventures

The Group accounts for its investments in associates (entities over which the Group has significant influence) and joint ventures, using the equity method. Under IFRS 11 – *Joint Arrangements*, a joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

Investments in Joint Operations

Under IFRS 11 – *Joint Arrangements*, a joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities, relating to the arrangement.

In accordance with this standard, the Group accounts for the assets, liabilities, revenue and expenses relating to its interest in a joint operation in accordance with the IFRS Standards applicable to these assets, liabilities, revenue and expenses.

Production sharing contracts, in particular in oil and gas exploration-production activities, are considered to be outside the scope of IFRS 11. Contractors account for their rights to a portion of production and reserves, based on the contractual clauses.

1.4.2 Foreign currency translation methods

1.4.2.1 Presentation currency of the consolidated financial statements

The Group's consolidated financial statements are presented in euros (€).

1.4.2.2 Functional currency

Functional currency is the currency of the primary economic environment in which an entity operates, which in most cases corresponds to local currency. However, certain entities may have a functional currency different from the local currency when that other currency is used for an entity's main transactions and better reflects its economic environment.

1.4.2.3 Foreign currency transactions

Foreign currency transactions are recorded in the functional currency at the exchange rate prevailing on 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 resulting translation gains and losses are recorded in the consolidated statement of income 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.

1.4.2.4 Translation of the financial statements of subsidiaries with a functional currency other than the euro (the presentation currency)

The statements of financial position of these subsidiaries are translated into euros at the official year-end exchange rates. Income statement and cash flow statement items are translated using the average exchange rate for the year. Any differences arising from the translation of the financial statements of these subsidiaries are recorded under "Translation adjustments" as other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of foreign entities are classified as assets and liabilities of those foreign entities and are therefore denominated in the functional currencies of the entities and translated at the year-end exchange rate.

1.4.3 Business combinations

Business combinations carried out prior to January 1, 2010 were accounted for 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 in recognizing the identifiable assets acquired and liabilities assumed at their fair values at the acquisition date, as well as any non-controlling interests in the acquiree. Non-controlling interests are measured either at fair value or at the entity's proportionate interest in the net identifiable assets of the acquiree. The Group determines on a case-by-case basis which measurement option to be used to recognize non-controlling interests.

1.4.4 Intangible assets

Intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

1.4.4.1 Goodwill

Recognition of goodwill

Due to the application of IFRS 3 revised at January 1, 2010, the Group is required to separately identify business combinations carried out before or after this date.

Business combinations carried out prior to 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) over the Group's interest in the fair value of the acquiree's 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 for each exchange transaction separately 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 the excess of the aggregate of:
(i) the consideration transferred;
(ii) the amount of any non-controlling interests in the acquiree; and
(iii) in a business combination achieved in stages, the acquisition-date fair value of the previously held equity interest in the acquiree;
over the net acquisition-date fair values of the identifiable assets acquired and liabilities assumed.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the measurement period.

Goodwill relating to interests in associates is recorded under "Investments in entities accounted for using the equity method".

Measurement of goodwill

Goodwill is not amortized but tested for impairment each year, or more frequently where an indication of impairment is identified. Impairment tests are carried out at the level of cash-generating units (CGUs) or groups of CGUs which constitute groups of assets generating cash inflows that are largely independent of the cash inflows from other CGUs.

The methods used to carry out these impairment tests are described in § 1.4.8 "Impairment of property, plant and equipment and intangible assets".

Impairment losses in relation to goodwill cannot be reversed and are shown under "Impairment losses" in the consolidated income statement.

1.4.4.2 Other intangible assets

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.

Other internally-generated or acquired intangible assets

Other intangible assets include mainly:

- amounts paid or payable as consideration for rights relating to concession contracts or public service contracts;
- customer portfolios acquired on business combinations;
- capacity rights, in particular regarding power stations; the Group helped finance the construction of certain nuclear power stations operated by third parties and in consideration received the right to purchase a share of the production over the life of the assets. Said capacity rights are amortized over the useful life of the related assets, not exceeding 50 years;
- concession assets;
- fulfillment contract costs.

Intangible assets are amortized on the basis of the expected pattern of consumption of the estimated future economic benefits embodied in the asset. Amortization is calculated mainly on a straight-line basis over the following useful lives:

	Useful life	
Main depreciation periods (years)	**Minimum**	**Maximum**
Concession rights	10	30
Customer portfolio	10	40
Other intangible assets	1	50

Some intangible assets with an indefinite useful life are not amortized but an impairment test has to be performed annually.

1.4.5 Property, plant and equipment

1.4.5.1 Initial recognition and subsequent measurement

Items of property, plant and equipment are recognized at historical cost 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.

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. A corresponding provision for this obligation is recorded for the amount of the asset component.

Property, plant and equipment acquired under finance leases is carried in the consolidated statement of financial position at the lower of market value and the present value of the related minimum lease payments. The corresponding liability is recognized under borrowings. These assets are depreciated using the same methods and useful lives as set out below.

Borrowing costs that are directly attributable to the construction of the qualifying asset are capitalized as part of the cost of that asset.

Cushion gas

“Cushion” gas injected into underground storage facilities is essential for ensuring that reservoirs can be operated effectively, and is therefore inseparable from these reservoirs. Unlike “working” gas which is included in inventories, cushion gas is reported in property, plant and equipment (*see § 1.4.10 “Inventories”*).

1.4.5.2 Depreciation

In accordance with the components approach, each significant component of an item of property, plant and equipment with a different useful life from that of the main asset to which it relates is depreciated separately over its own useful life.

Property, plant and equipment is depreciated mainly using the straight-line method over the following useful lives:

	Useful life	
Main depreciation periods (years)	Minimum	Maximum
Plant and equipment		
• Storage - Production - Transport - Distribution	5	60 (*)
• Installation - Maintenance	3	10
• Hydraulic plant and equipment	20	65
Other property, plant and equipment	2	33

(*) Excluding cushion gas.

The range of useful lives is due to the diversity of the assets in each category. The minimum periods relate to smaller equipment and furniture, while the maximum periods concern network infrastructures and storage facilities. In accordance with the law of January 31, 2003 adopted by the Belgian Chamber of Representatives with respect to the gradual phase-out of nuclear energy for the industrial production of electricity, the useful lives of nuclear power stations were reviewed and adjusted prospectively to 40 years as from 2003, except Tihange 1, Doel 1 and Doel 2 the operating life of which has been extended by 10 years.

Fixtures and fittings relating to the hydro plant operated by the Group are depreciated over the shorter of the contract term and useful life of the assets, taking into account the renewal of the concession period if such renewal is considered to be reasonably certain.

1.4.6 Assets relating to the exploration and production of mineral resources

The Group applies IFRS 6 – *Exploration for and Evaluation of Mineral Resources*.

Geological and geophysical studies are expensed in the year in which they are incurred.

Exploration costs (other than geological and geophysical studies) are temporarily capitalized in "pre-capitalized exploration costs" before the confirmation of the technical feasibility and commercial viability of extracting resources. These exploration drilling costs are temporarily capitalized when the following two conditions are met:

- sufficient reserves have been found to justify completion as a producing well assuming the required capital expenditure is made;
- the Group has made significant progress in determining that reserves exist and that the project is technically and economically viable. This progress is assessed based on criteria such as whether any additional exploratory work (drilling, seismic studies or other significant surveys) is underway or firmly planned for the near future. Progress is also assessed based on any expenses incurred in conducting development studies and on the fact that the Group may be required to wait for the relevant government or third party authorizations for the project, or for available transport capacity or treatment capacity at existing facilities.

In accordance with this method known as the "successful efforts" method, when the exploratory phase has resulted in proven, commercially viable reserves, the related costs are reported in property, plant and equipment and depreciated over the period during which the reserves are extracted. Otherwise, the costs are expensed as incurred.

The depreciation of production assets, including site rehabilitation costs, starts when the oil or gas field is brought into production, and is based on the unit of production method (UOP). According to this method, the depletion rate is equal to the ratio of oil and gas production for the period to probable reserves.

1.4.7 Concession arrangements

SIC 29 – *Service Concession Arrangements: Disclosures*, prescribes the information that should be disclosed in the notes to the financial statements of a concession grantor and concession operator, while IFRIC 12 deals with the treatment to be applied by the concession operator in respect of certain concession arrangements.

For a concession arrangement to fall within the scope of IFRIC 12, usage of the infrastructure must be controlled by the concession grantor. This requirement is met when the following two conditions are met:

- the grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- the grantor controls the infrastructure, i.e. retains the right to take back the infrastructure at the end of the concession.

Concessions outside the scope of IFRIC 12

Concession infrastructures that do not meet the requirements of IFRIC 12 are presented as property, plant and equipment.

This is the case of the distribution of gas in France. The related assets are recognized in accordance with IAS 16, since GRDF operates its network under long-term concession arrangements, most of which are mandatorily renewed upon expiration pursuant to French law No. 46-628 of April 8, 1946.

1.4.8 Impairment of property, plant and equipment and intangible assets

In accordance with IAS 36, impairment tests are carried out on items of property, plant and equipment and intangible assets where 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

Property, plant and equipment and intangible assets with finite useful lives are only tested for impairment when there is an indication that they may be impaired. This is generally the result of significant changes to the environment in which the assets are operated or when economic performance is less than expected.

The main impairment indicators used by the Group are described below:

- external sources of information:
  - significant changes in the economic, technological, regulatory, political or market environment in which the entity operates or to which an asset is dedicated,
  - fall in demand,
  - adverse changes in energy prices and US dollar exchange rates;
- internal sources of information:
  - evidence of obsolescence or physical damage not budgeted for in the depreciation/amortization schedule,
  - less-than-expected performance,
  - fall in resources for exploration-production activities.

Impairment

Items of property, plant and equipment and intangible assets are tested for impairment at the level of the individual asset or cash-generating unit (CGU) 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 written down 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 assets 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 amount. 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 grouped, where appropriate, into CGUs and the carrying amount of each CGU 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 the inflation rate.

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 recoverable amount of the assets concerned is based on market value less costs of disposal. Where negotiations are ongoing, this value 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 losses”.

1.4.9 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 if a lease transfers substantially all the risks and rewards incidental to ownership: whether (i) the lessor 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) lease term is for the major part of the economic life of the asset; (iv) the asset is of a highly specialized nature; and (v) the present value of minimum lease payments amounts to at least substantially all of the fair value of the leased asset.

1.4.9.1 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.

1.4.9.2 Accounting for operating leases

Payments made under operating leases are recognized as an expense on a straight-line basis over the lease term.

1.4.9.3 Accounting for arrangements that contain a lease

IFRIC 4 deals with the identification of services and take-or-pay sales or purchasing 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 finance 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.

The Group is concerned by this interpretation mainly with respect to:

- some energy purchase and sale contracts, particularly where the contract conveys to the purchaser of the energy an exclusive right to use a production asset;
- certain contracts with industrial customers relating to assets held by the Group.

1.4.10 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.

Nuclear fuel purchased is consumed in the process of producing electricity over a number of years. The consumption of this nuclear fuel inventory is recorded based on estimates of the quantity of electricity produced per unit of fuel.

Gas inventories

Gas injected into underground storage facilities includes working gas which can be withdrawn without adversely affecting the operation of the reservoir and cushion gas which is inseparable from the reservoirs and essential for their operation (*see § 1.4.5.1*).

Working gas is classified in inventory and measured at weighted average purchase cost upon entering the transportation network regardless of its source, including any regasification costs.

Group inventory outflows are valued using the weighted average unit cost method.

An impairment loss is recognized when the net realizable value of inventories is lower than their weighted average cost.

Certain inventories are used for trading purposes and are recognized at fair value less the estimated costs necessary to make the sale in accordance with IAS 2. Any change to this fair value is recognized in the consolidated income statement for the year to which it relates.

Greenhouse gas emissions rights

European Directive 2003/87/EC establishes a greenhouse gas (GHG) emissions allowance trading scheme within the European Union. Under the Directive, each year the sites concerned have to surrender a number of allowances equal to the total emissions from the installations during the previous calendar year. As there are no specific rules under IFRS dealing with the accounting treatment of GHG emissions allowances, the Group decided to apply the following principles:

- emission rights are classified as inventories, as they are consumed in the production process;
- emission rights purchased on the market are recognized at acquisition cost;

- emission rights granted free of charge are recorded in the statement of financial position at a value of nil.

The Group records a liability at the year-end in the event that it does not have enough emission rights to cover its GHG emissions during the period. This liability is measured at the market value of the allowances required to meet its obligations at the year-end or based on the contract price concluded to hedge this lack of emission rights.

Energy savings certificates (ESC)

In the absence of current IFRS Standards or IFRIC Interpretations on accounting for energy savings certificates (ESC), the following principles are applied:

- in the event that the number of ESCs held exceeds the obligation at the reporting date, this is accounted for as inventory; otherwise, a liability is recorded;
- ESC inventories are valued at weighted average cost (acquisition cost for those ESCs acquired or cost incurred for those ESCs generated internally).

1.4.11 Financial instruments

Financial instruments are recognized and measured in accordance with IAS 32 and IAS 39.

1.4.11.1 Financial assets

Financial assets comprise available-for-sale securities, loans and receivables carried at amortized cost including trade and other receivables and financial assets measured at fair value through income, including derivative financial instruments. Financial assets are broken down into current and non-current assets in the consolidated statement of financial position.

Available-for-sale securities

"Available-for-sale securities" include the Group's investments in non-consolidated companies and equity or debt instruments that do not satisfy the criteria for classification in another category (see below). Cost is determined using the weighted average cost formula.

These items are measured at fair value on initial recognition, which generally corresponds to the acquisition cost plus transaction costs.

At each reporting date, available-for-sale securities are measured at fair value. For listed securities, fair value is determined based on the quoted market price at the reporting date. For unlisted securities, fair value is measured using valuation models based primarily on recent market transactions, discounted dividends and future cash flows or net asset value. Changes in fair value are recorded directly in other comprehensive income, except when the decline in the value of the investment below its historical acquisition cost is judged significant or prolonged enough to require an impairment loss to be recognized. In this case, the loss is recognized in income under "Impairment losses". Only impairment losses recognized on debt instruments (debt securities/bonds) may be reversed through income.

Loans and receivables carried at amortized cost

This item primarily includes loans granted to affiliated companies, loans and advances to associates or non-consolidated companies, guarantee deposits, trade and other receivables.

On initial recognition, these loans and receivables are recorded at fair value plus transaction costs. At each statement of financial position date, they are measured at amortized cost using the effective interest rate method.

Leasing guarantee deposits are recognized at their nominal value.

On initial recognition, trade and other receivables are recorded at fair value, which generally corresponds to their nominal value. Impairment losses are recorded based on the estimated risk of non-recovery. This item also includes amounts due from customers under construction contracts.

Financial assets at fair value through income

These financial assets meet the qualification or designation criteria set out in IAS 39.

This item mainly includes trading securities and short-term investments which do not meet the criteria for classification as cash or cash equivalents (*see § 1.4.12*). The financial assets are measured at fair value at the statement of financial position date and changes in fair value are recorded in the consolidated income statement.

1.4.11.2 Financial liabilities

Financial liabilities include borrowings, trade and other payables, derivative financial instruments and other financial liabilities.

Financial liabilities are broken down into current and non-current liabilities in the consolidated statement of financial position. Current financial liabilities primarily comprise:

- financial liabilities with a settlement or maturity date within 12 months of the reporting date;
- financial liabilities in respect of which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting date;
- financial liabilities held primarily for trading purposes;
- derivative financial instruments qualifying as fair value hedges where the underlying is classified as a current item;
- all commodity trading derivatives not qualifying as hedges.

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 or redemption premiums and 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.

As regards structured debt instruments that do not have an equity component, the Group may be required to separate an "embedded" derivative instrument from its host contract (*see § 1.4.11.3*). The conditions under which these instruments must be separated are detailed below. When an embedded derivative is separated from its host contract, the initial carrying amount of the structured instrument is broken down into an embedded derivative component, corresponding to the fair value of the embedded derivative, and a financial liability component, corresponding to the difference between the amount of the issue and the fair value of the embedded derivative. The separation of components upon initial recognition does not give rise to any gains or losses.

The debt is subsequently recorded at amortized cost using the effective interest method while the derivative is measured at fair value, with changes in fair value taken to income.

Put options on non-controlling interests

Other financial liabilities primarily include put options granted by the Group in respect of non-controlling interests.

Put options on non-controlling interests granted prior to January 1, 2010

As no specific guidance is provided by IFRS and based on recommendations issued by the AMF for the 2009 reporting period, the Group decided to continue accounting for instruments recognized prior to January 1, 2010 using its previous accounting policies:

- when the put option with a variable price 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 consolidated income statement, non-controlling interests are allocated their share in income. In the consolidated 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.

1.4.11.3 Derivatives and hedge accounting

The Group uses derivative financial instruments to manage and reduce its exposure to market risks arising from fluctuations in interest rates, foreign currency exchange rates and commodity prices, mainly for gas and electricity. The use of derivative instruments is governed by a Group policy for managing interest rate, currency and commodity risks.

Definition and scope of derivative financial instruments

Derivative financial instruments are contracts (i) whose value changes in response to the change in one or more observable variables, (ii) that do not require any material initial net investment, and (iii) that are settled at a future date.

Derivative instruments therefore include swaps, options, futures and swaptions, as well as forward commitments to purchase or sell listed and unlisted securities, and firm commitments or options to purchase or sell non-financial assets that involve physical delivery of the underlying.

For purchases and sales of electricity and natural gas, the Group systematically analyzes whether the contract was entered into in the "normal" course of operations and therefore falls outside the scope of IAS 39. This analysis consists firstly of demonstrating that the contract is entered into and held for the purpose of making or taking physical delivery of the commodity in accordance with the Group's expected purchase, sale or usage requirements.

The second step is to demonstrate that the Group has no practice of settling similar contracts on a net basis and that these contracts are not equivalent to written options. In particular, in the case of electricity and gas sales allowing the buyer a certain degree of flexibility concerning the volumes delivered, the Group distinguishes between contracts that are equivalent to capacity sales considered as transactions falling within the scope of ordinary operations and those that are equivalent to written financial options, which are accounted for as derivative financial instruments.

Only contracts that meet all of the above conditions are considered as falling outside the scope of IAS 39. Adequate specific documentation is compiled to support this analysis.

Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

The main Group contracts that may contain embedded derivatives are contracts with clauses or options potentially affecting the contract price, volume or maturity. This is the case primarily with contracts for the purchase or sale of non-financial assets, whose price is revised based on an index, the exchange rate of a foreign currency or the price of an asset other than the contract's underlying.

Embedded derivatives are separated from the host contract and accounted for as derivatives when:

- the host contract is not a financial instrument measured at fair value through income;
- if separated from the host contract, the embedded derivative still fulfills the criteria for classification as a derivative instrument (existence of an underlying, no material initial net investment, settlement at a future date); and
- its characteristics are not closely related to those of the host contract. The analysis of whether or not the characteristics of the derivative are "closely related" to the host contract is made when the contract is signed.

Embedded derivatives that are separated from the host contract are recognized in the consolidated statement of financial position at fair value, with changes in fair value recognized in income (except when the embedded derivative is part of a designated hedging relationship).

Hedging instruments: recognition and presentation

Derivative instruments qualifying as hedging instruments are recognized in the consolidated statement of financial position and measured at fair value. However, their accounting treatment varies according to whether they are classified as (i) a fair value hedge of an asset or liability; (ii) a cash flow hedge or (iii) 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 remeasuring 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. These two adjustments are presented net in the consolidated 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 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 directly in other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in equity are reclassified to the consolidated 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 or expenses 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 recognized in equity until the forecast transaction occurs. However, if a forecast transaction is no longer expected to occur, the cumulative gain or loss on the hedging instrument is immediately recognized in income.

Hedge of a net investment in a foreign operation

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 liquidated or sold.

Hedging instruments: identification and documentation of hedging relationships

The hedging instruments and hedged items are designated at the inception of the hedging relationship. The hedging relationship is formally documented in each case, specifying the hedging strategy, the hedged risk and the method used to assess hedge effectiveness. Only derivative contracts entered into with external counterparties are considered as being eligible for hedge accounting.

Hedge effectiveness is assessed and documented at the inception of the hedging relationship and on an ongoing basis throughout the periods for which the hedge was designated. Hedges are considered to be effective when changes in fair value or cash flows between the hedging instrument and the hedged item are offset within a range of 80%-125%.

Hedge effectiveness is demonstrated both prospectively and retrospectively using various methods, based mainly on a comparison between changes in fair value or 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.

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” or “Mark-to-market on commodity contracts other than trading instruments” below 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 instruments not qualifying for hedge accounting used by the Group in connection with proprietary commodity trading activities and other derivatives 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.

Fair value measurement

The fair value of instruments listed on an active market is determined by reference to the market price. In this case, these instruments are presented in level 1 of the fair value hierarchy.

The fair value of unlisted financial instruments for which there is no active market and for which observable market data exist is determined based on valuation techniques such as option pricing models or the discounted cash flow method.

Models used to evaluate these instruments take into account assumptions based on market inputs:

- the fair value of interest rate swaps is calculated based on the present value of future cash flows;
- the fair value of forward foreign exchange contracts and currency swaps is calculated by reference to current prices for contracts with similar maturities by discounting the future cash flow spread (difference between the forward exchange rate under the contract and the forward exchange rate recalculated in line with the new market conditions applicable to the nominal amount);
- the fair value of currency and interest rate options is calculated using option pricing models;
- commodity derivatives contracts are valued by reference to listed market prices based on the present value of future cash flows (commodity swaps or commodity forwards) and option pricing models (options), for which market price volatility may be a factor. Contracts with maturities exceeding the depth of transactions for which prices are observable, or which are particularly complex, may be valued based on internal assumptions;
- exceptionally, for complex contracts negotiated with independent financial institutions, the Group uses the values established by its counterparties.

These instruments are presented in level 2 of the fair value hierarchy except when the evaluation is based mainly on data that are not observable; in which case they are presented in level 3 of the fair value hierarchy. Most often, this is the case for derivatives with a maturity that falls outside the observability period for market data relating to the underlying or when some parameters such as the volatility of the underlying are not observable.

Except in case of enforceable master netting arrangements or similar agreements, counterparty risk is included in the fair value of financial derivative instrument assets and liabilities. It is calculated according to the “expected loss” method and takes into account the exposure at default, the probability of default and the loss given default. The probability of default is determined on the basis of credit ratings assigned to each counterparty (“historical probability of default” approach).

1.4.12 Cash and cash equivalents

These items include cash equivalents 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.

Bank overdrafts are not included in the calculation of cash and cash equivalents and are recorded under "Short-term borrowings".

1.4.13 Treasury shares

Treasury shares are recognized at cost and deducted from equity. Gains and losses on disposals of treasury shares are recorded directly in equity and do not therefore impact income for the period.

1.4.14 Share-based payment

Under IFRS 2, share-based payments made in consideration for services provided are recognized as personnel costs. These services are measured at the fair value of the instruments awarded.

Equity-settled instruments: bonus share plans and performance shares granted to employees

The fair value of bonus share plans is estimated by reference to the share price at the grant date, taking into account the fact that no dividend is payable over the vesting period, and based on the estimated turnover rate for the employees concerned and the probability that the Group will meet its performance targets. The fair value measurement also takes into account the non-transferability period associated with these instruments. The cost of shares granted to employees is expensed over the vesting period of the rights and offset against equity.

A Monte Carlo pricing model is used for performance shares granted on a discretionary basis and subject to external performance criteria.

1.4.15 Provisions

1.4.15.1 Provisions for post-employment benefit obligations and other long-term employee benefits

Depending on the laws and practices in force in the countries where the Group 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 compliance with IAS 19. 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 using the projected unit credit method. 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 exceed the fair value of plan assets. Where the value of plan assets (capped where appropriate) is greater than the related commitments, the surplus is recorded as an asset under "Other assets" (current or non-current).

As regards post-employment benefit obligations, actuarial gains and losses are recognized in other comprehensive income. 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, are recognized immediately in income.

Net interest on the net defined benefit liability (asset) is presented in net financial expense (income).

1.4.15.2 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 are provisions for the back-end of the nuclear fuel cycle, provisions for dismantling facilities and provisions for site restoration costs. The discount rates used reflect current market assessments 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 dismantle facilities or to restore a site. An asset is recorded simultaneously by including this dismantling obligation in the carrying amount of the facilities concerned. Adjustments to the provision due to subsequent changes in the expected outflow of resources, the dismantling 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 period.

1.4.16 Revenue

Group revenue (as defined by IAS 18) is mainly generated from the following:

- energy sales;
- rendering of services;
- construction and lease contracts.

Revenue on sales of goods is recognized on delivery, i.e. when the significant risks and rewards of ownership are transferred to the buyer. For services and construction contracts, revenue is recognized using the percentage-of-completion method. In both cases, revenue is recognized solely when the transaction price is fixed or can be reliably determined and the recovery of the amounts due is probable.

Revenue is measured at the fair value of the consideration received or receivable. Where deferred payment has a material impact on the measurement of the fair value of this consideration, this is taken into account by discounting future receipts.

1.4.16.1 Energy sales

This revenue primarily includes sales of electricity and gas, transport and distribution fees relating to services such as electricity and gas distribution network maintenance and heating network sales.

Part of the price received by the Group under certain long-term energy sales contracts may be fixed rather than being based on volumes. In rare cases, the fixed amount can change over the term of the contract. In accordance with IAS 18, revenue from such components is recognized on a straight-line basis because, in substance, the fair value of the services rendered does not vary from one period to the next.

In accordance with IAS 1 and IAS 18, both proprietary energy trading transactions and energy trading carried out on behalf of customers are recorded within "Revenues" after netting off sales and purchases.

In addition, revenue from hedging contracts aimed at optimizing production assets and from fuel purchase and energy sale contracts is recognized based on the net amount.

1.4.16.2 Rendering of services

This revenue relates mainly to installation, maintenance and energy services, and is recognized in accordance with IAS 18, which requires services to be accounted for on a percentage-of-completion basis.

1.4.16.3 Construction and lease contracts

Revenue from construction contracts is determined using the percentage-of-completion method and more generally in accordance with the provisions of IAS 11. 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 transaction, or on the physical progress of the contract based on factors such as contractually defined milestones.

Revenue also includes revenue from financial concession assets (IFRIC 12) and finance lease receivables (IFRIC 4).

1.4.17 Current operating income

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" (this complies with ANC Recommendation 2013-03 on the format of financial statements of entities applying IFRS). Current operating income is a sub-total which helps 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, such elements relate to mark-to-market on commodity contracts other than trading instruments, impairment losses, restructuring costs, changes in the scope of consolidation and other non-recurring items, and are defined as follows:

- "Mark-to-market on commodity contracts other than trading instruments" corresponds to changes in the fair value (marked-to-market) of financial instruments relating to commodities, gas and electricity, which do not qualify as either trading or hedging instruments. These contracts are used in economic hedges of operating transactions in the energy sector. Since changes in the fair value of these instruments which must be recognized through income under IAS 39 can be material and difficult to predict, they are presented on a separate line of the consolidated income statement;
- "Impairment losses" include impairment losses on goodwill, other intangible assets and property, plant and equipment, investments in entities accounted for using the equity method and available-for-sale securities;
- "Restructuring costs" concern costs corresponding to a restructuring program planned and controlled by management that materially changes either the scope of a business undertaken by the entity, or the manner in which that business is conducted, based on the criteria set out in IAS 37;
- "Changes in the scope of consolidation". 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 equity interest at acquisition-date fair value,
  - subsequent changes in the fair value of contingent consideration,
  - gains or losses from disposals of investments which result in a change in consolidation method, as well as any impact of the remeasurement of retained interests;

- "Other non-recurring items" notably include capital gains and losses on disposals of non-current assets and available-for-sale securities.

1.4.18 Income tax expense

The Group computes taxes in accordance with 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 carrying amounts 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 tax is 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 differences 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, associates, joint ventures and branches, 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 taxes are calculated based on the tax position of each company or on the total income of companies included within the relevant consolidated tax group, and are presented in assets or liabilities for their net amount per tax entity.

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.

Tax effects relating to coupon payments on deeply-subordinated perpetual notes are recognized in profit or loss.

1.4.19 Earnings per share

Basic earnings per share are calculated by dividing net income Group share for the year by the weighted average number of ordinary shares outstanding during the year. The average number of ordinary shares outstanding during the 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 year.

The weighted average number of shares and basic earnings per share are adjusted to take into account the impact of the conversion or exercise of any dilutive potential ordinary shares (options, warrants and convertible bonds, etc.).

1.4.20 Consolidated statement of cash flows

The consolidated statement of cash flows is prepared using the indirect method starting from net income.

"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. This classification is consistent with the Group's internal organization, where debt and cash are managed centrally by the treasury department.

As impairment losses on current assets are considered to be definitive losses, changes in current assets are presented net of impairment.

Cash flows relating to the payment of income tax are presented on a separate line.

NOTE 2 MAIN SUBSIDIARIES AT DECEMBER 31, 2017

2.1 List of main subsidiaries at December 31, 2017

The following lists are made available by the Group to third parties, pursuant to Regulation No. 2016-09 of the French accounting standards authority (ANC) issued on December 2, 2016:

- list of companies included in consolidation;
- list of companies excluded from consolidation because their individual and cumulative incidence on the Group's consolidated accounts is not material. They correspond to entities deemed as not significant as regards to the Group's main key figures (revenues, total equity, etc), legal shells or entities which have ceased all activities and are undergoing liquidation/closure proceedings;
- list of main non-consolidated interests.

This information is available on the Group's website (www.engie.com, Investors/Regulated information section). Non-consolidated companies are classified under non-current financial assets (*see Note 15.1.1)* under "Available-for-sale securities".

The list of the main subsidiaries presented below was determined, as regards operating entities, based on their contribution to Group revenues, EBITDA, net income and net debt. The main equity-accounted investments (associates and joint ventures) are presented in Note 3 "Investments in entities accounted for using the equity method".

"FC" indicates the full consolidation method.

Some entities such as ENGIE SA, ENGIE Energie Services SA or Electrabel SA comprise both operating activities and headquarters functions which report to management teams of different reportable segments. In the following tables, these operating activities and headquarters functions are shown within their respective reportable segments under their initial company name followed by a (*) sign.

North America

			% interest		Consolidation method	
Company name	**Activity**	**Country**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**
GDF SUEZ Energy Generation North America Group(1)	Electricity generation	United States	-	100.0	-	FC
ENGIE North America	Electricity generation and sales/Natural gas/LNG/Energy services	United States	100.0	100.0	FC	FC
ENGIE Holding Inc.	Holding - parent company	United States	100.0	100.0	FC	FC
Distrigas of Massachussetts	LNG terminals	United States	100.0	100.0	FC	FC
ENGIE Resources Inc.	Energy sales	United States	100.0	100.0	FC	FC
Ecova	Energy services	United States	100.0	100.0	FC	FC

(1) Assets sold in 2017 (see Note 4 "Main changes in Group structure").

Latin America

			% interest		Consolidation method	
Company name	**Activity**	**Country**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	52.8	52.8	FC	FC
ENGIE Energía Perú	Electricity distribution and generation	Peru	61.8	61.8	FC	FC
ENGIE Brasil Energia Group	Electricity distribution and generation	Brazil	68.7	68.7	FC	FC

Africa/Asia

			% interest		Consolidation method	
Company name	Activity	Country	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
GLOW Group	Electricity distribution and generation	Thailand	69.1	69.1	FC	FC
Hazelwood Power Partnership	Electricity generation	Australia	72.0	72.0	FC	FC
Loy Yang B Group (1)	Electricity generation	Australia	70.0	70.0	FC	FC
Simply Energy	Energy sales	Australia	72.0	72.0	FC	FC
Baymina Enerji A.S.	Electricity generation	Turkey	95.0	95.0	FC	FC

(1) The Loy Yang B power plant in Australia was classified as "Assets held for sale" on November 23, 2017 (see Note 4.1 "Assets held for sale and discontinued operations").

Benelux

			% interest		Consolidation method	
Company name	Activity	Country	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Electrabel SA (*)	Electricity generation/Energy sales	Belgium	100.0	100.0	FC	FC
Synatom	Managing provisions relating to power plants and nuclear fuel	Belgium	100.0	100.0	FC	FC
Cofely Fabricom SA	Systems, facilities and maintenance services	Belgium	100.0	100.0	FC	FC
ENGIE Energie Nederland N.V. (*)	Energy sales	Netherlands	100.0	100.0	FC	FC
ENGIE Services Nederland N.V.	Energy services	Netherlands	100.0	100.0	FC	FC

France

			% interest		Consolidation method	
Company name	Activity	Country	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
ENGIE SA (*)	Energy sales	France	100.0	100.0	FC	FC
ENGIE Energie Services SA (*)	Energy services/Networks	France	100.0	100.0	FC	FC
Axima Concept	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
Endel Group	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
INEO Group	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
Compagnie Nationale du Rhône	Electricity distribution and generation	France	49.9	49.9	FC	FC
ENGIE Green (1)	Electricity distribution and generation	France	100.0	100.0	FC	FC
La Compagnie du Vent (1)	Electricity distribution and generation	France	-	59.0	-	FC
CPCU	Urban heating networks	France	64.4	64.4	FC	FC

(1) ENGIE Green and La Compagnie du Vent merged on December 15, 2017, ENGIE Green absorbing the latter. This transaction is pursuant to the acquisition in 2017 of the non-controlling interests in La Compagnie du Vent (see Note 4.3.3).

Europe excluding France & Benelux

			% interest		Consolidation method	
Company name	Activity	Country	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
ENGIE Energielösungen GmbH	Energy services	Germany	100.0	100.0	FC	FC
ENGIE Deutschland GmbH	Energy services	Germany	100.0	100.0	FC	FC
ENGIE Italia S.p.A (*)	Energy sales	Italy	100.0	100.0	FC	FC
Engie Servizi S.p.A	Energy services	Italy	100.0	100.0	FC	FC
ENGIE Romania	Natural gas distribution/Energy sales	Romania	51.0	51.0	FC	FC
ENGIE Supply Holding UK Limited	Energy sales	United Kingdom	100.0	100.0	FC	FC
ENGIE Retail Investment UK Limited	Holding	United Kingdom	100.0	100.0	FC	FC
First Hydro Holdings Company	Electricity generation	United Kingdom	75.0	75.0	FC	FC
Keepmoat Regeneration (1)	Energy services	United Kingdom	100.0	-	FC	-
ENGIE Services Holding UK Ltd	Energy services	United Kingdom	100.0	100.0	FC	FC
ENGIE Services Limited	Energy services	United Kingdom	100.0	100.0	FC	FC

(1) See Note 4 "Main changes in Group structure".

Infrastructures Europe

			% interest		Consolidation method	
Company name	**Activity**	**Country**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**
GRDF	Natural gas distribution	France	100.0	100.0	FC	FC
GRTgaz Group (excluding Elengy)	Natural gas transportation	France	74.8	74.7	FC	FC
Elengy (1)	LNG terminals	France	74.8	100.0	FC	FC
Fosmax LNG (2)	LNG terminals	France	54.2	72.5	FC	FC
Storengy Deutschland GmbH	Underground natural gas storage	Germany	100.0	100.0	FC	FC
Storengy SA	Underground natural gas storage	France	100.0	100.0	FC	FC

(1) ENGIE SA transferred its 100% interest in Elengy to GRTgaz on September 27, 2017 (see Note 4 "Main changes in Group structure").

(2) Elengy holds 72.5% of Fosmax LNG.

GEM & LNG

			% interest		Consolidation method	
Company name	**Activity**	**Country**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**
Electrabel SA (*)	Energy management trading	France/Belgium	100.0	100.0	FC	FC
ENGIE Global Markets	Energy management trading	France/Belgium/ Singapore	100.0	100.0	FC	FC
ENGIE Energy Management (*)	Energy management trading	France/Belgium/ Italy	100.0	100.0	FC	FC
ENGIE Energy Management Holding Switzerland AG	Holding	Switzerland	100.0	100.0	FC	FC
ENGIE Gas & LNG LLC	Natural gas/ LNG	United States	100.0	100.0	FC	FC
ENGIE SA (*)	Energy management trading/Energy sales/LNG	France	100.0	100.0	FC	FC

E&P (1)

			% interest		Consolidation method	
Company name	**Activity**	**Country**	**Dec. 31, 2017**	**Dec. 31, 2016**	**Dec. 31, 2017**	**Dec. 31, 2016**
ENGIE E&P International Group	Exploration-production	France and other countries	70.0	70.0	FC	FC
ENGIE E&P International	*Holding-parent company*	*France*	*70.0*	*70.0*	*FC*	*FC*
ENGIE E&P Nederland B.V.	*Exploration-production*	*Netherlands*	*70.0*	*70.0*	*FC*	*FC*
ENGIE E&P Deutschland GmbH	*Exploration-production*	*Germany*	*70.0*	*70.0*	*FC*	*FC*
ENGIE E&P Norge AS	*Exploration-production*	*Norway*	*70.0*	*70.0*	*FC*	*FC*
ENGIE E&P UK Ltd.	*Exploration-production*	*United Kingdom*	*70.0*	*70.0*	*FC*	*FC*

(1) ENGIE E&P International and its subsidiaries were classified under "Discontinued operations" on May 11, 2017 (see Note 4.1.1 "Disposal of the exploration-production business").

Others

			% interest		Consolidation method	
Company name	Activity	Country	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
ENGIE SA (*)	Holding-parent company	France	100.0	100.0	FC	FC
Electrabel SA (*)	Holding/Electricity generation	Belgium	100.0	100.0	FC	FC
ENGIE Energie Services SA (*)	Holding	France	100.0	100.0	FC	FC
International Power Limited	Holding	United Kingdom	100.0	100.0	FC	FC
ENGIE CC	Financial subsidiaries/Central functions	Belgium	100.0	100.0	FC	FC
ENGIE FINANCE SA	Financial subsidiaries	France	100.0	100.0	FC	FC
Solairedirect	Electricity generation	France	100.0	100.0	FC	FC
ENGIE Energie Nederland N.V. (*)	Electricity generation	Netherlands	100.0	100.0	FC	FC
ENGIE Cartagena	Electricity generation	Spain	100.0	100.0	FC	FC
ENGIE Deutschland AG (*)	Electricity generation	Germany	100.0	100.0	FC	FC
ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG	Electricity generation	Germany	57.0	57.0	FC	FC
ENGIE Energia Polska SA (*) (1)	Electricity generation	Poland	-	100.0	-	FC
ENGIE Thermique France	Electricity generation	France	100.0	100.0	FC	FC
Rugeley Power Limited	Electricity generation	United Kingdom	75.0	75.0	FC	FC
Saltend (1)	Electricity generation	United Kingdom	-	75.0	-	FC
Gaztransport & Technigaz (GTT)	Engineering	France	40.4	40.4	FC	FC
Tractebel Engineering	Engineering	Belgium	100.0	100.0	FC	FC

(1) Assets sold in 2017 (see Note 4 "Main changes in Group structure").

2.2 Significant judgments exercised when assessing control

The Group primarily considers the following information and criteria when determining whether it has control over an entity:

- governance arrangements: voting rights and whether the Group is represented in the governing bodies, majority rules and veto rights;
- whether substantive or protective rights are granted to shareholders, particularly in relation to the entity's relevant activities;
- the consequences of a "deadlock" clause;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.

The Group exercised its judgment regarding the entities and sub-groups described below.

Entities in which the Group has the majority of the voting rights

This category mainly comprises the ENGIE E&P International (70%) and GRTgaz (74.8%) sub-groups.

ENGIE E&P International (E&P): 70%

On October 31, 2011, ENGIE and China Investment Corporation (CIC) signed a partnership agreement for the acquisition by CIC of a 30% stake in the Group's exploration-production activities (ENGIE E&P International). The shareholder agreement provides that certain investment decisions relating to major development projects require a unanimous decision from the two shareholders, after a consultation period.

ENGIE considered that it continued to control ENGIE E&P International, as the rights granted to CIC represent minority protective rights, regarding in particular the risks to which all shareholders are exposed when undertaking exploration-production activities.

On February 15, 2018, the Group ceased to exert its control over ENGIE E&P International pursuant to the closing of the sale of its 70% interest, which simultaneously puts an end to the shareholders agreement with CIC (*see Note 27 "Post closing events"*).

GRTgaz (Infrastructures Europe): 74.8%

In addition to the analysis of the shareholder agreement with Société d'Infrastructures Gazières, a subsidiary of *Caisse des Dépôts et Consignations* (CDC), which owns 24.9% of the share capital of GRTgaz, the Group also assessed the rights granted to the French Energy Regulatory Commission (*Commission de régulation de l'énergie* – CRE). As a regulated activity, GRTgaz has a dominant position on the gas transportation market in France. Accordingly, since the transposition of the Third European Directive of July 13, 2009 into French law (Energy Code of May 9, 2011), GRTgaz has been subject to independence rules as concerns its directors and senior management team. The French Energy Code confers certain powers on the CRE in the context of its duties to control the proper functioning of the gas markets in France, including verifying the independence of the members of the Board of Directors and senior management and assessing its choice of investments. The Group considers that it exercises control over GRTgaz and its subsidiaries in view of its current ability to appoint the majority of the members of the Board of Directors and take decisions about the relevant activities, especially in terms of the level of investment and planned financing.

Entities in which the Group does not have the majority of the voting rights

In the entities in which the Group does not have a majority of the voting rights, judgment is exercised with regard to the following items, in order to assess whether there is a situation of *de facto* control:

- dispersion of shareholding structure: number of voting rights held by the Group relative to the number of rights held respectively by the other vote holders and their dispersion;
- voting patterns at shareholders' meetings: the percentages of voting rights exercised by the Group at shareholders' meetings in recent years;
- governance arrangements: representation in the governing body with strategic and operational decision-making power over the relevant activities, as well as the rules for appointing key management personnel;
- contractual relationships and material transactions.

The main fully consolidated entities in which the Group does not have the majority of the voting rights are Compagnie Nationale du Rhône (49.98%) and Gaztransport & Technigaz (40.4%).

Compagnie Nationale du Rhône ("CNR" – France): 49.98%

The Group holds 49.98% of the share capital of CNR, with CDC holding 33.2%, and the balance (16.82%) being dispersed among around 200 local authorities. In view of the current provisions of the French "Murcef" law, under which a majority of CNR's share capital must remain under public ownership, the Group is unable to hold more than 50% of the share capital of CNR. However, the Group considers that it exercises *de facto* control as it holds the majority of the voting rights exercised at shareholders' meetings due to the widely dispersed shareholding structure and the absence of evidence of the minority shareholders acting in concert.

Gaztransport & Technigaz ("GTT" – Others): 40.4%

Since GTT's initial public offering in February 2014, ENGIE has been the largest shareholder in that company with a 40.4% stake, the free float representing around 49% of the share capital. The Group holds the majority of the voting rights exercised at shareholders' meetings in view of the widely dispersed shareholding structure and the absence of evidence of minority shareholders acting in concert. ENGIE also holds the majority of the seats on the Board of Directors. The Group considers that it exercises *de facto* control over GTT, based on an IFRS 10 criteria analysis.

2.3 Subsidiaries with material non-controlling interests

The following table shows the non-controlling interests in Group entities that are deemed to be material, the respective contributions to equity and net income at December 31, 2017 and December 31, 2016, as well as the dividends paid to non-controlling interests of these significant subsidiaries:

Corporate name	Activity	Percentage interest of non-controlling interests		Net income/(loss) of non-controlling interests		Equity of non-controlling interests		Dividends paid to non-controlling interests	
In millions of euros		Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
GRTgaz Group (Infrastructures Europe, France) (1)	Regulated gas transportation activities in France	25.2	25.3	109	137	1,196	987	97	86
ENGIE Energía Chile Group (Latin America, Chile) (2)	Electricity distribution and generation - thermal power plants	47.2	47.2	45	112	842	941	27	47
GLOW Group (Africa/Asia, Thailand) (2)	Electricity distribution and generation - hydroelectric, wind and thermal power plants	30.9	30.9	110	94	565	599	87	84
ENGIE Brasil Energia Group (Latin America, Brazil) (2)	Electricity distribution and generation	31.3	31.3	177	131	563	621	154	105
ENGIE Romania Group (Europe excluding France & Benelux, Romania)	Distribution of natural gas/Energy sales	49.0	49.0	35	39	481	470	12	-
ENGIE E&P International Group (E&P, France and other countries) (3)	Portfolio of exploration-production assets and oil and gas field operation assets	30.0	30.0	93	(47)	363	320	-	-
ENGIE Energía Perú (Latin America, Peru) (2)	Electricity distribution and generation - thermal and hydroelectric power plants	38.2	38.2	45	45	337	351	17	19
Gaztransport & Technigaz (Other, France) (2)	Naval engineering, cryogenic membrane containment systems for LNG transportation	59.6	59.6	41	27	336	355	59	59
Other subsidiaries with non-controlling interests				159	40	1,255	1,226	227	106
TOTAL				**815**	**579**	**5,938**	**5,870**	**680**	**507**

(1) Elengy only contributed to the "GRTgaz Group" net income/(loss) of non-controlling interests line from September 27, 2017. Regarding Fosmax LNG, the 27.5% direct interest share of non-controlling interests in net income/(loss) and in dividends paid is not taken into account under this line for the period starting January 1, 2017 and ending September 27, 2017.

(2) The ENGIE Energía Chile, ENGIE Energia Brasil and GLOW groups, as well as Gaztransport & Technigaz and ENGIE Energía Perú are listed on the stock markets in their respective countries.

(3) The ENGIE E&P International Group was classified under "Discontinued activities" on May 11, 2017. Summarized financial information of ENGIE E&P International is presented in Note 4.1 "Assets held for sale and discontinued operations".

2.3.1 Condensed financial information on subsidiaries with material non-controlling interests

The condensed financial information concerning these subsidiaries presented in the table below is based on a 100% interest and is shown before intragroup eliminations.

	GRTgaz Group		ENGIE Energía Chile Group		GLOW Group		ENGIE Brasil Energia Group	
In millions of euros	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Income statement								
Revenues	2,295	1,993	928	876	1,331	1,343	1,935	1,670
Net income/(loss)	447	544	85	223	267	241	566	417
Net income/(loss) Group share	337	406	40	111	157	147	389	286
Other comprehensive income/(loss) – Owners of the parent	1	(26)	(122)	41	(61)	35	(177)	192
TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT	**339**	**381**	**(82)**	**152**	**96**	**183**	**212**	**478**
Statement of financial position								
Current assets	774	586	344	601	584	588	998	957
Non-current assets	10,481	9,114	2,562	2,601	2,284	2,558	3,897	3,162
Current liabilities	(884)	(699)	(293)	(280)	(359)	(383)	(1,387)	(489)
Non-current liabilities	(5,908)	(5,094)	(881)	(997)	(1,135)	(1,300)	(1,834)	(1,772)
TOTAL EQUITY	**4,462**	**3,908**	**1,732**	**1,926**	**1,374**	**1,463**	**1,675**	**1,858**
TOTAL NON-CONTROLLING INTERESTS	**1,196**	**987**	**842**	**941**	**565**	**599**	**563**	**621**
Statement of cash flows								
Cash flow from operating activities	1,074	1,069	190	266	477	432	794	658
Cash flow from (used in) investing activities	(915)	(619)	(428)	(55)	(23)	(17)	(1,548)	(355)
Cash flow from (used in) financing activities	(149)	(450)	55	(109)	(423)	(456)	770	(437)
TOTAL CASH FLOW FOR THE PERIOD (1)	**10**	**-**	**(183)**	**102**	**30**	**(41)**	**16**	**(134)**

(1) Excluding effects of changes in exchange rates and other.

	ENGIE Romania Group		ENGIE Energía Perú		Gaztransport & Technigaz	
In millions of euros	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Income statement						
Revenues	1,062	989	596	665	228	236
Net income/(loss)	71	80	117	119	69	(115)
Net income/(loss) Group share	36	41	72	73	28	(143)
Other comprehensive income/(loss) – Owners of the parent	(12)	(2)	(66)	20	-	1
TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT	**24**	**39**	**6**	**94**	**28**	**(141)**
Statement of financial position						
Current assets	531	564	225	258	226	201
Non-current assets	728	752	1,679	1,902	530	582
Current liabilities	(240)	(321)	(259)	(351)	(113)	(101)
Non-current liabilities	(50)	(49)	(764)	(894)	(79)	(87)
TOTAL EQUITY	**969**	**946**	**880**	**916**	**563**	**595**
TOTAL NON-CONTROLLING INTERESTS	**481**	**470**	**337**	**351**	**336**	**355**
Statement of cash flows						
Cash flow from operating activities	116	188	323	206	116	95
Cash flow from (used in) investing activities	(34)	(42)	(74)	(192)	(6)	(3)
Cash flow from (used in) financing activities	(67)	(29)	(242)	(36)	(95)	(102)
TOTAL CASH FLOW FOR THE PERIOD (1)	**15**	**117**	**8**	**(22)**	**14**	**(11)**

(1) Excluding effects of changes in exchange rates and other.

NOTE 3 INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD

The respective contributions of associates and joint ventures in the statement of financial position, the income statement and the statement of comprehensive income at December 31, 2017 and December 31, 2016 are as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Statement of financial position		
Investments in associates	4,913	4,736
Investments in joint ventures	2,495	1,888
INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**7,409**	**6,624**
Income statement [(1)]		
Share in net income/(loss) of associates	269	671
Share in net income/(loss) of joint ventures	168	81
SHARE IN NET INCOME/(LOSS) OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**437**	**752**
Statement of comprehensive income		
Share of associates in "Other comprehensive income/(loss)"	50	47
Share of joint ventures in "Other comprehensive income/(loss)"	(6)	12
SHARE OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD IN "OTHER COMPREHENSIVE INCOME/(LOSS)"	**44**	**59**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Significant judgments

The Group primarily considers the following information and criteria in determining whether it has joint control or significant influence over an entity:

- governance arrangements: whether the Group is represented in the governing bodies, majority rules and veto rights;
- whether substantive or protective rights are granted to shareholders, particularly in relation to the entity's relevant activities.
  This can be difficult to determine in the case of "project management" or "one-asset" entities, as certain decisions concerning the relevant activities are made upon the creation of the joint arrangement and remain valid throughout the project. Accordingly, the decision-making analysis concerns the relevant residual activities of the entity (those that significantly affect the returns of the entity);
- the consequences of a "deadlock" clause;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.
  This can also involve analyzing the Group's contractual relations with the entity, in particular the conditions in which contracts are entered into, the duration of contracts and the management of any conflicts of interest that may arise when the entity's governing body casts votes.

The Group exercised its judgment regarding the following entities and sub-groups:

Project management entities in the Middle East

The significant judgments made in determining the consolidation method to be applied to these project management entities concerned the risks and rewards relating to contracts between ENGIE and the entity concerned, as well as an analysis of the residual relevant activities over which the entity retains control after its creation. The Group considers that it has significant influence or joint control over these entities, since the decisions taken throughout the term of the project about the relevant activities such as refinancing, or the renewal or amendment of significant contracts (sales, purchases, operating and maintenance services) require, depending on the case, the unanimous consent of two or more parties sharing control.

SUEZ Group (31.96%)

With effect from July 22, 2013, the date on which the SUEZ shareholders' agreement expired, ENGIE no longer controls SUEZ but exercises significant influence over the company. In particular, this is because: (i) the Group does not have a majority of members on SUEZ's Board of Directors, (ii) at Shareholders' Meetings, although SUEZ's shareholder base is fragmented and ENGIE holds a large interest, past voting shows that ENGIE alone did not have the majority at Ordinary and Extraordinary Shareholders' Meetings between 2010 and 2017 and (iii) the operational transition agreements (essentially relating to a framework agreement governing purchases and IT) were entered into on an arm's length basis.

Associates in which the Group holds an interest of less than 20%

Cameron Holding LNG LLC (16.6%)

ENGIE entered into a partnership agreement with Sempra (50.2%), Mitsubishi (16.6%) and Mitsui (16.6%) to develop the Cameron LNG project in the United States. Pursuant to these agreements, ENGIE has held a 16.6% stake in the project management entity Cameron Holding LNG LLC since October 1, 2014 and will have a long-term liquefaction capacity of 4 million tons per annum (mtpa). Construction work has begun on the project and the facility should be operational for commercial purposes as from 2018.

The agreement grants all shareholders the right to participate in all decisions about the relevant activities, on the basis of qualified majorities. Accordingly, ENGIE has significant influence over this entity, which it has accounted for as an associate.

Joint ventures in which the Group holds an interest of more than 50%

Tihama (60%)

ENGIE holds a 60% stake in the Tihama cogeneration plant in Saudi Arabia and its partner Saudi Oger holds 40%. The Group considers that it has joint control over Tihama since the decisions about its relevant activities, including for example preparation of the budget and amendments to major contracts, require the unanimous consent of the parties sharing control.

Joint control – difference between joint ventures and joint operations

Classifying a joint arrangement requires the Group to use its judgment to determine whether the entity in question is a joint venture or a joint operation. IFRS 11 requires an analysis of "other facts and circumstances" when determining the classification of jointly controlled entities.

The IFRS Interpretations Committee (IFRS IC) (November 2014) decided that for an entity to be classified as a joint operation, other facts and circumstances must give rise to direct enforceable rights to the assets, and obligations for the liabilities, of the joint arrangement.

In view of this position and its application to our analyses, the Group has no material joint operations at December 31, 2017.

3.1 Investments in associates

3.1.1 Contribution of material associates and of associates that are not material to the Group taken individually

The table hereafter shows the contribution of each material associate along with the aggregate contribution of associates deemed not material taken individually, in the consolidated statement of financial position, income statement, statement of comprehensive income, and the "Dividends received from companies accounted for using the equity method" line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material associates. These criteria include the contribution to the consolidated line items "Share in net income/(loss) of associates" and "Investments in associates", the total assets of associates in Group share, and associates carrying major projects in the study or construction phase for which the related investment commitments are material.

Corporate name	Activity	Capacity	Percentage interest of investments in associates		Carrying amount of investments in associates		Share in net income/(loss) of associates		Other comprehensive income/(loss) of associates		Dividends received from associates	
In millions of euros			Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
SUEZ Group (Other)	Water and waste processing		31.96	32.57	2,099	1,906	100	139	99	(40)	119	119
Energia Sustentável Do Brasil (Latin America, Brazil)	Hydro power plant	3,750 MW	40.00	40.00	784	774	(23)	197	-	-	-	-
Project management entities in the Middle East (Africa/Asia, Saudi Arabia, Bahrain, Qatar, United Arab Emirates, Oman, Kuwait) (1)	Gas-fired power plants and seawater desalination facilities				646	651	166	129	(16)	52	96	99
Senoko (Africa/Asia, Singapore)	Gas-fired power plants	3,201 MW	30.00	30.00	298	355	(31)	(10)	(9)	31	-	-
GASAG (Europe excluding France & Benelux, Germany) (2)	Gas and heat networks		31.58	31.58	247	231	14	5	4	15	2	11
Cameron LNG (GEM & LNG, United States)	Gas liquefaction terminal		16.60	16.60	220	193	(3)	(6)	(11)	2	-	-
Canadian renewable energy activities (North America, Canada)	Wind farm	679 MW	40.00	40.00	154	161	16	13	(10)	(14)	23	21
Other investments in associates that are not material taken individually					466	466	30	204	(6)	1	37	105
INVESTMENTS IN ASSOCIATES					**4,913**	**4,736**	**269**	**671**	**50**	**47**	**278**	**355**

(1) *Investments in associates operating gas-fired power plants and seawater desalination facilities in the Arabian Peninsula have been grouped together under "Project management entities in the Middle East". This includes around 40 associates operating thermal power plants with a total installed capacity of 26,033 MW (at 100%) and a further 1,507 MW (at 100%) in capacity under construction. These associates have fairly similar business models and joint arrangements: the project management entities selected as a result of a competitive bidding process develop, build and operate power generation plants and seawater desalination facilities. The entire output of these facilities is sold to government-owned companies under power and water purchase agreements, over periods generally spanning 20 to 30 years.*
In accordance with their contractual arrangements, the corresponding plants are recognized as property, plant and equipment or as financial receivables whenever substantially all of the risks and rewards associated with the assets are transferred to the buyer of the output. This treatment complies with IFRIC 4 and IAS 17. The shareholding structure of these entities systematically includes a government-owned company based in the same country as the project management entity. The Group's percent interest and percent voting rights in each of these entities varies between 20% and 50%.

(2) *Share in net income/(loss) of associates excluding the €70 million of impairment losses accounted for at December 31, 2016 by the Group on the net value of its investment in GASAG.*

The share in net income/(loss) of associates includes net non-recurring loss for a total amount of €43 million in 2017 (compared to net non-recurring income of €27 million in 2016), mainly including changes in the fair value of derivative instruments and disposal gains and losses, net of taxes *(see Note 5.2 "Net recurring income Group share")*.

3.1.2 Financial information regarding material associates

The tables below provide condensed financial information for the Group's main associates. The amounts shown have been determined in accordance with IFRS, before the elimination of intragroup items and after (i) adjustments made in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of the associate performed at the date of acquisition at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE".

In millions of euros	**Revenues**	**Net income/ (loss)**	**Other compre-hensive income/ (loss)**	**Total compre-hensive income/ (loss)**	**Current assets**	**Non-current assets**	**Current liabilities**	**Non-current liabilities**	**Total equity**	**% interest of Group**	**Total equity attributable to ENGIE**
AT DECEMBER 31, 2017											
SUEZ Group (1)	15,871	302	(210)	92	10,153	22,218	10,450	12,855	9,066	31.96	2,099
Energia Sustentável Do Brasil	789	(58)	(1)	(58)	269	4,976	591	2,695	1,960	40.00	784
Project management entities in the Middle East	4,147	653	(25)	628	2,477	21,060	4,673	16,131	2,734		646
Senoko	1,081	(105)	(31)	(135)	238	2,505	145	1,603	995	30.00	298
GASAG	1,106	46	12	58	780	1,676	1,500	173	782	31.58	247
Cameron LNG	57	(20)	(67)	(86)	87	5,770	267	4,267	1,323	16.60	220
Canadian renewable energy activities	175	39	(25)	14	73	1,128	69	747	385	40.00	154
AT DECEMBER 31, 2016											
SUEZ Group (1)	15,322	420	(333)	87	9,086	20,198	10,037	11,881	7,366	32.57	1,906
Energia Sustentável Do Brasil	578	493	-	493	308	6,108	919	3,563	1,934	40.00	774
Project management entities in the Middle East	4,004	557	227	784	2,360	24,294	5,302	18,617	2,735		651
Senoko	1,125	(34)	102	68	308	2,763	141	1,744	1,185	30.00	355
GASAG (2)	1,164	14	48	63	810	1,730	1,592	217	732	31.58	231
Cameron LNG	60	(36)	13	(23)	50	5,167	256	3,801	1,161	16.60	193
Canadian renewable energy activities	172	41	(36)	6	76	1,247	66	857	401	40.00	161

(1) The data indicated in the table for SUEZ correspond to financial information published by SUEZ. Total SUEZ equity attributable to the Group amounts to €6,562 million based on the published financial statements of SUEZ and €6,464 million based on the financial statements of ENGIE. The €98 million difference in these amounts reflects the non-inclusion of the share in deeply-subordinated perpetual notes issued by SUEZ in total equity attributable to ENGIE, partly offset by the fair value measurement of the assets and liabilities of SUEZ at the date the Group changed its consolidation method (July 22, 2013).

(2) Share in net income/(loss) of associates excluding the €70 million of impairment losses accounted for at December 31, 2016 by the Group on the net value of its investment in GASAG.

SUEZ is the only material listed associate. Based on the closing share price at December 31, 2017, the market value of this interest was €2,922 million.

3.1.3 Transactions between the Group and its associates

The data below set out the impact of transactions with associates on the Group's 2017 consolidated financial statements.

In millions of euros	**Purchases of goods and services**	**Sales of goods and services**	**Net financial income (excluding dividends)**	**Trade and other receivables**	**Loans and receivables at amortized cost**	**Trade and other payables**	**Borrowings and debt**
Project management entities in the Middle East	-	264	-	37	333	-	-
Contassur (1)	-	-	-	159	-	-	-
Energia Sustentável Do Brasil	167	-	-	-	50	11	-
Other	15	6	1	7	34	3	-
AT DECEMBER 31, 2017	**183**	**270**	**1**	**202**	**416**	**14**	**-**

(1) Contassur is a life insurance company accounted for using the equity method. Contassur offers insurance contracts, chiefly with pension funds that cover post-employment benefit obligations for Group employees and also employees of other companies mainly engaged in regulated activities in the electricity and gas sector in Belgium. Insurance contracts entered into by Contassur represent reimbursement rights recorded within "Other assets" in the statement of financial position. These reimbursement rights totaled €159 million at December 31, 2017 (€130 million at December 31, 2016).

3.2 Investments in joint ventures

3.2.1 Contribution of material joint ventures and of joint ventures that are not material to the Group taken individually

The table below shows the contribution of each material joint venture along with the aggregate contribution of joint ventures deemed not material taken individually to the consolidated statement of financial position, income statement, statement of comprehensive income, and the "Dividends received from entities accounted for using the equity method" line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material joint ventures. These criteria include the contribution to the lines "Share in net income/(loss) of joint ventures" and "Investments in joint ventures", the Group's share in total assets of joint ventures, and joint ventures conducting major projects in the study or construction phase for which the related investment commitments are material.

Corporate name	Activity	Capacity	Percentage interest of investments in joint ventures		Carrying amount of investments in joint ventures		Share in net income/(loss) of joint ventures		Other comprehensive income/(loss) of joint ventures		Dividends received from joint ventures	
In millions of euros			Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
National Central Cooling Company "Tabreed" (Middle East, Abu Dhabi)	District cooling networks		40.00	-	656	-	13	-	-	-	-	-
EcoÉlectrica (North America, Puerto Rico)	Combined-cycle gas-fired power plant and LNG terminal	507 MW	50.00	50.00	478	504	46	38	-	-	-	37
Portfolio of power generation assets in Portugal (Europe excluding France & Benelux, Portugal)	Electricity generation	2,895 MW	50.00	50.00	329	420	40	62	3	1	135	30
WSW Energie und Wasser AG (Europe excluding France & Benelux, Germany) [(1)]	Electricity distribution and generation		33.10	33.10	192	185	7	12	-	-	3	3
Tihama Power Generation Co (Africa/Asia, Saudi Arabia)	Electricity generation	1,599 MW	60.00	60.00	122	136	2	21	1	6	-	-
Ohio State Energy Partners (North America)	Services		50.00	-	117	-	3	-	(2)	-	1	-
Megal GmbH (Infrastructures Europe, Germany)	Gas transmission network		49.00	49.00	98	105	4	5	-	-	12	17
Transmisora Eléctrica del Norte (Latin America, Chile)	Electricity transmission line		50.00	50.00	66	79	1	(1)	-	-	-	(5)
Other investments in joint ventures that are not material taken individually					438	459	51	(56)	(8)	5	36	32
INVESTMENTS IN JOINT VENTURES					**2,495**	**1,888**	**168**	**81**	**(6)**	**12**	**188**	**114**

(1) The share in net income in WSW Energie und Wasser AG does not include the €21 million of impairment losses accounted for by the Group at December 31, 2016 on the net value of its investment in the joint venture.

The share in net income/(loss) of joint ventures includes non-recurring income of €18 million in 2017 (non-recurring expenses of €8 million in 2016), resulting chiefly from changes in the fair value of derivatives, impairment losses and disposal gains and losses, net of tax *(see Note 5.2 "Net recurring income Group share")*.

3.2.2 Financial information regarding material joint ventures

The amounts shown have been determined in accordance with IFRS before the elimination of intragroup items and after (i) adjustments made in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of the joint venture performed at the date of acquisition at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of “Total equity attributable to ENGIE” in the statement of financial position.

Information on the income statement and statement of comprehensive income

In millions of euros	Revenues	Depreciation and amortization on intangible assets and property, plant and equipment	Net financial income/(loss) (1)	Income tax expense	Net income/(loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)
AT DECEMBER 31, 2017							
National Central Cooling Company "Tabreed"	121	(12)	(15)	-	34	-	34
EcoÉlectrica	301	(72)	(2)	(4)	92	-	92
Portfolio of power generation assets in Portugal	760	(66)	(36)	(20)	100	12	112
WSW Energie und Wasser AG	879	(13)	(5)	(16)	21	1	23
Tihama Power Generation Co	120	(5)	(26)	(5)	3	2	4
Ohio State Energy Partners	27	-	(16)	-	6	(5)	1
Megal GmbH	115	(59)	(4)	2	9	-	9
Transmisora Eléctrica del Norte	7	-	4	(1)	3	(8)	(5)
AT DECEMBER 31, 2016							
EcoÉlectrica	309	(66)	(5)	(3)	76	-	76
Portfolio of power generation assets in Portugal	680	(79)	(36)	(38)	179	(2)	177
WSW Energie und Wasser AG (2)	1,179	(16)	(4)	(19)	37	-	37
Tihama Power Generation Co	126	(6)	(29)	(3)	35	11	46
Megal GmbH	115	(55)	(4)	(1)	11	-	11
Transmisora Eléctrica del Norte	-	-	(2)	1	(2)	(10)	(12)

(1) *Interest income is not material.*

(2) *The share in net income in WSW Energie und Wasser AG does not include the €21 million impairments losses accounted for by the Group at December 31, 2016 on the net value of its investment in the joint venture.*

Information on the statement of financial position

In millions of euros	Cash and cash equivalents	Other current assets	Non-current assets	Short-term borrowings	Other current liabilities	Long-term borrowings	Other non-current liabilities	Total equity	% interest of Group	Total equity attributable to ENGIE
AT DECEMBER 31, 2017										
National Central Cooling Company "Tabreed"	101	108	2,351	-	160	760	-	1,641	40.00	656
EcoÉlectrica	97	128	773	3	16	-	23	955	50.00	478
Portfolio of power generation assets in Portugal [(1)]	245	741	1,259	315	168	886	130	746	50.00	329
WSW Energie und Wasser AG [(2)]	13	117	769	40	98	105	97	560	33.10	192
Tihama Power Generation Co	77	121	526	50	52	404	14	204	60.00	122
Ohio State Energy Partners	25	-	931	717	1	6	-	234	50.00	117
Megal GmbH	5	6	765	4	50	446	77	200	49.00	98
Transmisora Eléctrica del Norte	21	103	849	2	5	836	-	131	50.00	66
AT DECEMBER 31, 2016										
EcoÉlectrica	74	131	959	1	16	108	29	1,009	50.00	504
Portfolio of power generation assets in Portugal	275	729	1,699	382	162	1,113	130	917	50.00	420
WSW Energie und Wasser AG	37	171	754	33	174	126	95	534	33.10	185
Tihama Power Generation Co	64	108	660	55	27	508	16	227	60.00	136
Megal GmbH	24	8	726	3	69	389	84	214	49.00	105
Transmisora Eléctrica del Norte	29	3	733	1	119	487	-	158	50.00	79

(1) *Equity Group share amounts to €658 million for the Portuguese sub-group. The share of this €658 million attributable to ENGIE is therefore €329 million.*

(2) *Equity Group share amounts to €549 million for the WSW Energie und Wasser AG sub-group. The share of this €549 million attributable to ENGIE is therefore €182 million. This amount is increased by an additional share of €11 million in respect of a non-controlling interest held directly by ENGIE in a subsidiary of this sub-group (and is therefore not included in the €549 million in equity attributable to the owners of the parent).*

3.2.3 Transactions between the Group and its joint ventures

The data below set out the impact of transactions with joint ventures on the Group's 2017 consolidated financial statements.

In millions of euros	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
EcoÉlectrica	-	96	-	-	-	-	-
Portfolio of power generation assets in Portugal	-	-	-	1	128	-	-
WSW Energie und Wasser AG	3	54	-	5	-	2	-
Megal GmbH	65	-	-	-	-	5	-
Futures Energies Investissements Holding	1	16	4	1	206	1	-
Other	55	13	7	2	151	3	-
AT DECEMBER 31, 2017	**125**	**180**	**11**	**8**	**486**	**11**	**-**

3.3 Other information on investments accounted for using the equity method

3.3.1 Unrecognized share of losses of associates and joint ventures

Cumulative unrecognized losses of associates (corresponding to the cumulative amount of losses exceeding the carrying amount of investments in the associates concerned) including other comprehensive income/(loss), amounted to €249 million in 2017 (€289 million in 2016). Unrecognized losses relating to fiscal year 2017 amounted to €5 million.

These unrecognized losses mainly correspond to (i) the negative fair value of derivative instruments designated as interest rate hedges ("Other comprehensive income/(loss)") contracted by associates in the Middle East in connection with the financing of construction projects for power generation and seawater desalination plants and (ii) cumulative losses arising on Tirreno Power joint venture.

3.3.2 Commitments and guarantees given by the Group in respect of entities accounted for using the equity method

At December 31, 2017, the main commitments and guarantees given by the Group in respect of entities accounted for using the equity method concern the following three companies and groups of companies:

- Cameron LNG for an aggregate amount of USD 1,505 million (€1,255 million).

  Commitments and guarantees given by the Group in respect of this associate correspond to:
  - a capital contribution commitment for USD 180 million (€150 million),
  - a performance bond for USD 1,230 million (€1,026 million), designed to guarantee the lenders against any risk of non-payment in the event that the project cannot be completed or enter into operation. At December 31, 2017, debt drawdowns made by Cameron LNG, in respect of the share guaranteed by the Group, amounted to USD 848 million (€707 million) including accrued interest,
  - miscellaneous guarantees for a total amount of USD 95 million (€79 million). At December 31, 2017, the Group's net exposure in respect of these guarantees amounted to USD 30 million (€25 million);

- Energia Sustentável do Brasil ("Jirau") for an aggregate amount of BRL 4,427 million (€1,116 million).

  At December 31, 2017, the amount of loans granted by Banco Nacional de Desenvolvimento Econômico e Social, the Brazilian Development Bank, to Energia Sustentável do Brasil amounted to BRL 11,068 million (€2,790 million). Each partner stands as guarantor for this debt to the extent of its ownership interest in the consortium;

- the project management entities in the Middle East and Africa, for an aggregate amount of €1,801 million.

  Commitments and guarantees given by the Group in respect of these project management entities chiefly correspond to:
  - an equity contribution commitment (capital/subordinated debt) for €675 million. These commitments only concern entities acting as holding companies for projects in the construction phase,
  - letters of credit to guarantee debt service reserve accounts for an aggregate amount of €239 million. The project financing set up in certain entities can require those entities to maintain a certain level of cash within the company (usually enough to service its debt for six months). This is particularly the case when the financing is without recourse. This level of cash may be replaced by letters of credit,
  - collateral given to lenders in the form of pledged shares in the project management entities, for an aggregate amount of €420 million,
  - performance bonds and other guarantees for an amount of €467 million.

NOTE 4 MAIN CHANGES IN GROUP STRUCTURE

4.1 Assets held for sale and discontinued operations

Total "Assets classified as held for sale" and total "Liabilities directly associated with assets classified as held for sale" amounted to €6,687 million and €3,371 million, respectively, at December 31, 2017.

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Property, plant and equipment, net	5,307	3,153
Other assets	1,380	353
TOTAL ASSETS CLASSIFIED AS HELD FOR SALE	**6,687**	**3,506**
of which Assets relating to discontinued operations	*5,471*	*-*
Borrowings and debt	418	-
Other liabilities	2,953	300
TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH ASSETS CLASSIFIED AS HELD FOR SALE	**3,371**	**300**
of which Liabilities directly associated with assets relating to discontinued operations	*2,705*	*-*

All assets held for sale at December 31, 2016 (thermal merchant power plant portfolio in the United States and the Polaniec power plant in Poland) were sold in 2017 (*see Note 4.2 "Disposals carried out in 2017"*).

Assets held for sale and the associated liabilities presented in the statement of financial position at December 31, 2017 relate to the Group's exploration-production activities and to the Loy Yang B power plant in Australia.

The exploration-production activities held for sale have been classified in the Group's consolidated financial statements as discontinued operations as they represent a separate major line of business pursuant to IFRS 5 – *Non-current Assets Held for Sale and Discontinued Operations*. Consequently, the net income or loss generated by the exploration-production business is presented on a separate line after income relating to continued operations. The comparative income statement data for the previous year have been restated on the same basis.

The transaction concerning the Loy Yang B coal-fired power plant was finalized by the Group in January 2018, followed by the finalization of the disposal of exploration-production activities in February 2018.

Furthermore, the Group entered into an agreement in November 2017 regarding the sale to Total of ENGIE's upstream Liquefied Natural Gas (LNG) activities for a total value of USD 2.04 billion, including an earn-out of up to USD 550 million. However, in view of the progress made as of December 31, 2017 in fulfilling the conditions precedent – some of which are beyond its control – the Group considered that these activities could not be classified under "Assets held for sale" at that date.

4.1.1 Disposal of the exploration-production business

On May 11, 2017, the Group entered into exclusive negotiations with Neptune Energy for the sale of its entire 70% interest in its subsidiary ENGIE E&P International (EPI), having received a firm and binding offer from Neptune Energy. Upon completion of the consultation process held with staff representatives, ENGIE formally signed the contract with Neptune Energy for the sale of its 70% interest in EPI on September 22, 2017.

This transaction was completed on February 15, 2018 (*see Note 27 "Subsequent events"*).

EPI encompasses all the Group's activities relating to the exploration, development and operation of oil and gas fields. It constitutes the Exploration & Production reportable segment (*see Note 6 "Segment Information" to the 2016 consolidated financial statements*). Neptune Energy is a UK-based company which invests in upstream oil and gas activities. It is backed by funds recommended by The Carlyle Group and CVC Capital Partners, and by a sovereign investor.

EPI was classified under "Discontinued operations" on May 11, 2017. This assumption, which has since been confirmed following the completion of the transaction on February 15, 2018, was based on the firm and binding offer received from

Neptune Energy and on the conditions precedent to be met at the date of receipt of the offer. The impact of this classification on the Group's consolidated financial statements was as follows:

- assets held for sale and the associated liabilities are identified separately from other assets and liabilities in the statement of financial position at December 31, 2017, but the statement of financial position at December 31, 2016 has not been restated;
- net income relating to discontinued operations generated in 2017 is presented on a single line of the income statement entitled "Net income/(loss) from discontinued operations". The comparative income statement data for 2016 have been restated in accordance with IFRS 5 (*see Note 30 "Restatement of 2016 comparative data"*);
- recyclable and non-recyclable items relating to discontinued operations are presented separately in the statement of comprehensive income for 2017. The comparative comprehensive income data for 2016 have also been restated in accordance with IFRS 5 (*see Note 30 "Restatement of 2016 comparative data"*);
- cash flows generated by operating, investing and financial activities attributable to discontinued operations are presented on separate lines of the Group's statement of cash flows for 2017. The comparative cash flow data for 2016 have been restated in accordance with IFRS 5 (*see Note 30 "Restatement of 2016 comparative data"*).

4.1.2 Financial information on discontinued operations

Income from discontinued operations

In millions of euros	Dec 31, 2017	Dec. 31, 2016
Revenues	1,908	1,909
Purchases	(225)	(178)
Personnel costs	(206)	(235)
Depreciation, amortization and provisions	(121)	(646)
Other operating expenses	(285)	(434)
Other operating income	14	108
CURRENT OPERATING INCOME	**1,086**	**524**
Share in net income of entities accounted for using the equity method	5	12
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**1,091**	**536**
Mark-to-market on commodity contracts other than trading instruments	(13)	(25)
Impairment losses	(137)	(157)
Restructuring costs	(1)	(25)
Changes in scope of consolidation	4	-
Other non-recurring items	(1)	-
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**944**	**328**
Financial expenses	(85)	(78)
Financial income	43	20
NET FINANCIAL INCOME/(LOSS)	**(43)**	**(58)**
Income tax expense	(611)	(428)
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**290**	**(158)**
Net income/(loss) relating to discontinued operations, Group share	*196*	*(111)*
Non-controlling interests relating to discontinued operations	*93*	*(47)*

Revenue generated by EPI with ENGIE Group companies totaled €153 million in 2017 (€109 million in 2016).

As required by IFRS 5, ENGIE has no longer recognized any depreciation and amortization expense on EPI's property, plant and equipment and intangible assets as of May 11, 2017. The savings generated by this change amounted to €297 million before tax in 2017.

The net impairment losses of €137 million recognized in 2017 arose mainly as a result of the Group's decision to discontinue its operation of an exploration license for a gas field in the Caspian Sea. The exploration license, as well as the capitalized costs relating to this project, were therefore written down in full. The net impairment losses of €157 million recognized in 2016 related mainly to production assets and exploration licenses in the North Sea, Indonesia and Egypt.

Net financial income/(loss) for 2017 includes €35 million of interest expenses on EPI's borrowings from the ENGIE Group (€32 million in 2016).

Net income relating to discontinued operations also includes €20 million of costs incurred specifically in connection with the Neptune Energy transaction.

Comprehensive income from discontinued operations

In millions of euros	Dec. 31, 2017	Dec. 31, 2017 Owners of the parent	Dec. 31, 2017 Non-controlling interests	Dec. 31, 2016	Dec. 31, 2016 Owners of the parent	Dec. 31, 2016 Non-controlling interests
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**309**	**216**	**93**	**(158)**	**(111)**	**(47)**
Commodity cash flow hedges	115	81	35	(612)	(428)	(183)
Deferred tax on items above	(42)	(29)	(12)	263	184	79
Translation adjustments	(250)	(175)	(75)	73	51	22
TOTAL RECYCLABLE ITEMS	**(177)**	**(124)**	**(53)**	**(276)**	**(193)**	**(83)**
Actuarial gains and losses	(2)	(2)	(1)	8	5	2
Deferred tax on actuarial gains and losses	9	7	3	(5)	(3)	(1)
TOTAL NON-RECYCLABLE ITEMS	**7**	**5**	**2**	**3**	**2**	**1**
TOTAL COMPREHENSIVE INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**140**	**98**	**42**	**(432)**	**(302)**	**(129)**

The net loss recognized in comprehensive income in 2017 totaled €60 million (€43 million attributable to the Group), including:

- items that may not be recycled to profit or loss, mainly actuarial gains and losses on post-employment benefit obligations for a negative €73 million before tax (a negative €51 million attributable to the Group);
- items that may subsequently be recycled to profit or loss, mainly translation adjustments totaling €13 million (€9 million attributable to the Group).

Assets and liabilities from discontinued operations

In millions of euros	Dec. 31, 2017
Non-current assets	
Goodwill	32
Intangible assets, net	194
Property, plant and equipment, net	4,146
Available-for-sale securities	20
Loans and receivables at amortized cost	3
Investments in entities accounted for using the equity method	13
Other assets	11
Deferred tax assets	237
TOTAL NON-CURRENT ASSETS	**4,655**
Current assets	
Derivative instruments	1
Trade and other receivables, net	270
Inventories	60
Other assets	468
Cash and cash equivalents	16
TOTAL CURRENT ASSETS	**815**
TOTAL ASSETS RELATING TO DISCONTINUED OPERATIONS	**5,471**

In millions of euros	Dec. 31, 2017
Non-current liabilities	
Provisions	1,252
Long-term borrowings	5
Other liabilities	31
Deferred tax liabilities	836
TOTAL NON-CURRENT LIABILITIES	**2,123**
Current liabilities	
Provisions	14
Short-term borrowings	3
Derivative instruments	3
Trade and other payables	215
Other liabilities	346
TOTAL CURRENT LIABILITIES	**581**
TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH DISCONTINUED OPERATIONS	**2,705**

In addition, EPI's borrowings from the Group (excluded from the above items) totaled €1,612 million at December 31, 2017.

Cash flows from discontinued operations

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
NET INCOME/(LOSS)	**294**	**(158)**
Cash generated from operations before income tax and working capital requirements	**1,229**	**1,146**
Change in working capital requirements	**(95)**	**(473)**
CASH FLOW FROM OPERATING ACTIVITIES	**647**	**111**
Acquisitions of property, plant and equipment and intangible assets	(596)	(940)
Other	83	41
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES	**(512)**	**(899)**
Cash flow from (used in) financing activities excluding intercompany transactions	19	188
Intercompany transactions with ENGIE on borrowings	(207)	605
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES	**(188)**	**793**
Effects of changes in exchange rates and other	(11)	(12)
TOTAL CASH FLOW FOR THE PERIOD	**(64)**	**(7)**
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	**81**	**87**
CASH AND CASH EQUIVALENTS AT END OF PERIOD	**16**	**81**

4.1.3 Disposal of the coal-fired power plant Loy Yang B (Australia)

On November 23, 2017, the Group signed a conditional binding agreement for the sale of its interest in the Loy Yang B coal-fired power plant in Australia to the parent company of Alinta Energy, Chow Tai Fook Enterprises. This power plant, which has a capacity of 1,000 MW, is located in the Latrobe Valley in the state of Victoria. The disposal covers all the shares held indirectly by ENGIE (70%) and Mitsui (30%) in this ENGIE subsidiary.

At December 31, 2017, the Group considered that the sale of these assets was highly probable in view of progress made in the divestiture process and, as a result, classified the power plant in “Assets held for sale”. As the carrying amount of these assets held for sale was €141 million greater than the expected sale price, the Group recognized an impairment loss for the full amount of the difference against the goodwill allocated to the portfolio.

This reclassification under "Assets held for sale" led to a €294 million decrease in the Group’s net debt at December 31, 2017. Loy Yang B's contribution to "Net income/(loss) Group share" was a positive €36 million in 2017 and a negative €11 million in 2016.

This disposal was completed on January 15, 2018 (*see Note 27 "Subsequent events"*).

4.2 Disposals carried out in 2017

As part of its transformation plan, on February 25, 2016, the Group presented a €15 billion asset disposal program in order to reduce its exposure to high CO_2 emitting activities and merchant activities over the 2016-2018 period.

The table below shows the impact of the main disposals and sale agreements on the Group’s net debt at December 31, 2017, excluding partial disposals with respect to DBSO [(1)] activities:

In millions of euros	Disposal price	Reduction in net debt
Transactions finalized in 2017 relating to "Assets held for sale" at December 31, 2016	**3,377**	**(3,338)**
Disposal of the portfolio of thermal merchant power plants - United States	3,085	(3,098)
Disposal of the Polaniec power plant - Poland	292	(240)
Transactions carried out in 2017	**558**	**(1,369)**
Disposal of a 30% interest in Opus Energy - United Kingdom	122	(122)
Disposal of a 10% interest in Petronet LNG - India	436	(428)
Transfer of 100% of Elengy to GRTgaz - France	202	(195)
Disposal of a 38,1% interest in NuGen - United Kingdom	122	(122)
Disposal of a 75% interest in a a portfolio of power plants - United Kingdom	82	(218)
Classification of the Loy Yang B coal-fired power plant in "Asset held for sale" - Australia		(294)
Classification of exploration-production activities under "Discontinued operations"		10
Other disposals that are not material taken individually		**(84)**
TOTAL		**(4,791)**

The €4,791 million reduction in net debt at December 31, 2017 is in addition to the €3,992 million decrease recognized at December 31, 2016 and the €193 million decrease recognized at December 31, 2015 under the asset disposal program, making a total of €8,976 million.

4.2.1 Disposal of the portfolio of thermal merchant power plants in the United States

On February 7, 2017, the Group finalized the sale of its thermal merchant power plant portfolio in the United States, representing a total installed capacity of 8.7 GW (at 100%) and operating in Ercot, PJM and New England. The total

(1) Develop, Build, Share and Operate.

consideration received by the Group was USD 3,294 million (€3,085 million) at that date in accordance with the terms of the sale agreement entered into on February 24, 2016 by the Group and a consortium made up of Dynegy and ECP.

At December 31, 2017, this transaction resulted in the recognition of a €540 million disposal gain, including €513 million of items recycled to profit or loss from other comprehensive income (translation adjustments and net investment hedges). It also reduced the Group's net debt by €3,098 million.

The transaction completes the disposal of the merchant power plant portfolio in the United States.

At December 31, 2015, the Group considered the sale of this portfolio of assets to be highly probable in view of the progress made in the divestiture process and, as a result, classified the portfolio in "Assets held for sale" (*see Note 4.1 "Assets held for sale" to the 2015 consolidated financial statements).* An impairment loss of €1,111 million was recognized against this disposal group for the year ended December 31, 2015 and its classification in "Assets held for sale" reduced the Group's net debt by €193 million at that date.

At December 31, 2016, the Group had completed the sale of the merchant hydropower generation assets, reducing its net debt by €861 million. An additional €238 million impairment loss was recognized by the Group in respect of the unsold assets remaining in the portfolio at December 31, 2016 (i.e., thermal merchant power plants), which continued to be classified as "Assets held for sale" (*see Note 4.1.1 "Disposal of a portion of the portfolio of merchant power generation assets in the United States" to the 2016 consolidated financial statements*).

4.2.2 Disposal of the Polaniec power plant (Poland)

On March 14, 2017, the Group finalized the sale of 100% of its shares in ENGIE Energia Polska, the owner of the Polaniec power plant in Poland, to Enea, a state-owned Polish company. The plant consists of seven coal units and one biomass unit with a total installed capacity of 1.9 GW. The total consideration received by the Group for the sale of ENGIE Energia Polska was €292 million.

At December 31, 2017, this transaction resulted in the recognition of a €57 million disposal gain, including €59 million of items recycled to profit or loss from other comprehensive income (translation adjustments and net investment hedges). It also reduced the Group's net debt by €240 million.

At December 31, 2016, the Group considered the sale of these assets to be highly probable in view of the progress made in the divestiture process and, as a result, classified the power plant in "Assets held for sale". An impairment loss of €375 million was recognized against this disposal group (*see Note 4.2 "Assets held for sale" to the 2016 consolidated financial statements*).

4.2.3 Disposal of the 30% interest in Opus Energy (United Kingdom)

On February 10, 2017, the Group (via its subsidiary International Power Ltd) sold its entire 30% interest in Opus Energy to the Drax group. Opus Energy's main business is selling electricity and gas to business clients in the United Kingdom. It was accounted for by the equity method in the Group's consolidated financial statements.

The total consideration received by the Group for the sale of 30% of Opus Energy was GBP 105 million (€122 million). The disposal gain totaled €21 million.

4.2.4 Disposal of the 10% interest in Petronet LNG (India)

On June 8, 2017, the Group sold its entire 10% interest in the Indian company Petronet LNG Ltd, an importer of liquefied natural gas and an operator of regasification infrastructure, on the Bombay stock exchange. The total consideration received by the Group for its shares was €436 million.

The disposal gain amounted to €349 million, including €357 million in respect of fair value adjustments that had until then been recognized in "Other comprehensive income" and recycled to the income statement.

4.2.5 Transfer of 100% of Elengy to GRTgaz (France)

On September 27, 2017, ENGIE SA, Société d'Infrastructures Gazières ("SIG", held by CNP Assurances and Caisse des Dépôts et Consignations) and GRTgaz finalized the acquisition of the entire share capital of Elengy (a subsidiary of ENGIE operating LNG terminals in France) by GRTgaz (the French natural gas transmission operator owned at 74.7% by ENGIE and 24.9% by SIG, with FPCE Alto owning the remaining interest).

In accordance with the terms of the agreement between the parties signed on July 18, 2017, the transaction was carried out in three simultaneous stages, as follows:

- SIG subscribed, by way of a €202 million cash contribution, to a GRTgaz reserved capital increase;
- ENGIE SA transferred 25% of its interest in Elengy to GRTgaz for €202 million in cash, financed through the above-mentioned capital increase;
- ENGIE SA transferred its remaining 75% interest in Elengy to GRTgaz in exchange for a reserved capital increase.

This transaction between owners had no impact on the ownership structure of GRTgaz and was completed at the close of the Extraordinary Shareholders' Meeting held by GRTgaz which approved all of the related legal provisions. The Group retains exclusive control over Elengy.

As this transaction was the sale of a non-controlling interest, the difference between the sale price and the carrying amount of the investment, i.e., €69 million, was recognized in shareholders' equity. The transaction also reduced the Group's net debt by €195 million, after transaction costs.

4.2.6 Completion of the sale of ENGIE's United Kingdom nuclear business

On July 25, 2017, ENGIE completed the transfer of its entire 38.10% remaining stake in NuGen to Toshiba. NuGen, a UK based company accounted for using the equity method in the Group's consolidated financial statements, plans to build three reactors at Moorside, located in Cumbria, North West England.

On April 4, 2017, ENGIE had announced its decision to exercise its contractual rights in view of transferring its stake in the project, as the company was facing significant financial difficulties.

The completed transaction resulted in the recognition of GBP 109 million (€122 million) in proceeds from the sale, representing a disposal gain of €93 million.

4.2.7 Disposal of a portfolio of power plant in the United Kingdom

On October 31, 2017, the Group finalized the sale of a portfolio of power plants in the United Kingdom to Energy Capital Partners (ECP), a private equity firm that specializes in investments in energy infrastructure. The portfolio represents a total installed capacity of 1,841 MW (at 100%). It had been fully consolidated in ENGIE's consolidated financial statements and was 75%-owned by the Group, with the remaining interest held by Mitsui. The sold portfolio comprised:

- the Saltend combined-cycle gas plant in East Yorkshire, with a capacity of 1,197 MW;
- the Deeside gas-fired power plant in North Wales, with a capacity of 515 MW;
- the Indian Queens oil-fired thermal power plant in Cornwall, with a capacity of 129 MW.

The transaction was carried out based on a total enterprise value of GBP 205 million (€232 million). The Group received consideration of GBP 205 million (€232 million), corresponding to GBP 72 million (€82 million) for the sale of its entire interest in this portfolio of power plants – of which 25% was paid back to Mitsui as dividends – and GBP 133 million (€156 million) for the repayment of shareholder loans granted to this portfolio of power generation assets.

Besides the reversal of an impairment loss of €93 million previously recorded by the Group on this portfolio of power plants (*see Note 8.2 "Impairment losses"*), this transaction resulted in the recognition of a €61 million disposal gain in 2017, including €47 million recycled to profit or loss from other comprehensive income (translation adjustments and net investment hedges).

4.3 Acquisitions carried out in 2017

4.3.1 Acquisition of Keepmoat Regeneration (United Kingdom)

On April 28, 2017, the Group finalized the acquisition of 100% of Keepmoat Regeneration, the UK leader in regeneration services for local authorities. Keepmoat Regeneration designs, builds, refurbishes and regenerates residential buildings. The acquisition was carried out based on a transaction price of GBP 331 million (€392 million).

The accounting for this business combination was provisional at December 31, 2017. The provisional goodwill amounts to €453 million.

4.3.2 Acquisition of Icomera (Sweden)

On June 15, 2017, the Group (via its subsidiary ENGIE Ineo) finalized the acquisition of 100% of Swedish company Icomera AB, a developer of multi-service on board connectivity solutions for passengers and transport operators, representing a total investment of €119 million.

The accounting for this business combination was provisional at December 31, 2017. The provisional goodwill amounts to €113 million.

4.3.3 Acquisition of the non-controlling interests in La Compagnie du Vent (France)

On April 4, 2017, the Group agreed to acquire SOPER's 41% non-controlling interest in La Compagnie du Vent. This transaction between owners took effect on June 19, 2017 when the conditions precedent were met.

The agreement entailed a €131 million increase, prior to the transaction, in the fair value of the financial liability representing the put option granted by the Group on the non-controlling interests in La Compagnie du Vent, with a corresponding amount recognized in goodwill in accordance with the Group's accounting policies (*see Note 1.4.11.2 "Financial liabilities").* At December 31, 2017, the financial liability representing the put option had been fully extinguished.

4.3.4 Acquisition of 40% interest in Tabreed (United Arab Emirates)

On August 16, 2017, the Group finalized the acquisition of a 40% interest in the National Central Cooling Company PJSC ("Tabreed"). Tabreed is listed on the Dubai stock exchange and specializes in innovative cooling solutions for major infrastructure projects in the United Arab Emirates and in the Gulf Cooperation Council (GCC) countries. This interest was acquired for a total consideration of AED 2.8 billion (€657 million) from the Mubadala Investment Company ("Mubadala"), a strategic investment company based in Abu Dhabi. Mubadala retains a 42% interest in Tabreed.

The 40% interest in Tabreed is accounted for using the equity method in the Group's consolidated financial statements. This joint venture's carrying amount was €656 million at December 31, 2017.

4.4 Other transactions in 2017

Various other acquisitions, equity transactions and disposals took place in 2017, including the acquisition of the Dutch company EV-Box, a supplier of electric vehicle charging solutions, and the acquisition of six Talen Energy group companies, specializing in B2B services, in the United States. Their individual and cumulative impacts on the Group’s consolidated financial statements are not significant.

4.5 Disposals realized in 2016

Disposals carried out in 2016 led to a €3,992 million decrease in net debt compared with December 31, 2015.

In millions of euros	**Disposal price**	**Reduction in net debt at Dec. 31, 2016**
Transactions finalized in 2016 relating to "Assets held for sale" at December 31, 2015	**868**	**(861)**
Disposal of a portion of the portfolio of merchant power generation assets - United States		
- Disposal of the merchant hydropower generation assets	868	(861)
Transactions carried out in 2016	**1,786**	**(2,531)**
Disposal of Paiton coal-fired power plants - Indonesia	1,167	(1,359)
Disposal of Meenakshi coal-fired power plants - India	(242)	(142)
Disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN) - Chile	195	(267)
Disposal of a portfolio of Maïa Eolis' wind farm assets to Futures Energies Investissements Holding (FEIH) - France	102	(199)
Disposal of "available-for-sale securities"		
- Stake in the Walloon distribution network operator	410	(410)
- Stake in Transportadora de Gas del Perú (TgP)	154	(154)
Other disposals		**(601)**
TOTAL		**(3,992)**

NOTE 5 FINANCIAL INDICATORS USED IN FINANCIAL COMMUNICATION

The purpose of this note is to present the main non-GAAP financial indicators used by the Group as well as their reconciliation with the aggregates of the IFRS consolidated financial statements.

5.1 EBITDA

The reconciliation between EBITDA and current operating income after share in net income of entities accounted for using the equity method is as follows:

In millions of euros	Dec. 31, 2017 (1)	Dec. 31, 2016 (2)
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,273**	**5,636**
Net depreciation and amortization/Other	3,980	3,815
Share-based payments (IFRS 2)	38	59
Non-recurring share in net income of entities accounted for using the equity method	26	(19)
EBITDA	**9,316**	**9,491**

(1) Since January 1, 2017, the nuclear contribution in Belgium has been recognized in EBITDA and amounts to €142 million.

(2) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

5.2 Net recurring income Group share

Net recurring income Group share is a financial indicator used by the Group in its financial reporting to present net income Group share adjusted for unusual or non-recurring items.

This financial indicator therefore excludes:

- all items presented between the lines "Current operating income after share in net income of entities accounted for using the equity method" and "Income/(loss) from operating activities", i.e. "Mark-to-market on commodity contracts other than trading instruments", "Impairment losses", "Restructuring costs", "Changes in scope of consolidation" and "Other non-recurring items". These items are defined in Note 1.4.17 "Current operating income";
- the following components of net financial income/(loss): the impact of debt restructuring, compensation payments on the early unwinding of derivative instruments net of the reversal of the fair value of these derivatives that were settled early, changes in the fair value of derivative instruments which do not qualify as hedges under IAS 39 – *Financial Instruments: Recognition and Measurement,* as well as the ineffective portion of derivative instruments that qualify as hedges;
- the income tax impact of the items described above, determined using the statutory income tax rate applicable to the relevant tax entity;
- the recovery from the French State of the 3% tax on dividends on 2017;
- the impact of tax rate changes in France and in the United States and other non-recurring measures in 2017 *(see Note 10.1.2)*;
- the deferred tax income of €904 million recorded in 2016 in respect of the impact of tax rate change on the deferred balance in France as of January 1, 2020 as approved by the 2017 French Finance Law *(see Note 10.1.2);*
- net non-recurring items included in "Share in net income of entities accounted for using the equity method". The excluded items correspond to the non-recurring items as defined above.

The reconciliation of net income/(loss) with net recurring income Group share is as follows:

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016 (1)
NET INCOME/(LOSS) GROUP SHARE		**1,423**	**(415)**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS, GROUP SHARE		**196**	**(111)**
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS, GROUP SHARE		**1,226**	**(304)**
Non-controlling interests relating to continued operations		722	626
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS		**1,948**	**322**
Reconciliation items between CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD and INCOME/(LOSS) FROM OPERATING ACTIVITIES		**2,454**	**3,512**
Mark-to-market on commodity contracts other than trading instruments	*8*	*307*	*(1,279)*
Impairment losses	*8*	*1,317*	*4,035*
Restructuring costs	*8*	*671*	*450*
Changes in scope of consolidation	*8*	*(752)*	*(544)*
Other non-recurring items	*8*	*911*	*850*
Other adjusted items		**(1,268)**	**(754)**
Ineffective portion of derivatives qualified as fair value hedges	*9.3*	*2*	*5*
Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments	*9.2*	*98*	*-*
Change in fair value of derivatives not qualified as hedges and ineffective portion of derivatives qualified as cash flow hedges	*9.3*	*186*	*103*
Recovery from the French State of the 3% tax on dividends		*(408)*	*-*
Tax rate changes in France, in the United States and other non-recurring measures		*(479)*	*(904)*
Other adjusted tax impacts		*(693)*	*61*
Non-recurring income included in share in net income of entities accounted for using the equity method		*26*	*(19)*
NET RECURRING INCOME RELATING TO CONTINUED OPERATIONS		**3,134**	**3,080**
Net recurring income relating to continued operations attributable to non-controlling interests		762	650
NET RECURRING INCOME RELATING TO CONTINUED OPERATIONS, GROUP SHARE		**2,372**	**2,430**
Net recurring income relating to discontinued operations, Group share		291	47
NET RECURRING INCOME GROUP SHARE		**2,662**	**2,477**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

The reconciliation of net income relating to discontinued operations Group share with net recurring income relating to discontinued operations Group share is as follows:

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS, GROUP SHARE		**196**	**(111)**
Non-controlling interests relating to discontinued operations		93	(47)
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS		**290**	**(158)**
Reconciliation items between CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD and INCOME/(LOSS) FROM OPERATING ACTIVITIES		147	208
Other adjusted items		(21)	19
NET RECURRING INCOME RELATING TO DISCONTINUED OPERATIONS		**416**	**68**
Net recurring income relating to discontinued operations attributable to non-controlling interests		125	21
NET RECURRING INCOME RELATING TO DISCONTINUED OPERATIONS, GROUP SHARE		**291**	**47**

5.3 Industrial capital employed

The reconciliation of industrial capital employed with items in the statement of financial position is as follows:

In millions of euros		Dec. 31, 2017	Dec. 31, 2016
(+)	Property, plant and equipment and intangible assets, net	57,528	64,378
(+)	Goodwill	17,285	17,372
(-)	*Goodwill Gaz de France - SUEZ and International Power [1]*	*(7,715)*	*(8,448)*
(+)	IFRIC 4 and IFRIC 12 receivables	1,496	1,008
(+)	Investments in entities accounted for using the equity method	7,409	6,624
(-)	*Goodwill arising on the International Power combination [1]*	*(144)*	*(173)*
(+)	Trade and other receivables, net	20,311	20,835
(-)	*Margin calls [1, 2]*	*(1,110)*	*(1,691)*
(+)	Inventories	4,155	3,656
(+)	Other current and non-current assets	9,059	11,123
(+)	Deferred tax	(4,417)	(5,525)
(+)	*Cancellation of deferred tax on other recyclable items [1]*	*(236)*	*(477)*
(-)	Provisions	(21,768)	(22,208)
(+)	*Actuarial gains and losses in shareholders' equity (net of deferred tax) [1]*	*2,438*	*2,566*
(-)	Trade and other payables	(16,432)	(17,075)
(+)	*Margin calls [1, 2]*	*473*	*771*
(-)	Other liabilities	(15,803)	(17,106)
INDUSTRIAL CAPITAL EMPLOYED		**52,528**	**55,629**

(1) For the purpose of calculating industrial capital employed, the amounts recorded in respect of these items have been adjusted from those appearing in the statement of financial position.

(2) Margin calls included in "Trade and other receivables, net" and "Trade and other payables" correspond to advances received or paid as part of collateralization agreements set up by the Group to reduce its exposure to counterparty risk on commodity transactions.

5.4 Cash flow from operations (CFFO)

The reconciliation of cash flow from operations (CFFO) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 [1]
Cash generated from operations before income tax and working capital requirements	8,305	9,117
Tax paid	(894)	(896)
Change in working capital requirements	1,251	1,842
Interest received on non-current financial assets	83	12
Dividends received on non-current financial assets	170	142
Interest paid	(745)	(817)
Interest received on cash and cash equivalents	100	137
Change in financial assets at fair value through income	(181)	(257)
(+) Change in financial assets at fair value through income recorded in the statement of financial position and other	*222*	*297*
CASH FLOW FROM OPERATIONS (CFFO)	**8,311**	**9,578**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

5.5 Capital expenditures (CAPEX)

The reconciliation of capital expenditures (CAPEX) with items in the statement of cash flows is as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Acquisitions of property, plant and equipment and intangible assets	5,779	5,290
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	690	411
(+) Cash and cash equivalents acquired	*32*	*80*
Acquisitions of investments in entities accounted for using the equity method and joint operations	1,446	208
Acquisitions of available-for-sale securities	258	391
Change in loans and receivables originated by the Group and other	838	(30)
(+) Other	*3*	-
Change in ownership interests in controlled entities	(1)	26
(+) Payments received in respect of the disposal of non-controlling interests	*222*	-
TOTAL CAPITAL EXPENDITURE (CAPEX)	**9,267**	**6,375**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

5.6 Net debt

Net debt is presented in Note 15.3 "Net debt".

5.7 Economic net debt

Economic net debt is as follows:

In millions of euros	Notes	Dec. 31, 2017	Dec. 31, 2016
NET DEBT	15	**22,548**	**24,807**
E&P internal debt	15	1,612	1,727
NET DEBT (excluding E&P internal debt)		**20,936**	**23,080**
Future minimum operating lease payments	21	3,463	3,644
(-) E&P			(103)
Provisions for back-end of the nuclear fuel cycle	18	5,914	5,630
Provisions for dismantling of plant and equipment	18	5,728	5,671
Provisions for site rehabilitation	18	313	1,487
(-) E&P			(1,128)
Post-employment benefit - Pension	19	1,763	2,067
(-) E&P			(166)
(-) Infrastructures regulated companies		*(41)*	(26)
Post-employment benefit - Reimbursement rights	19	(159)	(130)
Post-employment benefit - Others benefits	19	4,277	4,286
(-) E&P			(50)
(-) Infrastructures regulated companies		*(2,421)*	(2,354)
Deferred tax assets for pension and related obligations	10	(1,319)	(1,451)
(-) E&P			9
(-) Infrastructures regulated companies		*578*	635
Plan assets relating to nuclear provisions, inventories of uranium and a receivable of Electrabel towards EDF Belgium	15 & 25	(2,673)	(2,676)
ECONOMIC NET DEBT		**36,362**	**38,426**

NOTE 6 SEGMENT INFORMATION

6.1 Operating segments and reportable segments

ENGIE is organized into 24 Business Units (BUs) or operating segment primarily based on a region-centered approach within a single country or group of countries. Each Business Unit corresponds to an "operating segment" whose operational and financial performance is regularly reviewed by the Group's Executive Committee, which is the Group's “chief operating decision maker” within the meaning of IFRS 8.

These operating segments are grouped into nine reportable segments to present the Group's segment information: North America, Latin America, Africa/Asia, Benelux, France, Europe excluding France & Benelux, Infrastructures Europe, GEM & LNG and Other.

Exploration & Production (E&P) is now presented under discontinued operations.

6.1.1 Description of reportable segments

- **North America**: includes power generation, energy services and natural gas and electricity sales activities in the United States, Canada and Puerto Rico.
- **Latin America**: groups together the activities of (i) the Brazil BU and (ii) the Latin America BU (Argentina, Chile, Mexico and Peru). The subsidiaries concerned are involved in the centralized power generation and gas chain businesses, and energy services.
- **Africa/Asia**: groups together the activities of the following BUs: (i) Asia-Pacific (Australia, New Zealand, Thailand, Singapore, Indonesia and Laos), (ii) China, (iii) Africa (Morocco, South Africa) and (iv) the Middle East, South and Central Asia and Turkey (including India and Pakistan). In all of these regions, the Group is active in electricity generation and sales, gas distribution and sales, energy services and seawater desalination in the Arabian peninsula.
- **Benelux**: includes the Group's activities in Belgium, the Netherlands and Luxembourg: (i) power generation using its nuclear power plants and renewable power generation facilities, (ii) natural gas and electricity sales and (iii) energy services.
- **France**: groups together the activities of the following BUs: (i) France BtoB: energy sales and services for buildings and industry, cities and regions and major infrastructures, (ii) France BtoC: sales of energy and related services to individual and professional customers, (iii) France Renewable Energy: development, construction, financing, operation and maintenance of all renewable power generation assets in France (excluding Solairedirect) and (iv) France Networks, which designs, finances, builds and operates decentralized energy production and distribution facilities (heating and cooling networks).
- **Europe excluding France & Benelux**: groups together the activities of the following BUs: (i) United Kingdom (management of renewable power generation assets and the portfolio of distribution assets, supply of energy services and solutions, etc.) and (ii) North, South and Eastern Europe (sales of natural gas and electricity and related energy services and solutions, operation of renewable power generation assets, management of distribution networks).
- **Infrastructures Europe**: groups together the GRDF, GRTgaz, Elengy and Storengy BUs, which operate natural gas transportation, storage and distribution networks and facilities, and LNG terminals, mainly in France and Germany. They also sell access rights to these infrastructures to third parties.
- **GEM & LNG**: includes the activities of the Global Energy Management (GEM) and Global LNG BUs. The aim of the GEM BU is to manage and optimize the Group's portfolios of physical and contractual assets (excluding gas infrastructures), particularly on the European market, on behalf of the BUs that hold power generation assets. It is also responsible for sales of energy to major pan-European and national industrial clients, and leverages its expertise in the energy-related financial markets to provide solutions to third parties. The Global LNG BU manages a long-term supply contract portfolio and interests in LNG infrastructures and operates an LNG fleet.
- **Other**: includes the activities of the following BUs: (i) Generation Europe, comprising the Group's thermal power generation activities in Europe, (ii) Tractebel (engineering companies specializing in energy, hydraulics and infrastructures), (iii) GTT (specialized in the design of cryogenic membrane confinement systems for sea

transportation and storage of LNG, both on land and at sea), as well as the Group's holding and corporate activities which include the entities centralizing the Group’s financing requirements, Solairedirect's activities, energy sales to BtoB in France (*Entreprises & Collectivités*) and the contribution of the associate SUEZ.

As from January 1, 2017 and subsequent to changes brought by the Group to its organization, energy sales to BtoB in France (Entreprises & Collectivités) – previously classified within the France reportable segment – are presented within the Other reportable segment (with no restatement of 2016 comparative data).

The main commercial relationships between the reportable segments are as follows:

- relationships between the "Infrastructures Europe" reportable segment and the users of these infrastructures, i.e. the "GEM & LNG" ,"France" and “Other” (E&C) reportable segments: services relating to the use of the Group’s gas infrastructures in France are billed based on regulated fees applicable to all network users, except for storage infrastructure. Prices for the reservation and use of storage facilities are established by storage operators based on a "negotiated access" system;
- relationships between the "GEM & LNG" reportable segment and the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments: the "GEM & LNG" reportable segment manages the Group's natural gas supply contracts and sells gas at market prices to commercial companies within the “Other” (E&C), "France", "Benelux" and "Europe excluding France & Benelux" reportable segments. As regards electricity, GEM manages and optimizes the power stations and sales portfolios on behalf of entities that hold power generation assets and deducts a percentage of the energy margin in return for providing these services. The revenue and margins related to power generation activities (minus the percentage deducted by GEM) are reported by the segments that hold power generation assets ("France", "Benelux", "Europe excluding France & Benelux" and "Generation Europe" within the "Other" reportable segment);
- relationships between the "Generation Europe" segment, which is part of the "Other" reportable segment, and the commercial entities in the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments: a portion of the power generated by thermal assets within the "Generation Europe" BU is sold to commercial entities from these segments at market prices.

Due to the variety of its businesses and their geographical location, the Group serves a very diverse range of situations and customer types (industry, local authorities and individual customers). Accordingly, no external customer represents individually 10% or more of the Group’s consolidated revenues.

6.2 Key indicators by reportable segment

Key indicators by reportable segments (except for 2016 industrial capital employed), presented hereafter, no longer take into account the contribution of exploration-production activities (E&P) following the classification of the latter under "Discontinued operations" on May 11, 2017 in accordance with IFRS 5 (*see Note 4.1.1 "Disposal of the exploration-production business"*).

REVENUES

	Dec. 31, 2017			Dec. 31, 2016		
In millions of euros	External revenues	Intra-Group Revenues	Total	External revenues	Intra-Group Revenues	Total
North America	2,934	33	2,967	3,814	39	3,853
Latin America	4,511	-	4,511	4,075	1	4,076
Africa/Asia	3,984	-	3,984	3,804	4	3,808
Benelux	8,865	976	9,842	9,044	1,230	10,274
France	16,659	105	16,764	20,332	383	20,714
Europe excluding France & Benelux	8,848	160	9,008	8,118	112	8,230
Infrastructures Europe	3,488	3,224	6,712	3,267	3,495	6,762
GEM & LNG (1)	9,391	7,009	16,400	8,981	6,979	15,959
E&P	-	-	-	-	-	-
Others	6,347	1,979	8,327	3,405	1,308	4,712
Elimination of internal transactions	-	(13,487)	(13,487)	-	(13,550)	(13,550)
TOTAL REVENUES	**65,029**	**-**	**65,029**	**64,840**	**-**	**64,840**

(1) *As of October 1, 2017, GEM BU revenues include the trading margin relating to realized and unrealized gains and losses accounted for on most of the Group's long-term gas supply contracts and on a power exchange contract according to their new management methods resulting in a change in accounting treatment (trading accounting) (see Note 8.5 "Other non-recurring items").*

EBITDA

In millions of euros	Dec. 31, 2017 (1)	Dec. 31, 2016
North America	169	475
Latin America	1,711	1,696
Africa/Asia	1,323	1,162
Benelux	551	755
France	1,475	1,315
Europe excluding France & Benelux	655	612
Infrastructures Europe	3,384	3,459
GEM & LNG	(82)	3
E&P	-	-
Others	128	15
TOTAL EBITDA	**9,316**	**9,491**

(1) *The net expense relating to the nuclear contribution in Belgium is classified in EBITDA as from January 1, 2017 and amounts to €142 million.*

DEPRECIATION AND AMORTIZATION

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
North America	(53)	(48)
Latin America	(432)	(410)
Africa/Asia	(244)	(235)
Benelux	(558)	(381)
France	(606)	(612)
Europe excluding France & Benelux	(201)	(203)
Infrastructures Europe	(1,444)	(1,390)
GEM & LNG	(52)	(74)
E&P	-	-
Others	(391)	(462)
TOTAL DEPRECIATION AND AMORTIZATION	**(3,980)**	**(3,815)**

SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
North America	80	63
Latin America	(18)	197
Africa/Asia	202	312
Benelux	5	2
France	8	(22)
Europe excluding France & Benelux	36	60
Infrastructures Europe	9	11
GEM & LNG	2	1
E&P	-	-
Others	115	127
Of which share in net income of SUEZ	*100*	*139*
TOTAL SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**437**	**752**

Associates and joint ventures account for €269 million and €168 million respectively of share in net income of entities accounted for using the equity method at December 31, 2017, compared to €671 million and €81 million at December 31, 2016.

CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
North America	120	430
Latin America	1,278	1,284
Africa/Asia	1,067	923
Benelux	(9)	371
France	882	695
Europe excluding France & Benelux	439	410
Infrastructures Europe	1,940	2,068
GEM & LNG	(137)	(74)
E&P	-	-
Others	(308)	(472)
TOTAL CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,273**	**5,636**

INDUSTRIAL CAPITAL EMPLOYED

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
North America	1,674	1,520
Latin America	9,147	8,793
Africa/Asia	4,908	5,520
Benelux	(3,015)	(2,552)
France	5,827	5,304
Europe excluding France & Benelux	5,028	4,720
Infrastructures Europe	19,934	19,693
GEM & LNG	945	1,330
E&P	-	2,855
Others	8,080	8,445
Of which SUEZ equity value	*2,126*	*1,977*
TOTAL INDUSTRIAL CAPITAL EMPLOYED	**52,528**	**55,629**

CAPITAL EXPENDITURE (CAPEX)

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
North America	316	519
Latin America	2,241	1,037
Africa/Asia	879	212
Benelux	688	680
France	1,067	1,083
Europe excluding France & Benelux	625	169
Infrastructures Europe	1,718	1,552
GEM & LNG	491	127
E&P	-	-
Others	1,242	997
TOTAL CAPITAL EXPENDITURE (CAPEX)	9,267	6,375

6.3 Key indicators by geographic area

The amounts set out below are analyzed by:

- destination of products and services sold for revenues;
- geographic location of consolidated companies for industrial capital employed.

	Revenues		Industrial capital employed	
In millions of euros	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
France	25,722	24,898	31,025	29,721
Belgium	8,475	9,359	(2,224)	(1,326)
Other EU countries	15,584	14,940	7,272	8,827
Other European countries	1,178	1,272	293	686
North America	3,873	4,691	2,149	1,906
Asia, Middle East & Oceania	5,524	5,531	4,998	6,347
South America	4,272	3,857	8,941	8,598
Africa	401	291	75	870
TOTAL	65,029	64,840	52,528	55,629

NOTE 7 CURRENT OPERATING INCOME

7.1 Revenues

Group revenues break down as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Energy sales	43,188	44,033
Rendering of services	21,424	20,306
Lease and construction contracts	417	501
REVENUES	**65,029**	**64,840**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued activities" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Realized but not yet metered revenues (so called un-metered revenues) mainly relate to France and Belgium for an amount of €3,034 million at December 31, 2017.

"Lease and construction contracts" mainly include operating lease revenues for €329 million (€412 million in 2016) (see *Note 21.2 "Operating leases for which ENGIE acts as lessor*").

7.2 Personnel costs

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Short-term benefits	(9,517)	(9,464)
Share-based payments (see Note 22)	(45)	(59)
Costs related to defined benefit plans (see Note 19.3.4)	(378)	(337)
Costs related to defined contribution plans (see Note 19.4)	(142)	(137)
PERSONNEL COSTS	**(10,082)**	**(9,996)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued activities" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

7.3 Depreciation, amortization and provisions

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Depreciation and amortization (see Notes 13 and 14)	(3,980)	(3,816)
Net change in write-downs of inventories, trade receivables and other assets	(48)	(60)
Net change in provisions (see Note 18)	292	(348)
DEPRECIATION, AMORTIZATION AND PROVISIONS	**(3,736)**	**(4,223)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued activities" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

At December 31, 2017, depreciation and amortization mainly break down as €779 million for intangible assets and €3,390 million for property, plant and equipment.

NOTE 8 INCOME/(LOSS) FROM OPERATING ACTIVITIES

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 [(1)]
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**5,273**	**5,636**
Mark-to-market on commodity contracts other than trading instruments	(307)	1,279
Impairment losses	(1,317)	(4,035)
Restructuring costs	(671)	(450)
Changes in scope of consolidation	752	544
Other non-recurring items	(911)	(850)
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**2,819**	**2,124**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

8.1 Mark-to-market on commodity contracts other than trading instruments

In 2017, this item represents a net expense of €307 million, compared with net income of €1,279 million in 2016. It mainly reflects the changes in the fair value of (i) electricity and natural gas sale and purchase contracts falling within the scope of IAS 39 and (ii) financial instruments used as economic hedges but not eligible for hedge accounting.

This expense is due to (i) a negative price effect related to changes in the forward prices of the underlying commodities, coupled with (ii) the negative impact of the settlement of positions over the period with a positive fair value at December 31, 2016.

8.2 Impairment losses

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 [(1)]
Impairment losses:		
Goodwill	(481)	(1,690)
Property, plant and equipment and other intangible assets	(953)	(2,296)
Investments in entities accounted for using the equity method and related provisions	(31)	(98)
Financial assets	(25)	(49)
TOTAL IMPAIRMENT LOSSES	**(1,489)**	**(4,132)**
Reversal of impairment losses:		
Property, plant and equipment and other intangible assets	165	95
Financial assets	8	2
TOTAL REVERSALS OF IMPAIRMENT LOSSES	**173**	**97**
TOTAL	**(1,317)**	**(4,035)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Net impairment losses recognized at December 31, 2017 amounted to €1,317 million, primarily relating to the Storengy (€494 million) and Generation Europe (€317 million) CGUs. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share for 2017 amounts to €1,146 million.

Impairment losses recognized against goodwill, property, plant and equipment, intangible assets and investments in entities accounted for using the equity method at December 31, 2017 can be analyzed as follows:

In millions of euros	Location	Impairment losses on goodwill	Impairment losses on property, plant and equipment and intangible assets	Impairment losses on entities accounted for using the equity method and related provisions	Total impairment losses	Valuation method	Discount rate
Storengy goodwill CGU		**(338)**	**(156)**	**-**	**(494)**		
Gas storage	*Germany*		(156)		(156)	Value-in-use - DCF	4.5% - 8.7%
Generation Europe goodwill CGU		**-**	**(421)**	**-**	**(421)**		
Thermal power plants			-		-		
	Germany		*(184)*		(184)	Value-in-use - DCF	*8.4%*
	Netherlands		*(227)*		(227)	Value-in-use - DCF	*7.1% - 8.4%*
	Others		*(10)*		(10)		
Australia goodwill CGU		**(141)**	**-**	**-**	**(141)**		
Power generation assets		(141)			(141)	Fair value less costs to sell	
Middle-East North, South and Central Asia and Turkey goodwill CGU		**-**	**(125)**	**-**	**(125)**		
Power generation assets			(125)		(125)	Value-in-use - DCF	11.0%
B2C goodwill CGU		**-**	**(43)**	**-**	**(43)**		
GDF Gaz de France brand			(43)		(43)	Value-in-use - DCF	
North America goodwill CGU		**-**	**(43)**	**(9)**	**(52)**		
Customer relations intangible	United States		(29)		(29)	Value-in-use - DCF	
Other			(14)	(9)	(23)		
Latin America goodwill CGU		**-**	**(41)**	**-**	**(41)**		
Hydropower generation asset	Chile		(37)		(37)	Value-in-use - DCF	8.0%
Other			(4)		(4)		
Other impairment losses		**(2)**	**(124)**	**(22)**	**(147)**		
TOTAL AT DECEMBER 31, 2017		**(481)**	**(953)**	**(31)**	**(1,464)**		

8.2.1 Information on cash flow projections used in impairment tests

In most cases, the recoverable amount of CGUs is determined by reference to a value in use that is calculated using cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on extrapolated cash flows beyond that time frame.

Cash flow projections are determined on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates) and price forecasts resulting from the Group's reference scenario for 2021-2040. The forecasts that feature in the reference scenario were approved by the Executive Committee in December 2017. The forecasts and projections included in the reference scenario were determined on the basis of the following inputs:

- forward market prices over the liquidity period for fuel (coal, oil and gas), CO_2 and electricity on each market;
- beyond this period, medium- and long-term energy prices were determined by the Group based on macroeconomic assumptions and fundamental supply and demand equilibrium models, the results of which are regularly compared against forecasts prepared by external energy sector specialists. Long-term projections for CO_2 prices are those presented in the "Canfin, Grandjean et Mestrallet" report published in July 2016. More specifically, medium- and long-term electricity prices were determined by the Group using electricity demand forecasting models, medium- and long-term forecasts of fuel and CO_2 prices, and expected trends in installed capacity and in the technology mix of the production assets within each power generation system.

8.2.2 Impairment losses on Storengy CGU goodwill

The goodwill allocated to the Storengy CGU amounted to €543 million before the result of the impairment test in 2017. The Storage CGU groups together the entities that own, operate, market and sell underground natural gas storage capacities in France, Germany, and the United Kingdom.

Storage activities in Europe were impacted by changes in the regulatory environment in France and the downward revision of long-term spread forecasts in Germany.

In France, Article 12 of the law on ending oil and gas exploration and production, published in the *Journal officiel* on December 31, 2017, provides for the regulation of storage of natural gas activities in the country.

Following the consultations initiated by the public authorities alongside various industry players (storage operators and natural gas suppliers in France), the French Energy Regulation Commission (CRE) has, in a decision dated February 22 2018, set the terms of the regulation, which will be valid for a period of two years based on:

- the amount of the Regulated Asset Base (RAB), corresponding to the value assigned by the regulator to the assets operated by the distributor;
- the rate of return guaranteed by the regulator;
- 2018 revenue levels.

The regulation covers all storage facilities, but its scope may be subsequently revised when the Multi-Annual Energy Plan is updated.

The value in use of the storage activities in France was calculated using cash flow forecasts for the 2018-2023 period. The terminal value corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2023.

In Germany and the United Kingdom, the value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan approved by the Executive Committee and the Board of Directors. Cash flow projections beyond this three-year period were based on the reference scenario adopted by the Group.

Cash flows for storage activities in Germany were projected up to 2025, which is when the Group estimates that seasonal spreads will have reached their long-term price equilibrium. A terminal value was calculated for 2026 by applying to the normative cash flows for 2025 a growth rate corresponding to the long-term inflation rate expected in the Eurozone.

The discount rates applied to these cash flow projections were 7.8% for the United Kingdom and between 4.5% and 8.7% for the German storage activities.

Results of the impairment test

Given the terms of the regulation governing storage activities in France and the downward revision of long-term spreads in Germany, the recoverable amount of the Storengy CGU was €451 million lower than its carrying amount at December 31, 2017. The Group therefore recognized an impairment loss of €494 million, of which €338 million against the goodwill allocated to the CGU and €156 million against property, plant and equipment in Germany.

8.2.3 Impairment losses on Australia CGU goodwill

The goodwill allocated to the Australia CGU amounted to €170 million at December 31, 2017. The Australia CGU groups together power generation activities, marketing of natural gas and electricity, and Energy Services in the Oceania region (Australia and New Zealand).

At December 31, 2017, the Group classified the Loy Yang B coal-fired power plant in Australia in “Assets held for sale” (*see Note 4.1.3*). As the carrying amount was greater than the expected sale price, the Group recognized an impairment loss of €141 million at December 31, 2017, against the entire goodwill allocated to the assets held for sale.

8.2.4 Impairment losses on property, plant and equipment and intangible assets

Net impairment losses recognized at December 31, 2017 amounted to €788 million, primarily relating to:

- **Generation Europe CGU assets**

The Group recognized a €317 million net impairment loss against its thermal power plants in Europe at December 31, 2017.

Coal-fired power plants in Europe have been subject to unfavorable conditions, including the expected impact of the stricter regulatory environment, which has resulted in lower captured margins over the long term, impacting the profitability of these assets. Given the downward revision of the cash flow projections, the Group recognized impairment losses on coal-fired power plants in Germany and the Netherlands of €184 million and €146 million, respectively.

The Group also recognized (i) an impairment loss of €74 million, resulting from the decision to permanently shut down a gas-fired power plant unit in the Netherlands in 2019, and (ii) the reversal of impairment losses of €103 million, mainly relating to three thermal assets in the United Kingdom prior to their disposal in the second half of 2017 (*see Note 4.2.7*).

- **Other impairment losses**

Other impairment losses recognized by the Group chiefly concern:

- a gas-fired power plant in Turkey (€125 million), stemming from the downward revision of forecast captured margins over the long term;
- the residual value of the intangible assets corresponding to the corporate brand GDF Gaz de France (€43 million), following the Group's decision to discontinue the use of the "Tarif Réglementé Gaz GDF SUEZ" brand as of January 1, 2018. An impairment loss of €455 million was recognized in respect of the brand in 2015 and the residual value of €71 million was to be amortized over a period of five years, corresponding to the period during which the Group considered that the benefits and attributes associated with the historic brand would continue to benefit all B2C sales activities;
- a hydropower plant in Chile (€37 million).

8.2.5 Impairment losses recognized in 2016

In 2016, against a backdrop of persistently poor economic conditions over the medium- to long-term, the Group significantly downgraded its reference scenario for medium- to long-term electricity prices in Europe, as well as the margins captured by thermal power plants. The change was due mainly to an upward revision of the share of renewable energy capacity in the European energy mix, coupled with a downward revision of fuel price forecasts.

The resulting impairment losses recognized against goodwill, property, plant and equipment and intangible assets at December 31, 2016 amounted to €4,084 million and can be analyzed as follows:

In millions of euros	Location	Impairment losses on goodwill	Impairment losses on property, plant and equipment and intangible assets	Impairment losses on entities accounted for using the equity method and related provisions	Total [(1)]	Valuation method	Discount rate
Benelux goodwill CGU		**(1,362)**	**(68)**	**-**	**(1,430)**		
Drilling rig	Netherlands		(46)			Fair value	
Other			(22)				
Generation Europe goodwill CGU		**(139)**	**(520)**	**-**	**(659)**		
Assets classified as "Assets held for sale"	*Poland*	(139)	(237)			*Fair value less costs to sell*	
Thermal power plants	*Netherlands, Germany, France, Italy, United Kingdom*		(283)			*Value-in-use - DCF*	*6.5% - 7.5%*
France Renewable Energy goodwill CGU		**-**	**(419)**	**-**	**(419)**		
Hydropower generation asset			(414)			Value-in-use - DCF	7.8%
Other			(5)	-			
North, South and Eastern Europe goodwill CGU		**-**	**(148)**	**(91)**	**(239)**		
Power generation assets	Poland		(119)			Value-in-use - DCF	9.5%
Interests in groups present across the gas chain	Germany			(91)			
Other			(29)				
North America goodwill CGU		**-**	**(357)**	**-**	**(357)**		
Portfolio of merchant power generation assets	United States		(238)			Fair value less costs to sell	
LNG terminal	United States		(53)			Value-in-use - DCF	6.7%
Power generation assets	United States, Canada		(66)			Value-in-use - DCF	3.9% - 7.5%
Latin America goodwill CGU		**-**	**(109)**	**-**	**(109)**		
Hydropower generation asset	Chile		(72)			Value-in-use - DCF	8.0%
Other			(37)				
GTT goodwill CGU		**(161)**	**-**	**-**	**(161)**		
Goodwill	France	(161)				Fair value	
Global LNG goodwill CGU		**(24)**	**(153)**	**-**	**(177)**		
LNG carriers			(141)			Fair value	
Other			(12)				
Global Energy Management (GEM) CGU		**-**	**(350)**	**-**	**(350)**		
Drawing rights on power generation assets	Italy		(225)			Value-in-use - DCF	7.5%
Portfolio of long-term supply contracts			(83)			Value-in-use - DCF	5.7% - 9.6%
Other			(42)				
Other impairment losses		**(4)**	**(172)**	**(7)**	**(183)**		
TOTAL AT DECEMBER 31, 2016		**(1,690)**	**(2,296)**	**(98)**	**(4,084)**		

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Including writedowns of financial assets, total impairment losses (net of reversals) for 2016 amounted to €4,035 million. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on 2016 net income Group share amounted to €3,699 million.

8.3 Restructuring costs

Restructuring costs totaled €671 million in 2017, mainly including:

- costs related to various staff reduction plans implemented as part of the Group's transformation plan, as well as measures to adapt to economic conditions (€509 million);
- costs related to decisions to relinquish several premises, restructure agencies and close a facility (€108 million);
- various other restructuring costs (€53 million).

In 2016, restructuring costs totaled €450 million, including €223 million related to the shutdown of production and closure of some facilities, €132 million related to staff reduction plans and €90 million related to various other restructuring costs.

8.4 Changes in scope of consolidation

In 2017, this item amounted to a positive €752 million, and mainly comprised:

- a €540 million gain on the disposal of the thermal merchant power plant portfolio in the United States, including €513 million in respect of items of other comprehensive income recycled to the income statement (*see Note 4.2.1*);
- a €93 million gain on the disposal of the Group's entire 38.10% residual interest in NuGen, including €5 million in respect of items of other comprehensive income recycled to the income statement (*see Note 4.2.6*);
- a €57 million gain on the disposal of the Polaniec power plant in Poland, including €59 million in respect of items of other comprehensive income recycled to the income statement (*see Note 4.2.2*); and
- a €61 million gain on the disposal of the thermal power plants in the United Kingdom (Saltend, Deeside and Indian Queens), including €47 million in respect of items of other comprehensive income recycled to the income statement (*see Note 4.2.7*).

In 2016, this item amounted to a positive €544 million, and mainly comprised the €225 million gain on the disposal of Paiton in Indonesia, €211 million on the disposal of Transmisora Eléctrica del Norte (TEN) in Chile and €84 million on the disposal of Meenakshi in India.

8.5 Other non-recurring items

In 2017, this item mainly comprised:

- the effects of the new management model implemented by the GEM BU regarding long-term gas supply contracts, transport and storage capacity contracts, and a power exchange contract, resulting in a change in accounting treatment:

  Given structural changes in gas markets, ENGIE decided to overhaul the management model of its midstream gas business (excluding LNG). To this end, in 2017 a new organization was put in place for the activities of the GEM BU, aimed at changing the model for managing long-term gas supply contracts, transport and storage capacity contracts, and a power exchange contract. This new modelis are designed to permit the relevant contracts to be managed individually rather than as part of a portfolio.

  With this new management framework, the Group has to extend fair value accounting to the management activities of most long-term supply contracts as from the implementation date of the new management methods. Therefore, as of October 1, 2017, the Group's results integrate realized and unrealized gains and losses relating to these contracts, which are now measured at fair value through profit or loss and included in the net margin presented in revenues. Changes in the management framework have also led the Group to reclassify a power exchange contract as a derivative contract, which is now recognized at fair value through profit or loss. The initial non-recurring accounting impact of the fair value measurement of these contracts was a negative €472 million.

The revised management model have also impacted the classification of a series of capacity reservation (storage and transport) contracts entered into by the GEM BU. These contracts are now managed individually and are no longer necessary to the Group's industrial needs. As the unavoidable costs required to fulfill the obligations under these contracts are higher than the expected economic benefits they will generate, a provision for onerous contracts has been recorded, giving rise to an initial non-recurring accounting impact of a negative €771 million.

- a €349 million gain on the disposal of Petronet LNG available-for-sale securities, including €357 million in respect of changes in fair value recognized in "Other comprehensive income" and recycled to the income statement (*see Note 4.2.4*).

In 2016, this item mainly comprised a net expense of €584 million related to additions to provisions for nuclear waste processing and storage under the triennial revision of nuclear provisions in Belgium (*see Note 18.2*), as well as a €124 million expense corresponding to the recognition of additional dismantling and rehabilitation costs for the Hazelwood power plant in Australia following the shut-down plan approved in November 2016 by the shareholders.

NOTE 9 NET FINANCIAL INCOME/(LOSS)

In millions of euros	Dec. 31, 2017 Expense	Dec. 31, 2017 Income	Dec. 31, 2017 Total	Dec. 31, 2016 (1) Expense	Dec. 31, 2016 (1) Income	Dec. 31, 2016 (1) Total
Cost of net debt	(822)	128	(694)	(936)	162	(774)
Gains and losses on debt restructuring transactions and from the early unwinding of derivative financial instruments	(181)	83	(98)	(66)	66	-
Other financial income and expenses	(1,119)	616	(503)	(1,208)	661	(547)
NET FINANCIAL INCOME/(LOSS)	**(2,122)**	**827**	**(1,296)**	**(2,210)**	**889**	**(1,321)**

(1) *Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").*

9.1 Cost of net debt

The main items of the cost of net debt break down as follows:

In millions of euros	Expense	Income	Total Dec. 31, 2017	Dec. 31, 2016 (1)
Interest expense on gross debt and hedges	(925)	-	(925)	(1,034)
Foreign exchange gains/losses on borrowings and hedges	-	21	21	15
Ineffective portion of derivatives qualified as fair value hedges	(2)	-	(2)	(5)
Gains and losses on cash and cash equivalents and financial assets at fair value through income	-	107	107	147
Capitalized borrowing costs	104	-	104	102
COST OF NET DEBT	**(822)**	**128**	**(694)**	**(774)**

(1) *Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").*

The decrease in the cost of net debt is mainly due to a slight reduction in the volume of average debt since the end of 2016, to the positive impacts of debt financing transactions realized by the Group and to active interest-rate management *(see Note 15.3.3 "Financial instruments – Main events of the period").*

9.2 Gains and losses on debt restructuring transactions and from the early unwinding of derivative financial instruments

The main effects of debt restructuring break down as follows:

In millions of euros	Expense	Income	Total Dec. 31, 2017	Dec. 31, 2016 (1)
Impact of early unwinding of derivative financial instruments on the income statement	**(83)**	**83**	**-**	**-**
of which cash payments made on the unwinding of swaps	*(83)*	*-*	*(83)*	*(66)*
of which reversal of the negative fair value of these derivatives that were settled early	*-*	*83*	*83*	*66*
Impact of debt restructuring transactions on the income statement	**(98)**	**-**	**(98)**	**-**
of which early refinancing transactions expenses	*(98)*	*-*	*(98)*	*-*
GAINS AND LOSSES ON DEBT RESTRUCTURING TRANSACTIONS AND THE EARLY UNWINDING OF DERIVATIVE FINANCIAL INSTRUMENTS	**(181)**	**83**	**(98)**	**-**

(1) *Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").*

The Group carried out a number of early refinancing transactions *(see Note 15.3.3. "Financial instruments - Main events of the period")*, including several buybacks of bonds with an aggregate par value of €538 million.

9.3 Other financial income and expenses

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Other financial expenses		
Change in fair value of derivatives not qualified as hedges	(186)	(103)
Gains and losses on the dedesignation and inefficiency of economic hedges on other financial items	(1)	(5)
Unwinding of discounting adjustments to other long-term provisions	(498)	(553)
Net interest expense on post-employment benefits and other long-term benefits	(119)	(137)
Interest on trade and other payables	(48)	(58)
Other financial expenses	(267)	(352)
TOTAL	**(1,119)**	**(1,208)**
Other financial income		
Income from available-for-sale securities	173	136
Gains and losses on the dedesignation and inefficiency of economic hedges on other financial items	-	3
Interest income on trade and other receivables	29	30
Interest income on loans and receivables at amortized cost	145	73
Other financial income	269	420
TOTAL	**616**	**661**
OTHER FINANCIAL INCOME AND EXPENSES, NET	**(503)**	**(547)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

Other financial income notably includes interest relating to the recovery from the French State of the 3% tax on dividends as well as interest relating to the dispute opposing Electrabel and E.ON in respect of the Belgian and German nuclear contribution payments for an amount of €87 million.

NOTE 10 INCOME TAX EXPENSE

10.1 Actual income tax expense recognized in the income statement

10.1.1 Breakdown of actual income tax expense recognized in the income statement

The tax income recognized in the income statement for 2017 amounts to €425 million (€481 million income tax expense in 2016). It breaks down as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Current income taxes	(397)	(1,328)
Deferred taxes	822	847
TOTAL INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**425**	**(481)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

10.1.2 Reconciliation of theoretical income tax expense with actual income tax expense

A reconciliation of theoretical income tax expense with the Group's actual income tax expense is presented below:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016(1)
Net income/(loss)	**2,238**	**163**
Share in net income of entities accounted for using the equity method	437	752
Net income from discontinued operations	290	(158)
Income tax expense	425	(481)
Income/(loss) before income tax expense and share in net income of associates (A)	**1,085**	**50**
Of which French companies	*(588)*	*863*
Of which companies outside France	*1,674*	*(813)*
Statutory income tax rate of the parent company (B)	34.4%	34.4%
THEORETICAL INCOME TAX EXPENSE (C) = (A) X (B)	**(374)**	**(17)**
Reconciling items between theoretical and actual income tax expense		
Difference between statutory tax rate applicable to the parent and statutory tax rate in force in jurisdictions in France and abroad	114	95
Permanent differences [(a)]	(286)	(806)
Income taxed at a reduced rate or tax-exempt [(b)]	555	254
Additional tax expense [(c)]	(258)	(476)
Effect of unrecognized deferred tax assets on tax loss carry-forwards and other tax-deductible temporary differences [(d)]	(568)	(951)
Recognition or utilization of tax income on previously unrecognized tax loss carry-forwards and other tax-deductible temporary differences [(e)]	242	174
Impact of changes in tax rates [(f)]	518	882
Tax credits and other tax reductions [(g)]	507	249
Other [(h)]	(26)	115
INCOME TAX BENEFIT/(EXPENSE) RECOGNIZED IN INCOME	**425**	**(481)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

(a) Includes mainly the disallowable impairment losses on goodwill, the disallowable operating expenses and effects relating to the cap on allowable interest on borrowings in France.

(b) Reflects notably capital gains on disposals of securities exempt from tax or taxed at a reduced rate in some tax jurisdictions, the impact of the specific tax regimes used by some entities, the disallowable impairment losses and capital losses on securities, and the impact of the untaxed income from remeasuring previously-held (or retained) equity interests in connection with acquisitions and changes in consolidation methods.

(c) Includes mainly tax on dividends resulting from the parent company tax regime, the 3% tax on the dividends paid in cash by the French companies in 2016 (without any effect in 2017 because of its cancellation by the Constitutional Council), the exceptional income tax to compensate the reimbursement of the 3% tax on the dividends, the withholding tax on dividends and interest levied in several tax jurisdictions, the flat-rate contribution on nuclear activities payable by nuclear-sourced electricity utilities in Belgium (€117 million in 2016 but classified in EBITDA in 2017), allocations to provisions for income tax, and regional and flat-rate corporate taxes.

(d) Includes (i) the cancellation of the net deferred tax asset position for some tax entities in the absence of sufficient profit being forecast and (ii) the impact of disallowable impairment losses on the assets.

(e) Includes the impact of the recognition of net deferred tax asset positions for some tax entities.

(f) Includes mainly the impact of tax rate changes on the deferred tax balances in France (see below) and in the United States.

(g) Includes notably the reversals of provisions for tax litigation, the impact of deductible notional interest in Belgium and tax credits in France and in 2017 the refund of €376 million relating to the 3% tax on dividends paid previously in cash by the French companies.

(h) Includes mainly the correction of previous tax charges.

The 2018 French Finance Law approved on December 30, 2017 plans a tax rate decrease to 25.82% as of 2022 for any French tax entity. This rate results from the decrease in the common income tax rate from 33.33% to 25.00%, plus the 3.3% social contribution. The deferred tax recorded by French entities which are expected to be released after 2022 have been re-measured at this new rate in the December 31, 2017 accounts. It results in a positive impact of €550 million on the non-recurring income and a negative impact of €91 million on the deferred tax recognized in the statement of comprehensive income.

The 2017 French Finance Law approved on December 20, 2016 planed a tax rate decrease to 28.92% as of 2020 for any French tax entity. This rate resulted from the decrease in the standard income tax rate from 33.33% to 28.00%, plus the 3.3% social contribution. Deferred tax recorded by the French entities which was expected to reverse after 2020 was re-measured at this new rate in the December 31, 2016 accounts. This had a positive impact of €904 million on non-recurring income and a negative impact of €187 million on the deferred tax recognized in the statement of comprehensive income.

Income tax for the year also includes a €34 million in capital gains tax on the disposal of investments.

10.1.3 Analysis of the deferred tax income/(expense) recognized in the income statement, by type of temporary difference

	Impact in the income statement	
In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Deferred tax assets:		
Tax loss carry-forwards and tax credits	(126)	(253)
Pension obligations	(68)	(107)
Non-deductible provisions	(32)	(27)
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(249)	179
Measurement of financial instruments at fair value (IAS 32/39)	(316)	181
Other	(77)	(1)
TOTAL	**(868)**	**(28)**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	671	1,148
Measurement of financial instruments at fair value (IAS 32/39)	705	(398)
Other	169	124
TOTAL	**1,545**	**875**
DEFERRED TAX INCOME/(EXPENSE)	**677**	**847**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under “Discontinued operations” on May 11, 2017 (see Note 30 “Restatement of 2016 comparative data”).

The deferred tax income recorded in 2016 and 2017 derives notably from the future tax rate decrease approved in France.

10.2 Deferred tax income/(expense) recognized in "Other comprehensive income"

Net deferred tax income/(expense) recognized in "Other comprehensive income" is broken down by component as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Available-for-sale financial assets	52	(13)
Actuarial gains and losses	(97)	52
Net investment hedges	(86)	13
Cash flow hedges on other items	(151)	119
Cash flow hedges on net debt	1	4
TOTAL EXCLUDING SHARE OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**(280)**	**175**
Share of entities accounted for using the equity method	2	10
TOTAL	**(278)**	**185**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

10.3 Deferred taxes presented in the statement of financial position

10.3.1 Change in deferred taxes

Changes in deferred taxes recognized in the statement of financial position, after netting deferred tax assets and liabilities by tax entity, break down as follows:

In millions of euros	Assets	Liabilities	Net position
At December 31, 2016	**1,250**	**(6,775)**	**(5,525)**
Impact on net income for the year	(868)	1,545	677
Impact on other comprehensive income items	(126)	(206)	(331)
Impact of changes in scope of consolidation	(6)	8	2
Impact of translation adjustments	(133)	234	102
Transfers to assets and liabilities classified as held for sale	(826)	1,503	676
Other	37	(54)	(17)
Impact of netting by tax entity	1,475	(1,475)	-
AT DECEMBER 31, 2017	**803**	**(5,220)**	**(4,417)**

10.3.2 Analysis of the net deferred tax position recognized in the statement of financial position (before netting deferred tax assets and liabilities by tax entity), by type of temporary difference

	Statement of financial position at	
In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Deferred tax assets:		
Tax loss carry-forwards and tax credits	1,652	2,178
Pension obligations	1,319	1,451
Non-deductible provisions	301	631
Difference between the carrying amount of PP&E and intangible assets and their tax bases	974	1,258
Measurement of financial instruments at fair value (IAS 32/39)	2,725	3,285
Other	495	585
TOTAL	**7,466**	**9,388**
Deferred tax liabilities:		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(8,680)	(10,886)
Measurement of financial instruments at fair value (IAS 32/39)	(2,627)	(3,214)
Other	(576)	(813)
TOTAL	**(11,883)**	**(14,913)**
NET DEFERRED TAX ASSETS/(LIABILITIES)	**(4,417)**	**(5,525)**

The deferred tax assets recognized in respect of tax loss carry-forwards are justified by the existence of adequate taxable timing differences and/or by expectations that these loss carry-forwards will be used over a six-year tax projection period, as approved by management, except when the specific context justifies otherwise.

The decrease in the net deferred tax liability mainly results from the classification of ENGIE E&P International under "Discontinued operations" and from the decrease in the future tax rate approved in the new French Finance Law.

10.4 Unrecognized deferred taxes

At December 31, 2017, the tax effect of tax losses and tax credits eligible for carry-forward but not utilized and not recognized in the statement of financial position amounted to €3,141 million (€3,716 million at December 31, 2016). Most of these unrecognized tax losses relate to companies based in countries which allow losses to be carried forward indefinitely (mainly Belgium, Luxembourg, and Australia) or up to nine years in the Netherlands. These tax loss carry-forwards did not give rise to the recognition of deferred tax due to the absence of sufficient profit forecasts in the medium term.

The tax effect of other tax-deductible temporary differences not recorded in the statement of financial position was €1,238 million at end-December 2017 versus €1,698 million at end-December 2016.

NOTE 11 EARNINGS PER SHARE

	Dec. 31, 2017	Dec. 31, 2016 (1)
Numerator (in millions of euros)		
Net income/(loss) Group share	**1,423**	**(415)**
of which Net income(loss) relating to continued activities, Group share	*1,226*	*(304)*
Interest from deeply-subordinated perpetual notes	(144)	(146)
Net income used to calculate earnings per share	**1,279**	**(562)**
of which Net income(loss) relating to continued activities, Group share, used to calculate earnings per share	*1,083*	*(450)*
Impact of dilutive instruments	-	-
Diluted net income/(loss) Group share	**1,279**	**(562)**
Denominator (in millions of shares)		
Average number of outstanding shares	**2,396**	**2,396**
Impact of dilutive instruments:		
Bonus share plans reserved for employees	9	9
Diluted average number of outstanding shares	**2,405**	**2,405**
Earnings per share (in euros)		
Basic earnings/(loss) per share	**0.53**	**(0.23)**
of which Basic earnings/(loss) Group share relating to continued activities per share	*0.45*	*(0.19)*
Diluted earnings/(loss) per share	**0.53**	**(0.23)**
of which Diluted earnings/(loss) Group share relating to continued activities per share	*0.45*	*(0.19)*

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

In compliance with IAS 33 – *Earnings per Share,* earnings per share and diluted earnings per share are based on net income/(loss) Group share after deduction of payments to bearers of deeply-subordinated perpetual notes *(see Note 17.2.1).*

The Group's dilutive instruments included in the calculation of diluted earnings per share include bonus shares and performance shares granted in the form of ENGIE securities.

Due to their accretive effect, all stock option plans were excluded from the 2016 and 2017 diluted earnings per share calculation. Instruments that were accretive at December 31, 2017 may become dilutive in subsequent periods due to changes in the average annual share price. These plans are described in Note 22 "Share-based payments".

NOTE 12 GOODWILL

12.1 Movements in the carrying amount of goodwill

In millions of euros	Net amount
At December 31, 2015	**19,024**
Impairment losses	(1,690)
Changes in scope of consolidation and Other	39
Translation adjustments	(1)
At December 31, 2016	**17,372**
Impairment losses	(481)
Changes in scope of consolidation and Other	775
Transfer to Assets classified as held for sale	(32)
Translation adjustments	(350)
AT DECEMBER 31, 2017	**17,285**

The impact of changes in the scope of consolidation at December 31, 2017 relates primarily to:

- the recognition of goodwill arising on the acquisition of Keepmoat Regeneration (€476 million), Icomera (€113 million) and EV-Box (€85 million);
- the increase in the fair value of the financial liability representing the put option granted by the Group on the non-controlling interests in La Compagnie du Vent, with a matching entry to goodwill in an amount of €131 million, in accordance with the Group's accounting policies (*see Note 1.4.11.2 "Financial liabilities"*). This increase in the fair value of the financial liability follows the agreement entered into on April 4, 2017 concerning ENGIE's acquisition of a 41% interest in La Compagnie du Vent, previously held by SOPER (*see Note 4 "Main changes in Group structure"*);
- the derecognition of goodwill in an amount of €127 million relating to assets disposed of during the year.

Translation adjustments totaling a negative €350 million are primarily related to the US dollar (a negative €194 million), the Brazilian real (a negative €49 million) and the pound sterling (a negative €46 million).

As a result of the annual impairment tests performed on the goodwill Cash Generating Units (CGUs), the Group recognized impairment losses against goodwill totaling €481 million, including €338 million against the Storengy CGU and €141 million allocated to the portfolio of assets held for sale with respect to the Loy Yang B power plant in Australia. The impairment tests performed on these CGUs in 2017 are described in Note 8.2 "Impairment losses".

The decrease in this caption in 2016 related chiefly to the recognition of impairment losses against goodwill totaling €1,690 million, including €1,362 million against the Benelux CGU, €161 million against the GTT CGU and €139 million allocated to the group of assets held for sale with respect to the Polaniec power plant.

12.2 Goodwill CGUs

The goodwill CGUs correspond to the Business Units described in Note 6, with the exception of the Asia-Pacific BU, which is split into two goodwill CGUs (Australia and Asia-Pacific excluding Australia), and the Solairedirect goodwill CGU.

The table below shows material goodwill CGUs for which the amount of goodwill is greater than 5% of the total value of the Group's goodwill at December 31, 2017, as well as CGUs with goodwill exceeding €500 million.

In millions of euros	**Operating segment**	**Dec. 31, 2017**
MATERIAL CGUs		
Benelux	Benelux	4,238
GRDF	Infrastructures Europe	4,009
France BtoC	France	1,036
United Kingdom	Europe excl. France & Benelux	1,032
France Renewable Energy	France	978
OTHER SIGNIFICANT CGUs		
North America	North America	726
Generation Europe	Other	629
France BtoB	France	663
GRTgaz	Infrastructures Europe	614
Northern, South and Central Europe	Europe excl. France & Benelux	594
Storengy	Infrastructures Europe	205
OTHER CGUs (GOODWILL INDIVIDUALLY LESS THAN €500 MILLION)		2,561
TOTAL		**17,285**

12.3 Impairment testing of goodwill CGUs

All goodwill CGUs are tested for impairment based on data as of end-June, completed by a review of events arisen in the second half of the year. In most cases, the recoverable amount of the goodwill CGUs is determined by reference to a value in use that is calculated based on cash flow projections drawn from the 2018 budget and from the 2019-2020 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on extrapolated cash flows beyond that time frame.

Cash flow projections are drawn up in accordance with the conditions described in Note 8.2 "Impairment losses".

The discount rates used correspond to the weighted average cost of capital, which is adjusted in order to reflect the business, market, country and currency risk relating to each goodwill CGU reviewed. The discount rates used are consistent with available external information sources. The post-tax rates used in 2017 to measure the value in use of the goodwill CGUs for discounting future cash flows ranged between 4.7% and 12.5%, compared with a range of between 4.7% and 15.1% in 2016. The discount rates used for the main goodwill CGUs are shown in Notes 12.3.1 "Material CGUs" and 12.3.7 "Other significant CGUs", below.

The impairment test related to goodwill allocated to the Storengy CGU is described in Note 8.2 "Impairment losses".

12.3.1 Material CGUs

This section presents the method for determining value in use, the key assumptions underlying the valuation, and the sensitivity analyses for the impairment tests on CGUs where the amount of goodwill represents more than 5% of the Group's total goodwill at December 31, 2017.

12.3.1.1 Benelux CGU

The total amount of goodwill allocated to this CGU prior to the 2017 impairment test was €4,238 million. The Benelux CGU includes the Group's activities in Belgium, the Netherlands and Luxembourg: (i) power generation activities using its nuclear power plants and wind farms, (ii) natural gas and electricity sales activities, and (iii) energy services activities, as well as drawing rights on the Chooz B and Tricastin power plants.

Key assumptions used for the impairment test

The 2017 value in use of the activities included in this CGU was calculated using the cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan. Cash flow projections for the period beyond the medium-term business plan were determined as described below:

Activities	Assumptions applied beyond the term of the business plan (1)
Nuclear power generation in Belgium	For Doel 1, Doel 2 and Tihange 1, cash flow projection over a useful life of 50 years. For the second generation reactors (Doel 3, Doel 4, Tihange 2 and Tihange 3), cash flow projection over 40 years, then extension of the operating life of half of this power plant portfolio for a period of 20 years.
Drawing rights on Chooz B et Tricastin power plants	Cash flow projection over the remaining term of existing contract plus assumption that drawing rights will be extended for a further 10 years
Natural gas supply, trading and marketing and sales France activities	Cash flow projection over the duration of the business plan at mid term, plus application of a terminal value based on a normative cash flow using a long-term growth rate of 1.9%

(1) Assumptions unchanged from December 31, 2016.

The discount rates applied to these cash flows ranged from 5.5% to 9.1%, depending on the risk profiles of each business activity.

Key assumptions used for impairment tests for the Benelux goodwill CGU included expected changes in the regulatory environment, changes in the price of electricity, changes in demand for gas and electricity, and discount rates.

The most important assumptions concerning the Belgian regulatory environment relate to the operating life of existing nuclear reactors and the level of royalties and nuclear contributions paid to the Belgian State.

The impairment test took into account the 10-year extension (through 2025) of the operating life of Tihange 1, Doel 1 and Doel 2, as well as the capital expenditure required for the extension of Doel 1 and Doel 2, annual royalties totaling €20 million in respect of said extension and the new conditions for determining the nuclear contribution that will apply to second-generation reactors (Doel 3 and 4, Tihange 2 and 3) through their 40th year of operation, as defined in the December 29, 2016 law.

As regards second-generation reactors, the principle of a gradual phase-out of nuclear power and the schedule for this phase-out, with the shutdown of the reactors Doel 3 in 2022, Tihange 2 in 2023 and Tihange 3 and Doel 4 in 2025, after 40 years of operation, were reaffirmed in the law of June 18, 2015 and by the energy pact announced by the French prime minister in December 2017, with discussions ongoing between the various stakeholders.

However, in view of (i) the extension of the operating life of Tihange 1, Doel 1 and Doel 2 beyond 40 years, (ii) the importance of nuclear power generation in the Belgian energy mix, (iii) the lack of a sufficiently detailed and attractive industrial plan enticing energy utilities to invest in replacement thermal capacity, and (iv) CO_2 emissions reduction targets, the Group considers that nuclear power will still be needed to guarantee the energy equilibrium in Belgium after 2025. Accordingly, in calculating value in use, the Group assumes a 20-year extension of the operating life of half of its second-generation reactors, while taking into account a mechanism of nuclear contributions to be paid to the Belgian government. Should the circumstances described above change in the future, the Group may adapt its industrial scenarios accordingly.

In France, the Group included an assumption that its drawing rights on the Tricastin and Chooz B nuclear plants expiring in 2021 and 2037, respectively, would be extended by 10 years. Although no such decision has been taken by the government and the nuclear safety authority, the Group considers that extending the reactors' operating life is the most credible and likely scenario at this point in time. This is also consistent with the expected French energy mix featured in the Group's reference scenario.

Results of the impairment test

At December 31, 2017, the recoverable amount of the Benelux goodwill CGU was higher than its carrying amount.

Sensitivity analyses

A decrease of €10/MWh in electricity prices for nuclear power generation would lead to an impairment loss of around €800 million. Conversely, an increase of €10/MWh in electricity prices would have a positive impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU.

An increase of 50 basis points in the discount rates used would have a negative 34% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 34% impact on the calculation.

Various transformational scenarios were considered concerning nuclear power generation in Belgium:

- the disappearance of the entire nuclear component from the portfolio in 2025 after 50 years of operation in the case of Tihange 1, Doel 1 and Doel 2, and 40 years of operation for the second-generation reactors would have a strongly adverse impact on the results of the test, with the recoverable amount falling significantly below the carrying amount. In this scenario, the impairment risk would represent around €2,300 million;
- if the life of half of the second-generation reactors were to be extended by 10 years and the entire nuclear component subsequently disappear, the recoverable amount would fall below the carrying amount and the impairment risk would represent €500 million.

12.3.1.2 GRDF CGU

The total amount of goodwill allocated to the GRDF CGU was €4,009 million at December 31, 2017. The GRDF CGU groups together the Group’s regulated natural gas distribution activities in France.

The value in use of the GRDF CGU was calculated using the cash flow projections drawn up on the basis of the 2018 budget, the 2019-2020 medium-term business plan, and cash flow projections for the 2021-2023 period. The terminal value corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2023. The RAB is the value assigned by the French Energy Regulation Commission (CRE) to the assets operated by the distributor. It is the sum of the future pre-tax cash flows, discounted at a rate that equals the pre-tax rate of return guaranteed by the regulator.

The cash flow projections are drawn up based on the tariff for public natural gas distribution networks, known as the “ATRD 5 tariff”, which entered into effect for a period of four years on July 1, 2016, and on the overall level of investments agreed by the CRE as part of its decision on the ATRD 5 tariff.

Given the regulated nature of the businesses grouped within the GRDF CGU, a reasonable change in any of the valuation inputs would not result in the recoverable amount falling below the carrying amount.

12.3.1.3 France BtoC CGU

The goodwill allocated to the France BtoC CGU amounted to €1,036 million at December 31, 2017. The France BtoC CGU groups together sales of energy and related services to individual and professional customers in France.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan. A terminal value was calculated by extrapolating the cash flows beyond that period using a long-term growth rate of 1.8%.

The main assumptions and key estimates relate primarily to discount rates, expected trends in gas and electricity demand in France, changes in the Group’s market share and sales margin forecasts.

The discount rates applied are between 6.5% and 8.5%.

An increase of 50 basis points in the discount rates used would have a negative 9% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 9% impact on the calculation.

A decrease of 5% in the margin on gas and electricity sales activities would have a negative 8% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of 5% in the margin on gas and electricity sales activities would have a positive 8% impact on the calculation.

12.3.1.4 United Kingdom CGU

The goodwill allocated to the United Kingdom CGU amounted to €1,032 million at December 31, 2017. The United Kingdom CGU includes activities in (i) renewable power generation (hydraulic, wind and solar), (ii) gas and electricity sales, and (iii) services to individual and professional customers in the United Kingdom.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan. A terminal value was calculated for the services and energy sales businesses by extrapolating the cash flows beyond that period using a long-term growth rate of 2%.

The main assumptions and key estimates relate primarily to discount rates and changes in price beyond the liquidity period.

The discount rates applied are between 6.3% and 9.1%.

An increase of 50 basis points in the discount rates used would have a negative 44% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 64% impact on the calculation.

A decrease of 10% in the margin captured by power generation assets would have a negative 36% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. An increase of 10% in the margin captured would have a positive 36% impact on this calculation.

12.3.1.5 France Renewable Energy CGU

The goodwill allocated to the France Renewable Energy CGU amounted to €978 million at December 31, 2017. The France Renewable Energy CGU groups together the development, construction, financing, operation and maintenance of all of the renewable power generation assets in France (hydraulic, wind and photovoltaic, with the exception of the photovoltaic parks developed and operated by Solairedirect).

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan. For the hydraulics business, a terminal value was calculated by extrapolating the cash flows beyond that period based on the reference scenario adopted by the Group.

The main assumptions and key estimates relate primarily to discount rates, assumptions on the renewal of the hydropower concession agreements and changes in the sales prices of electricity beyond the liquidity period.

The discount rates applied are between 5.1% and 10.1%, depending on whether they relate to regulated assets or merchant activities.

Value in use of the Compagnie Nationale du Rhône and SHEM were calculated based on assumptions including the renewal of or a tender process for the concession agreements, as well as on the conditions of a potential renewal.

The cash flows for the periods covered by the renewal of the concession agreements are based on a number of assumptions relating to the economic and regulatory conditions for operating these assets (royalty rates, required level of investment, etc.) during this period.

A decrease of €10/MWh in electricity prices for hydropower generation would have a negative 65% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of €10/MWh in electricity prices would have a positive 65% impact on the calculation.

An increase of 50 basis points in the discount rates used would have a negative 46% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 46% impact on the calculation.

If the Compagnie Nationale du Rhône hydropower concession agreements are not renewed beyond 2023, this would have a strong adverse impact on the results of the test, with the recoverable amount falling significantly below the carrying amount. In this scenario, the impairment risk would represent around €500 million.

12.3.2 Other significant CGUs

The table below sets out the assumptions used to determine the recoverable amount of the other main CGUs.

CGU	Reportable segment	Measurement	Discount rate
Generation Europe	Other	DCF + DDM	6.9% - 10.0%
North America	North America	DCF + DDM	3.9% - 12.5%
North, South and Eastern Europe	Europe excl. France & Benelux	DCF + DDM	5.5% - 10.0%
France BtoB	France	DCF + DDM	7.1% - 7.7%

DDM refers to the discounted dividend model.

12.3.2.1 Generation Europe CGU

The goodwill allocated to the Generation Europe CGU amounted to €629 million at December 31, 2017. The Generation Europe CGU groups together the thermal power generation activities in Europe.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2018 budget and the 2019-2020 medium-term business plan. Beyond this three-year period, cash flows were projected over the useful lives of the assets based on the reference scenario adopted by the Group, taking into account the expected impact of a stricter regulatory environment for coal-fired power plants in Europe (*see Note 8.2.4*).

The discount rates applied to these cash flow projections ranged between 6.9% and 10.0%.

The main assumptions and key estimates relate primarily to discount rates, estimated demand for electricity and changes in the price of CO_2, fuel and electricity beyond the liquidity period.

Results of the impairment test

At December 31, 2017, the recoverable amount of the Generation Europe goodwill CGU was higher than its carrying amount. Furthermore, net impairment losses of €317 million were recognized against thermal power plants at December 31, 2017 (*see Note 8.2.5*).

Sensitivity analyses

An increase of 50 basis points in the discount rates used would have a negative 18% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 19% impact on the calculation.

A decrease of 10% in the margin captured by thermal power plants would have a negative 40% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. An increase of 10% in the margin captured would have a positive 40% impact on this calculation.

12.3.2.2 EcoElectrica CGU

ENGIE owns an investment in EcoElectrica, a key energy industry player in Puerto Rico's economy (*see Note 3.2 "Investments in joint ventures"*). Despite the difficult financial environment in Puerto Rico, ENGIE does not have any information at December 31, 2017 on the basis of which the Group would modify its valuation assumptions regarding its share in these assets.

12.4 Goodwill segment information

The carrying amount of goodwill can be analyzed as follows by operating segment:

In millions of euros	Dec. 31, 2017
North America	726
Latin America	711
Africa-Asia	758
Benelux	4,238
France	3,092
Europe excl. France & Benelux	1,625
Infrastructures Europe	5,000
Other	1,134
TOTAL	**17,285**

NOTE 13 INTANGIBLE ASSETS

13.1 Movements in intangible assets

In millions of euros	Intangible rights arising on concession contracts	Capacity entitlements	Others	Total
GROSS AMOUNT				
At December 31, 2015	**3,108**	**2,545**	**10,912**	**16,565**
Acquisitions	169	-	584	753
Disposals	(54)	(13)	(51)	(119)
Translation adjustments	(43)	-	27	(16)
Changes in scope of consolidation	5	-	106	112
Transfers to "Assets classified as held for sale"	-	-	(4)	(4)
Other	19	33	38	91
At December 31, 2016	**3,205**	**2,565**	**11,613**	**17,383**
Acquisitions	179	-	1,025	1,204
Disposals	(32)	-	(224)	(256)
Translation adjustments	(57)	-	(261)	(318)
Changes in scope of consolidation	1	-	50	51
Transfers to "Assets classified as held for sale"	-	-	(1,075)	(1,075)
Other	343	116	(461)	(2)
AT DECEMBER 31, 2017	**3,640**	**2,681**	**10,667**	**16,988**
ACCUMULATED AMORTIZATION AND IMPAIRMENT				
At December 31, 2015	**(1,171)**	**(1,716)**	**(6,666)**	**(9,553)**
Amortization	(108)	(61)	(601)	(770)
Impairment	(6)	(225)	(176)	(407)
Disposals	29	13	34	76
Translation adjustments	3	-	4	7
Changes in scope of consolidation	-	-	(10)	(10)
Transfers to "Assets classified as held for sale"	-	-	3	3
Other	(7)	-	(84)	(92)
At December 31, 2016	**(1,259)**	**(1,988)**	**(7,497)**	**(10,744)**
Amortization	(117)	(56)	(605)	(779)
Impairment (1)	(7)	-	(223)	(231)
Disposals	20	-	219	239
Translation adjustments	5	-	149	154
Changes in scope of consolidation	-	-	(2)	(2)
Transfers to "Assets classified as held for sale"	-	-	880	880
Other	(26)	-	25	(1)
AT DECEMBER 31, 2017	**(1,385)**	**(2,045)**	**(7,054)**	**(10,484)**
CARRYING AMOUNT				
At December 31, 2016	**1,946**	**576**	**4,116**	**6,639**
AT DECEMBER 31, 2017	**2,255**	**636**	**3,613**	**6,504**

(1) Including €138 million in impairment losses recognized in "Net income/(loss) from discontinued operations" in the income statement in respect of an exploration-production license for a gas field in the Caspian Sea (see Note 4 "Main changes in Group structure").

Pursuant to the classification of exploration-production activities under discontinued operations (*see Note 4.1 "Assets held for sale and discontinued operations"*), the carrying amount of the corresponding intangible assets, was transferred to "Assets classified as held for sale" in the statement of financial position at December 31, 2017.

In 2017, other impairment losses on intangible assets mainly relate to the ENGIE brand for €43 million (*see Note 8.2 "Impairment losses"*).

In 2016, impairment losses on intangible assets amounted to €407 million. They related mainly to drawing rights on power generation assets in Italy (€225 million) and a portfolio of natural gas long-term supply contracts (€125 million).

13.1.1 Intangible rights arising on concession contracts

This item primarily includes the right to bill users of public services recognized in accordance with the intangible asset model as set out in IFRIC 12. Acquisitions mainly relate to the France Networks businesses and hydropower plants in Brazil.

13.1.2 Capacity entitlements

The Group has acquired capacity entitlements from power stations operated by third parties. These power station capacity rights were acquired in connection with transactions or within the scope of the Group's involvement in financing the construction of certain power stations. In consideration, the Group received the right to purchase a share of the production over the useful life of the underlying assets. These rights are amortized over the useful life of the underlying assets, not to exceed 40 years. The Group currently holds entitlements in the Chooz B and Tricastin power plants in France and in the virtual power plant (VPP) in Italy.

13.1.3 Others

At December 31, 2017, this caption notably relates to software, licenses, capitalized acquisition costs for customer contracts and intangible assets acquired as a result of business combinations.

13.2 Information regarding research and development costs

Research and development activities primarily relate to various studies regarding technological innovation, improvements in plant efficiency, safety, environmental protection, service quality, and the use of energy resources.

Research and development costs, excluding technical assistance costs, totaled €180 million in 2017, of which €19 million expenses related to in-house projects in the development phase that meet the criteria for recognition as an intangible asset as defined in IAS 38.

NOTE 14 PROPERTY, PLANT AND EQUIPMENT

14.1 Movements in property, plant and equipment

In millions of euros	Land	Buildings	Plant and equipment	Vehicles	Dismantling costs	Assets in progress	Other	Total
GROSS AMOUNT								
At December 31, 2015	**755**	**4,993**	**93,201**	**437**	**2,318**	**6,428**	**1,115**	**109,248**
Acquisitions	7	26	893	46	-	4,299	65	5,336
Disposals	(8)	(46)	(743)	(41)	(97)	(20)	(48)	(1,003)
Translation adjustments	16	(46)	717	3	(11)	10	(2)	688
Changes in scope of consolidation	(6)	22	38	3	-	(718)	9	(653)
Transfers to "Assets classified as held for sale"	(3)	(7)	(1,208)	-	(23)	(47)	(2)	(1,291)
Other	(5)	746	2,615	2	842	(3,489)	37	749
At December 31, 2016	**756**	**5,687**	**95,514**	**451**	**3,030**	**6,462**	**1,174**	**113,073**
Acquisitions[1]	6	55	708	39	-	4,178	58	5,045
Disposals	(10)	(84)	(851)	(40)	(34)	(110)	(208)	(1,337)
Translation adjustments	(23)	(122)	(2,484)	(11)	(41)	(420)	(16)	(3,117)
Changes in scope of consolidation	(2)	(38)	(1,377)	3	(4)	(131)	-	(1,548)
Transfers to "Assets classified as held for sale"	(26)	(67)	(11,698)	(7)	(742)	(1,160)	(14)	(13,714)
Other	16	85	3,694	9	11	(3,967)	11	(140)
AT DECEMBER 31, 2017	**717**	**5,517**	**83,506**	**444**	**2,220**	**4,853**	**1,005**	**98,262**
ACCUMULATED DEPRECIATION AND IMPAIRMENT								
At December 31, 2015	**(113)**	**(2,231)**	**(45,377)**	**(314)**	**(1,259)**	**(2,132)**	**(834)**	**(52,259)**
Depreciation	(8)	(265)	(3,148)	(43)	(74)	-	(89)	(3,627)
Impairment	(14)	(438)	(1,126)	(11)	31	(151)	(2)	(1,711)
Disposals	1	27	555	36	97	2	45	761
Translation adjustments	(7)	5	(198)	(3)	11	93	3	(95)
Changes in scope of consolidation	-	(12)	(29)	(2)	-	444	(5)	396
Transfers to "Assets classified as held for sale"	-	5	977	-	12	-	2	996
Other	(5)	(15)	(186)	(1)	(142)	550	4	204
At December 31, 2016	**(145)**	**(2,925)**	**(48,531)**	**(337)**	**(1,324)**	**(1,195)**	**(878)**	**(55,334)**
Depreciation[2]	(9)	(124)	(2,935)	(40)	(187)	-	(96)	(3,390)
Impairment	2	(31)	(670)	(1)	2	(19)	(2)	(719)
Disposals	1	68	692	36	46	96	202	1,140
Translation adjustments	6	16	1,227	10	24	59	10	1,352
Changes in scope of consolidation	1	18	832	(1)	2	27	1	879
Transfers to "Assets classified as held for sale"	15	35	7,785	5	518	208	11	8,577
Other	-	7	(388)	(2)	(9)	624	26	257
AT DECEMBER 31, 2017	**(129)**	**(2,937)**	**(41,989)**	**(330)**	**(929)**	**(199)**	**(725)**	**(47,238)**
CARRYING AMOUNT								
At December 31, 2016	**612**	**2,762**	**46,983**	**113**	**1,706**	**5,268**	**296**	**57,739**
AT DECEMBER 31, 2017	**588**	**2,579**	**41,516**	**114**	**1,291**	**4,653**	**280**	**51,023**

(1) Including €437 million related to the property, plant and equipment of exploration-production activities, which are classified under "Discontinued operations" (see Note 4 "Main changes in Group structure").

(2) Depreciation and amortization of the property, plant and equipment relating to exploration-production activities are recognized in "Net income/(loss) from discontinued operations" in the income statement for a negative €171 million, at December 31, 2017.

Pursuant to the classification of exploration-production activities under discontinued operations (*see Note 4.1 "Assets held for sale and discontinued operations"*), and the agreement reached for the future disposal of the Loy Lang B assets, the carrying amount of the corresponding property, plant and equipment (€5,137 million) has been transferred to "Assets classified as held for sale" in the statement of financial position at December 31, 2017.

In 2017, the net decrease in “Property, plant and equipment” takes into account:

- maintenance and development investments for a total amount of €5,045 million mainly relating to the construction of new plants and the development of wind farms in Latin America and France, the extension of the transportation and distribution networks in the Infrastructures Europe segment;
- depreciation for a total negative amount of €3,390 million;
- negative net translation adjustments of €1,765 million, mainly resulting from the US dollar (negative impact of €963 million), the Brazilian real (negative impact of €439 million), and the Norwegian krone (negative impact of €103 million);
- impairment losses amounting to €719 million, mainly related to thermal power generation assets (€510 million) and gas storage facilities in Germany (€156 million);
- changes in the scope of consolidation for a negative €670 million, mainly resulting from the DBSO (1) activities relating to wind and solar fields in France (negative impact of €277 million), and the disposal of power generation plants in the United-Kingdom (negative impact of €186 million).

In 2016, the net increase in “Property, plant and equipment” mainly resulted from:

- maintenance and development investments for a total amount of €5,336 million mainly related to the construction of new plants and the development of wind farms in Latin America and France, the extension of the transportation and distribution networks in the Infrastructures Europe segment and developments in the exploration-production business;
- a €981 million increase in dismantling assets recorded against provisions for dismantling nuclear facilities in Belgium;
- positive net translation adjustments of €593 million, mainly resulting from the Brazilian real (positive impact of €557 million), the US dollar (positive impact of €267 million), the Norwegian krone (positive impact of €87 million), and the pound sterling (negative impact of €349 million);
- depreciation for a total negative amount of €3,627 million;
- impairment losses amounting to €1,711 million, mainly related to thermal power generation assets in Europe (€520 million), hydro generation assets in France (€414 million), LNG tankers (€142 million), and exploration-production assets;
- the transfer of carrying amount of property, plant and equipment of the Polaniec power plant in Poland to “Assets held for sale” (negative impact of €295 million);
- changes in scope of consolidation for a negative €257 million, mainly resulting from the disposal of a 50% interest in Transmisora Eléctrica del Norte SA (TEN) in Chile (negative impact of €202 million) and the sale of the Meenakshi coal-fired plants in India (negative impact of €131 million), partly offset by the acquisition of a controlling interest in Energieversorgung Gera GmbH in Germany (positive impact of €100 million).

14.2 Pledged and mortgaged assets

Items of property, plant and equipment pledged by the Group to guarantee borrowings and debt amounted to €2,185 million at December 31, 2017 compared to €3,727 million at December 31, 2016. The decrease mainly related to the classification of the Loy Yang B coal-fired power plant in Australia under "Assets held for sale" *(see Note 4.1.3).*

14.3 Contractual commitments to purchase property, plant and equipment

In the ordinary course of their operations, some Group companies have entered into commitments to purchase, and the related third parties to deliver, property, plant and equipment. These commitments relate mainly to orders for equipment, and material related to the construction of energy production units and to service agreements.

(1) Develop Build Share and Operate.

Investment commitments made by the Group to purchase property, plant and equipment totaled €1,988 million at December 31, 2017 versus €3,079 million at December 31, 2016.

14.4 Other information

Borrowing costs for 2017 included in the cost of property, plant and equipment amounted to €104 million at December 31, 2017 versus €102 million at December 31, 2016.

NOTE 15 FINANCIAL INSTRUMENTS

15.1 Financial assets

The following table presents the Group's different categories of financial assets, broken down into current and non-current items:

In millions of euros	Dec. 31, 2017			Dec. 31, 2016		
	Non-current	Current	Total	Non-current	Current	Total
Available-for-sale securities	2,656	-	2,656	2,997	-	2,997
Loans and receivables at amortized cost	2,976	20,911	23,887	2,250	21,430	23,680
Loans and receivables at amortized cost (excluding trade and other receivables)	*2,976*	*599*	*3,576*	*2,250*	*595*	*2,845*
Trade and other receivables	-	*20,311*	*20,311*	-	*20,835*	*20,835*
Other financial assets at fair value	2,948	8,985	11,933	3,603	10,486	14,089
Derivative instruments	*2,948*	*7,378*	*10,325*	*3,603*	*9,047*	*12,650*
Financial assets at fair value through income	-	*1,608*	*1,608*	-	*1,439*	*1,439*
Cash and cash equivalents	-	8,931	8,931	-	9,825	9,825
TOTAL	**8,580**	**38,827**	**47,407**	**8,850**	**41,741**	**50,591**

15.1.1 Available-for-sale securities

In millions of euros	
At December 31, 2015	**3,016**
Acquisitions	407
Disposals - carrying amount excluding changes in fair value recorded in "Other comprehensive income"	(500)
Disposals - "Other comprehensive income" derecognized	(152)
Other changes in fair value recorded in equity	298
Changes in fair value recorded in income	(21)
Changes in scope of consolidation, foreign currency translation and other changes	(49)
At December 31, 2016	**2,997**
Acquisitions	279
Disposals - carrying amount excluding changes in fair value recorded in "Other comprehensive income"	(178)
Disposals - "Other comprehensive income" derecognized	(362)
Other changes in fair value recorded in equity	(14)
Changes in fair value recorded in income	(19)
Changes in scope of consolidation, foreign currency translation and other changes	(47)
AT DECEMBER 31, 2017	**2,656**

The Group's available-for-sale securities amounted to €2,656 million at December 31, 2017 breaking down as €1,558 million of listed securities and €1,098 million of unlisted securities (respectively, €1,977 million and €1,020 million at December 31, 2016).

The main changes over the period correspond to the acquisition by Synatom of money market funds and bonds as part of its investing objectives designed to cover nuclear provisions *(see Note 15.1.5)* and to the disposal of interests held by the Group in Petronet LNG (*see Note 4.2.4*).

In 2016, the main change over the period corresponded to the acquisition by Synatom of money market funds and bonds as part of its investing objectives designed to cover nuclear provisions and to the sales of interests previously held by the Group in the Walloon distribution network operator, in Transportadora de Gas del Perú, and in Société d'Enrichissement du Tricastin Holding *(see Note 4.1.5 to the 2016 annual consolidated financial statements)*.

15.1.1.1 Gains and losses on available-for-sale securities recognized in equity or income

The table below shows gains and losses on available-for-sale securities recognized in equity or income:

In millions of euros	Dividends	Post-acquisition measurement: Change in fair value	Post-acquisition measurement: Foreign currency translation	Post-acquisition measurement: Impairment	Reclassified to income	Net gain/(loss) on disposals
Equity [(1)]	-	(14)	-	-	(362)	-
Income	172	-	-	(19)	362	17
TOTAL AT DECEMBER 31, 2017	**172**	**(14)**	**-**	**(19)**	**-**	**17**
Equity [(1)]	-	298	1	-	(152)	-
Income	114	-	-	(21)	152	90
TOTAL AT DECEMBER 31, 2016	**114**	**298**	**1**	**(21)**	**-**	**90**

(1) Excluding tax impact.

In 2017, the disposal gain recorded in “Other items of comprehensive income” and reclassified to income mainly comprised the sale of the Petronet LNG shares for € 362 million (see *Note 4.2.4*).

15.1.1.2 Analysis of available-for-sale securities in connection with impairment tests

The Group reviewed the value of its available-for-sale securities on a case-by-case basis in order to determine whether any impairment losses should be recognized in light of the current market environment.

Among factors taken into account, an impairment indicator for listed securities is when the value of any such security falls below 50% of its historical cost or remains below its historical cost for more than 12 months.

The Group recognized impairment losses for an amount of €19 million at December 31, 2017.

Based on its analyses, the Group has not identified any evidence of material unrealized capital losses at December 31, 2017 on other securities.

15.1.2 Loans and receivables at amortized cost

In millions of euros	Dec. 31, 2017 Non-current	Dec. 31, 2017 Current	Dec. 31, 2017 Total	Dec. 31, 2016 Non-current	Dec. 31, 2016 Current	Dec. 31, 2016 Total
Loans and receivables at amortized cost (excluding trade and other receivables)	2,976	599	3,576	2,250	595	2,845
Loans granted to affiliated companies	*993*	*395*	*1,388*	*718*	*441*	*1,159*
Other receivables at amortized cost	*658*	*34*	*692*	*655*	*22*	*678*
Amounts receivable under concession contracts	*573*	*82*	*655*	*14*	*6*	*20*
Amounts receivable under finance leases	*752*	*88*	*840*	*862*	*125*	*987*
Trade and other receivables	-	*20,311*	*20,311*	-	*20,835*	*20,835*
TOTAL	**2,976**	**20,911**	**23,887**	**2,250**	**21,430**	**23,680**

The table below shows impairment losses on loans and receivables at amortized cost:

In millions of euros	Dec. 31, 2017 Gross	Dec. 31, 2017 Allowances and impairment	Dec. 31, 2017 Net	Dec. 31, 2016 Gross	Dec. 31, 2016 Allowances and impairment	Dec. 31, 2016 Net
Loans and receivables at amortized cost (excluding trade and other receivables)	3,816	(241)	3,576	3,092	(248)	2,845
Trade and other receivables	21,231	(920)	20,311	21,897	(1,062)	20,835
TOTAL	**25,048**	**(1,161)**	**23,887**	**24,989**	**(1,310)**	**23,680**

Information on the age of receivables past due but not impaired and on counterparty risk associated with loans and receivables at amortized cost (including trade and other receivables) are provided in Note 16.2 “Counterparty risk”.

Net gains and losses recognized in the consolidated income statement with regard to loans and receivables at amortized cost (including trade and other receivables) break down as follows:

		Post-acquisition measurement	
In millions of euros	Interest income	Foreign currency translation	Impairment
At December 31, 2017	196	(13)	(53)
At December 31, 2016 (1)	109	32	(85)

(1) *Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").*

Loans and receivables at amortized cost (excluding trade and other receivables)

At December 31, 2017, as at December 31, 2016, no material impairment losses had been recognized against loans and receivables at amortized cost (excluding trade and other receivables).

Trade and other receivables

On initial recognition, trade and other receivables are recorded at fair value, which generally corresponds to their nominal value. Impairment losses are recorded based on the estimated risk of non-recovery. The carrying amount of trade and other receivables in the consolidated statement of financial position represents a reasonable estimate of the fair value.

Impairment losses recognized against trade and other receivables amounted to €920 million at December 31, 2017 (€1,062 million at December 31, 2016).

15.1.3 Other financial assets at fair value through income

	Dec. 31, 2017			Dec. 31, 2016		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Derivative instruments	**2,948**	**7,378**	**10,325**	**3,603**	**9,047**	**12,650**
Derivatives hedging borrowings	*610*	*63*	*673*	*888*	*250*	*1,138*
Derivatives hedging commodities	*1,532*	*7,231*	*8,763*	*1,875*	*8,712*	*10,587*
Derivatives hedging other items (1)	*805*	*83*	*888*	*840*	*85*	*925*
Financial assets at fair value through income (excluding margin calls)	**-**	**1,108**	**1,108**	**-**	**816**	**816**
Financial assets qualifying as at fair value through income	-	*1,108*	*1,108*	-	*816*	*816*
Margin calls on derivatives hedging borrowings - assets	**-**	**500**	**500**	**-**	**622**	**622**
TOTAL	**2,948**	**8,985**	**11,933**	**3,603**	**10,486**	**14,089**

(1) *Derivatives hedging other items mainly include the interest rate component of interest rate derivatives (not qualifying as hedges or qualifying as cash flow hedges) that are excluded from net debt, as well as net investment hedge derivatives.*

Financial assets qualifying as at fair value through income (excluding margin calls) are mainly money market funds held for trading purposes and held to be sold in the near term. They are included in the calculation of the Group's net debt *(see Note 15.3 "Net debt")*.

Gains on financial assets qualifying as at fair value through income held for trading purposes totaled €7 million in 2017 versus €8 million in 2016.

15.1.4 Cash and cash equivalents

Cash and cash equivalents totaled €8,931 million at December 31, 2017 (€9,825 million at December 31, 2016).

This amount included funds related to the green bond issues, which remain unallocated to the funding of eligible projects (*see section 5 of the Registration Document*).

This amount also included €141 million in cash and cash equivalents subject to restrictions (€246 million at December 31, 2016). Cash and cash equivalents subject to restrictions include notably €91 million of cash equivalents set aside to cover the repayment of borrowings and debt as part of project financing arrangements in certain subsidiaries.

Gains recognized in respect of “Cash and cash equivalents” amounted to €92 million at December 31, 2017 compared to €131 million at December 31, 2016.

15.1.5 Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material

As indicated in Note 18.2 “Nuclear dismantling liabilities”, the Belgian law of April 11, 2003, amended by the law of April 25, 2007, granted the Group’s wholly-owned subsidiary Synatom responsibility for managing and investing funds received from operators of nuclear power plants in Belgium and designed to cover the costs of dismantling nuclear power plants and managing radioactive fissile material.

Pursuant to the law, Synatom may lend up to 75% of these funds to operators of nuclear plants provided that they meet certain financial criteria – particularly in terms of credit quality. The funds that cannot be lent to operators are either lent to entities meeting the credit quality criteria set by the law or invested in financial assets such as bonds and money market funds.

Loans to entities outside the Group and other cash investments are shown in the table below:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Loans to third parties	**516**	**562**
Loan to Eso/Elia	454	454
Loan to Ores Assets	41	82
Loan to Sibelga	22	26
Other cash investments	**1,507**	**1,464**
Money market funds	1,507	1,464
TOTAL	**2,023**	**2,026**

Loans to entities outside the Group are shown in the statement of financial position as “Loans and receivables at amortized cost”. Bonds and money market funds held by Synatom are shown as “Available-for-sale securities”.

15.1.6 Transfer of financial assets

At December 31, 2017, the outstanding amount of transferred financial assets (as well as the risks to which the Group remains exposed following the transfer of those financial assets) as part of transactions leading to either (i) all or part of those assets being retained in the statement of financial position, or (ii) their full deconsolidation while retaining a continuing involvement in these financial assets, was not material in terms of the Group’s indicators.

In 2017, the Group carried out disposals without recourse to financial assets as part of transactions leading to full derecognition, for an outstanding amount of €928 million at December 31, 2017.

15.1.7 Financial assets and equity instruments pledged as collateral for borrowings and debt

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Financial assets and equity instruments pledged as collateral	3,602	4,177

This item mainly includes the carrying amount of equity instruments pledged as collateral for borrowings and debt.

15.2 Financial liabilities

Financial liabilities are recognized either:

- as "Liabilities at amortized cost" for borrowings and debt, trade and other payables, and other financial liabilities;
- as "Financial liabilities at fair value through income" for derivative instruments or financial liabilities designated as derivatives.

The following table presents the Group's different financial liabilities at December 31, 2017, broken down into current and non-current items:

	Dec. 31, 2017			Dec. 31, 2016		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt	25,292	8,176	33,467	24,411	12,539	36,950
Derivative instruments	2,980	8,720	11,700	3,410	9,228	12,638
Trade and other payables	-	16,432	16,432	-	17,075	17,075
Other financial liabilities	32	-	32	200	-	200
TOTAL	**28,303**	**33,328**	**61,632**	**28,021**	**38,842**	**66,864**

15.2.1 Borrowings and debt

	Dec. 31, 2017			Dec. 31, 2016		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Bond issues	20,062	2,175	22,237	18,617	3,360	21,977
Bank borrowings	4,231	928	5,159	4,501	977	5,478
Negotiable commercial paper	-	3,889	3,889	-	6,330	6,330
Drawdowns on credit facilities	26	21	47	12	30	43
Liabilities under finance leases	330	152	483	520	150	670
Other borrowings	65	56	121	90	249	339
TOTAL BORROWINGS	**24,714**	**7,221**	**31,935**	**23,740**	**11,097**	**34,837**
Bank overdrafts and current accounts	-	466	466	-	608	608
OUTSTANDING BORROWINGS AND DEBT	**24,714**	**7,688**	**32,401**	**23,740**	**11,705**	**35,444**
Impact of measurement at amortized cost	242	47	289	235	72	306
Impact of fair value hedges	336	29	365	436	31	468
Margin calls on derivatives hedging borrowings - liabilities	-	412	412	-	731	731
BORROWINGS AND DEBT	**25,292**	**8,176**	**33,467**	**24,411**	**12,539**	**36,950**

The fair value of gross borrowings and debt amounted to €35,568 million at December 31, 2017, compared with a carrying amount of €33,467 million.

Financial income and expenses relating to borrowings and debt are detailed in Note 9 "Net financial income/(loss)".

Borrowings and debt are analyzed in Note 15.3 "Net debt".

15.2.2 Derivative instruments

Derivative instruments recorded in liabilities are measured at fair value and broken down as follows:

	Dec. 31, 2017			Dec. 31, 2016		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Derivatives hedging borrowings	293	59	352	251	67	318
Derivatives hedging commodities	1,475	8,544	10,018	1,461	9,038	10,499
Derivatives hedging other items (1)	1,212	118	1,329	1,698	123	1,821
TOTAL	**2,980**	**8,720**	**11,700**	**3,410**	**9,228**	**12,638**

(1) Derivatives hedging other items mainly include the interest rate component of interest rate derivatives (not qualifying as hedges or qualifying as cash flow hedges), that are excluded from net debt, as well as net investment hedge derivatives.

15.2.3 Trade and other payables

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Trade payables	16,011	16,327
Payable on fixed assets	422	748
TOTAL	**16,432**	**17,075**

The carrying amount of these financial liabilities represents a reasonable estimate of their fair value.

15.2.4 Other financial liabilities

At December 31, 2017, other financial liabilities amounted to €32 million (compared to €200 million at December 31, 2016), mainly corresponding to debt resulting from uncalled share capital of entities accounted for using the equity method, notably Cameron LNG.

The change over the period is mainly due to the exercise of the put option granted by the Group on the non-controlling interest in La Compagnie du Vent related to the agreement concluded on April 4, 2017 for the acquisition by the Group of SOPER's 41% non-controlling interest in La Compagnie du Vent (*see Note 4.3.3*).

15.3 Net debt

15.3.1 Net debt by type

	Dec. 31, 2017			Dec. 31, 2016		
In millions of euros	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt outstanding	24,714	7,688	32,401	23,740	11,705	35,444
Impact of measurement at amortized cost	242	47	289	235	72	306
Impact of fair value hedge (1)	336	29	365	436	31	468
Margin calls on derivatives hedging borrowings - liabilities	-	412	412	-	731	731
BORROWINGS AND DEBT	**25,292**	**8,176**	**33,467**	**24,411**	**12,539**	**36,950**
Derivatives hedging borrowings - carried in liabilities (2)	293	59	352	251	67	318
GROSS DEBT	**25,585**	**8,234**	**33,820**	**24,662**	**12,606**	**37,268**
Assets related to financing	(59)	(1)	(60)	(58)	(1)	(58)
ASSETS RELATED TO FINANCING	**(59)**	**(1)**	**(60)**	**(58)**	**(1)**	**(58)**
Financial assets at fair value through income (excluding margin calls)	-	(1,108)	(1,108)	-	(816)	(816)
Margin calls on derivatives hedging borrowings - carried in assets	-	(500)	(500)	-	(622)	(622)
Cash and cash equivalents	-	(8,931)	(8,931)	-	(9,825)	(9,825)
Derivatives hedging borrowings - carried in assets (2)	(610)	(63)	(673)	(888)	(250)	(1,138)
NET CASH	**(610)**	**(10,602)**	**(11,212)**	**(888)**	**(11,514)**	**(12,402)**
NET DEBT	**24,916**	**(2,369)**	**22,548**	**23,716**	**1,091**	**24,807**
Borrowings and debt outstanding	24,714	7,688	32,401	23,740	11,705	35,444
Assets related to financing	(59)	(1)	(60)	(58)	(1)	(58)
Financial assets at fair value through income (excluding margin calls)	-	(1,108)	(1,108)	-	(816)	(816)
Cash and cash equivalents	-	(8,931)	(8,931)	-	(9,825)	(9,825)
NET DEBT EXCLUDING THE IMPACT OF DERIVATIVE INSTRUMENTS, CASH COLLATERAL AND AMORTIZED COST	**24,655**	**(2,352)**	**22,303**	**23,682**	**1,062**	**24,744**

(1) This item corresponds to the revaluation of the interest rate component of debt in a qualified fair value hedging relationship.

(2) This item represents the interest rate component of the fair value of derivatives hedging borrowings in a designated fair value hedging relationship. It also represents the exchange rate and outstanding accrued interest rate components of the fair value of all debt-related derivatives irrespective of whether or not they qualify as hedges.

Net debt, excluding internal E&P debt of €1,612 million (*see Note 4.1.2*) amounted to €20,936 million at December 31,2017 compared to €23,080 million at December 31, 2016.

15.3.2 Reconciliation between net debt and cash flow from financing activities

In millions of euros	Dec. 31, 2016	Cash flow from financing activities	Cash flow from operating and investing activities and variation of cash and cash equivalents	Change in fair value	Translation adjustments	Change in scope of consolidation and others	Dec. 31, 2017
Borrowings and debt outstanding	35,444	(1,193)	-	-	(1,087)	(762)	32,401
Impact of measurement at amortized cost	306	(68)	-	43	(11)	19	289
Impact of fair value hedge	468	-	-	(102)	-	-	365
Margin calls on derivatives hedging borrowings - liabilities	731	(319)	-	-	-	-	412
BORROWINGS AND DEBT	**36,950**	**(1,580)**	**-**	**(60)**	**(1,099)**	**(743)**	**33,467**
Derivatives hedging borrowings - carried in liabilities	318	(78)	-	1	112	(1)	352
GROSS DEBT	**37,268**	**(1,659)**	**-**	**(58)**	**(987)**	**(744)**	**33,820**
Assets related to financing	(58)	(19)	-	-	9	9	(60)
ASSETS RELATED TO FINANCING	**(58)**	**(19)**	**-**	**-**	**9**	**9**	**(60)**
Financial assets at fair value through income (excluding margin calls)	(816)	(285)	-	-	-	(7)	(1,108)
Margin calls on derivatives hedging borrowings - carried in assets	(622)	123	-	-	-	-	(500)
Cash and cash equivalents	(9,825)	-	324	-	249	321	(8,931)
Derivatives hedging borrowings - carried in assets	(1,138)	277	-	114	72	1	(673)
NET CASH	**(12,402)**	**115**	**324**	**114**	**321**	**315**	**(11,212)**
NET DEBT	**24,807**	**(1,562)**	**324**	**55**	**(657)**	**(419)**	**22,548**

15.3.3 Main events of the period

15.3.3.1 Impact of changes in the scope of consolidation and in exchange rates on net debt

In 2017, changes in exchange rates resulted in a €657 million decrease in net debt (including a €486 million decrease in relation to the US dollar and a €117 million decrease in relation to the Brazilian real).

Changes in the scope of consolidation (including the cash impact of acquisitions and disposals) led to a €3,659 million decrease in net debt, reflecting:

- disposals of assets over the period, which reduced net debt by €4,791 million, including the disposal of the thermal merchant power plant portfolio in the United States, the Polaniec power plant in Poland, the Group's 30% interest in Opus Energy in the United Kingdom, its 10% interest in Petronet LNG in India, its 38,1% interest in NuGen, the transfer of 100% of Elengy to GRTgaz and the classification of the Loy Yang B coal-fired power plant under "Assets held for sale" (*see Note 4.2 "Disposals carried out in 2017"*);
- several acquisitions carried out over the period (notably Keepmoat Regeneration, Icomera and Tabreed), which increased net debt by €1,168 million (*see Notes 4.3.1, 4.3.2, 4.3.4 and 4.3.3*).

15.3.3.2 Financing and refinancing transactions

The Group carried out the following main transactions in 2017:

- on March 23 and September 19, 2017 ENGIE SA issued €2,750 million worth of green bonds:
  - a €700 million tranche maturing in 2024 with a 0.875% coupon,
  - a €800 million tranche maturing in 2028 with a 1.5% coupon,
  - a €500 million tranche maturing in 2023 with a 0.375% coupon,
  - a €750 million tranche maturing in 2029 with a 1.375% coupon;

- on September 19, 2017, ENGIE SA also issued:
  - a €750 million tranche maturing in 2037 with a 2% coupon;
- on June 1, September 27 and October 20 and 24, 2017, ENGIE SA carried out private issues in the amounts of €100 million, HKD 1.4 billion and HKD 900 million (outstandings of €153 million and €98 million respectively at the hedged rate), and €100 million;
- on November 10, 2017, ENGIE Brasil Energia issued €581 million worth of bonds;
- on March 15, 2017, ENGIE Brasil Energia took out four bank loans totaling BRL 217 million (€63 million) that will mature in May 2033;
- on November 10, 2017, ENGIE Brasil Energia took out a bank loan totaling €529 million;
- the redemption of the following bonds, which matured in 2017:
  - €500 million worth of ENGIE SA bonds with a coupon of 0% which matured on March 13, 2017,
  - €750 million worth of ENGIE SA bonds with a coupon of 1.5% which matured on July 20, 2017,
  - €564 million worth of ENGIE SA bonds with a coupon of 2.75% which matured on October 18, 2017,
  - CHF 300 million (€262 million) worth of ENGIE SA bonds with a coupon of 1.5% which matured on October 20, 2017,
  - USD 750 million (€635 million) worth of ENGIE SA bonds with a coupon of 1.625% which matured on October 10, 2017,
  - €350 million worth of ENGIE SA bonds with a coupon of 0% which matured on December 7, 2017;
- refinancing transactions:
  - on March 27, 2017, the Group launched an offer to buy back bonds for a nominal amount of €538 million.

15.4 Fair value of financial assets by level in the fair value hierarchy

15.4.1 Financial assets

The table below shows the allocation of financial instruments carried in assets to the different levels in the fair value hierarchy:

	Dec. 31, 2017				Dec. 31, 2016			
In millions of euros	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Available-for-sale securities	2,656	1,558	-	1,098	2,997	1,977	-	1,020
Derivative instruments	10,325	21	9,992	313	12,650	68	12,560	22
Derivatives hedging borrowings	*673*	-	*673*	-	*1,138*	-	*1,138*	-
Derivatives hedging commodities - relating to portfolio management activities	*2,001*	-	*1,969*	*32*	*2,504*	*68*	*2,414*	*22*
Derivatives hedging commodities - relating to trading activities	*6,763*	*21*	*6,461*	*281*	*8,083*	-	*8,083*	-
Derivatives hedging other items	*888*	-	*888*	-	*925*	-	*925*	-
Financial assets at fair value through income (excluding margin calls)	1,108	-	1,108	-	816	1	816	-
Financial assets qualifying as at fair value through income	*1,108*	-	*1,108*	-	*816*	*1*	*816*	-
TOTAL	**14,090**	**1,579**	**11,100**	**1,411**	**16,464**	**2,046**	**13,376**	**1,042**

A definition of these three levels is presented in Note 1.4.11.3 “Derivatives and hedge accounting”.

Available-for-sale securities

Listed securities – measured at their market price at the reporting date – are included in level 1.

Unlisted securities – measured using valuation models based primarily on recent market transactions, the present value of future dividends/cash flows or net asset value – are included in level 3.

At December 31, 2017, changes in level 3 available-for-sale securities can be analyzed as follows:

In millions of euros	**Available-for-sale securities**
At December 31, 2016	**1,020**
Acquisitions	136
Disposals - carrying amount excluding changes in fair value recorded in "Other comprehensive income"	11
Disposals - "Other comprehensive income" derecognized	-
Other changes in fair value recorded in equity	25
Changes in fair value recorded in income	(46)
Changes in scope of consolidation, foreign currency translation and other changes	(47)
At December 31, 2017	**1,098**
Gains/(losses) recorded in income relating to instruments held at the end of the period	**(5)**

A 10% gain or loss in the market price of unlisted shares would generate a gain or loss (before tax) of around €110 million on the Group's comprehensive income.

Loans and receivables at amortized cost (excluding trade and other receivables)

Loans and receivables at amortized cost (excluding trade and other receivables) in a designated fair value hedging relationship are presented in level 2 in the above table. Only the interest rate component of these items is remeasured, with fair value determined by reference to observable data.

Derivative instruments

Derivative instruments included in level 1 are mainly futures traded on organized markets with clearing houses. They are measured at fair value based on their quoted price.

The measurement at fair value of other derivative instruments is based on commonly-used models in the trading environment, and includes directly or indirectly observable inputs. These instruments are included in level 2 of the fair value hierarchy.

The measurement at fair value of derivative instruments included in level 3 is based on non-observable inputs and internal assumptions, usually because the maturity of the instruments exceeds the observable period of the underlying forward price, or because certain inputs such as the volatility of the underlying were not observable at the measurement date.

These primarily consist mainly in long-term gas supply contracts and in a power contract that are measured at fair value and which relate to trading activities.

At December 31, 2017, changes in level 3 derivative instruments can be analyzed as follows:

In millions of euros	**Net Asset/(Liability)**
At December 31, 2016	**(11)**
Changes in fair value recorded in income (1)	(170)
Settlements	15
Transfer out of level 3	(7)
Net fair value recorded in income	**(173)**
Deferred Day-One gains/(losses)	(15)
At December 31, 2017	**(188)**

(1) This amount includes the initial non-recurring impact relating to the October 1, 2017 change in accounting treatment for a negative amount of €155 million.

Financial assets qualifying or designated as at fair value through income

Financial assets qualifying as at fair value through income for which the Group has regular net asset value data are included in level 1. If net asset values are not available on a regular basis, these instruments are included in level 2.

Financial assets designated as at fair value through income are included in level 2.

15.4.2 Financial liabilities

The table below shows the allocation of financial instruments carried in liabilities to the different levels in the fair value hierarchy:

	Dec. 31, 2017				Dec. 31, 2016			
In millions of euros	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Borrowings used in designated fair value hedges	4,860	-	4,860	-	4,691	-	4,691	-
Borrowings not used in designated fair value hedges	30,709	19,835	10,874	-	34,652	20,144	14,508	-
Derivative instruments	11,700	26	11,173	501	12,638	121	12,483	34
Derivatives hedging borrowings	*352*	-	*352*	-	*318*	-	*318*	-
Derivatives hedging commodities - relating to portfolio management activities	*2,210*	-	*2,140*	*70*	*2,411*	*119*	*2,258*	*34*
Derivatives hedging commodities - relating to trading activities	*7,808*	*26*	*7,351*	*431*	*8,088*	*3*	*8,085*	-
Derivatives hedging other items	*1,329*	-	*1,329*	-	*1,821*	-	*1,821*	-
TOTAL	**47,269**	**19,861**	**26,907**	**501**	**51,982**	**20,266**	**31,682**	**34**

Borrowings used in designated fair value hedges

This caption includes bonds in a designated fair value hedging relationship which are presented in level 2 in the above table. Only the interest rate component of the bonds is remeasured, with fair value determined by reference to observable inputs.

Borrowings not used in designated fair value hedges

Listed bond issues are included in level 1.

Other borrowings not used in a designated hedging relationship are presented in level 2 in the above table. The fair value of these borrowings is determined on the basis of future discounted cash flows and relies on directly or indirectly observable data.

Derivative instruments

The classification of derivative instruments in the fair value hierarchy is detailed in Note 15.4.1 "Financial assets".

15.5 Offsetting of derivative instrument assets and liabilities

The net amount of derivative instruments after taking into account enforceable master netting arrangements or similar agreements, whether or not they are set off in accordance with Section 42 of IAS 32, are presented in the table below:

At December 31, 2017

In millions of euros		Gross amount	NET AMOUNT RECOGNIZED IN THE STATEMENT OF FINANCIAL POSITION (1)	Other offsetting agreements (2)	TOTAL NET AMOUNT
Assets	Derivatives hedging commodities	9,177	**8,763**	(5,061)	**3,703**
	Derivatives hedging borrowings and other items	1,562	**1,562**	(315)	**1,247**
Liabilities	Derivatives hedging commodities	(10,432)	**(10,018)**	7,221	**(2,798)**
	Derivatives hedging borrowings and other items	(1,682)	**(1,682)**	393	**(1,289)**

(1) Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in Section 42 of IAS 32.

(2) Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in Section 42 of IAS 32.

At December 31, 2016

In millions of euros		Gross amount	NET AMOUNT RECOGNIZED IN THE STATEMENT OF FINANCIAL POSITION (1)	Other offsetting agreements (2)	TOTAL NET AMOUNT
Assets	Derivatives hedging commodities	10,948	**10,587**	(7,981)	**2,607**
	Derivatives hedging borrowings and other items	2,063	**2,063**	(596)	**1,467**
Liabilities	Derivatives hedging commodities	(10,860)	**(10,499)**	9,867	**(632)**
	Derivatives hedging borrowings and other items	(2,139)	**(2,139)**	390	**(1,750)**

(1) Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in Section 42 of IAS 32.

(2) Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in Section 42 of IAS 32.

NOTE 16 RISKS ARISING FROM FINANCIAL INSTRUMENTS

The Group mainly uses derivative instruments to manage its exposure to market risks. Financial risk management procedures are set out in Chapter 2 “Risk factors” of the Registration Document.

16.1 Market risks

16.1.1 Commodity risk

Commodity risk arises primarily from the following activities:

- portfolio management; and
- trading.

The Group has identified two types of commodity risks: price risk resulting from fluctuations in market prices, and volume risk inherent to the business.

In the ordinary course of its operations, the Group is exposed to commodity risks on natural gas, electricity, coal, oil and oil products, other fuels, CO_2 and other “green” products. The Group is active on these energy markets either for supply purposes or to optimize and secure its energy production chain and its energy sales. The Group also uses derivatives to offer hedging instruments to its clients and to hedge its own positions.

16.1.1.1 Portfolio management activities

Portfolio management seeks to optimize the market value of assets (power plants, gas and coal supply contracts, energy sales and gas storage and transmission) over various time frames (short-, medium- and long-term). Market value is optimized by:

- guaranteeing supply and ensuring the balance between needs and physical resources;
- managing market risks (price, volume) to unlock optimum value from portfolios within a specific risk framework.

The risk framework aims to safeguard the Group’s financial resources over the budget period and smooth out medium-term earnings (over three or five years, depending on the maturity of each market). It encourages portfolio managers to take out economic hedges on their portfolio.

Sensitivities of the commodity-related derivatives portfolio used as part of the portfolio management activities as at December 31, 2017 are detailed in the table below. They are not representative of future changes in consolidated earnings and equity, insofar as they do not include the sensitivities relating to the purchase and sale contracts for the underlying commodities.

Sensitivity analysis (1)

		Dec. 31, 2017		Dec. 31, 2016	
In millions of euros	Changes in price	Pre-tax impact on income	Pre-tax impact on equity	Pre-tax impact on income	Pre-tax impact on equity
Oil-based products	+USD 10/bbl	307	197	475	(49)
Natural gas	+€3/MWh	(17)	(48)	(23)	(97)
Electricity	+€5/MWh	145	(30)	84	(39)
Coal	+USD 10/ton	33	2	67	3
Greenhouse gas emission rights	+€2/ton	53	-	64	-
EUR/USD	+10%	102	(233)	(89)	(7)
EUR/GBP	+10%	69	2	(42)	8

(1) The sensitivities shown above apply solely to financial commodity derivatives used for hedging purposes as part of the portfolio management activities.

16.1.1.2 Trading activities

The Group's trading activities are primarily conducted within:

- ENGIE Global Markets and ENGIE Energy Management. The purpose of these wholly-owned companies is to (i) assist Group entities in optimizing their asset portfolios; (ii) create and implement energy price risk management solutions for internal and external customers;
- ENGIE SA for the optimization of part of its long-term gas supply contracts and of a power exchange contract (*see Note 8.5 "Other non-recurring items*).

Revenues from trading activities totaled €332 million at December 31, 2017 (€427 million at December 31, 2016).

The use of Value at Risk (VaR) to quantify market risk arising from trading activities provides a transversal measure of risk taking all markets and products into account. VaR represents the maximum potential loss on a portfolio of assets over a specified holding period based on a given confidence interval. It is not an indication of expected results but is back-tested on a regular basis.

The Group uses a one-day holding period and a 99% confidence interval to calculate VaR, as well as stress tests, in accordance with banking regulatory requirements.

The VaR shown below corresponds to the global VaR of the Group's trading entities.

Value at Risk

In millions of euros	Dec. 31, 2017	2017 average (1)	2017 maximum (2)	2017 minimum (2)	2016 average (1)
Trading activities	12	9	19	1	10

(1) Average daily VaR.
(2) Maximum and minimum daily VaR observed in 2017.

16.1.2 Hedges of commodity risks

The Group enters into cash flow hedges as defined by IAS 39, using derivative instruments (firm or option contracts) contracted over-the-counter or on organized markets. These instruments may be settled net or involve physical delivery of the underlying.

The fair values of commodity derivatives at December 31, 2017 and December 31, 2016 are indicated in the table below:

	Dec. 31, 2017				Dec. 31, 2016			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivative instruments relating to portfolio management activities	1,532	468	(1,475)	(736)	1,875	629	(1,461)	(949)
Cash flow hedges	*186*	*62*	*(208)*	*(110)*	*87*	*101*	*(231)*	*(283)*
Other derivative instruments	*1,346*	*406*	*(1,267)*	*(625)*	*1,788*	*528*	*(1,230)*	*(666)*
Derivative instruments relating to trading activities	-	6,763	-	(7,808)	-	8,083	-	(8,088)
TOTAL	**1,532**	**7,231**	**(1,475)**	**(8,544)**	**1,875**	**8,712**	**(1,461)**	**(9,038)**

See also Notes 15.1.3 "Other financial assets at fair value through income" and 15.2.2 "Derivative instruments".

The fair values shown in the table above reflect the amounts for which assets could be exchanged, or liabilities settled, at the end of the reporting period. They are not representative of expected future cash flows insofar as positions (i) are sensitive to changes in prices; (ii) can be modified by subsequent transactions; and (iii) can be offset by future cash flows arising on the underlying transactions.

16.1.2.1 Cash flow hedges

The fair values of cash flow hedges by type of commodity are as follows:

	Dec. 31, 2017				Dec. 31, 2016 (1)			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Natural gas	14	12	-	(10)	36	25	(106)	(81)
Electricity	3	7	(44)	(52)	5	9	(42)	(37)
Coal	8	4	-	-	5	4	-	-
Oil	145	1	-	(1)	1	2	(62)	(152)
Other (2)	16	38	(164)	(47)	40	61	(21)	(14)
TOTAL	**186**	**62**	**(208)**	**(110)**	**87**	**101**	**(231)**	**(283)**

(1) Comparative data at December 31, 2016 have not been restated for the classification of ENGIE E&P International under “Discontinued operations” on May 11, 2017 (see Note 4.1.1 “Disposal of exploration-production business”).

(2) Includes mainly foreign currency hedges on commodities.

Notional amounts (net) (1)

Notional amounts and maturities of cash flow hedges are as follows:

	Unit	Total at Dec. 31, 2017	2018	2019	2020	2021	2022	Beyond 5 years
Natural gas	*GWh*	9,500	5,780	2,703	1,017	-	-	-
Electricity	*GWh*	(7,309)	(3,515)	(3,168)	(626)	-	-	-
Coal	*Thousands of tons*	289	128	128	32	-	-	-
Oil-based products	*Thousands of barrels*	45,182	607	14,083	30,492	-	-	-
Forex	*Millions of euros*	2,914	153	1,011	1,436	314	-	-
Greenhouse gas emission rights	*Thousands of tons*	2,064	930	934	200	-	-	-

(1) Long/(short) position.

At December 31, 2017, a loss of €24 million was recognized in equity in respect of cash flow hedges, versus a loss of €372 million at December 31, 2016. A loss of €185 million was reclassified from equity to income in 2017, compared to a gain of €167 million in 2016.

Gains and losses arising from the ineffective portion of hedges are taken to income. The impact recognized in income represented a gain of €2 million in 2017, compared to a nil impact in 2016.

16.1.2.2 Other commodity derivatives

Other commodity derivatives include embedded derivatives, commodity purchase and sale contracts which were not entered into within the ordinary course of business at the statement of financial position date, as well as derivative financial instruments not eligible for hedge accounting in accordance with IAS 39.

16.1.3 Currency risk

The Group is exposed to currency risk, defined as the impact on its statement of financial position and income statement of fluctuations in exchange rates affecting its operating and financing activities. Currency risk comprises (i) transaction risk arising in the ordinary course of business, (ii) specific transaction risk related to investments, mergers-acquisitions or disposal projects, (iii) translation risk related to assets outside the Eurozone, and (iv) the risk arising on the consolidation in euros of subsidiaries’ financial statements with a functional currency other than the euro. The three main translation and consolidation risk exposures correspond, in order, to assets in American dollars, Brazilian real and pound sterling.

16.1.3.1 Analysis of financial instruments by currency

The following tables present a breakdown by currency of outstanding gross debt and net debt, before and after hedging:

Outstanding gross debt

	Dec. 31, 2017		Dec. 31, 2016	
	Before hedging	After hedging	Before hedging	After hedging
EUR	69%	79%	65%	77%
USD	12%	11%	16%	10%
GBP	7%	0%	7%	2%
Other currencies	12%	10%	12%	11%
TOTAL	100%	100%	100%	100%

Net debt

	Dec. 31, 2017		Dec. 31, 2016	
	Before hedging	After hedging	Before hedging	After hedging
EUR	65%	80%	59%	77%
USD	16%	14%	21%	13%
GBP	9%	(1)%	10%	3%
Other currencies	10%	7%	10%	7%
TOTAL	100%	100%	100%	100%

16.1.3.2 Currency risk sensitivity analysis

Sensitivity analysis to currency risk on the income statement was performed based on all financial instruments managed by the treasury department and representing a currency risk (including derivative financial).

Sensitivity analysis to currency risk on equity was performed based on all financial instruments qualified as net investment hedged at the reporting date.

For currency risk, sensitivity corresponds to a 10% rise or fall in exchange rates of foreign currencies against the euro compared to closing rates.

Impact on income after currency hedges

Changes in exchange rates only affect income via gains and losses on expositions denominated in a currency other than the functional currency of companies carrying the assets and liabilities on their statements of financial position, and when the expositions in question are neither hedged nor constitute currency risk hedges. The impact of a uniform appreciation (or depreciation) of 10% in foreign currencies against the euro would ultimately be a loss (or gain) of €6 million (€2 million).

Impact on equity

For financial instruments (debt and derivatives) designated as net investment hedges, a depreciation of 10% in foreign currencies against the euro would have a positive impact of €252 million on equity. An appreciation of 10% in foreign currencies against the euro would have a negative impact of €252 million on equity. These impacts are countered by the offsetting change in the net investment hedged.

16.1.4 Interest rate risk

The Group seeks to manage its borrowing costs by limiting the impact of interest rate fluctuations on its income statement. It does this by ensuring a balanced interest rate structure in the medium-term (five years). The Group's aim is therefore to use a mix of fixed rates, floating rates and capped floating rates for its net debt. The interest rate mix may shift within a range defined by the Group Management in line with market trends.

In order to manage the interest rate structure for its net debt, the Group uses hedging instruments, particularly interest rate swaps and options. At December 31, 2017, the Group had a portfolio of interest rate options (caps) protecting it from a rise in short-term interest rates for the euro.

In 2014, the Group contracted 2019 forward interest rate pre-hedges with an 18 year maturity in order to protect the refinancing interest rate on a portion of its debt.

16.1.4.1 Analysis of financial instruments by type of interest rate

The following tables present a breakdown by type of interest rate of outstanding gross debt and net debt before and after hedging.

Outstanding gross debt

	Dec. 31, 2017		Dec. 31, 2016	
	Before hedging	After hedging	Before hedging	After hedging
Floating rate	29%	39%	36%	41%
Fixed rate	71%	61%	64%	59%
TOTAL	100%	100%	100%	100%

Net debt

	Dec. 31, 2017		Dec. 31, 2016	
	Before hedging	After hedging	Before hedging	After hedging
Floating rate	(1)%	14%	11%	17%
Fixed rate	101%	86%	89%	83%
TOTAL	100%	100%	100%	100%

16.1.4.2 Interest rate risk sensitivity analysis

Sensitivity was analyzed based on the Group's net debt position (including the impact of interest rate and foreign currency derivatives relating to net debt) at the reporting date.

For interest rate risk, sensitivity corresponds to a 100-basis-point rise or fall in the yield curve compared with year-end interest rates.

Impact on income after hedging

A uniform rise of 100 basis points in short-term interest rates (across all currencies) on the nominal amount of floating-rate net debt and the floating-rate leg of derivatives, would increase net interest expense by €31 million. A fall of 100 basis points in short-term interest rates would reduce net interest expense by €30 million.

In the income statement, a uniform rise of 100 basis points in interest rates (across all currencies) on derivative instruments not qualifying for hedge accounting would result in a gain of €55 million attributable to changes in the fair value of derivatives. However, a fall of 100 basis points in interest rates would generate a loss of €75 million. The asymmetrical impacts are partly attributable to the interest rate options portfolio.

Impact on equity

A uniform rise of 100 basis points in interest rates (across all currencies) would generate a gain of €232 million on equity, attributable to changes in the fair value of derivative instruments designated as cash flow hedges. However, a fall of 100 basis points in interest rates would have a negative impact of €289 million.

16.1.4.3 Currency and interest rate hedges

The fair values of derivatives (excluding commodity instruments) at December 31, 2017 and December 31, 2016 are indicated in the table below:

	Dec. 31, 2017				Dec. 31, 2016			
	Assets		Liabilities		Assets		Liabilities	
In millions of euros	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Derivatives hedging borrowings	610	63	(293)	(59)	888	250	(251)	(67)
Fair value hedges	*449*	*9*	*(38)*	*-*	*683*	*-*	*(19)*	*-*
Cash flow hedges	*15*	*1*	*(191)*	*-*	*68*	*166*	*(90)*	*(1)*
Derivative instruments not qualifying for hedge accounting	*147*	*53*	*(64)*	*(59)*	*137*	*84*	*(142)*	*(66)*
Derivatives hedging other items	805	83	(1,212)	(118)	840	85	(1,698)	(123)
Fair value hedges	*-*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
Cash flow hedges	*128*	*5*	*(375)*	*(37)*	*13*	*6*	*(976)*	*(55)*
Net investment hedges	*54*	*-*	*(8)*	*-*	*37*	*-*	*(118)*	*-*
Derivative instruments not qualifying for hedge accounting	*623*	*78*	*(830)*	*(80)*	*791*	*79*	*(604)*	*(68)*
TOTAL	**1,416**	**146**	**(1,505)**	**(177)**	**1,728**	**335**	**(1,949)**	**(190)**

See also Notes 15.1.3 “Other financial assets at fair value through income” and 15.2.2 “Derivative instruments”.

The fair values shown in the table above reflect the amounts for which assets could be exchanged, or liabilities settled, at the end of the reporting period. They are not representative of expected future cash flows insofar as positions (i) are sensitive to changes in prices or to changes in credit ratings, (ii) can be modified by subsequent transactions, and (iii) can be offset by future cash flows arising on the underlying transactions.

The table below shows the fair values and notional amounts of derivative instruments designated as currency or interest rate hedges:

Currency derivatives

	Dec. 31, 2017		Dec. 31, 2016	
In millions of euros	Fair value	Nominal amount	Fair value	Nominal amount
Fair value hedges	5	411	-	-
Cash flow hedges	(166)	3,285	(146)	4,513
Net investment hedges	47	3,370	(81)	6,281
Derivative instruments not qualifying for hedge accounting	(76)	5,161	(102)	9,796
TOTAL	**(191)**	**12,227**	**(329)**	**20,591**

Interest rate derivatives

	Dec. 31, 2017		Dec. 31, 2016	
In millions of euros	Fair value	Nominal amount	Fair value	Nominal amount
Fair value hedges	415	8,313	664	10,163
Cash flow hedges	(288)	1,550	(724)	3,520
Derivative instruments not qualifying for hedge accounting	(56)	18,008	313	20,567
TOTAL	**71**	**27,871**	**253**	**34,250**

The fair values shown in the table above are positive for an asset and negative for a liability.

The Group qualifies foreign currency derivatives hedging firm foreign currency commitments and interest rate swaps transforming fixed-rate debt into floating-rate debt as fair value hedges.

Cash flow hedges are mainly used to hedge foreign currency cash flows, floating-rate debt as well as future refinancing requirements.

Net investment hedging instruments are mainly cross currency swaps.

Derivative instruments not qualifying for hedge accounting correspond to instruments that do not meet the definition of hedges from an accounting perspective, even though they are used as economic hedges of borrowings and foreign currency commitments.

Fair value hedges

At December 31, 2017, the net impact of fair value hedges recognized in the income statement was not significant.

Cash flow hedges

Foreign currency and interest rate derivatives designated as cash flow hedges can be analyzed as follows by maturity:

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Fair value of derivatives by maturity date	(454)	(49)	(31)	(62)	(29)	(22)	(261)

At December 31, 2017, a loss of €392 million was recognized in equity.

The amount reclassified from equity to income in the period represented a loss of €23 million.

The ineffective portion of cash flow hedges recognized in income represented a loss of €25 million at December 31, 2017.

At December 31, 2016

In millions of euros	Total	2017	2018	2019	2020	2021	Beyond 5 years
Fair value of derivatives by maturity date	(870)	84	(80)	(84)	(84)	(65)	(641)

Net investment hedges

The ineffective portion of net investment hedges recognized in income was not significant at December 31, 2017.

16.2 Counterparty risk

The Group is exposed to counterparty risk from customers, suppliers, partners, intermediaries and banks on its operating and financing activities, when such parties are unable to honor their contractual obligations. Counterparty risk results from a combination of payment risk (failure to pay for services or deliveries carried out), delivery risk (failure to deliver services or products paid for) and the risk of replacing contracts in default (known as mark-to-market exposure, i.e. the cost of replacing the contract in conditions other than those initially agreed).

16.2.1 Operating activities

Counterparty risk arising on operating activities is managed via standard mechanisms such as third-party guarantees, netting agreements and margin calls, using dedicated hedging instruments or special prepayment and debt recovery procedures, particularly for retail customers.

Under the Group's policy, each business unit is responsible for managing counterparty risk, although the Group continues to manage the biggest counterparty exposures.

The credit rating of large- and mid-sized counterparties with which the Group has exposures above a certain threshold is measured based on a specific rating process, while a simplified credit scoring process is used for commercial customers with which the Group has fairly low exposures. These processes are based on formally documented, consistent methods across the Group. Consolidated exposures are monitored by counterparty and by segment (credit rating, sector, etc.) using standard indicators (payment risk, mark-to-market exposure).

The Group's Energy Market Risk Committee consolidates and monitors the Group's exposure to its main energy counterparties on a quarterly basis and ensures that the exposure limits set for these counterparties are respected.

16.2.1.1 Trade and other receivables

Past-due trade and other receivables are analyzed below:

	Past due assets not impaired at the reporting date				Impaired assets	Assets neither impaired nor past due	
In millions of euros	0-6 months	6-12 months	Beyond 1 year	Total	Total	Total	Total
At December 31, 2017	939	122	241	1,301	1,366	18,390	21,058
At December 31, 2016	920	196	268	1,384	1,279	19,234	21,897

The age of receivables that are past due but not impaired may vary significantly depending on the type of customer with which the Group does business (private corporations, individuals or public authorities). The Group decides whether or not to recognize impairment on a case-by-case basis according to the characteristics of the customer categories concerned. The Group does not consider that it is exposed to any material concentration of credit risk.

16.2.1.2 Commodity derivatives

In the case of commodity derivatives, counterparty risk arises from positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

	Dec. 31, 2017		Dec. 31, 2016	
In millions of euros	Investment Grade (3)	Total	Investment Grade (3)	Total
Gross exposure (1)	7,309	8,764	9,626	10,588
Net exposure (2)	2,913	3,705	2,347	2,571
% of credit exposure to "Investment Grade" counterparties	78.6%		91.3%	

(1) Corresponds to the maximum exposure, i.e. the value of the derivatives shown under assets (positive fair value).

(2) After taking into account the liability positions with the same counterparties (negative fair value), collateral, netting agreements and other credit enhancement techniques.

(3) Investment Grade corresponds to transactions with counterparties that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's, or equivalent by Dun & Bradstreet. "Investment Grade" is also determined based on an internal rating tool that has been rolled out within the Group, and covers its main counterparties.

16.2.2 Financing activities

For its financing activities, the Group has put in place procedures for managing and monitoring risk based on (i) the accreditation of counterparties according to external credit ratings, objective market data (credit default swaps, market capitalization) and financial structure, and (ii) counterparty risk exposure limits.

To reduce its counterparty risk exposure, the Group drew increasingly on a structured legal framework based on master agreements (including netting clauses) and collateralization contracts (margin calls).

The oversight procedure for managing counterparty risk arising from financing activities is managed by a middle office that operates independently of the Group's Treasury department and reports to the Finance division.

16.2.2.1 Counterparty risk arising from loans and receivables at amortized cost (excluding trade and other receivables)

Loans and receivables at amortized cost (excluding trade and other receivables)

The balance of outstanding past due loans and receivables at amortized cost (excluding trade and other receivables) is analyzed below:

	Past due assets not impaired at the reporting date				Impaired assets	Assets neither impaired nor past due	
In millions of euros	0-6 months	6-12 months	Beyond 1 year	Total	Total	Total	Total
At December 31, 2017	2	-	-	3	254	3,539	3,795
At December 31, 2016	-	-	2	2	238	2,832	3,071

The balance of outstanding loans and receivables carried at amortized cost (excluding trade and other receivables) presented in the above table does not include the impact of impairment losses or changes in fair value and the application of amortized cost, which totaled a negative €220 million, at December 31, 2017 (compared to a negative €227 million at December 31, 2016). Changes in these items are presented in Note 15.1.2 "Loans and receivables at amortized cost".

16.2.2.2 Counterparty risk arising from investing activities and the use of derivative financial instruments

The Group is exposed to counterparty risk arising from investments of surplus cash and from the use of derivative financial instruments. In the case of financial instruments at fair value through income, counterparty risk arises on instruments with a positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

At December 31, 2017, total outstandings exposed to credit risk amounted to €10,009 million.

	Dec. 31, 2017				Dec. 31, 2016			
In millions of euros	Total	Investment Grade (1)	Unrated (2)	Non Investment Grade (2)	Total	Investment Grade (1)	Unrated (2)	Non Investment Grade (2)
Exposure	10,009	84.0%	9.0%	7.0%	10,664	89.0%	4.0%	7.0%

(1) Counterparties that are rated at least BBB- by Standard & Poor's or Baa3 by Moody's.

(2) Most of these two exposures is carried by consolidated companies that include non-controlling interests, or by Group companies that operate in emerging countries, where cash cannot be pooled and is therefore invested locally.

At December 31, 2017, Crédit Agricole Corporate and Investment Bank (CACIB) is the main Group counterparty and represents 22% of cash surpluses. This relates mainly to a depositary risk.

16.3 Liquidity risk

In the context of its operating activities, the Group is exposed to a risk of having insufficient liquidity to meet its contractual obligations. As well as the risks inherent in managing working capital, margin calls are required in certain market activities.

The Group has set up a quarterly committee tasked with managing and monitoring liquidity risk throughout the Group, by maintaining a broad range of investments and sources of financing, preparing forecasts of cash investments and divestments, and performing stress tests on the margin calls put in place when commodity, interest rate and currency derivatives are negotiated.

The Group centralizes virtually all financing needs and cash flow surpluses of the companies it controls, as well as most of their medium- and long-term external financing requirements. Centralization is provided by financing vehicles (long-term and short-term) and by dedicated Group cash pooling vehicles based in France, Belgium and Luxembourg.

Surpluses held by these structures are managed in accordance with a uniform policy. Unpooled cash surpluses are invested in instruments selected on a case-by-case basis in light of local financial market imperatives and the financial strength of the counterparties concerned.

The onslaught of successive financial crises since 2008 and the ensuing rise in counterparty risk prompted the Group to tighten its investment policy with the aim of keeping an extremely high level of liquidity and protecting invested capital and a daily monitoring of performance and counterparty risks for both investment types, allowing the Group to take immediate action where required in response to market developments. Consequently, 88% of cash pooled at December 31, 2017 was invested in overnight bank deposits and standard money market funds with daily liquidity.

The Group's financing policy is based on:

- centralizing external financing;
- diversifying sources of financing between credit institutions and capital markets;
- achieving a balanced debt repayment profile.

The Group seeks to diversify its sources of financing by carrying out public or private bond issues within the scope of its Euro Medium Term Notes program. It also issues negotiable commercial paper in France and in the United States.

At December 31, 2017, bank loans accounted for 18% of gross debt (excluding overdrafts and the impact of derivatives and amortized cost), while the remaining debt was raised on capital markets (including €22,237 million in bonds, or 70% of gross debt).

Outstanding negotiable commercial paper issues represented 12% of gross debt, or €3,889 million at December 31, 2017. As negotiable commercial paper is relatively inexpensive and highly liquid, it is used by the Group in a cyclical or structural fashion to finance its short-term cash requirements. However, the refinancing of all outstanding negotiable commercial paper remains secured by confirmed bank lines of credit allowing the Group to continue to finance its activities if access to this financing source were to dry up.

Available cash, comprising cash and cash equivalents and financial assets measured at fair value through income (excluding margin calls), totaled €10,039 million at December 31, 2017, of which 65% was invested in the Eurozone.

The Group also has access to confirmed credit lines. These facilities are appropriate for the scale of its operations and for the timing of contractual debt repayments. Confirmed credit facilities had been granted for a total of €13,431 million at December 31, 2017, of which €13,384 million was available. 94% of available credit facilities are centralized. None of these centralized facilities contain a default clause linked to covenants or minimum credit ratings.

At December 31, 2017, all the entities of the Group whose debt is consolidated comply with the covenants and declarations included in their financial documentation, except for some non-significant entities for which compliance actions are being implemented.

16.3.1 Undiscounted contractual payments relating to financial activities

At December 31, 2017, undiscounted contractual payments on net debt (excluding the impact of derivatives, margin calls and amortized cost) break down as follows by maturity:

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Bond issues	22,237	2,175	864	2,468	1,897	2,574	12,259
Bank borrowings	5,159	928	395	792	263	486	2,294
Negotiable commercial paper	3,889	3,889	-	-	-	-	-
Drawdowns on credit facilities	47	21	3	22	-	-	1
Liabilities under finance leases	483	152	135	86	75	8	27
Other borrowings	121	56	11	12	4	2	35
Bank overdrafts and current accounts	466	466	-	-	-	-	-
OUTSTANDING BORROWINGS AND DEBT	**32,401**	**7,688**	**1,408**	**3,380**	**2,239**	**3,070**	**14,617**
Assets related to financing	(60)	(1)	-	(2)	(2)	-	(54)
Financial assets at fair value through income (excluding margin calls)	(1,108)	(1,108)	-	-	-	-	-
Cash and cash equivalents	(8,931)	(8,931)	-	-	-	-	-
NET DEBT EXCLUDING THE IMPACT OF DERIVATIVE INSTRUMENTS, MARGIN CALLS AND AMORTIZED COST	**22,303**	**(2,352)**	**1,408**	**3,377**	**2,237**	**3,070**	**14,563**

At December 31, 2016

In millions of euros	Total	2017	2018	2019	2020	2021	Beyond 5 years
OUTSTANDING BORROWINGS AND DEBT	**35,444**	**11,705**	**2,602**	**1,574**	**3,402**	**2,543**	**13,619**
Assets related to financing, financial assets at fair value through income (excluding margin calls) and cash and cash equivalents	(10,700)	(10,644)	(1)	(1)	(3)	(4)	(47)
NET DEBT EXCLUDING THE IMPACT OF DERIVATIVE INSTRUMENTS, MARGIN CALLS AND AMORTIZED COST	**24,744**	**1,061**	**2,601**	**1,573**	**3,399**	**2,539**	**13,572**

At December 31, 2017, undiscounted contractual interest payments on outstanding borrowings and debt break down as follows by maturity:

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Undiscounted contractual interest flows on outstanding borrowings and debt	9,500	930	808	741	651	531	5,839

At December 31, 2016

In millions of euros	Total	2017	2018	2019	2020	2021	Beyond 5 years
Undiscounted contractual interest flows on outstanding borrowings and debt	9,688	982	846	773	694	599	5,793

At December 31, 2017, undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) recognized in assets and liabilities break down as follows by maturity (net amounts):

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Derivatives (excluding commodity instruments)	(105)	(156)	(106)	(62)	(55)	(12)	286

At December 31, 2016

In millions of euros	Total	2017	2018	2019	2020	2021	Beyond 5 years
Derivatives (excluding commodity instruments)	(843)	(223)	16	(32)	(83)	(85)	(436)

To better reflect the economic substance of these transactions, the cash flows linked to the derivatives recognized in assets and liabilities shown in the table above relate to net positions.

The maturities of the Group's undrawn credit facility programs are analyzed in the table below:

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Confirmed undrawn credit facility programs	13,384	704	540	1,421	5,018	5,515	186

The maturity of the €5.5 billion syndicated loan was extended by one year to November 2022.

Of these undrawn programs, an amount of €3,889 million is allocated to covering commercial paper issues.

At December 31, 2017, no single counterparty represented more than 6% of the Group's confirmed undrawn credit lines.

At December 31, 2016

In millions of euros	Total	2017	2018	2019	2020	2021	Beyond 5 years
Confirmed undrawn credit facility programs	13,559	1,517	483	538	376	10,525	120

16.3.2 Undiscounted contractual payments relating to operating activities

The table below provides an analysis of undiscounted fair values due and receivable in respect of commodity derivatives recorded in assets and liabilities at the statement of financial position date.

The Group provides an analysis of residual contractual maturities for commodity derivative instruments included in its portfolio management activities. Derivative instruments relating to trading activities are considered to be liquid in less than one year, and are presented under current items in the statement of financial position.

At December 31, 2017

In millions of euros	Total	2018	2019	2020	2021	2022	Beyond 5 years
Derivative instruments carried in liabilities							
relating to portfolio management activities	*(2,179)*	*(713)*	*(858)*	*(374)*	*(172)*	*(49)*	*(12)*
relating to trading activities	*(7,801)*	*(7,801)*	-	-	-	-	-
Derivative instruments carried in assets							
relating to portfolio management activities	*2,018*	*463*	*794*	*433*	*220*	*56*	*52*
relating to trading activities	*6,770*	*6,770*	-	-	-	-	-
TOTAL AT DECEMBER 31, 2017	**(1,192)**	**(1,281)**	**(64)**	**59**	**48**	**7**	**40**

At December 31, 2016

In millions of euros	Total	2017	2018	2019	2020	2021	Beyond 5 years
Derivative instruments carried in liabilities							
relating to portfolio management activities	*(2,404)*	*(935)*	*(731)*	*(513)*	*(170)*	*(36)*	*(19)*
relating to trading activities	*(8,085)*	*(8,085)*	-	-	-	-	-
Derivative instruments carried in assets							
relating to portfolio management activities	*2,514*	*606*	*1,082*	*501*	*211*	*71*	*42*
relating to trading activities	*8,081*	*8,081*	-	-	-	-	-
TOTAL AT DECEMBER 31, 2016	**106**	**(332)**	**352**	**(12)**	**42**	**34**	**22**

16.3.3 Commitments relating to commodity purchase and sale contracts entered into within the ordinary course of business

Some Group operating companies have entered into long-term contracts, some of which include “take-or-pay” clauses. These consist of firm commitments to purchase (sell) specified quantities of gas, electricity or steam as well as related services, in exchange for a firm commitment from the other party to deliver (purchase) said quantities and services. These contracts were documented as falling outside the scope of IAS 39. The table below shows the main future commitments arising from contracts entered into by the GEM & GNL, Latin America and North America reportable segments (expressed in TWh):

In TWh	Total at Dec. 31, 2017	2018	2019-2022	Beyond 5 years	Total at Dec. 31, 2016
Firm purchases	(5,680)	(792)	(2,117)	(2,771)	(6,214)
Firm sales	2,046	394	644	1,017	2,051

16.4 Equity risk

At December 31, 2017, available-for-sale securities held by the Group amounted to €2,656 million *(see Note 15.1.1 “Available-for-sale securities”)*.

A fall of 10% in the market price of listed shares would have a negative impact (before tax) of around €156 million on the Group’s comprehensive income.

The Group’s main unlisted security corresponds to its 9% interest in the Nordstream pipeline, which is measured by reference to the Discounted Dividend Method (DDM).

The Group’s portfolio of listed and unlisted securities is managed within the context of a specific investment procedure and its performance is reported on a regular basis to Executive Management.

NOTE 17 EQUITY

17.1 Share capital

	Number of shares			Value (in millions of euros)		
	Total	Treasury stock	Outstanding	Share capital	Additional paid-in capital	Treasury stock
AT DECEMBER 31, 2015	**2,435,285,011**	**(39,407,541)**	**2,395,877,470**	**2,435**	**32,506**	**(822)**
Purchase/disposal of treasury stock	-	1,884,703	1,884,703	-	-	61
AT DECEMBER 31, 2016	**2,435,285,011**	**(37,522,838)**	**2,397,762,173**	**2,435**	**32,506**	**(761)**
Purchase/disposal of treasury stock	-	(9,335,181)	(9,335,181)	-	-	(122)
AT DECEMBER 31, 2017	**2,435,285,011**	**(46,858,019)**	**2,388,426,992**	**2,435**	**32,506**	**(883)**

Changes in the number of shares during 2017 reflect the acquisition of treasury stock for 9 million shares (against 2 million shares as part of bonus share plans in 2016) bought to the French State in accordance with its shares transfer program (0.46% of ENGIE capital). These shares will be allocated to the employee savings transaction foreseen by the Group.

17.1.1 Potential share capital and instruments providing a right to subscribe for new ENGIE SA shares

At December 31, 2017 the last stock subscription option plan came to an end.

Shares to be allocated under bonus share plans, performance share award plans as well as the stock purchase option plans, described in Note 22 "Share-based payments", will be covered by existing ENGIE SA shares.

17.1.2 Treasury stock

The Group has a stock repurchase program as a result of the authorization granted to the Board of Directors by the Ordinary and Extraordinary Shareholders' Meeting of May 12, 2017. This program provides for the repurchase of up to 10% of the shares comprising the share capital of ENGIE SA at the date of said Shareholders' Meeting. The aggregate amount of acquisitions net of expenses under the program may not exceed the sum of €9.7 billion, and the purchase price must be less than €40 per share excluding acquisition costs.

At December 31, 2017, the Group held 46.9 million treasury shares, allocated in full to cover the Group's share commitments to employees and corporate officers.

The liquidity agreement signed with an investment service provider assigns to the latter the role of operating on the market on a daily basis, to buy or sell ENGIE SA shares, in order to ensure liquidity and an active market for the shares on the Paris and Brussels stock exchanges. To date, the resources allocated to the implementation of this agreement amount to €150.0 million.

17.2 Other disclosures concerning additional paid-in capital, consolidated reserves and issuance of deeply-subordinated perpetual notes (Group share)

Total additional paid-in capital, consolidated reserves and issuance of deeply-subordinated perpetual notes (including net income for the fiscal year), amounted to €37,090 million at December 31, 2017, including €32,506 million of additional paid-in capital.

Consolidated reserves include the cumulated income of the Group, the legal and statutory reserves of the company ENGIE SA and the cumulative actuarial differences, net of tax.

Under French law, 5% of the net income of French companies must be allocated to the legal reserve until the latter reaches 10% of share capital. This reserve can only be distributed to shareholders in the event of liquidation. The ENGIE SA legal reserve amounts to €244 million.

The cumulative actuarial differences Group share represent losses of €3,095 million at December 31, 2017 (losses of €3,235 million at December 31, 2016); deferred taxes on these actuarial differences amount to €744 million at December 31, 2017 (€846 million at December 31, 2016).

17.2.1 Issuance of deeply-subordinated perpetual notes

ENGIE SA carried out two issues of deeply-subordinated perpetual notes, the first on July 3, 2013 and the second on May 22, 2014. These transactions were divided into several tranches, offering an average coupon of 3.4% (2014) and 4.4% (2013).

In accordance with the provisions of IAS 32 – *Financial Instruments – Presentation,* and given their characteristics, these instruments were accounted for in equity in the Group's consolidated financial statements for a total amount of €1,907 million in 2014 and €1,657 million in 2013.

The coupons ascribed to the owners of these notes, for which €144 million was paid in 2017, are accounted for as a deduction from equity in the Group's consolidated financial statements; the relating tax saving is accounted for in the income statement.

17.2.2 Distributable capacity of ENGIE SA

ENGIE SA's distributable capacity totaled €33,969 million at December 31, 2017 (compared with €34,741 million at December 31, 2016), including €32,506 million of additional paid-in capital.

17.2.3 Dividends

The table below shows the dividends and interim dividends paid by ENGIE SA in respect of 2016 and 2017.

	Amount distributed *(in millions of euros)*	**Net dividend per share** *(in euros)*
In respect of 2016		
Interim dividend (paid on October 14, 2016)	1,198	0.50
Remaining dividend (paid on May 18, 2017)	1,199	0.50
Remaining dividend (paid on May 18, 2017)	14	0.10
In respect of 2017		-
Interim dividend (paid on October 13, 2017)	836	0.35

The additional 3% contribution, introduced by France’s 2012 Finance Law and payable in respect of the dividend and interim dividend, has been invalidated by Constitutional Court dated October 6, 2017. The Group has been reimbursed of almost the entire contributions paid in the past. In 2016, the distribution amounted to €74 million and was accounted for in the income statement.

The Shareholders’ Meeting of May 12, 2017 approved the distribution of a total dividend of €1 per share in respect of 2016. In accordance with Article 26.2 of the bylaws, a dividend increase of 10% (€0.10 per share) has been distributed to on registrated shares held for at least two years at December 31, 2016, provided they are held in this form by the same shareholder until the payment date. This increase of 10%, may only apply, for any one shareholder, for a number of shares not representing more than 0.5% of the capital.

As an interim dividend of €0.50 per share was paid on October 14, 2016, for an amount of €1,198 million, ENGIE SA settled the remaining dividend balance of €0.50 per share in cash on May 18, 2017, for an amount of €1,213 million, for shares benefitting from ordinary dividend, as well as the remaining €0.60 per share for shares benefiting from the bonus dividend. In addition, the Board of Directors' Meeting of July 27, 2017 approved the payment of an interim dividend of €0.35 per share payable on October 13, 2017 for a total amount of €836 million.

Proposed dividend in respect of 2017

Shareholders at the Shareholders' Meeting convened to approve the ENGIE Group financial statements for the year ended December 31, 2017, will be asked to approve a dividend of €0.70 per share, representing a total payout of €1,672 million based on the number of shares outstanding at December 31, 2017. This dividend will be increased by 10% for all shares held for at least two years on December 31, 2017 and up to the 2017 dividend payment date. Based on the number of outstanding shares on December 31, 2017, this increase is valued at €12 million. An interim dividend of €0.35 per share was paid on October 13, 2017, representing a total amount of €836 million.

Subject to approval by the Shareholders' Meeting, this dividend, net of the interim dividend paid, will be detached and paid on May 24, 2018 for an amount of €848 million. It is not recognized as a liability in the financial statements at December 31, 2017, since the financial statements at the end of 2017 are presented before the appropriation of earnings.

17.3 Total gains and losses recognized in equity (Group share)

All the items shown in the table below correspond to cumulative gains and losses (Group share) at December 31, 2017 and December 31, 2016, which are recyclable to income in subsequent periods.

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Available-for-sale securities	206	587
Net investment hedges	(320)	(647)
Cash flow hedges (excl. commodity instruments)	(521)	(900)
Commodity cash flow hedges	(47)	(64)
Deferred taxes on the items above	194	378
Share of entities accounted for using the equity method in recyclable items, net of tax	(389)	(401)
Translation adjustments	(1,134)	1,075
Recyclable items relating to discontinued operations, net of tax	6	130
TOTAL RECYCLABLE ITEMS	**(2,003)**	**159**

17.4 Capital management

ENGIE SA seeks to optimize its financial structure at all times by pursuing an optimal balance between its net debt and its EBITDA. The Group's key objective in managing its financial structure is to maximize value for shareholders, and reduce the cost of capital, while ensuring that the Group has the financial flexibility required to continue its expansion. The Group manages its financial structure and makes any necessary adjustments in light of prevailing economic conditions. In this context, it may choose to adjust the amount of dividends paid to shareholders, reimburse a portion of capital, carry out share buybacks *(see Note 17.1.2 "Treasury stock")*, issue new shares, launch share-based payment plans, recalibrate its investment budget, or sell assets in order to scale back its net debt.

The Group's policy is to maintain an "A" rating by the rating agencies. To achieve this, it manages its financial structure in line with the indicators usually monitored by these agencies, namely the Group's operating profile, financial policy and a series of financial ratios. One of the most commonly used ratios is the ratio where the numerator includes operating cash flows less net financial expense and taxes paid, and the denominator includes adjusted net financial debt. Net debt is mainly adjusted for nuclear provisions, provisions for unfunded pension plans and operating lease commitments.

The Group's objectives, policies and processes for managing capital have remained unchanged over the past few years.

ENGIE SA is not obliged to comply with any minimum capital requirements except those provided for by law.

NOTE 18 PROVISIONS

In millions of euros	Dec. 31, 2016	Additions	Reversals (utilizations)	Reversals (surplus provisions)	Changes in scope of consolidation	Impact of unwinding discount adjustments	Translation adjustments	Other	Dec. 31, 2017	Non-current	Current
Post-employment and other long-term benefits	6,422	274	(410)	3	1,790	125	(23)	(2,039)	6,142	5,994	148
Back-end of the nuclear fuel cycle	5,630	146	(59)	-	-	197	-	-	5,914	5,859	55
Dismantling of plant and equipment (1)	5,671	(1)	(6)	(11)	(6)	214	(21)	(110)	5,728	5,728	-
Site rehabilitation (2)	1,487	(4)	(59)	(14)	307	31	(44)	(1,390)	313	313	1
Litigation, claims, and tax risks	1,133	294	(514)	(80)	4	5	(35)	(54)	753	19	734
Other contingencies	1,865	1,605	(653)	(80)	518	16	(17)	(337)	2,917	515	2,402
TOTAL PROVISIONS	**22,208**	**2,314**	**(1,701)**	**(181)**	**2,612**	**587**	**(140)**	**(3,930)**	**21,768**	**18,428**	**3,340**

(1) *Of which €5,159 million in provisions for dismantling nuclear facilities, compared to €4,997 million at December 31, 2016.*

(2) *Of which a €1,290 million decrease included in the "Other" column and relating to the classification of E&P activities under discontinued operations.*

The impact of unwinding discount adjustments in respect of post-employment and other long-term benefits relates to the interest expense on the benefit obligation, net of the interest income on plan assets.

The "Other" column mainly comprises actuarial gains and losses arising on post-employment benefit obligations in 2017 which are recorded in "Other comprehensive income" as well as provisions recorded against a dismantling or site rehabilitation asset.

Additions, reversals and the impact of unwinding discounting adjustments are presented as follows in the consolidated income statement:

In millions of euros	Dec. 31, 2017
Income/(loss) from operating activities	(334)
Other financial income and expenses	(587)
Income taxes	(97)
TOTAL	**(1,018)**

The different types of provisions and the calculation principles applied are described below.

18.1 Post-employment benefits and other long-term benefits

See Note 19 "Post-employment benefits and other long-term benefits".

18.2 Nuclear power generation activities

In the context of its nuclear power generation activities, the Group assumes obligations relating to the back-end of the nuclear fuel cycle and the dismantling of nuclear facilities.

18.2.1 Legal framework

The Belgian law of April 11, 2003 granted Group subsidiary Synatom responsibility for managing provisions set aside to cover the costs of dismantling nuclear power plants and managing radioactive fissile material from such plants. The tasks of the Commission for Nuclear Provisions set up pursuant to the above-mentioned law is to oversee the process of computing and managing these provisions. The Commission also issues opinions on the maximum percentage of funds that Synatom can lend to operators of nuclear plants and on the types of assets in which Synatom may invest its outstanding funds *(see Note 15.1.5 "Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material")*.

To enable the Commission for Nuclear Provisions to carry out its work in accordance with the above-mentioned law, Synatom is required to submit a report every three years describing the core inputs used to measure these provisions.

If any changes are observed from one triennial report to another that could materially impact the financial inputs used, i.e., the industrial scenario, estimated costs and timing, the Commission may revise its opinion.

Synatom submitted its triennial report to the Commission for Nuclear Provisions on September 12, 2016. The Commission issued its opinion on December 12, 2016 based on the opinion given by ONDRAF, the Belgian agency for radioactive waste and enriched fissile material.

For 2017, core inputs for measuring provisions including management scenarios, implementation program and timetable, detailed technical analyses (physical and radiological inventories), estimation methods and timing of expenditures, as well as discount rates, correspond to those which have been approved by the Commission for Nuclear Provisions and the Group has made sure that these assumptions remain reasonable. Changes in provisions in 2017 therefore mainly relate to recurring items linked to the passage of time (the unwinding of discounting adjustments) and provisions for fuel spent during the year.

The provisions recognized by the Group were measured taking into account the prevailing contractual and legal framework, which sets the operating life of the Tihange 1 reactor and the Doel 1 and 2 reactors at 50 years, and the other reactors at 40 years.

The provisions set aside take into account all existing or planned environmental regulatory requirements on a European, national and regional level. If new legislation were to be introduced in the future, the cost estimates used as a basis for the calculations could vary. However, the Group is not aware of any planned legislation on this matter which could materially impact the amount of the provisions.

The estimated provision amounts include margins for contingencies and other risks that may arise in connection with dismantling and radioactive spent fuel management procedures. These margins are estimated by the Group for each cost category. The contingency margins relating to the disposal of waste are determined by ONDRAF and built into its tariffs.

The Group considers that the provisions approved by the Commission take into account all currently available information to manage the contingencies and other risks associated with the processes of dismantling nuclear facilities and managing radioactive spent fuel.

18.2.2 Provisions for nuclear fuel processing and storage

When spent nuclear fuel is removed from a reactor, it remains radioactive and requires processing. There are two different procedures for managing radioactive spent fuel: reprocessing or conditioning without reprocessing. The Belgian government has not yet decided which scenario will be made compulsory in Belgium.

The Commission for Nuclear Provisions has adopted a "mixed" scenario in which around one-quarter of total fuel is reprocessed, and the rest disposed of directly without reprocessing.

The provisions booked by the Group for nuclear fuel processing and storage cover all of the costs linked to this "mixed" scenario, including on-site storage, transportation, reprocessing by an accredited facility, conditioning, storage and removal. They are calculated based on the following principles and inputs:

- storage costs primarily comprise the costs of building and operating additional dry storage facilities, along with the costs of purchasing containers;
- part of the spent fuel is transferred for reprocessing. The resulting plutonium and uranium is sold to a third party;

- spent fuel that has not been reprocessed is to be conditioned, which requires conditioning facilities to be built according to ONDRAF's approved criteria;
- the reprocessing residues and conditioned spent fuel are transferred to ONDRAF;
- the cost of burying fuel in deep geological repositories is estimated by ONDRAF;
- the long-term obligation is calculated using estimated internal costs and external costs assessed based on offers received from third parties or fee proposals from independent organizations;
- the discount rate used is 3.5% and was calculated based on an inflation rate of 2.0% (actual rate of 1.5%). It is based on an analysis of trends in and average, past and prospective benchmark long-term rates;
- allocations to the provision are computed based on the average unit cost of the quantities used up to the end of the operating life of the plant;
- an annual allocation is also recognized with respect to unwinding the discount on the provision.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. The provisions may be subsequently adjusted in line with changes in the above-mentioned inputs and related cost estimates. However, these components are based on information and estimates which the Group deems reasonable to date and which have been approved by the Commission for Nuclear Provisions.

Belgium's current legal framework does not prescribe methods for managing nuclear waste. The reprocessing of spent fuel was suspended following a resolution adopted by the House of Representatives in 1993. The scenario adopted is based on the assumption that the Belgian government will allow Synatom to reprocess uranium and that an agreement will be reached between Belgium and France designating Areva as responsible for these reprocessing operations. The Commission's 2016 opinion recommends that the necessary steps be officially initiated to ensure that this partial reprocessing scenario is implemented.

A scenario assuming the direct disposal of waste without reprocessing would lead to a decrease in the provision compared to the provision resulting from the "mixed" scenario currently used and approved by the Commission for Nuclear Provisions.

The Belgian government has not yet taken a decision as to whether the waste should be buried in a deep geological repository or stored over the long term. In accordance with the European Directive, in 2015 the government drew up its national program for the management of spent fuel and radioactive waste. The program remains subject to approval by a ministerial order. The scenario adopted by the Commission for Nuclear Provisions is based on the assumption that the waste will be buried in a deep geological repository at the Boom clay facility, as recommended in ONDRAF's waste management program. To date, there is no accredited site in Belgium where the waste may be buried. The Commission's 2016 opinion requires developing a scenario that includes the creation of a storage facility concept that the authorities are likely to deem as fit for authorization.

The Group does not expect that demonstrating the feasibility of these facilities will challenge the industrial scenario that is being adopted since it has been reviewed and validated by both national and international experts who, to date, have not raised any objections as to the technical implementation of the proposed solution of burying waste in a deep geological repository.

In these conditions, on February 9, 2018, ONDRAF proposed that geological storage be adopted as the national policy for managing this waste over the long term. Once the Government has ratified the proposal after obtaining the opinion of the Belgian Federal Agency for Nuclear Control (FANC), ONDRAF will launch a decision-making process with all the stakeholders, which will be included in the analysis of the Commission for Nuclear Provisions

18.2.3 Provisions for dismantling nuclear facilities

Nuclear power plants have to be dismantled at the end of their operating life. Provisions are set aside in the Group's accounts to cover all costs relating to (i) the shutdown phase, which involves removing radioactive fuel from the site and (ii) the dismantling phase, which consists of decommissioning and cleaning up the site.

The dismantling strategy is based on the facilities being dismantled (i) immediately after the reactor is shut down, (ii) "serial" rather than on a site-by-site basis, and (iii) completely, the land being subsequently returned to greenfield status.

Provisions for dismantling nuclear facilities are calculated based on the following principles and inputs:

- costs payable over the long term are calculated by reference to the estimated costs for each nuclear facility, based on a study conducted by independent experts under the assumption that the facilities will be dismantled “in series”;
- an inflation rate of 2.0% is applied until the dismantling obligations expire in order to determine the value of the future obligation;
- a discount rate of 3.5% (including inflation of 2.0%) is applied to determine the present value (NPV) of the obligation. This rate is the same as that used to calculate the provision for processing spent nuclear fuel;
- the operating life is 50 years for Tihange 1 and Doel 1 and 2, and 40 years for the other facilities;
- the start of the technical shutdown procedures depends on the facility concerned and on the timing of operations for the nuclear reactor as a whole. The shutdown procedures are immediately followed by dismantling operations;
- the present value of the obligation when the facilities are commissioned represents the initial amount of the provision. The matching entry is an asset recognized for the same amount within the corresponding property, plant and equipment category. This asset is depreciated over the remaining operating life of the facilities;
- an annual allocation to the provision, reflecting the interest cost on the provision carried in the books at the end of the previous year, is calculated at the discount rate used to estimate the present value of the obligation.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. The provisions may be subsequently adjusted in line with changes in the above-mentioned inputs. The assumptions used have a significant impact on the related implementation costs. However, these inputs and assumptions are based on information and estimates which the Group deems reasonable to date and which have been approved by the Commission for Nuclear Provisions.

The scenario adopted is based on a dismantling program and on timetables that have to be approved by the nuclear safety authorities.

Provisions are also recognized for the Group’s share of the expected dismantling costs for the nuclear facilities in which it has drawing rights.

18.2.4 Sensitivity to discount rates

The remaining balance at end-2017 of provisions for the back-end of the nuclear fuel cycle came to €5.9 billion. The obligation, expressed in current euros and estimated at the share of spent fuel to date amounted to approximately €11.7 billion.

Provisions for dismantling nuclear facilities in Belgium amounted to €5.2 billion at end-2017. The obligation, expressed in current euros, totaled approximately €7.5 billion.

Based on currently applied inputs for estimating costs and the timing of payments, a change of 10 basis points in the discount rate used could lead to an adjustment of around €150 million in dismantling and nuclear fuel processing and storage provisions. A fall in discount rates would lead to an increase in outstanding provisions, while a rise in discount rates would reduce the provision amount.

Changes arising as a result of the review of the dismantling provision would not have an immediate impact on income, since the matching entry under certain conditions would consist in adjusting the corresponding assets accordingly.

Sensitivity to discount rates as presented above in accordance with the applicable standards, is an automatic calculation and should therefore be interpreted with appropriate caution in view of the variety of other inputs – some of which may be interdependent – included in the evaluation. The frequency with which these provisions are reviewed by the Commission for Nuclear Provisions in accordance with applicable regulations ensures that the overall obligation is measured accurately.

18.3 Dismantling of non-nuclear plant and equipment and site rehabilitation

18.3.1 Dismantling obligations arising on other non-nuclear plant and equipment

Certain plant and equipment, including conventional power stations, transmission and distribution pipelines, storage facilities and LNG terminals, have to be dismantled at the end of their operational lives. This obligation is the result of prevailing environmental regulations in the countries concerned, contractual agreements, or an implicit Group commitment.

Based on estimates of proven and probable gas reserves through 2260 using current production levels, dismantling provisions for gas infrastructures in France have a present value near zero.

18.3.2 Hazelwood Power Station & Mine (Australia)

Following the Group and its partner Mitsui's announcement in November 2016 of their decision to close the coal-fired Hazelwood Power Station, the adjoining mine was shut down in late March 2017. The Group holds a 72% interest in the 1,600 MW power station, which is fully consolidated.

At end-2017, the provision covering the obligation to dismantle and rehabilitate the mine amounted to €446 million (including €282 million of mine rehabilitation and €164 million of power station dismantling costs).

Dismantling and site rehabilitation work was initiated in 2017 and includes mine rehabilitation, with the purpose of ensuring long-term land and wall stability, the demolition and dismantling of all of the site's industrial facilities, the monitoring of environmental incidents and any related remediation plans, as well as long-term site monitoring.

The applicable laws and regulations are currently undergoing reform by the State of Victoria. The final regulations adopted could change the nature of the work to be carried out, the timing and, consequently, the provisions recorded to cover the related costs.

The average discount rates used to determine the amount of the provision were 4.26% and 4.14% for mine restoration work and power station dismantling work, respectively.

The amount of the provision recognized is based on the Group's best current estimate of the dismantling and rehabilitation costs that Hazelwood is expected to incur. However, the amount of this provision may be adjusted in the future to take into account any changes in the key inputs.

18.4 Contingencies and tax risks

This caption includes essentially provisions for commercial contingencies, and claims and tax disputes.

18.5 Other contingencies

This caption includes notably provisions for onerous contracts relating to storage and transport capacity reservation contracts *(see Note 8.5).*

NOTE 19 POST-EMPLOYMENT BENEFITS AND OTHER LONG-TERM BENEFITS

19.1 Description of the main pension plans

The Group's main pension plans are described below.

19.1.1 Companies belonging to the Electricity and Gas Industries sector in France

Since January 1, 2005, the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*) has operated the pension, disability, death, occupational accident and occupational illness benefit plans for electricity and gas industry (hereinafter "EGI") companies in France. The CNIEG is a social security legal entity under private law placed under the joint responsibility of the ministries in charge of social security and the budget.

Employees and retirees of EGI sector companies have been fully affiliated to the CNIEG since January 1, 2005. The main affiliated Group entities are ENGIE SA, GRDF, GRTgaz, ELENGY, STORENGY, ENGIE Thermique France, CPCU, CNR and SHEM.

Following the funding reform of the special EGI pension plan introduced by Law No. 2004-803 of August 9, 2004 and its implementing decrees, specific benefits (pension benefits on top of the standard benefits payable under ordinary law) already vested at December 31, 2004 ("past specific benefits") were allocated between the various EGI entities. Past specific benefits (benefits vested at December 31, 2004) relating to regulated transmission and distribution businesses ("regulated past specific benefits") are funded by the levy on gas and electricity transmission and distribution services (*Contribution Tarifaire d'Acheminement*) and therefore no longer represent an obligation for the ENGIE Group. Unregulated past specific benefits (benefits vested at December 31, 2004) are funded by EGI sector companies to the extent defined by Decree No. 2005-322 of April 5, 2005.

The special EGI pension plan is a legal pension plan available to new entrants.

The specific benefits vested under the plan since January 1, 2005 are wholly financed by EGI sector companies in proportion to their respective weight in terms of payroll costs within the EGI sector.

As this plan represents a defined benefit plan, the Group has set aside a pension provision in respect of specific benefits payable to employees of unregulated activities and specific benefits vested by employees of regulated activities since January 1, 2005. This provision also covers the Group's early retirement obligations. The provision amount may be subject to fluctuations based on the weight of the Group's companies within the EGI sector.

Pension benefit obligations and other "mutualized" obligations are assessed by the CNIEG.

At December 31, 2017, the projected benefit obligation in respect of the special pension plan for EGI sector companies amounted to €3.4 billion.

The duration of the pension benefit obligation of the EGI pension plan is 20 years.

19.1.2 Companies belonging to the electricity and gas sector in Belgium

In Belgium, the rights of employees in electricity and gas sector companies, principally Electrabel, Laborelec, ENGIE CC and some ENGIE Energy Management Trading employee categories, are governed by collective bargaining agreements.

These agreements, applicable to "wage-rated" employees recruited prior to June 1, 2002 and managerial staff recruited prior to May 1, 1999, specify the benefits entitling employees to a supplementary pension equivalent to 75% of their most recent annual income, for a full career and in addition to the statutory pension. These top-up pension payments provided under defined benefit plans are partly reversionary. In practice, the benefits are paid in the form of a lump sum for the majority of plan participants. Most of the obligations resulting from these pension plans are financed through pension funds set up for the electricity and gas sector and by certain insurance companies. Pre-funded pension plans are financed by employer and employee contributions. Employer contributions are calculated annually based on actuarial assessments.

The projected benefit obligation relating to these plans represented around 14% of total pension obligations and related liabilities at December 31, 2017. The average duration is 9 years.

"Wage-rated" employees recruited after June 1, 2002 and managerial staff (i) recruited after May 1, 1999 or (ii) having opted for the transfer through defined contribution plans, are covered under defined contribution plans. Prior to January 1, 2017, the law specified a minimum average annual return (3.75% on wage contributions and 3.25% on employer contributions) when savings are liquidated.

The law on supplementary pensions, approved on December 18, 2016 and enforced on January 1, 2017 henceforth specifies a minimum rate of return, depending on the actual rate of return of Belgian government bonds, within a range of 1.75%-3.25% (the rates are now identical for employee and employer contributions). In 2016, the minimum rate of return stood at 1.75%.

An expense of €31 million was recognized in 2017 in respect of these defined contribution plans (€24 million at December 31, 2016).

19.1.3 Multi-employer plans

Employees of some Group companies are affiliated to multi-employer pension plans.

Under multi-employer plans, risks are pooled to the extent that the plan is funded by a single contribution rate determined for all affiliated companies and applicable to all employees.

Multi-employer plans are particularly common in the Netherlands, where employees are normally required to participate in a compulsory industry-wide plan. These plans cover a significant number of employers, thereby limiting the impact of potential default by an affiliated company. In the event of default, the vested rights are maintained in a special compartment and are not transferred to the other members. Refinancing plans may be set up to ensure the funds are balanced.

The ENGIE Group accounts for multi-employer plans as defined contribution plans.

An expense of €70 million was recognized in 2017 in respect of multi-employer pension plans (€69 million at December 31, 2016).

19.1.4 Other pension plans

Most other Group companies also grant their employees retirement benefits. In terms of financing, pension plans within the Group are almost equally split between defined benefit and defined contribution plans.

The Group's main pension plans outside France, Belgium and the Netherlands concern:

- the United Kingdom: the large majority of defined benefit pension plans is now closed to new entrants and future benefits no longer vest under these plans. All entities run a defined contribution scheme. The pension obligations of International Power's subsidiaries in the United Kingdom are covered by the special Electricity Supply Pension Scheme (ESPS). The assets of this defined benefit scheme are invested in separate funds. Since June 1, 2008, the scheme has been closed and a defined contribution plan was set up for new entrants;
- Germany: the Group's German subsidiaries have closed their defined benefit plans to new entrants and now offer defined contribution plans;
- Brazil: ENGIE Brasil Energia operates its own pension scheme. This scheme has been split into two parts, one for the (closed) defined benefit plan, and the other for the defined contribution plan that has been available to new entrants since the beginning of 2005.

19.2 Description of other post-employment benefit obligations and other long-term benefits

19.2.1 Other benefits granted to current and former EGI sector employees

Other benefits granted to EGI sector employees are:

Post-employment benefits:

- reduced energy prices;
- end-of-career indemnities;
- bonus leave;
- death capital benefits.

Long-term benefits:

- allowances for occupational accidents and illnesses;
- temporary and permanent disability allowances;
- long-service awards.

The Group's main obligations are described below.

19.2.1.1 Reduced energy prices

Under Article 28 of the national statute for electricity and gas industry personnel, all employees (current and former employees, provided they meet certain length-of-service conditions) are entitled to benefits in kind which take the form of reduced energy prices known as "employee rates".

This benefit entitles employees to electricity and gas supplies at a reduced price. For retired employees, this provision represents a post-employment defined benefit. Retired employees are only entitled to the reduced rate if they have completed at least 15 years' service within EGI sector companies.

In accordance with the agreements signed with EDF in 1951, ENGIE provides gas to all current and former employees of ENGIE and EDF, while EDF supplies electricity to these same beneficiaries. ENGIE pays (or benefits from) the balancing contribution payable in respect of its employees as a result of energy exchanges between the two utilities.

The obligation to provide energy at a reduced price to current and former employees is measured as the difference between the energy sale price and the preferential rate granted.

The provision set aside in respect of reduced energy prices amounts to €3.1 billion at December 31, 2017. The duration of the obligation is 21 years.

19.2.1.2 End-of-career indemnities

Retiring employees (or their dependents in the event of death during active service) are entitled to end-of-career indemnities which increase in line with the length of service within the EGI sector.

19.2.1.3 Compensation for occupational accidents and illnesses

EGI sector employees are entitled to compensation for accidents at work and occupational illnesses. These benefits cover all employees or the dependents of employees who die as a result of occupational accidents or illnesses, or injuries suffered on the way to work.

The amount of the obligation corresponds to the likely present value of the benefits to be paid to current beneficiaries, taking into account any reversionary annuities.

19.2.2 Other benefits granted to employees of the gas and electricity sector in Belgium

Electricity and gas sector companies also grant other employee benefits such as the reimbursement of medical expenses, electricity and gas price reductions, as well as length-of-service awards and early retirement schemes. These benefits are not prefunded, with the exception of the special "*allocation transitoire*" termination indemnity, considered as an end-of-career indemnity.

19.2.3 Other collective agreements

Most other Group companies also grant their staff post-employment benefits (early retirement plans, medical coverage, benefits in kind, etc.) and other long-term benefits such as jubilee and length-of-service awards.

19.3 Defined benefit plans

19.3.1 Amounts presented in the statement of financial position and statement of comprehensive income

In accordance with IAS 19, the information presented in the statement of financial position relating to post-employment benefit obligations and other long-term benefits results from the difference between the gross projected benefit obligation and the fair value of plan assets. A provision is recognized if this difference is positive (net obligation), while a prepaid benefit cost is recorded in the statement of financial position when the difference is negative, provided that the conditions for recognizing the prepaid benefit cost are met.

Changes in provisions for post-employment benefits and other long-term benefits, plan assets and reimbursement rights recognized in the statement of financial position are as follows:

In millions of euros	Provisions	Plan assets	Reimbursement rights
At December 31, 2015	**(5,785)**	**62**	**167**
Exchange rate differences	(51)	(1)	-
Changes in scope of consolidation and other	46	(12)	-
Actuarial gains and losses	(663)	(7)	2
Periodic pension cost of continued activities	(411)	(44)	3
Periodic pension cost of discontinued activities	(19)	-	-
Asset ceiling	41	-	-
Contributions/benefits paid	420	76	(42)
At December 31, 2016	**(6,422)**	**69**	**130**
Exchange rate differences	31	17	-
Transfer to "Liabilities directly associated with assets classified as held for sale"	233	-	-
Changes in scope of consolidation and other	(86)	8	-
Actuarial gains and losses	92	5	13
Periodic pension cost of continued activities	(427)	(50)	3
Periodic pension cost of discontinued activities	(28)	-	-
Asset ceiling	2	-	-
Contributions/benefits paid	464	53	13
AT DECEMBER 31, 2017	**(6,142)**	**101**	**159**

Plan assets and reimbursement rights are presented in the statement of financial position under “Other non-current assets” or “Other current assets”.

The cost recognized for the period, adjusted due to the classification of ENGIE E&P International under “Discontinued operations” on May 11, 2017 (*see Note 30 “Restatement of 2016 comparative data”*) amounted to €477 million in 2017

(€460 million in 2016). The components of this defined benefit cost in the period are set out in Note 19.3.4 “Components of the net periodic pension cost”.

The Eurozone represents 96% of the Group’s net obligation at December 31, 2017 (compared to 95% at December 31, 2016).

Cumulative actuarial gains and losses recognized in equity amounted to €3,327 million at December 31, 2017, compared to €3,469 million at December 31, 2016.

Net actuarial differences arising in the period and presented on a separate line in the statement of comprehensive income represented a net actuarial gain totaling €99 million in 2017 and a net actuarial loss of €670 million in 2016.

19.3.2 Change in benefit obligations and plan assets

The table below shows the amount of the Group's projected benefit obligations and plan assets, changes in these items during the periods presented, and their reconciliation with the amounts reported in the statement of financial position:

In millions of euros		Dec. 31, 2017				Dec. 31, 2016			
		Pension benefit obligations(1)	Other post-employment benefit obligations(2)	Long-term benefit obligations(3)	Total	Pension benefit obligations(1)	Other post-employment benefit obligations(2)	Long-term benefit obligations(3)	Total
A - CHANGE IN PROJECTED BENEFIT OBLIGATION									
Projected benefit obligation at January 1		**(7,944)**	**(3,731)**	**(556)**	**(12,232)**	**(7,197)**	**(3,394)**	**(530)**	**(11,121)**
Service cost		(278)	(57)	(46)	(381)	(234)	(50)	(45)	(329)
Interest expense		(189)	(73)	(9)	(271)	(208)	(84)	(11)	(303)
Contributions paid		(13)	-	-	(13)	(14)	-	-	(14)
Amendments		(7)	-	-	(7)	8	-	-	8
Changes in scope of consolidation		3	1	5	9	(6)	(3)	-	(10)
Curtailments/settlements		6	-	-	6	1	-	-	1
Non-recurring items		-	(2)	-	(2)	-	-	-	-
Financial actuarial gains and losses		23	(53)	23	(8)	(825)	(261)	(15)	(1,102)
Demographic actuarial gains and losses		(195)	1	(8)	(201)	106	(51)	(2)	52
Benefits paid		498	129	46	673	434	113	46	594
Transfer to "liabilities directly associated with assets classified as held for sale		404	44	6	454				
Other (of which translation adjustments)		39	1	-	40	(8)	(1)	-	(8)
Projected benefit obligation at December 31	**A**	**(7,653)**	**(3,739)**	**(538)**	**(11,931)**	**(7,944)**	**(3,731)**	**(556)**	**(12,232)**
B - CHANGE IN FAIR VALUE OF PLAN ASSETS									
Fair value of plan assets at January 1		**5,919**	**1**	**-**	**5,920**	**5,445**	**1**	**-**	**5,446**
Interest income on plan assets		144	-	-	144	162	-	-	162
Financial actuarial gains and losses		321	-	-	321	361	-	-	361
Contributions received		298	21	-	318	267	-	-	267
Changes in scope of consolidation		-	-	-	-	1	-	-	1
Settlements		(9)	(1)	-	(10)	-	-	-	-
Benefits paid		(441)	(21)	-	(461)	(352)	-	-	(352)
Transfer to "liabilities directly associated with assets classified as held for sale		(222)	-	-	(222)				
Other (of which translation adjustments)		(105)	-	-	(105)	33	-	-	33
Fair value of plan assets at December 31	**B**	**5,904**	**-**	**-**	**5,904**	**5,919**	**1**	**-**	**5,920**
C - FUNDED STATUS	**A+B**	**(1,749)**	**(3,739)**	**(538)**	**(6,027)**	**(2,026)**	**(3,731)**	**(556)**	**(6,313)**
Asset ceiling		(14)	-	-	(14)	(42)	-	-	(42)
NET BENEFIT OBLIGATION		**(1,763)**	**(3,739)**	**(538)**	**(6,041)**	**(2,067)**	**(3,731)**	**(556)**	**(6,354)**
ACCRUED BENEFIT LIABILITY		**(1,865)**	**(3,739)**	**(538)**	**(6,142)**	**(2,136)**	**(3,731)**	**(556)**	**(6,422)**
PREPAID BENEFIT COST		**101**	**-**	**-**	**101**	**68**	**1**	**-**	**68**

(1) Pensions and retirement bonuses.
(2) Reduced energy prices, healthcare, gratuities and other post-employment benefits.
(3) Length-of-service awards and other long-term benefits.

19.3.3 Change in reimbursement rights

Changes in the fair value of reimbursement rights relating to plan assets managed by Contassur are as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Fair value at January 1	**130**	**167**
Interest income on plan assets	*3*	*3*
Financial actuarial gains and losses	*13*	*2*
Actual return	16	5
Curtailments/settlements	-	-
Employer contributions	16	15
Employee contributions	-	-
Benefits paid	(3)	(14)
Other	-	(43)
FAIR VALUE AT DECEMBER 31	**159**	**130**

19.3.4 Components of the net periodic pension cost

The net periodic cost recognized in respect of defined benefit obligations for the years ended December 31, 2017 and 2016 breaks down as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Current service cost	360	314
Actuarial gains and losses (2)	(14)	17
Plan amendments	6	(8)
Gains or losses on pension plan curtailments, terminations and settlements	2	(1)
Non-recurring items	1	1
Total recognized for under current operating income after share in net income of entities accounted for using the equity method	**355**	**324**
Net interest expense	122	136
Total accounted for under net financial income/(loss)	**122**	**136**
TOTAL	**477**	**460**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued operations" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

(2) On the long-term benefit obligation.

19.3.5 Funding policy and strategy

When defined benefit plans are funded, the related plan assets are invested in 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 return on investment and acceptable levels of risk.

The objectives of these strategies are twofold: to maintain sufficient liquidity to cover pension and other benefit payments; and as part of risk management, to achieve a long-term rate of return higher than the discount rate or, where appropriate, at least equal to future required returns.

When plan assets are invested in pension funds, investment decisions are the responsibility of the fund management concerned. For French companies, where plan assets are invested with an insurance company, the latter manages the investment portfolio for unit-linked policies or euro-denominated policies, in a manner adapted to the risk and long-term profile of the liabilities.

The funding of these obligations at December 31 for each of the periods presented can be analyzed as follows:

In millions of euros	Projected benefit obligation	Fair value of plan assets	Asset ceiling	Total net obligation
Underfunded plans	(5,876)	4,505	(9)	(1,380)
Overfunded plans	(1,286)	1,399	(5)	108
Unfunded plans	(4,768)	-	-	(4,768)
AT DECEMBER 31, 2017	**(11,930)**	**5,904**	**(14)**	**(6,041)**
Underfunded plans	(6,593)	5,078	(42)	(1,557)
Overfunded plans	(804)	842	-	38
Unfunded plans	(4,835)	-	-	(4,835)
AT DECEMBER 31, 2016	**(12,232)**	**5,920**	**(42)**	**(6,354)**

The allocation of plan assets by principal asset category can be analyzed as follows:

In %	Dec. 31, 2017	Dec. 31, 2016
Equity investments	27	29
Sovereign bond investments	24	17
Corporate bond investments	28	31
Money market securities	3	10
Real estate	2	4
Other assets	17	9
TOTAL	**100**	**100**

All plan assets were quoted on an active market at December 31, 2017.

The actual return on assets of EGI sector companies stood at 4% in 2017.

The actual return on plan assets of Belgian entities amounted to approximately 3% in Group insurance and 6% in pension funds.

The allocation of plan assets categories by geographic area of investment can be analyzed as follows:

In %	Europe	North America	Latin America	Asia - Oceania	Rest of the World	Total
Equity investments	60	23	2	12	3	100
Sovereign bond investments	72	26	-	-	1	100
Corporate bond investments	78	14	2	4	2	100
Money market securities	69	6	-	23	2	100
Real estate	91	8	-	2	-	100
Other assets	22	10	3	3	62	100

19.3.6 Actuarial assumptions

Actuarial assumptions are determined individually by country and company in conjunction with independent actuaries. Weighted discount rates for the main actuarial assumptions are presented below:

		Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
		2017	2016	2017	2016	2017	2016	2017	2016
Discount rate	Eurozone	1.9%	1.7%	2.0%	2.0%	1.8%	1.5%	1.9%	1.8%
	UK Zone	2.6%	2.7%	-	-	-	-	-	-
Inflation rate	Eurozone	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%	1.8%
	UK Zone	3.2%	3.3%	-	-	-	-	-	-

19.3.6.1 Discount and inflation rate

The discount rate applied is determined based on the yield, at the date of the calculation, on top-rated corporate bonds with maturities mirroring the term of the plan.

The rates were determined for each monetary area based on data for AA corporate bonds yields. For the Eurozone, data (from Bloomberg) are extrapolated on the basis of government bond yields for long maturities.

According to the Group's estimates, a 100-basis-point increase or decrease in the discount rate would result in a change of approximately 15% in the projected benefit obligation.

The inflation rates were determined for each monetary area. A 100-basis-point increase or decrease in the inflation rate (with an unchanged discount rate) would result in a change of approximately 14% in the projected benefit obligation.

19.3.6.2 Other assumptions

The increase in the rate of medical costs (including inflation) was estimated at 2.8%.

A 100-basis-point change in the assumed increase in medical costs would have the following impacts:

In millions of euros	**100 basis point increase**	**100 basis point decrease**
Impact on expenses	-	-
Impact on pension obligations	7	(6)

19.3.7 Estimated employer contributions payable in 2018 under defined benefit plans

The Group expects to pay around €227 million in contributions into its defined benefit plans in 2018, including €85 million for EGI sector companies. Annual contributions in respect of EGI sector companies will be made by reference to rights vested in the year, taking into account the funding level for each entity in order to even out contributions over the medium term.

19.4 Defined contribution plans

In 2017, the Group recorded a €142 million expense in respect of amounts paid into Group defined contribution plans (€137 million in 2016). These contributions are recorded under "Personnel costs" in the consolidated income statement.

NOTE 20 FINANCE LEASES

20.1 Finance leases for which ENGIE acts as lessee

The carrying amounts of property, plant and equipment held under finance leases are broken down into different categories depending on the type of asset concerned.

The main finance lease agreements entered into by the Group primarily concern power plants in the Latin America segment (mostly ENGIE Energía Perú – Peru) and Cofely's cogeneration plants.

The undiscounted and present values of future minimum lease payments break down as follows:

	Dec. 31, 2017		Dec. 31, 2016	
In millions of euros	Undiscounted value	Present value	Undiscounted value	Present value
Year 1	155	151	158	153
Years 2 to 5 inclusive	334	306	539	493
Beyond year 5	27	20	32	22
TOTAL	**516**	**477**	**728**	**668**

The following table provides a reconciliation of liabilities under finance leases as reported in the statement of financial position *(see Note 15.2.1 "Borrowings and debt")* with undiscounted future minimum lease payments by maturity:

In millions of euros	Total	Year 1	Years 2 to 5 inclusive	Beyond year 5
Liabilities under finance leases	483	152	303	27
Impact of discounting future repayments of principal and interest	33	3	31	-
UNDISCOUNTED FUTURE MINIMUM LEASE PAYMENTS	**516**	**155**	**334**	**27**

20.2 Finance leases for which ENGIE acts as lessor

These leases fall mainly within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They concern (i) energy purchase and sale contracts where the contract conveys an exclusive right to use a production asset; and (ii) certain contracts with industrial customers relating to assets held by the Group.

The Group has recognized finance lease receivables, notably for cogeneration plants for Wapda and NTDC (Uch – Pakistan), Bowin (Glow – Thailand) and Lanxess (Electrabel – Belgium).

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Undiscounted future minimum lease payments	1,013	1,116
Unguaranteed residual value accruing to the lessor	27	46
TOTAL GROSS INVESTMENT IN THE LEASE	**1,041**	**1,163**
Unearned financial income	**197**	**166**
NET INVESTMENT IN THE LEASE (STATEMENT OF FINANCIAL POSITION)	**844**	**997**
o/w present value of future minimum lease payments	*828*	*962*
o/w present value of unguaranteed residual value	*16*	*35*

Amounts recognized in the statement of financial position in connection with finance leases are detailed in Note 15.1.2 "Loans and receivables at amortized cost".

Undiscounted future minimum lease payments receivable under finance leases can be analyzed as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Year 1	130	115
Years 2 to 5 inclusive	456	450
Beyond year 5	427	552
TOTAL	**1,013**	**1,116**

NOTE 21 OPERATING LEASES

21.1 Operating leases for which ENGIE acts as lessee

The Group has entered into operating leases mainly in connection with LNG tankers, and miscellaneous buildings and fittings.

Operating lease income and expenses for 2017 and 2016 can be analyzed as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Minimum lease payments	(819)	(864)
Contingent lease payments	(17)	(15)
Sub-letting income	(1)	-
Sub-letting expenses	(35)	(28)
Other operating lease expenses	(95)	(179)
TOTAL	**(967)**	**(1,085)**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued activities" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

The present values of future minimum lease payments under non-cancelable operating leases can be analyzed as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Year 1	609	611
Years 2 to 5 inclusive	1,642	1,694
Beyond year 5	1,211	1,339
TOTAL	**3,463**	**3,644**

At December 31, 2017 they included €1,148 million relating to contracts (primarily LNG tankers) carried by liquefied natural gas upstream activities for which the disposal process has been initiated. At December 31, 2016, they included €103 million relating to contracts carried by discontinued exploration-production activities. The contracts carried by discontinued exploration-production activities are not displayed at December 31, 2017.

21.2 Operating leases for which ENGIE acts as lessor

These leases fall mainly within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They primarily concern power plants operated in the Africa/Asia segment.

Operating lease income for 2017 and 2016 can be analyzed as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Minimum lease payments	307	388
Contingent lease payments	22	24
TOTAL	**329**	**412**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under "Discontinued activities" on May 11, 2017 (see Note 30 "Restatement of 2016 comparative data").

The present values of future minimum lease payments receivable under non-cancelable operating leases can be analyzed as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016 (1)
Year 1	286	335
Years 2 to 5 inclusive	58	264
Beyond year 5	3	-
TOTAL	**347**	**598**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under “Discontinued activities” on May 11, 2017 (see Note 30 “Restatement of 2016 comparative data”).

NOTE 22 SHARE-BASED PAYMENTS

Expenses recognized in respect of share-based payments break down as follows:

		Expense for the year	
In millions of euros	Note	Dec. 31, 2017	Dec. 31, 2016
Employee share issues [(1)]	22.2	1	2
Bonus/performance share plans	22.3	36	36
Other Group companies' plans		1	22
TOTAL		**38**	**60**

(1) Including Share Appreciation Rights set up within the scope of employee share issues in certain countries.

22.1 Stock option plans [(1)]

No new ENGIE stock option grants were approved by the Group's Board of Directors in either 2017 or 2016.

At December 31, 2017, the last stock purchase plan expired and 5 million options were cancelled.

Plan	Date of authorizing General Share-holders' Meeting	Vesting date	Adjusted exercise price *(in euros)*	Number of benefi-ciaries per plan	Number of options granted to members of the Executive Committee	Outstanding options at Dec. 31, 2016	Options cancelled or expired	Outstanding options at Dec. 31, 2017	Expiration date	Residual life
Nov. 10, 2009	May 4, 2009	Nov. 10, 2013	29.4	4,036	-	4,775,429	4,775,429	-	Nov. 9, 2017	-
TOTAL					**2,615,000**	**4,775,429**	**4,775,429**	**-**		

22.1.1 Link

ENGIE did not issue any new shares to employees in 2017.

The only impact of employee share issues on 2017 income relate to cash-settled Share Appreciation Rights, resulting from the fair value of warrants hedging the liability towards employees issued as part of the Link 2014 subscription plan. This charge amounted to €1 million in 2017.

22.2 Bonus shares and performance shares

22.2.1 New awards in 2017

ENGIE Performance Share plan of December 13, 2017

On December 13, 2017, the Board of Directors approved the allocation of 5 million performance shares to members of the Group's executive and senior management, breaking down into three tranches:

- performance shares vesting on March 14, 2021, subject to a further one-year lock-up period;
- performance shares vesting on March 14, 2021, without a lock-up period; and
- performance shares vesting on March 14, 2022, without a lock-up period.

(1) The terms and conditions of plans set up in the past are described in previous Registration Documents prepared by GDF SUEZ.

In addition to a condition requiring employees to be employed with the Group at the vesting date, each tranche is made up of instruments subject to three different conditions, excluding the first 150 performance shares granted to beneficiaries (excluding top management) which are exempt from performance conditions. The performance conditions, each of which accounts for one-third of the total grant, are as follows:

- a market performance condition relating to ENGIE’s total shareholder return compared to that of a reference panel of six companies, as assessed between November 2017 and January 2021;
- two internal performance conditions relating to Group net recurring income Group share and to Return On Capital Employed (ROCE) in 2019 and 2020.

As part of this plan, performance shares without conditions were also awarded to the winners of the Innovation and Incubation programs (21,900 shares allocated).

22.2.2 Fair value of bonus share plans with or without performance conditions

The following assumptions were used to calculate the fair value of the new plans awarded by ENGIE in 2017:

Allocation date	Vesting date	End of the lock-up period	Price at the award date	Expected dividend	Financing cost for the employee	Non-transferability cost	Market-related performance condition	Fair value per unit
December 13, 2017	March 14, 2021	March 14, 2022	14.7	0.7	4.6%	0.4	yes	11.03
December 13, 2017	March 14, 2021	March 14, 2021	14.7	0.7	4.6%	0.4	yes	11.53
December 13, 2017	March 14, 2021	March 14, 2021	14.7	0.7	4.6%	0.5	no	12.58
December 13, 2017	March 14, 2022	March 14, 2022	14.7	0.7	4.6%	0.4	yes	10.88
Weighted fair value of the December 13, 2017 plan								**11.64**

22.2.3 Review of internal performance conditions applicable to the plans

In addition to the condition of continuing employment within the Group, eligibility for certain bonus share and performance share plans is subject to an internal performance condition. When this condition is not fully met, the number of bonus shares granted to employees is reduced in accordance with the plans’ regulations, leading to a decrease in the total expense recognized in relation to the plans in accordance with IFRS 2.

Performance conditions are reviewed at each reporting date. Volume reduction was recorded in 2017 due to a failure to meet performance criteria on the December 2013 performance plan, resulting in a €1 million profit.

22.2.4 Free share plans with or without performance conditions in force at December 31, 2017, and impact on income

The expense recorded during the year on plans in effect was as follows:

	Expense for the year	
	(In millions of euros)	
	Dec. 31, 2017	**Dec. 31, 2016**
Bonus share plans	-	5
Performance share plans	36	31
of which expense for the year	*37*	*31*
of which reversal for performance conditions not achieved	*(1)*	*-*
TOTAL	**36**	**36**

NOTE 23 RELATED PARTY TRANSACTIONS

This note describes material transactions between the Group and related parties.

Compensation payable to key management personnel is disclosed in Note 24 “Executive compensation”.

Transactions with joint ventures and associates are described in Note 3 “Investments in entities accounted for using the equity method”.

Only material transactions are described below.

23.1 Relations with the French State and with entities owned or partly owned by the French State

23.1.1 Relations with the French State

Until January 10, 2017, the French State owned 32.76% of ENGIE and appointed five representatives to the Group’s 19-member Board of Directors. At this date, the French State sold 4.1% of ENGIE by way of a private placement to institutional investors. On September 5, 2017, the French State sold once again 4.1% of ENGIE by way of an accelerated institutional placement, while simultaneously selling to ENGIE a 0.46% share of its capital. Pursuant to these transactions, the French State now owns 24.10% of ENGIE and 28.07% of the Group’s voting rights.

The French State holds a golden share aimed at protecting France’s critical interests and ensuring the continuity and safeguarding of supplies in the energy sector. The golden share is granted to the French State indefinitely and entitles it to veto decisions taken by ENGIE if it considers they could harm France’s interests.

Public service engagements in the energy sector are defined by the law of January 3, 2003.

On November 6, 2015, the French State and ENGIE renewed the public service contract which sets out how such engagements are implemented, the Group's public service obligations and the conditions for rate regulation in France:

- as part of its public service obligations, the Group reaffirmed its commitments in terms of security of supply, quality of customer relations, solidarity and assistance to low-income customers, sustainable development and protection of the environment, as well as in terms of research;
- regarding the conditions for rate regulation in France, the contract confirms the overall regulatory framework for setting and changing natural gas tariffs in France, according to the Decree of December 18, 2009, which notably forecasts rate changes based on costs incurred, while also defining the transitional framework following the elimination of regulated natural gas tariffs for business customers.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, as well as rates for accessing the French LNG terminals, are all regulated.

23.1.2 Relations with EDF

Following the creation on July 1, 2004 of the French gas and electricity distribution network operator (EDF Gaz de France Distribution), Gaz de France SA and EDF entered into an agreement on April 18, 2005 setting out their relationship as regards the distribution business. The December 7, 2006 law on the energy sector reorganized the natural gas and electricity distribution networks. Enedis SA (previously ERDF SA), a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and January 1, 2008, respectively, and act in accordance with the agreement previously signed by the two incumbent operators.

23.2 Relations with the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*)

The Group's relations with the CNIEG, which manages all old-age, death and disability benefits for active and retired employees of the Group who belong to the special EGI pension plan, employees of EDF and Non-Nationalized Companies (*Entreprises Non Nationalisées* – ENN), are described in Note 19 "Post-employment benefits and other long-term benefits".

NOTE 24 EXECUTIVE COMPENSATION

The executive compensation presented below includes the compensation of the members of the Group's Executive Committee and Board of Directors.

The Executive Committee had 12 members in 2017 (12 members in 2016).

Their compensation breaks down as follows:

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Short-term benefits	17	18
Post-employment benefits	8	6
Shared-based payments	6	5
Termination benefits	-	11
TOTAL	**31**	**40**

NOTE 25 WORKING CAPITAL REQUIREMENTS, INVENTORIES, OTHER ASSETS AND OTHER LIABILITIES

25.1 Composition of change in working capital requirements

In millions of euros	Change in working capital requirements at Dec. 31, 2017	Change in working capital requirements at Dec. 31, 2016 [(1)]
Inventories	(542)	502
Trade and other receivables, net	521	(732)
Trade and other payables, net	132	709
Tax and employee-related receivables/payables	101	219
Margin calls and derivative instruments hedging commodities relating to trading activities	878	1,077
Other	161	66
TOTAL	**1,251**	**1,842**

(1) Comparative data at December 31, 2016 have been restated due to the classification of ENGIE E&P International under “Discontinued operations” on May 11, 2017 (see Note 30 “Restatement of 2016 comparative data”).

25.2 Inventories

In millions of euros	Dec. 31, 2017	Dec. 31, 2016
Inventories of natural gas, net	1,423	1,169
Inventories of uranium	575	581
CO_2 emission rights, green certificates and certificates of energy efficiency commitment, net	650	384
Inventories of commodities other than gas and other inventories, net	1,507	1,522
TOTAL	**4,155**	**3,656**

25.3 Other assets and other liabilities

Other current assets (€8,492 million) and other non-current assets (€567 million) mainly comprise tax receivables. Other non-current assets also include at December 31, 2017 a receivable towards EDF Belgium in respect of nuclear provisions amounting to €75 million (€69 million at December 31, 2016)

Other current liabilities (€14,756 million) and other non-current liabilities (€1,009 million) mainly include tax and employee-related liabilities.

NOTE 26 LEGAL AND ANTI-TRUST PROCEEDINGS

The Group is party to a number of legal and anti-trust proceedings with third parties or with legal and/or administrative authorities (including tax authorities) in the normal course of its business.

Provisions recorded in respect of these proceedings totaled €753 million at December 31, 2017 (€1,133 million at December 31, 2016).

The main disputes and investigations presented hereafter are recognized as liabilities or give rise to contingent assets or liabilities.

In the normal course of its business, the Group is also involved in a number of disputes and investigations before state courts, arbitral tribunals or regulatory authorities. The disputes and investigations that could have a material impact on the Group are presented below.

26.1 Latin America

26.1.1 Concessions in Buenos Aires and Santa Fe

In 2003, ENGIE and its joint shareholders, water distribution concession operators in Buenos Aires and Santa Fe, initiated two arbitration proceedings against the Argentinean State before the International Center for Settlement of Investment Disputes (ICSID). The purpose of these proceedings was to obtain compensation for the loss in value of investments made since the start of the concession, in accordance with bilateral investment protection treaties.

On April 9, 2015, the ICSID ordered the Argentinean State to pay USD 405 million (of which USD 367 million to ENGIE and its subsidiaries) in respect of the termination of the Buenos Aires water distribution and treatment concession contracts, and on December 4, 2015, to pay USD 211 million (ICSID subsequently reassessed the initial amount, which increased to USD 225 million) in respect of the termination of the Santa Fe concession contracts. The Argentinean State is seeking the annulment of these awards. By decision dated May 5, 2017, the claim for the annulment of the Buenos Aires award was rejected and the award became final. The claim for the annulment of the Sante Fe award is still pending.

As a reminder, prior to the stock market listing of SUEZ Environnement Company, ENGIE and SUEZ (formerly SUEZ Environnement) entered into an agreement providing for the economic transfer to SUEZ of the rights and obligations relating to the ownership interest held by ENGIE in Aguas Argentinas and Aguas Provinciales de Santa Fe.

26.1.2 Planned construction of an LNG terminal in Uruguay

GNLS SA, a joint subsidiary of Marubeni and ENGIE, was selected in 2013 to build an offshore LNG terminal in Uruguay. On November 20, 2013, GNLS contracted out the design and construction of the terminal to Construtora OAS SA. Following a number of problems and defects, GNLS terminated the contract in March 2015 and made use of its guarantees. OAS challenged the termination of the contract but did not take action against GNLS. OAS went bankrupt on April 8, 2015. In September 2015, GNLS and the authorities agreed to cancel the planned construction.

On May 24, 2017, OAS and GNLS appeared before the Uruguayan courts in a conciliation process at the request of OAS. The conciliation process was unsuccessful. OAS then threatened to call GNLS before the Uruguayan courts to claim damages. Since GNLS had incurred significant losses as a result of the termination of the contract, it filed a request for arbitration on August 22, 2017 in accordance with the terms of the contract providing for dispute resolution by the ICC International Court of Arbitration, claiming a principal amount of USD 373 million. OAS responded by summonsing GNLS before the Montevideo Commercial Court, claiming USD 311 million in damages. Both proceedings are still pending.

26.2 Benelux

26.2.1 Resumption and extension of operations at the nuclear reactors

Various associations have brought actions before the Constitutional Court, the *Conseil d'État* and the ordinary courts against the laws and administrative decisions authorizing the extension of operations at the Doel 1 and 2 and Tihange 1 reactors. On June 22, 2017, the Constitutional Court referred the case to the Court of Justice of the European Union for a preliminary ruling. Some of these proceedings are still pending. In addition, some German local authorities and various organizations have challenged the authorization to restart operations at the Tihange 2 reactor. These actions are also pending.

26.2.2 Nuclear capacity swap with E.ON

On November 26, 2014, E.ON, via its subsidiary PreussenElektra GmbH submitted a request for arbitration to the ICC International Court of Arbitration against Electrabel. E.ON was seeking (i) the payment by Electrabel of a portion of the German nuclear contribution in the amount of €100 million plus interest and (ii) the repayment of the Belgian nuclear contribution paid by E.ON representing a total of €199 million plus interest. Electrabel disputed these claims and has filed counterclaims seeking: (i) the payment of the full amount invoiced by Electrabel for the Belgian nuclear contribution in the amount of €120 million plus interest and (ii) the repayment of the German nuclear tax paid by Electrabel in the amount of €189 million plus interest.

On June 7, 2017, the German Federal Constitutional Court ruled that the German nuclear tax was illegal.

The court of arbitration delivered a final award on December 21, 2017, ordering both Electrabel and E.ON to pay back their respective portions of the Belgian and German taxes. After payment from Electrabel and having taken interest into account, E.ON is liable to pay the outstanding balance of €27.9 million to Electrabel.

26.2.3 Claim by the Dutch tax authorities

Based on a disputable interpretation of a statutory modification that came into force in 2007, the Dutch tax authorities refuse the deductibility of a portion of the interest paid on financing contracted for the acquisition of investments made in the Netherlands since 2000. At the end of March 2016, the Dutch tax authorities rejected the claim lodged by ENGIE Energie Nederland Holding BV against the tax assessment for the 2007 fiscal year. On May 5, 2016, an appeal was filed against this decision. The total amount of tax and default interest assessed at December 31, 2012 amounted to €259 million. Following the Dutch Tax Authorities' rejection of the administrative claim against the 2007 tax assessment, action was brought before the Arnhem Court of First Instance in June 2016.

26.3 France

26.3.1 La Compagnie du Vent

Since 2011, ENGIE has been involved in a number of disputes with Jean-Michel Germa, founder of La Compagnie du Vent (LCV) and SOPER, minority shareholder of LCV, the main one being the action brought by SOPER on January 18, 2013 seeking payment by ENGIE of about €250 million in compensation for the alleged breach of the agreement and the shareholders' agreement signed in 2007. Pursuant to the agreement dated April 4, 2017, all disputes involving SOPER, and Jean-Michel Germa and the Group are being closed.

26.3.2 Practices in the gas and electricity supply markets

On April 15, 2014, Direct Energie lodged a complaint with the competition authorities against ENGIE for alleged abuse of a dominant position on the gas and electricity supply markets, as well as a request for protective interim measures. The competition authority delivered its decision as regards the interim protective measures on September 9, 2014. ENGIE appealed the decision. However, the Appeal Court substantially upheld the competition authority's decision, which has now become final and binding.

On March 27, 2015, the competition authorities informed ENGIE that a claim of alleged abuse of a dominant position by ENGIE on the gas and electricity supply markets had been referred to them by UFC Que Choisir, a French consumer group. The case brought by Direct Energie was joined with that of UFC Que Choisir.

On March 21, 2017, the competition authorities, ruling on the merits, endorsed the settlement reached by ENGIE, which involves no admission of guilt. ENGIE paid the settlement payment of €100 million. The competition authorities' decision is final.

On October 26, 2015, the competition authorities informed ENGIE that another claim of alleged abuse of a dominant position by ENGIE on the gas and electricity supply markets had been referred to them by Direct Energie, as well as another request for protective interim measures. By decision of May 2, 2016, the competition authority ordered ENGIE, as a protective interim measure and pending a decision on the merits, to comply with certain protective interim measures. Direct Energie challenged this decision before the Paris Appeal Court, which, on July 28, 2016, dismissed Direct Energie's claim. Substantively, ENGIE proposed certain commitments which were approved by the competition authorities in their final and binding decision dated September 7, 2017.

26.3.3 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non-recourse sale by SUEZ (now ENGIE) of a withholding tax (*précompte*) receivable in 2005 for an amount of €995 million. In May 2016, the French tax authorities issued an assessment notice for part of the resulting corporate income tax, in an amount of €89.6 million. ENGIE paid this sum and filed a claim in August 2016.

Regarding the dispute over the *précompte* itself, on February 1, 2016, the *Conseil d'État* dismissed the appeal before the Court of Cassation seeking the repayment of the *précompte* in respect of the 1999, 2000, and 2001 fiscal years. The Cergy Pontoise Administrative Court adopted an identical position to that of the Paris Court of Appeal for the amounts claimed by SUEZ (now ENGIE) in respect of the 2002/2003 and 2004 fiscal years. ENGIE SA has appealed this decision.

Furthermore, after ENGIE and several French groups lodged a complaint, on April 28, 2016, the European Commission issued a reasoned opinion to the French State as part of infringement proceedings, setting out its view that the *Conseil d'État* did not comply with European Union law when handing down decisions in disputes regarding the *précompte*, such as those involving ENGIE. On July 10, 2017, the European Commission referred the matter to the Court of Justice of the European Union on the grounds of France's failure to comply.

26.3.4 Regulated natural gas tariffs

On June 24, 2013, ANODE, the French national energy retailers association (*Association nationale des opérateurs détaillants en énergie*) filed an appeal before the *Conseil d'État* seeking the annulment of Decree No. 2013-400 of May 16, 2013 amending Decree No. 2009-1603 of December 18, 2009 relating to regulated natural gas tariffs. ANODE contends in substance that the regulated natural gas tariff framework is inconsistent with the objectives of Directive 2009/73/EC concerning common rules for the internal market in natural gas, and Article 106.1 of the Treaty on the Functioning of the European Union.

On December 15, 2014, the *Conseil d'État* ordered a stay of proceedings pending the Court of Justice of the European Union's preliminary ruling on these matters. The Court of Justice of the European Union delivered its ruling on September 7, 2016. On July 19, 2017, the *Conseil d'État* annulled the Decree of May 16, 2013, considering it to be contrary to European law. However, in light of the risk of legal uncertainty related to the annulment during the Decree's application period (2013-2015), the *Conseil d'État* ruled that the effects generated by the Decree are final and the contracts concerned cannot therefore be called into question.

26.4 Europe excluding France & Benelux

26.4.1 Spain – Punica

In the Punica case (investigation into the awarding of contracts), 12 Cofely España employees as well as the company itself were placed under investigation by the examining judge in charge of the case. The criminal investigation is in progress. It is expected to be closed by December 6, 2018 at the latest.

26.4.2 Hungary – ICSID arbitration

On April 4, 2016, ENGIE, GDF International and ENGIE International Holdings filed a request for arbitration before the International Center for Settlement of Investment Disputes (ICSID). In essence, the Group accused the Hungarian State of not fulfilling its obligations under the Energy Charter Treaty by taking various fiscal and regulatory measures that breached the principle of fair and equitable treatment and the ban on forceful expropriation, and is requesting compensation for the damage it has suffered. In an agreement signed on October 13, 2017, ENGIE initiated the sale of its gas distribution business to NKM, a Hungarian state-owned company, which was completed on January 11, 2018 (see. "Note 27 Subsequent events"). On November 21, 2017, ENGIE and the Hungarian state agreed to bring the ICSID arbitration to an end upon closing of the sale. The arbitration proceedings were officially closed on February 23, 2018.

26.4.3 Italy – Vado Ligure

On March 11, 2014, the Court of Savona seized and closed down the VL3 and VL4 coal-fired production units at the Vado Ligure thermal power plant belonging to Tirreno Power S.p.A. (TP), a company which is 50%-owned by the ENGIE Group. This decision was taken as part of a criminal investigation against the present and former executive managers of TP into environmental infringements and public health risks. The investigation was closed on July 20, 2016. The preliminary hearing to determine whether or not to refer the matter back to the Court of Savona to rule on the merits began on October 26, 2017.

26.5 Infrastructures Europe

26.5.1 Access to gas infrastructures

On May 22, 2008, the European Commission announced its decision to initiate formal proceedings against Gaz de France for a suspected breach of European Union rules pertaining to abuse of dominant position and restrictive business practices. The proceedings relate to a combination of long-term transport capacity reservation and a network of import agreements, as well as potential underinvestment in transport and import infrastructure capacity.

On October 21, 2009, the Group submitted proposed commitments aimed at facilitating access to and enhancing competition on the French natural gas market. On December 3, 2009, the Commission adopted a decision that rendered these commitments legally binding. This decision by the Commission put an end to the proceedings initiated in May 2008. The commitments (which are valid until 2024 and as far as 2029 in certain cases) are being fulfilled under the supervision of a trustee approved by the European Commission.

26.5.2 Commissioning

In the dispute between GRDF and various gas suppliers, in a decision dated June 2, 2016, the Paris Appeal Court (i) recalled that the risk of unpaid compensation for the "transmission" part of the agreement with the end customer should be borne by the grid manager and not the gas supplier; (ii) held that the compensation for customer management services provided by the supplier on behalf of the grid manager should be fair and commensurate with the grid manager's cost savings and (iii) ordered GRDF to bring its transmission agreements into compliance with these principles. GRDF appealed the decision handed down by the Court of Appeal before the Court of Cassation. On January 18, 2018, the CRE published a decision setting the rate for access to the grids for management services provided to single contract customers from January 1, 2018. This compensation is included in the costs covered by the transmission rate and is therefore ultimately borne by the grids' users. Furthermore, GRDF is awaiting a decision from the French Standing Committee for Disputes and Sanctions (*Comité de règlement des différends et des sanctions* – CoRDiS) regarding the dispute on the same subject between GRDF and Direct Énergie.

Regarding the customer management services carried out on behalf of the grid manager in the electricity sector (in this case ERDF, now ENEDIS), following proceedings brought by ENGIE, in a decision of July 13, 2016, the *Conseil d'État* has also ruled that the same principle whereby the grid manager pays compensation to the supplier should apply. In the same decision, the *Conseil d'État* denied the Energy Regulatory Commission (*Commission de Régulation de l'Énergie* – CRE) the right to set a customer threshold beyond which the compensation would not be payable, which has hitherto prevented ENGIE from receiving any compensation. In light of this decision, ENGIE brought an action against ENEDIS with the purpose of obtaining payment for these customer management services. ENGIE also brought an action before the *Conseil d'État* against the CRE's decision of October 26, 2017 in respect of the compensation for customer management services in the electricity sector, seeking the annulment of the decision for the period prior to January 1, 2018 only.

26.5.3 Fos Cavaou

On January 17, 2012, Fosmax LNG, a subsidiary of Elengy, submitted a request for arbitration to the ICC International Court of Arbitration against the STS consortium.

The dispute involved the construction of an LNG terminal owned by Fosmax LNG, built by STS under a fixed lump-sum turnkey contract entered into on May 17, 2004, which included construction work and supplies.

On February 13, 2015, the arbitration court delivered its award and Fosmax LNG accordingly paid STS net compensation (including interest) of €70 million before tax on April 30, 2015. However, on February 18, 2015, Fosmax LNG brought an action before the *Conseil d'État* seeking the annulment of this decision.

In a decision dated November 9, 2016, the *Conseil d'État* partially annulled the arbitral award of February 13, 2015, considering that Fosmax LNG was entitled to put the work out to public contract. Fosmax LNG sent a formal notice to STS requesting a refund of the sum of €36 million corresponding to the unduly paid portion of the award. After STS failed to respond to the notice, Fosmax LNG initiated further ICC arbitration proceedings on June 14, 2017.

26.6 Other

26.6.1 Luxembourg – State aid investigation

On September 19, 2016, the European Commission announced its decision to open an investigation into whether or not two private rulings granted by the Luxembourg State in 2008 and 2010 covering two similar transactions between several of the Group's Luxembourg subsidiaries constitute State aid. Both Luxembourg and ENGIE have challenged the decision to open an investigation and are currently engaged in a dialogue with the Commission to advance their case, as part of the Commission's further investigation into the matter prior to reaching a final decision.

26.6.2 United Kingdom – State aid investigation regarding Gibraltar

On October 7, 2016, the European Commission announced its decision to open a state aid investigation against the United Kingdom with regard to Gibraltar’s tax system. The decision covers Gibraltar’s tax ruling practices and cited 165 tax rulings, which if obtained, could constitute State aid. One of the rulings was obtained by a subsidiary of International Power Ltd in 2011 as part of the dismantling of a facility in Gibraltar. ENGIE contested this decision on November 25, 2016, pending the Commission's final decision.

NOTE 27 SUBSEQUENT EVENTS

Disposal of the distribution business in Hungary

On January 11, 2018, following the success of the negotiations initiated in the second half of 2015 with the Hungarian State, the Group completed the sale of its entire interest in its Hungarian gas distribution subsidiary Égaz-Dégaz to Nemzeti Közmuvek Zártköruen Muködö Résvénytársaság (NKM) – a Hungarian state-owned company. The transaction reduced the Group's net debt by around €0.1 billion.

Disposal of the Loy Yang B coal-fired power plant (Australia)

On January 15, 2018, the Group completed the sale of the Loy Yang B coal-fired power plant in Australia (*see Note 4.1.3*), for which it received a payment of AUD 0.7 billion (€0.5 billion) corresponding to the sale price of all of the shares in Loy Yang B. An amount corresponding to 30% of this price was paid to Mitsui in the form of dividends.

The disposal gain mainly corresponds to the recycling of items relating to the portfolio from other comprehensive income to the income statement (translation adjustments and net investment hedges of around €0.1 billion). The transaction also reduced the Group's net debt by around €0.6 billion (the derecognition of Loy Yang B's net debt totaling €0.3 billion following its classification under "Assets held for sale" at December 31, 2017, plus the payment of €0.3 million for the 70% interest sold).

Disposal of the exploration-production business

On February 15, 2018, the Group completed the sale of its 70% interest in EPI to Neptune Energy (*see Note 4.1.1*) and received a payment of USD 1.1 billion (€1.0 billion), corresponding to the sale price of all of its shares.

At the financial statement's issuance, the combined effects of the transaction and of the cash generation from these exploration-production businesses since January 1, 2018 result in a reduction in the Group's net debt by around €1.9 billion excluding any additional future payments to be received.

Following the transaction, the Group still holds a residual 46% interest in ENGIE E&P Touat B.V., which holds a 65% stake in the Touat gas field under development in Algeria. This 46% interest is now accounted for using the equity method.

CRE decision on the regulation of natural gas storage in France

On February 22, 2018, the Energy Regulatory Commission (*Commission de Régulation de l'Energie – CRE*) published a decision setting the terms and conditions for the regulation of natural gas storage in France for a two-year period. The decision follows the publication in the *Journal officiel* on December 31, 2017 of the law on ending oil and gas exploration and production, Article 12 of which provides for the regulation of such activities. The impact of this decision on the 2017 consolidated financial statements is described in Note 8.2 "Impairment on Storengy CGU goodwill".

NOTE 28 FEES PAID TO THE STATUTORY AUDITORS AND TO MEMBERS OF THEIR NETWORKS

Pursuant to Article 222-8 of the General Regulations of the French Financial Markets Authority (AMF), the following table presents information on the fees paid by ENGIE SA, its fully consolidated subsidiaries and joint operations to each of the auditors in charge of auditing the annual and consolidated financial statements of the ENGIE Group.

The Shareholders' Meeting of ENGIE SA of April 28, 2014 decided to renew the terms of office of Deloitte and EY as Statutory Auditors for a six-year period from 2014 to 2019.

	Deloitte			EY			
In million of euros	**Deloitte & Associés**	**Network**	**Total**	**EY & Autres**	**Network**	**Total**	**Total**
Statutory audit and review of consolidated and parent company financial statements	**5.2**	**8.2**	**13.3**	**6.0**	**4.3**	**10.4**	**23.7**
ENGIE SA	2.3	-	2.3	2.9	-	2.9	5.3
Controlled entities	2.8	8.2	11.0	3.1	4.3	7.4	18.5
Non-audit services	**0.7**	**2.1**	**2.8**	**1.3**	**2.0**	**3.3**	**6.1**
ENGIE SA	**0.6**	**-**	**0.6**	**1.1**	**0.1**	**1.2**	**1.7**
Of which services related to legal and regulatory requirements	*0.4*	*-*	*0.4*	*0.3*	*-*	*0.3*	*0.7*
Of which other audit services	*0.2*	*-*	*0.2*	*0.8*	*-*	*0.8*	*1.0*
Of which reviews of internal control	-	-	-	-	-	-	-
Of which due diligence services	-	-	-	-	-	-	-
Of which tax services	-	-	-	-	0.1	0.1	0.1
Controlled entities	**0.2**	**2.1**	**2.3**	**0.1**	**1.9**	**2.1**	**4.4**
Of which services related to legal and regulatory requirements	-	*0.1*	*0.1*	*0.1*	*0.2*	*0.2*	*0.4*
Of which other audit services	*0.2*	*0.6*	*0.8*	*0.1*	*0.5*	*0.6*	*1.4*
Of which reviews of internal control	-	*0.3*	*0.3*	-	-	-	*0.3*
Of which due diligence services	-	*0.5*	*0.5*	-	*0.3*	*0.3*	*0.8*
Of which tax services	-	*0.5*	*0.5*	-	*1.0*	*1.0*	*1.5*
Total	**5.9**	**10.3**	**16.2**	**7.3**	**6.3**	**13.6**	**29.8**

NOTE 29 INFORMATION REGARDING LUXEMBOURG AND DUTCH COMPANIES EXEMPTED FROM THE REQUIREMENTS TO PUBLISH ANNUAL FINANCIAL STATEMENTS

Some companies in the Benelux, GEM & LNG and Other segments do not publish annual financial statements pursuant to domestic provisions in Luxembourg law (Article 70 of the Law of December 19, 2002) and Dutch law (Article 403 of the Civil Code) relating to the exemption from the requirement to publish audited annual financial statements.

The companies exempted are: ENGIE Energie Nederland NV, ENGIE Energie Nederland Holding BV, ENGIE Nederland Retail BV, ENGIE United Consumers Energie BV, Epon Eemscentrale III BV, Epon Eemscentrale IV BV, Epon Eemscentrale V BV, Epon Eemscentrale VI BV, Epon Eemscentrale VII BV, Epon Eemscentrale VIII BV, Epon International BV, Epon Power Engineering BV, ENGIE Portfolio Management BV, IPM Energy Services BV, IPM Eagle Victoria BV, Electrabel Invest Luxembourg, ENGIE Corp Luxembourg SARL, ENGIE Treasury Management SARL and ENGIE Invest International SA.

NOTE 30 RESTATEMENT OF 2016 COMPARATIVE DATA

On May 11, 2017, the Group entered into exclusive negotiations with Neptune Energy for the sale of its entire 70% interest in its subsidiary ENGIE E&P International (EPI), which encompasses all the Group's activities relating to the exploration, development and operation of oil and gas fields (*see Note 4 "Main changes in Group structure"*).

In accordance with IFRS 5, EPI is presented as "discontinued operations" in the income statement, statement of comprehensive income and statement of cash flows. Its contribution is identified separately from other assets and liabilities in the statement of financial position at December 31, 2017 under "Assets classified as held for sale" and "Liabilities directly associated with assets classified as held for sale".

Restated financial statements at December 31, 2016 are presented hereafter.

30.1 Income statement at December 31, 2016

In millions of euros	Dec. 31, 2016 published	IFRS 5 adjustments	Dec. 31, 2016 restated
Revenues	66,639	(1,799)	64,840
Purchases	(36,688)	68	(36,620)
Personnel costs	(10,231)	235	(9,996)
Depreciation, amortization and provisions	(4,869)	646	(4,223)
Other operating expenses	(10,841)	434	(10,407)
Other operating income	1,399	(108)	1,291
CURRENT OPERATING INCOME	**5,408**	**(524)**	**4,884**
Share in net income of entities accounted for using the equity method	764	(12)	752
CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD	**6,172**	**(536)**	**5,636**
Mark-to-market on commodity contracts other than trading instruments	1,254	25	1,279
Impairment losses	(4,192)	157	(4,035)
Restructuring costs	(476)	25	(450)
Changes in scope of consolidation	544	-	544
Other non-recurring items	(850)	-	(850)
INCOME/(LOSS) FROM OPERATING ACTIVITIES	**2,452**	**(328)**	**2,124**
Financial expenses	(2,245)	34	(2,210)
Financial income	865	24	889
NET FINANCIAL INCOME/(LOSS)	**(1,380)**	**58**	**(1,321)**
Income tax expense	(909)	428	(481)
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**163**	**158**	**322**
NET INCOME/(LOSS) RELATING TO DISCONTINUED OPERATIONS	**-**	**(158)**	**(158)**
NET INCOME/(LOSS)	**163**	**-**	**163**
Net income/(loss) Group share	**(415)**	**-**	**(415)**
of which Net income/(loss) relating to continued operations, Group share	*(415)*	*111*	*(304)*
of which Net income/(loss) relating to discontinued operations, Group share	*-*	*(111)*	*(111)*
Non-controlling interests	**579**	**-**	**579**
of which Non-controlling interests relating to continued operations	*579*	*47*	*626*
of which Non-controlling interests relating to discontinued operations	*-*	*(47)*	*(47)*
BASIC EARNINGS/(LOSS) PER SHARE (EUROS)	**(0.23)**	**(0.00)**	**(0.23)**
of which Basic earnings/(loss) relating to continued operations per share	*(0.23)*	*0.05*	*(0.19)*
of which Basic earnings/(loss) relating to discontinued operations per share	*-*	***(0.05)***	***(0.05)***
DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)	**(0.23)**	**(0.00)**	**(0.23)**
of which Diluted earnings/(loss) relating to continued operations per share	*(0.23)*	*0.05*	*(0.19)*
of which Diluted earnings/(loss) relating to discontinued operations per share	*-*	***(0.05)***	***(0.05)***

30.2 Statement of comprehensive income at December 31, 2016

In millions of euros	Dec. 31, 2016 published	IFRS 5 adjustments	Dec. 31, 2016 restated
NET INCOME/(LOSS)	**163**	**-**	**163**
Available-for-sale securities	146	-	146
Net investment hedges	(86)	-	(86)
Cash flow hedges (excl. commodity instruments)	(250)	-	(250)
Commodity cash flow hedges	(641)	612	(30)
Deferred tax on items above	386	(263)	123
Share of entities accounted for using the equity method in recyclable items, net of tax	108	-	108
Translation adjustments	474	(73)	402
Recyclable items relating to discontinued operations, net of tax	-	(276)	(276)
TOTAL RECYCLABLE ITEMS	**137**	**-**	**137**
Actuarial gains and losses	(670)	(8)	(677)
Deferred tax on actuarial gains and losses	47	5	52
Share of entities accounted for using the equity method in non-recyclable items from actuarial gains and losses, net of tax	(50)	-	(50)
Non-recyclable items relating to discontinued operations, net of tax	-	3	3
TOTAL NON-RECYCLABLE ITEMS	**(672)**	**-**	**(672)**
TOTAL COMPREHENSIVE INCOME/(LOSS)	**(371)**	**-**	**(371)**
of which owners of the parent	(946)	-	(946)
of which non-controlling interests	575	-	575

30.3 Statement of cash flows at December 31, 2016

In millions of euros	Dec. 31, 2016 published	IFRS 5 adjustments	Dec. 31, 2016 restated
NET INCOME/(LOSS)	163	-	163
- Net income/(loss) relating to discontinued operations	-	(158)	(158)
NET INCOME/(LOSS) RELATING TO CONTINUED OPERATIONS	**163**	**158**	**322**
- Share in net income of entities accounted for using the equity method	(764)	12	(752)
+ Dividends received from entities accounted for using the equity method	469	(12)	457
- Net depreciation, amortization, impairment and provisions	9,995	(743)	9,252
- Impact of changes in scope of consolidation and other non-recurring items	(676)	(48)	(724)
- Mark-to-market on commodity contracts other than trading instruments	(1,254)	(25)	(1,279)
- Other items with no cash impact	41	(1)	40
- Income tax expense	909	(428)	481
- Net financial income/(loss)	1,380	(58)	1,321
Cash generated from operations before income tax and working capital requirements	**10,263**	**(1,146)**	**9,117**
+ Tax paid	(1,459)	562	(896)
Change in working capital requirements	**1,369**	**473**	**1,842**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO CONTINUED OPERATIONS	**10,174**	**(111)**	**10,063**
CASH FLOW FROM OPERATING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**-**	**111**	**111**
CASH FLOW FROM OPERATING ACTIVITIES	10,174	-	10,174
Acquisitions of property, plant and equipment and intangible assets	(6,230)	940	(5,290)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	(411)	-	(411)
Acquisitions of investments in entities accounted for using the equity method and joint operations	(208)	-	(208)
Acquisitions of available-for-sale securities	(391)	-	(391)
Disposals of property, plant and equipment, and intangible assets	202	(50)	153
Loss of controlling interests in entities, net of cash and cash equivalents sold	983	-	983
Disposals of investments in entities accounted for using the equity method and joint operations	1,457	-	1,457
Disposals of available-for-sale securities	768	-	767
Interest received on financial assets	-	12	12
Dividends received on non-current financial assets	145	(3)	142
Change in loans and receivables originated by the Group and other	30	-	30
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO CONTINUED OPERATIONS	**(3,655)**	**899**	**(2,756)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**-**	**(899)**	**(899)**
CASH FLOW FROM (USED IN) INVESTING ACTIVITIES	(3,655)	-	(3,655)
Dividends paid	(3,155)	-	(3,155)
Repayment of borrowings and debt	(4,760)	8	(4,752)
Change in financial assets at fair value through income	(257)	-	(257)
Interest paid	(799)	(18)	(817)
Interest received on cash and cash equivalents	137	-	137
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings	(236)	-	(236)
Increase in borrowings	2,994	(91)	2,904
Increase/decrease in capital	78	(87)	(9)
Hybrid issue of subordinated perpetual notes	-	-	-
Purchase and/or sale of treasury stock	(11)	-	(11)
Changes in ownership interests in controlled entities	(26)	-	(26)
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO CONTINUED OPERATIONS	**(6,034)**	**(188)**	**(6,222)**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES RELATING TO DISCONTINUED OPERATIONS	**-**	**188**	**188**
CASH FLOW FROM (USED IN) FINANCING ACTIVITIES	(6,034)	-	(6,034)
Effects of changes in exchange rates and other relating to continued operations	157	12	169
Effects of changes in exchange rates and other relating to discontinued operations	-	(12)	(12)
TOTAL CASH FLOW FOR THE PERIOD	642	-	642
Reclassification of cash and cash equivalents relating to discontinued operations	-	-	-
CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD	9,183	-	9,183
CASH AND CASH EQUIVALENTS AT END OF PERIOD	9,825	-	9,825

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