

Annual Report

2019



VIOHALCO

TABLE OF CONTENTS

A. Viohalco	3
B. Message from the President of the Board of Directors.....	4
C. Business segments.....	6
D. Financial Highlights 2019.....	9
E. Business segments review.....	13
F. Subsequent events.....	41
G. Risks and Uncertainties.....	43
H. Non-financial information report.....	48
I. Corporate governance statement.....	63
J. Appendix – Alternative Performance Measures (APMs).....	79
K. Consolidated financial statements 2019 and Auditor’s report.....	85
L. Declaration of responsible persons.....	174
M. Condensed Statutory Balance Sheet and Income Statement.....	175
N. Glossary.....	177

A.Viohalco

Viohalco S.A. ('Viohalco') is the Belgium-based holding company of leading metal processing companies involved in the sustainable manufacture of aluminium, copper, cables, steel and steel pipes products.

Its companies provide high-quality and innovative products to a diverse range of markets including building and construction, telecommunications, oil and gas, transportation, marine, automotive, food and pharmaceutical packaging, heating and air conditioning, renewable energy, water supply and lithography.

Viohalco's dedicated research, development, innovation ('R&D&I') and technology segment focuses on innovation, industrial research, technological development, engineering applications and ERP application services, to ensure that its companies maintain superior product and service quality.

Its resource recovery segment trades and processes secondary raw materials and undertakes general waste management and environmental operations.

Viohalco and its companies also own substantial real estate, predominantly in Greece, which generates income following commercial development. Companies in this segment also provide a wide range of additional real estate, property and facility management services to Viohalco subsidiaries.

Production facilities across Greece, Bulgaria, the United Kingdom, Romania, Russia, North Macedonia, the Netherlands and Turkey are supported by a strong marketing and sales network comprising commercial subsidiaries, agents and distributors, enabling the Viohalco companies to provide comprehensive customer support on a global scale.

Viohalco's eight business segments:

- Aluminium – page 13
- Copper – page 17
- Steel – page 21
- Steel pipes – page 25
- Cables – page 28
- Real Estate – page 33
- R&D&I and Technology – page 36
- Resource recovery – page 38

Key facts:

- Commercial network in 21 countries.
- Products distributed in 105 countries.

Listing information:

- Listed on Euronext Brussels (VIO) and Athens Stock Exchange (BIO).
- Cenergy Holdings S.A., a subsidiary of Viohalco, is listed on Euronext Brussels and Athens Stock Exchange (CENER).
- ElvalHalcor S.A., a subsidiary of Viohalco, is listed on Athens Stock Exchange (ELHA).

B. Message from the President of the Board of Directors

In a challenging environment during 2019, Viohalco companies responded resiliently to headwinds, mainly as a consequence of their diversified business models. Consolidated revenue for 2019 was EUR 4,198 million, down 4.7% compared with the previous year, largely due to the decline in metal prices globally during the year. Consolidated adjusted EBITDA (a-EBITDA) amounted to EUR 302 million in 2019, down 3.4% year-on-year, while consolidated EBITDA decreased by 17.7% to EUR 273 million (2018: EUR 332 million).

In a market characterised by intense competition, the aluminium segment's sophisticated product and service portfolio, together with its continued investment in state-of-the-art machinery and equipment and advanced technology, fortified the global positions of its companies. The segment's ongoing strategic investment programme includes the construction of a four-stand-tandem aluminium hot finishing mill, which is scheduled to commence production in the second quarter of 2020 and which will more than double the Oinofyta plant's hot rolling capacity. The segment also announced early in 2020, that it would be investing in the construction of a 6-high aluminium cold rolling mill. These initiatives demonstrate, the aluminium companies' strategic focus on maintaining competitiveness by meeting growing demand for aluminium products with innovative and sustainable flat rolled products and solutions.

The copper segment witnessed weaker demand for rolling products, due to the slowdown of industrial output in European markets. Despite this, copper segment sales volumes were flat versus the previous year, with the copper tube sales volumes advancing positively even. At the same time, the recently upgraded copper tubes mill operated at near maximum capacity. Furthermore, following the successful launch of a hot dip tinning line for strips, Sofia Med successfully penetrated new markets with higher demand, by introducing value-added products.

The slowdown in industrial production in Europe during 2019 also presented challenges for the steel segment. This was compounded by an increase in imports of low-price steel products from third countries, a reduction in international steel prices, and increases in raw materials and energy costs.

Corinth Pipeworks experienced strong protectionism during the year. The company was still able to maintain high plant utilisation levels and strengthen its global presence, though sales volumes declined compared with record highs in 2018. Following the completion of a number of strategic investments, Corinth Pipeworks leveraged its reputation for quality and successfully delivering challenging global projects to win a number of large mandates during the year.

In the cables segment, a shift in focus to deliver high added value projects in the energy transport markets began to bear fruit, with performance further supported by high levels of capacity utilisation across all production units. As a result, the Hellenic Cables companies delivered a positive performance for the year. The outlook for the cables segment is encouraging, due to the substantial order backlog, a strong pipeline of new tenders and significant growth opportunities in the offshore business.

In the real estate segment, Noval Property was formally established as a Real Estate Investment Company ('REIC'), during the year. With a modern and diversified real estate portfolio comprising 41 properties, with both high marketability and a significant geographical distribution, Noval Property is currently the second largest REIC in Greece, in terms of real estate value. In addition to several retail, hotel and office developments currently underway, Noval Property continues to explore additional development of its captive portfolio and acquisition opportunities.

Looking ahead, the Viohalco companies remain focused on strengthening their market positions through ongoing investment programmes excellent service and the professional development of their employees. Across all segments, the companies remain committed to operational optimisation, technological innovation and strategic investment in higher value-added products across the businesses. This focus is expected to drive further product portfolio improvements. The above initiatives have thus far yielded significant positive results and have improved Viohalco companies' resilience to external pressures. Aiming to create value for all their stakeholders they invest on innovation and sustainable solutions. The companies constantly focus on their people's advancement, while in the light of climate change strive to address relevant challenges and reduce the environmental footprint of their operations.

The current COVID-19 pandemic is causing an unprecedented impact on global markets. Our priority at this time is the health and wellbeing of our colleagues, customers and other stakeholders as such, appropriate safeguarding measures have been taken across our businesses. While the precise impact of the virus' effects on the overall companies' business remains to be seen, each Viohalco company is closely monitoring developments and assessing the implications for its respective operations.

I am confident that Viohalco companies' diverse business models, robust organizational structures and long-term strategies will ensure their long-term sustainable growth in these challenging and unusual times.

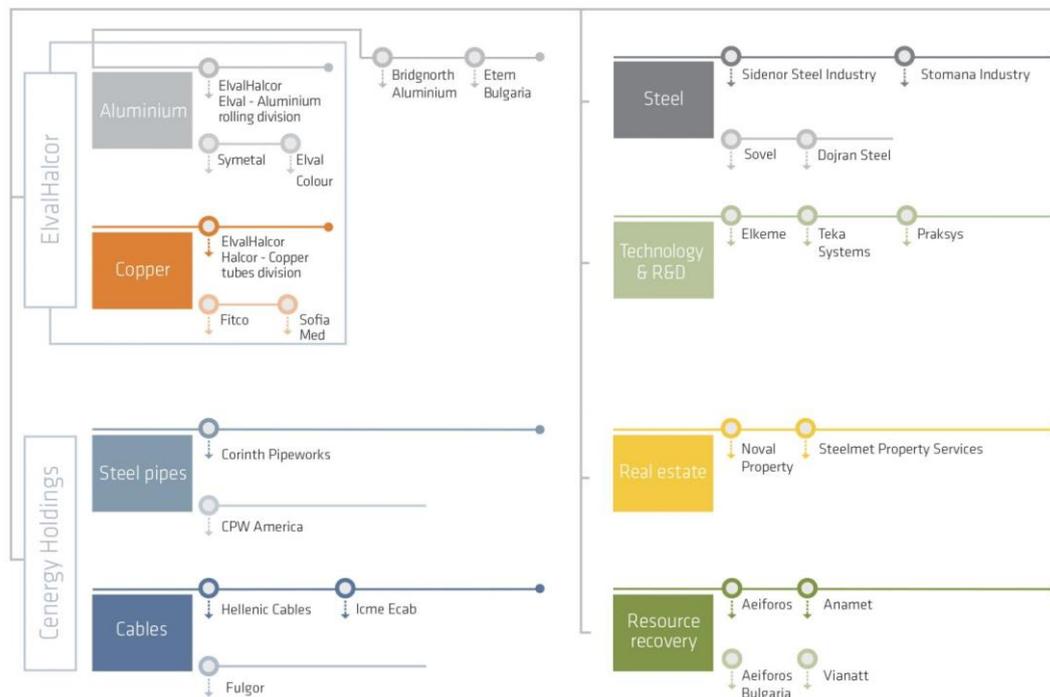
Nikolaos Stassinopoulos

President of the Board of Directors

C. Business segments

Viohalco operates under the following organizational structure, comprising eight business segments.

Viohalco segments



Aluminium: The companies in the segment manufacture a variety of aluminium rolling and extrusion products for a wide range of markets and applications. The aluminium segment operates through its aluminium rolling division ('Elval'), and aluminium subsidiaries Symetal S.A. ('Symetal'), Elval Colour S.A. ('Elval Colour') and Vepal S.A. ('Vepal'), Bridgnorth Aluminium Ltd ('Bridgnorth Aluminium') and Etem Bulgaria S.A. ('Etem Bulgaria').

The aluminium segment provides flat rolled and extruded products and solutions for a range of markets including transportation, HVAC&R, packaging, building & construction, lithography, energy, industrial and engineering applications.

Copper: Viohalco produces a wide range of copper, brass and high-performance copper alloys through its copper tubes division, Halcor and its subsidiaries Fitco S.A. ('Fitco'), Sofia Med S.A. ('Sofia Med'), Epirus Metalworks S.A. ('Epirus Metalworks') and the joint ventures Nedzink BV ('Nedzink') and HC Isitma. Halcor and copper subsidiaries have a strong track record of developing products which strengthen their global commercial presence.

Halcor and the copper subsidiaries provide innovative and added-value solutions that meet contemporary client demands. Their main product categories include copper tubes, copper-alloy rolled and extruded products in a wide range of applications, such as plumbing, HVAC&R, renewable energy, architecture, engineering, automotive and industrial production, fish farming, as well as the production of all types of coin blanks.

Steel: Sidenor Steel Industry S.A. ('Sidenor Steel Industry'), Stomana Industry S.A. ('Stomana Industry') and their subsidiaries are leading producers of steel products in Southeastern Europe. The steel companies have more than 55 years of manufacturing experience and expertise in steel products manufacturing and distribution, and an extensive product portfolio which includes long, flat and downstream steel products.

The steel segment companies offer a broad range of value-added products and solutions for building and construction (including buildings, roadworks, metro stations, bridges, shopping malls and hydroelectric dam projects), mechanical engineering, shipbuilding, road and rail, the automotive industry, and mining and tunneling applications.

In order to achieve an optimum balance between operational and commercial flexibility and production effectiveness, the steel segment has adopted an operational structure focused on the following:

- mini-mills
- downstream operations for steel product processing
- sales and distribution

Steel pipes: With a manufacturing plant in Greece and extensive expertise in delivering complex projects on a global scale, Corinth Pipeworks ('Corinth Pipeworks') is a supplier of choice for oil, gas and international construction companies.

Corinth Pipeworks' three main product categories are:

- Line pipes – manufactured either in the Company's high frequency induction welding unit ('HFW'), or the helically submerged arc welding unit ('HSAW') and the longitudinal submerged arc welding unit ('LSAW/JCOE')
- Casing pipes – used in oil and gas extraction drills
- Hollow structural sections – used in the construction sector

Corinth Pipeworks has extensive experience implementing complex onshore and offshore projects for the energy sector worldwide. The company is an approved supplier to major oil and gas companies and engineering, procurement, construction ("EPC") contractors.

It offers a comprehensive set of services from initial evaluation of a project and technical compliance assessment, to completion and delivery to the final site. Corinth Pipeworks' capabilities include:

- Internal and external coating of pipes produced by other pipe manufacturers
- Raw material and pipe testing at its accredited laboratory
- In-house corrosion testing laboratory for sour service applications
- Weld-on connector facilities for casing pipes
- Pipe storage
- Supply of pipes or assignment of pipe coating to authorized third party subcontractors on major project implementation
- Pipe transportation

Cables: The cables segment of Viohalco comprises three companies (hereafter collectively referred to as '*Hellenic Cables companies*') - Hellenic Cables S.A. Hellenic Cables Industry ('*Hellenic Cables*') and its subsidiary Fulgor S.A. ('*Fulgor*'), which operate in Greece; and Icme Ecab S.A. ('*Icme Ecab*'), which operates in Romania.

Hellenic Cables companies manufacture:

- Land and submarine power cables
- Telecommunication cables
- Enameled wires and compounds

Together, they are the largest cable producers in Greece and Southeastern Europe, exporting to more than 50 countries worldwide.

A competitive advantage of the Hellenic Cables companies is their ability to provide turnkey solutions to customers. Capabilities include:

- System design and engineering
- Cable route survey
- Design and manufacture of suitable underground and submarine cable types
- Loading and transportation of cables to the project site
- Installation of cables (using specialized cable laying vessels for submarine cables)
- Protection of cables along the cable route
- Supply and installation of repair joints, transition joints and cable terminations
- Supply and installation of terminal equipment
- System testing and commissioning
- Project management
- Training of customer personnel in system operation
- Provision of maintenance and repair solutions

Real estate: Viohalco creates value through the development of retail, office and hospitality buildings; asset management of its former industrial real estate assets in Greece and abroad through Noval Property; and by providing a wide range of real estate services to its subsidiaries through Steelmet Property Services S.A.

On 15 October 2019, Noval Property was formed as a Real Estate Investment Company ('REIC') through the merger of Noval S.A. and Vet S.A.. Following the formation of Noval Property, the company was awarded a license to operate as a Real Estate Investment Company (and an internally managed Alternative Investment Fund) by the Hellenic Capital Markets Commission.

Noval Property owns a portfolio of 41 properties, mainly in Greece and Bulgaria, comprising shopping centres, office buildings and hotels, with a total built-up area of c. 430,000 sq.m.

Steelmet Property Services supports Viohalco and its subsidiary companies' in monitoring their real estate assets by providing a wide range of real estate, property and facility management services at a centralized level.

R&D&I and Technology: Viohalco's portfolio includes dedicated R&D companies and R&D centres within its subsidiaries, which focus on the development of innovative and high value-added products, efficient solutions for the optimisation of industrial and business processes, research into the environmental performance of plants and impact assessment of sustainable growth.

Resource recovery segment: Viohalco's resource recovery segment produces and trades secondary raw materials and undertakes waste management and environmental projects, providing services to consumers, corporations and the public sector.

Notes:

- *Cenergy Holdings S.A. (Cenergy Holdings) was founded in 2016, following a cross-border merger by absorption of Corinth Pipeworks Holdings S.A. and Hellenic Cables S.A. Holdings Société Anonyme. Cenergy Holdings is listed on Euronext Brussels and the Athens Stock Exchange.*
- *In December 2017, the merger by absorption of Elval by Halcor was concluded, while the latter was renamed to ElvalHalcor Hellenic Copper and Aluminium Industry S.A. (ElvalHalcor). ElvalHalcor is listed on the Athens Stock Exchange.*

D. Financial highlights 2019

Viohalco

Viohalco companies have a clearly articulated strategy for future growth. While the companies operate in different market segments, they share common strategic goals aimed at:

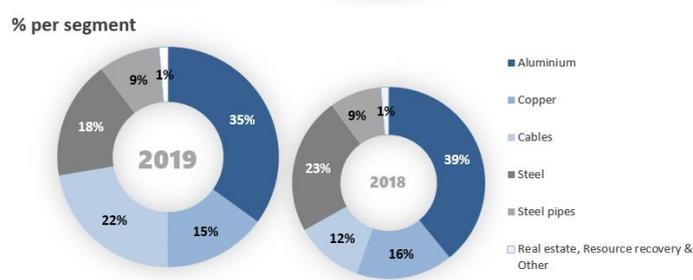
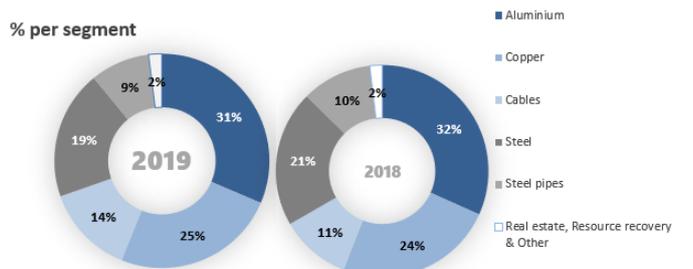
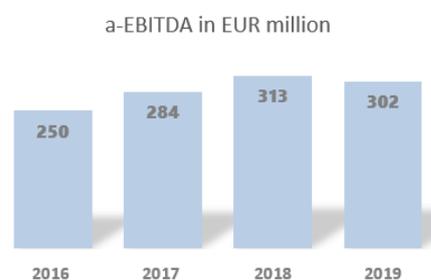
- optimising production capacity and product offering through continuous innovation;
- increasing penetration of existing and new markets;
- maintaining a customer-oriented approach to marketing and product development;
- driving operating efficiencies by optimising the utilisation of assets and by cost control; and
- promoting sustainable development across the companies.

In recent years, the Viohalco companies have faced a number of challenging external factors, including economic uncertainty in key operating markets, metal price fluctuations and depressed demand in energy markets.

Despite this backdrop, they have sustained a disciplined focus on improving operational performance and implemented a number of key initiatives. Most notably, significant investment into new technologies, R&D&I and the upgrade of existing facilities. These investments have enabled the companies to redefine and improve product and service offerings in key markets, resulting in the award of several significant projects.

Highlights

- Viohalco segments secured market positions and expanded global presence;
- Continuous investments by Viohalco companies to meet end-market trends;
- Consolidated revenue of EUR 4,198 million, down 5% (2018: EUR 4,406 million);
- Consolidated adjusted EBITDA (a-EBITDA) of EUR 302 million, down 3% (2018: EUR 313 million);
- Consolidated EBITDA of EUR 273 million, down 18% (2018: EUR 332 million);
- Consolidated profit before income tax of EUR 32 million, down 67% year-on-year (2018: EUR 96 million).



Overview

Although the Viohalco companies experienced significant market headwinds during the year, the resilience of their diversified business models allowed them to respond effectively to these challenges. Within Viohalco, the cables segment delivered a particularly strong performance.

Despite growing competition in the US and Europe, the aluminium flat rolled products market was stable in 2019, with demand driven by the packaging, transportation and industrial sectors. In this competitive environment, Viohalco's aluminium segment companies expanded their global presence by leveraging their high-quality, sophisticated product and customer service portfolios, while also selectively investing in state-of-the-art equipment. The adoption of advanced aluminium technology further supported these efforts. The revenue of the segment was adversely impacted by the 10.4% decrease in aluminium prices versus the prior year, a decline in sales volumes towards the end of the year due to a drop in demand in the US market, and lower sales volumes in the lithography sector due to declining demand year-on-year and uncertainty associated with the UK's departure from the EU.

During the year, copper segment sales volumes maintained levels recorded in 2018, with the copper tube volumes advancing positively even, in spite of a slowdown of industrial output in European markets significantly reducing the demand, predominantly in rolling products. At the same time, Sofia Med successfully penetrated new markets by launching high-demand added-value products.

2019 was a challenging year for the European steel industry, and consequently, for Viohalco's steel segment. This was due to a combination of factors including a slow-down in European industrial production, the decline in steel prices internationally, as a result of trade wars and global trade distortions, and the increase in raw materials and energy prices. EU trade protection measures partially mitigated the impact of these factors. Despite this, the segment strengthened its market position in the Balkan area, with Romania becoming a major market, and maintained its market share in Greece.

The steel pipes segment also faced challenges in 2019, though the year was characterized by a high utilization rate at the Thisvi plant and a strong market presence, despite reduced sales volumes due to strong protectionism, particularly in the US. Corinth Pipeworks leveraged its reputation for quality to increase market share, and it successfully entered new markets and product segments, including the technically-demanding deep offshore market, while also being awarded several major projects.

All business units in the cables segment delivered a positive performance during the year, with revenue growth reaching 20%. This growth was supported by the solid performance of the energy projects unit in particular and translated into a profit uplift for the whole segment. High capacity utilization levels for all production units greatly assisted financial performance for the year. The segment's performance was further supported by recent initiatives to enter new geographical markets, such as the US, as well as a persistent determination to be at the forefront of technology.

In the real estate segment, Noval Property was formally established as a Real Estate Investment Company ('REIC') in October 2019 and became the second largest REIC in Greece, based on real estate value. Noval Property boasts a modern and diversified real estate portfolio comprising 41 properties, with high marketability and significant geographical distribution. Both retail developments (the River West | IKEA Shopping Center and Mare West Retail Park) and hospitality properties (the Wyndham Grand Athens and K29) delivered a strong performance in 2019. During the year, progress was made on a number of developments and several significant projects were completed, including The Orbit and The Butterfly office buildings in Athens, both of which have been leased to blue-chip tenants.

Financial Overview

<i>Amounts in EUR thousands</i>	2019	2018
Revenue	4,198,194	4,406,185
Gross profit	347,766	396,775
EBITDA	273,374	331,857
a-EBITDA	302,473	312,565
EBIT	130,782	200,044
a-EBIT	159,881	180,752
Net finance cost	-98,515	-102,499
Profit before tax	31,924	95,612
Profit after tax	16,740	85,852
Profit / Loss (-) attributable to owners of the Company	8,206	76,112

- EBITDA, EBIT, adjusted EBITDA and adjusted EBIT are considered Alternative Performance Measures (APMs). For definitions and further information please refer to Appendix C.

Viohalco's consolidated revenue for 2019 was amounted to EUR 4,198 million, slightly down compared last year (2018: EUR 4,406 million). This trend was mainly driven by decline in metal prices mainly in aluminium and steel segments and by lower volumes at certain segments due to market slowdown recorded in the last quarter of 2019.

Consolidated a-EBITDA totalled EUR 302 million in 2019 (2018: EUR 313 million), while **consolidated EBITDA** including the effect of metal prices decreased by 18% to EUR 273 million (2018: EUR 332 million).

Net finance cost improved to EUR 98.5 million (2018: EUR 102.5 million), mainly due to credit spread reductions implemented gradually across all Viohalco companies during the last years.

Viohalco's consolidated profit before income tax for the year was EUR 32 million compared to EUR 96 million in 2018, affected mainly by lower metal prices.

Consolidated profit after tax for the period amounted to EUR 17 million (2018: EUR 86 million).

<i>Amounts in EUR thousands</i>	31/12/2019	31/12/2018
Fixed & intangible assets	2,152,103	1,989,868
Other non-current assets	67,296	67,224
Non-current assets	2,219,399	2,057,092
Inventory	1,060,009	1,142,309
Trade and other receivables (<i>inc. contract assets</i>)	559,919	668,633
Cash and cash equivalents	214,499	163,676
Other current assets	9,084	13,976
Current assets	1,843,511	1,988,594
Total assets	4,062,910	4,045,685
Equity	1,335,073	1,304,624
Loans and borrowings	943,522	874,802
Other non-current liabilities	212,302	194,164
Non-current liabilities	1,155,824	1,068,966
Loans and borrowings	830,455	899,468
Trade and other payables (<i>inc. contract liabilities</i>)	710,957	739,391
Other current liabilities	30,600	33,237
Current liabilities	1,572,012	1,672,096
Total equity and liabilities	4,062,910	4,045,686

Capital expenditure for the year reached EUR 284 million (2018: EUR 196 million) due to investment in the new four-stand tandem hot finishing mill in aluminium segment and investments focused on new products and increase in capacity in cables segment.

Depreciation and amortization for the period amounted to EUR 143 million.

Working capital decreased by 15% compared to 2018, as a result of effective management across all elements (debtors, creditors and inventory).

Viohalco companies' **net debt** improved to EUR 1,590 million (2018: EUR 1,636 million) before IFRS 16, despite the heavy investing program occurring in 2019. The respective amount after IFRS 16 implementation amounted to EUR 1,613 million.

Outlook

As the outbreak of Covid-19 continues to progress and evolve, the prediction of the full extent and duration of its business and economic impact remains challenging. Viohalco companies have already activated protection mechanisms and measures for human resources and its partners in compliance to health authorities, while closely monitoring the developments and assessing the implications on their operations.

The spread of Covid-19 is expected to affect both business and financial results of 2020, but the extent of the impact depends on a number of factors amongst which the most important relate to government restrictions, the duration of such restrictions and logistics constraints.

Regarding copper and aluminium segments, although production and business are not expected to be affected significantly, the global slowdown in demand might have an impact on the second semester of 2020.

In energy projects business of cables and steel pipes segments, no significant impact is expected, given the existing backlog and the nature of projects assigned, while the business of products will be affected more, as short-term demand, linked to the construction sector, is expected to decrease.

Steel segment is expected to be affected from April 2020 onwards as short-term demand which is linked to construction sector is expected to experience a decline, as a result of government restrictions aiming at limiting the spread of COVID-19.

Real estate business will be affected primarily on the retail and hospitality side. The operation of shopping centers and most of the retail shops has been ceased, accompanied by an obligatory 40% discount on monthly rents for the first months of COVID-19 expansion; both measures on Greek government orders.

However, Viohalco companies with diverse business model and solid organizational structure basis continue to show resilience in this challenging environment, securing their long-term sustainable growth.

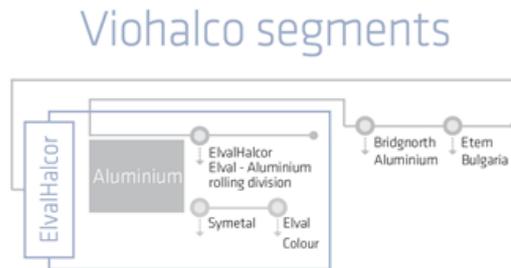
While market conditions in 2020 are expected to vary by segment, strategic investment in higher value-added products across the businesses is expected to drive further product portfolio improvements. Viohalco companies remain focused on their long-term growth strategy on strengthening their market positions through ongoing investment programmes, technological innovation along with cost and operational efficiency improvements.

E. Business segments' review

Aluminium

Activities

Viohalco companies manufacture a variety of aluminium rolling and extrusion products for a wide range of markets and applications. It operates through its aluminium rolling division ('Elval'), and its subsidiaries Symetal S.A. ('Symetal'), Elval Colour S.A. ('Elval Colour') and Vepal S.A. ('Vepal'), Bridgnorth Aluminium Ltd ('Bridgnorth Aluminium') and Etem Bulgaria S.A. ('Etem Bulgaria').



The aluminium segment offers:

- Rolled products
- Packaging: aluminium for rigid and flexible packaging solutions, from beverage and food cans, closures, household products, pharmaceutical and aseptic packaging foil;
- Transportation: Aluminium solutions for the automotive, marine, road and rail industries, and the HVAC&R sector;
- Construction: Mill finish and coated aluminium sheets and coils for the total building envelope, such as etalbond® aluminium composite panels, orofe® and Ydoral® coated strips for roofing and rain guttering applications;
- Industrial applications: Aluminium sheets, coils and circles for general engineering, renewable energy and household use applications;
- Lithographic coils: Coils for the production of printing plates;
- Extruded products;
- Architectural systems: Aluminium systems for doors, windows, dynamic building facades, curtain wall systems, sun shading systems, rolling shutters, ventilated facades systems and security systems;
- Industrial aluminium applications: Aluminium profiles and processed hard alloy bars for various industrial uses, general engineering applications, building applications, energy applications and transportation;
- Automotive applications: Extruded aluminium profiles and parts that have undergone special tooling and machining and are used in car chassis, suspension system and doors and decorative aluminium profiles for roof railings, aluminium composite panels for special automotive applications.

Viohalco's aluminium companies operate nine state-of-the-art production facilities:

Plant	Production focus	Annual production capacity	Quality certifications
Elval rolling plant (Oinofyta, Greece)	<ul style="list-style-type: none"> Aluminium segment's main production facility Flat rolled aluminium products for contemporary applications in the rigid packaging, building and construction, sea, road and rail transportation, automotive, industrial, energy, cookware and HVAC&R markets 	292,500 tons	ISO 9001:2015, IATF 16949:2016, ISO 14001:2015, OHSAS 18001:2007, ISO 50001:2011 Certified for design, production and sale of aluminium rolled / painted products, manufacturing of aluminium rolled products for the automotive industry. Certified by all major classification societies as an approved manufacturer for shipbuilding products (ABS, BV, DNV, GL, KR, LRS, RINA and NK)
Anoxal (Agios Thomas, Greece)	<ul style="list-style-type: none"> Recycling and casting aluminium Manufacturing billets and slabs 	49,500 tons	ISO 9001:2015 ISO 14001:2015 ISO 45001:2015
Vepal (Thiva, Greece)	<ul style="list-style-type: none"> Aluminium products for the construction, food and automotive industries 	45,000 tons	ISO 9001:2015 ISO 14001:2015 OSHAS 18001:2007
Elval Colour (Aghios Thomas, Greece)	<ul style="list-style-type: none"> Extensive range of coated aluminium products and aluminium composite panels for the building envelope A series of advance-performance products that are dedicated to the improvement of the environmental efficacy on buildings, increase in the durability of building facades and roofing, while resulting in the reduction of their impact on the environment 		ISO 9001:2015 ISO 14001:2015 OSHAS 18001:2007 Product's certifications from: BBA, DIBT, CSTB, ITB and TBWIC
Symetal aluminium foil rolling plant (Oinofyta - Viotia, Greece)	<ul style="list-style-type: none"> Plain aluminium foil in a wide range of gauges and alloys for various usages such as flexible and pharmaceutical packaging, food containers, household batteries and various technical applications (e.g. cable insulations and heat exchangers) 	52,000 tons	ISO 9001:2015 ISO 14001:2015 ISO 50001:2011 OHSAS 18001:2007
Symetal aluminium foil converting plant (Mandra - Attica, Greece)	<ul style="list-style-type: none"> Conversion of aluminium foil into a number of packaging applications, carrying out aluminium foil coated and/or laminated with paper for 	26,000 tons	ISO 9001:2015 ISO 14001:2015 ISO 50001:2011 ISO 45001:2018 ISO 15378:2017

	products used in food, pharmaceutical and cigarette industries		ISO 22000:2018 FSSC 22000 (v.5) FDA/IMS Certification FSC® Chain of Custody
Viomal (<i>Nea Artaki - Evia, Greece</i>)	<ul style="list-style-type: none"> Aluminium rolls for doors, windows and garage doors, Screen and shading systems Retractable security doors 	4,500 tons	
Bridgnorth Aluminium (<i>Bridgnorth, UK</i>)	<ul style="list-style-type: none"> Lithographic aluminium coils Semi-finished aluminium coils Electrical aluminium strip for transformer windings 	115,000 tons	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 ASI performance standard (v2 2017)
Etem – Gestamp Bulgaria (<i>Sofia, Bulgaria</i>)	<ul style="list-style-type: none"> Manufactures profiles for industrial application in the transportation, automotive, shipbuilding, electronic and photovoltaic industries 	27,000 tons	Accredited TIER 2 and TIER 1 automotive supplier Certified for the production of crash relevant aluminium profiles IATF 16949:2016 ISO 9001:2015 ISO 14001:2015 OHSAS 18001 QUALICOAT EN 15088
Etem Greece (<i>Magoula- Attica, Greece</i>)	<ul style="list-style-type: none"> Aluminium extrusion Architectural systems Industrial profiles 	7,000 tons	ISO 9001:2015 OSHAS 18001:2007

Financial charts

Summary consolidated figures for the aluminium segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	1,318,774	1,397,322
Gross profit	124,132	149,335
Gross profit (%)	9.4%	10.7%
EBITDA	109,073	144,079
EBITDA (%)	8.3%	10.3%
a-EBITDA	105,340	122,353
a-EBITDA (%)	8.0%	8.8%
EBIT	59,444	89,565
EBIT (%)	4.5%	6.4%
a-EBIT	55,712	67,838
a-EBIT (%)	4.2%	4.9%
Profit/ Loss (-) before tax	45,943	70,278

- All percentages are vs. revenue

2019 Financial Performance

In 2019, the aluminium segment witnessed a 5.6% decrease in **revenue** to EUR 1,319 million, mainly due to lower international aluminium prices. **Profit before income tax** amounted to EUR 46 million (2018: EUR 70 million).

During 2019, the aluminium rolling division's diverse product portfolio was particularly successful in end-use industries, especially in Europe and the US. A declining trend in shipments during the fourth quarter, driven by a drop in demand of the US market was reversed in the first two months of 2020. During the year, EUR 118.6 million was invested in the production facilities of the aluminium rolling division, as part of the ongoing strategic investment program. This included the installation of a new four-stand tandem mill, scheduled to commence production in the second quarter of 2020, which will more than double the Oinofyta plant's hot rolling capacity. At the start of 2020, Elval announced the initiation of the second phase of its five-year investment plan, worth EUR 100 million, and signed a contract for the purchase and installation of a 6-high cold rolling mill, which is expected to commence operation in 2022.

2019 was another year of growth for Symetal, despite negative market trends in the last quarter, namely decreased US market demand and increased competition as Chinese foil producers entered the European market, adversely impacting sales volumes and profitability. The decline in sales volumes was particularly apparent in flexible packaging foil, food containers and industrial foil. Despite this, Symetal successfully adapted its business strategy to capitalise on growing demand for lacquered products, its market share as a supplier to the tobacco industry and the developing battery foil market.

During the year, Etem Bulgaria shifted its strategic focus to automotive-based projects and investments. It concluded the spin-off of its extrusion and post-operations businesses and formed a joint venture with Gestamp for the production of extruded aluminium profiles. Due to Etem Bulgaria's expertise, the new Etem-Gestamp joint venture was selected for a number of projects related to the production of automotive battery boxes, firmly establishing a solid platform for future growth.

At Bridgnorth Aluminium, demand in the lithographic segment declined year-on-year, as a result of key customers reducing production activity and uncertainty associated with the UK's departure from the European Union.

Outlook

The sustainable characteristics of aluminium are expected to drive demand for innovative flat rolled aluminium solutions. This positive trend presents significant growth opportunities for Elval in 2020, especially following the company's investment in the four-stand-tandem aluminium hot finishing mill and the recently announced 6-high aluminium cold rolling mill.

In 2020, Symetal will remain focused on exploiting growth in demand for lacquered products, flexible packaging foil and battery foil.

Implementation of the Etem Bulgaria's investment plan, the purpose of which is to increase extrusion capacity, will progress throughout 2020. The automotive extrusion sector will also enhance its competitiveness through its continued strong focus on research and development.

Regarding Bridgnorth Aluminium, the 2020 order book is strong, comprising large contracts with key customers. Forthcoming negotiations on trade agreements between the UK and the European Union are expected to provide further clarity on trading arrangements from 2021 and beyond.

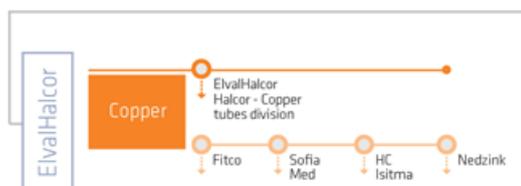
Further information on Elval is available on its website: www.elval.com

Copper

Activities

Viohalco produces a wide range of copper, brass and high-performance copper alloys through its copper tubes division, Halcor, and its subsidiaries Fitco, Sofia Med, Epirus Metalworks, and the joint ventures Nedzink and HC Isitma.

Viohalco segments



Halcor offers a diversified product portfolio comprising copper and brass tubes and extruded and rolled products through commercial outlets across Europe. By investing in advanced technical solutions and offering high added value products and solutions, Halcor is able to expand existing market share and penetrate new markets.

The main product categories of Halcor and the copper subsidiaries are:

- Copper Tubes products: TALOS[®], TALOS[®] Ecutherm[™], Cusmart[®], TALOS[®] Plastic Coated, TALOS[®] Gas, TALOS[®] Med, TALOS[®] ACR, TALOS[®] ACR Inner Grooved, TALOS[®] ACR Ecutherm[™], TALOS[®] ACR Ecutherm II[™], TALOS[®] Geotherm, TALOS[®] Ecutherm[™] Solar, TALOS[®] Solar Plus, TALOS[®] ACR Linesets, TALOS[®] Form, TALOS[®] Sprinkler, TALOS[®] XS, TALOS[®] Plated and TALOS[®] S80.
- Rolled products: strips (including hot dip tinned surface), foil, sheets, discs, circles and plates in copper, brass and special high performance copper alloys.
- Extruded products: copper bus bars, rods, wires, profiles, fabricated parts with tin and silver surface coating (electroplating) options, brass copper alloy rods and tubes, sections and wires, along with UR30 copper alloy wire and net cages for aquaculture and fish farming.
- All types of coin blanks: monochrome blanks, outer rings for bi-color blanks, inner blanks for bi-color blanks, electroplated bi-color blanks and assembled bi-color blanks in a wide range of colors and material combinations, enabling Halcor to meet all tender specifications and offer high-quality products with extended after-sales support.
- Nedzink titanzinc products.

The copper segment's industrial base comprises the following manufacturing facilities:

Plant	Production focus	Annual production capacity	Quality certifications
Halcor foundry (Oinofyta, Greece)	<ul style="list-style-type: none"> • Semi-finished copper • Copper alloys • Brass products in billet and slab form 	235,000 tons	ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 50001:2018
Halcor copper tubes (Oinofyta, Greece)	<p>Copper tubes</p> <ul style="list-style-type: none"> ○ for HVAC&R ○ industrial plumbing, HVAC&R, renewable energy, architecture, and engineering applications, including fittings, filters and cable shoes 	75,000 tons	ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 50001:2018
Fitco extrusion for brass and copper alloy products (Oinofyta, Greece)	<ul style="list-style-type: none"> • Solid and hollow copper alloy rods and sections • Copper alloy wire and bars • Seamless copper alloy tubes of different cross-sections • Welded copper alloy tubes with a circular cross-section • Copper alloy wire cage nets for farming aquaculture 	40,000 tons	ISO 9001:2015 ISO 14001:2015 OSHAS 18001:2007 Products comply with several quality specifications (EN, DIN, BS, NF, ASTM, JIS)
Sofia Med copper and copper alloys processing plant (Sofia, Bulgaria)	<ul style="list-style-type: none"> • Copper, brass, high performance rolled products • Copper bus bars • Rod profiles • Wires • Additional capabilities for tin and silver plating 	140,000 tons	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 ISO 45001:2018 ISO 26000:2010 ISO 50001:2011 IATF 16949:2016
Epirus Metalworks (Epirus, Greece)	<ul style="list-style-type: none"> • All types of coin blanks • Rings for bi-color coins 	6,000 tons	ISO 9001:2015 ISO 14001:2015 ISO 50001:2011
HC Isitma (Gebze, Turkey)	<ul style="list-style-type: none"> • Ecutherm copper tubes • Corrugated A/C drain hoses 	<ul style="list-style-type: none"> • 4,200,000 m. for copper tubes • 1,800,00 m. for hoses 	
Nedzink (Budel-Dorplein, the Netherlands)	<ul style="list-style-type: none"> • Titanzinc coils, sheets, strips, gutters and other accessories for roofing 	24,000 tons	NEN-EN-ISO 9001:2015

Financial charts

Summary consolidated figures for the copper segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	1,036,972	1,065,500
Gross profit	68,052	77,638
Gross profit (%)	6.6%	7.3%
EBITDA	45,033	53,500
EBITDA (%)	4.3%	5.0%
a-EBITDA	45,749	50,693
a-EBITDA (%)	4.4%	4.8%
EBIT	29,916	41,706
EBIT (%)	2.9%	3.9%
a-EBIT	30,632	38,899
a-EBIT (%)	3.0%	3.6%
Profit/ Loss (-) before tax	12,123	21,119

- All percentages are vs. revenue

2019 Financial Performance

In 2019, copper segment volumes remained almost flat compared with 2018. **Revenue** stood at EUR 1,037 million versus EUR 1,066 million in the prior year, mainly due to a 2.9% decrease in copper prices, while **profit before income tax** amounted to EUR 12 million (2018: EUR 21 million).

The copper segment's competitive landscape evolved significantly during 2019. Demand for copper and copper alloy flat rolled products, both globally and in Europe, was particularly weak and the segment outperformed the market as volumes increased marginally. For the copper tubes segment in particular, there has been an increase in both sales volumes and in market share, despite a slightly weaker performance in the last quarter of 2019.

Halcor successfully completed its copper tubes mill investment at the end of 2018, increasing overall annual production capacity by 5,000 tons. In addition, following the successful launch of a hot dip tinning line for strips, Sofia Med successfully penetrated new markets and launched high demand, value-added products.

Outlook

Market conditions in 2020 are not expected to improve significantly. However, despite expectations that demand for copper tubes will remain stable, the tubes mill will continue to operate at near full capacity. Production of copper and copper alloy rolled products is expected to rise, and Sofia Med will therefore seek to increase its market share by improving product quality and expanding its product range. Finally, investment in higher value-added products will drive further product portfolio improvements and segment profitability.

Further information on Halcor is available on the website: www.halcor.com

ElvalHalcor S.A.

Formed in December 2017 through the merger of Elval, a leading European aluminum rolling company, and Halcor, the largest copper tubes producer in Europe, ElvalHalcor Hellenic Copper and Aluminium industry S.A. ('ElvalHalcor') is a leading global industrial manufacturer of aluminium and copper products.

As a combined entity, ElvalHalcor takes advantage of synergies in innovation, technology, R&D, procurement, marketing, infrastructure and sustainability to produce high-quality, value added solutions for customers globally. ElvalHalcor's success is driven by its customer-focused philosophy, commercial export efforts and innovation achieved through ongoing investment in R&D.

The company has over 80 years of experience, a strong production base across 14 industrial units, a market presence in over 100 countries, and highly experienced and specialised personnel.

ElvalHalcor is a key player in the non-ferrous metals industry. It effectively navigates the challenges of the evolving business environment, whilst generating value for its stakeholders through sustainable growth and development.

ElvalHalcor is active in a number of dynamic, growing markets, including:

- Packaging
- Road, sea and rail transportation
- Automotive
- Heating, ventilation, air conditioning and refrigeration ('HVAC&R')
- Building and construction
- Renewable energy
- Energy and power networks
- Water supply
- Industrial and engineering applications

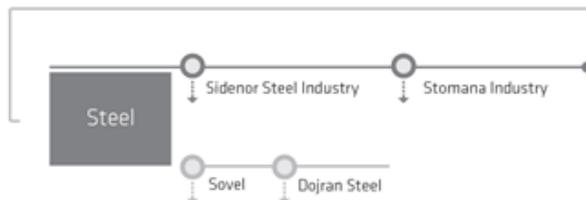
ElvalHalcor is listed on the Athens Stock Exchange (ELHA).

Steel

Activities

Sidenor Steel Industry S.A. ('Sidenor Steel Industry'), Stomana Industry S.A. ('Stomana Industry') and their subsidiaries are leading producers of steel products in South Eastern Europe. The companies have more than 55 years of manufacturing experience and expertise in steel production and distribution, and an extensive product portfolio which includes long, flat and downstream steel products.

Viohalco segments



Steel segment companies offer a broad range of value added products and solutions for building and construction (including buildings, roadworks, metro stations, bridges, shopping malls and hydroelectric dam projects), mechanical engineering, shipbuilding, road and rail, the automotive industry, and mining and tunneling applications.

The product family is structured as follows:

- SD integrated reinforcing system: SD concrete reinforcing steel, SD stirrup reinforcing mesh, Sidefit special mesh, SD wire mesh, Sidefor and Sidefor Plus prefabricated stirrup cages, Inomix steel fibres and lattice girders.
- Wire rods for cold drawing & mesh applications.
- Special Bar Quality steels (SBQ).
- Steel plates.
- Merchant bars: hot-rolled square bars, hot-rolled flat bars, hot-rolled round bars, hot-rolled equal angle bars and UPN channels.
- Grinding balls.
- THN Mining profiles.
- Boron flats: hot-rolled boron flats.
- Welding products and electrodes (manufactured by Erlikon Wire Processing S.A.).
- Wire products (manufactured by Erlikon Wire Processing S.A.)
- Flat wire for electric cables reinforcement.
- Tubular products: tubes of pre-galvanized steel and cold and hot rolled steel in round, square and rectangular profiles.

In order to achieve the optimum balance between operational and commercial flexibility and production effectiveness, the steel segment has adopted an operational structure focused on the following:

- Mini-mills.
- Downstream operations for steel product processing.
- Sales and distribution.

Steel segment operates six steel manufacturing facilities:

Plant	Production focus	Annual production capacity	Quality certifications
Sidenor Steel Industry (Thessaloniki, Greece)	<ul style="list-style-type: none"> • Billets • SD concrete reinforcing steel (in bars and coils) • Merchant bars • Wire rod products 	<p>Meltshop: 800,000 tons</p> <p>Long products rolling mill: 800,000 tons</p>	<p>ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 ISO 50001:2011 SustSteel</p> <p>Products certified according to EN, DIN, ELOT, SR, SRPS, BDS standards</p>
Sovel plant and privately owned port facilities (Almyros, Greece)	<ul style="list-style-type: none"> • Billets • SD concrete reinforcing steel • SD spooled coils • SD wire mesh • SD stirrup reinforcing mesh • Sidefit special mesh • Sidefor and Sidefor Plus prefabricated stirrup cages 	<p>Meltshop: 1,350,000 tons</p> <p>Long products rolling mill: 1,200,000 tons</p>	<p>ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 ISO 50001:2011 SustSteel</p> <p>Products certified according to EN, BS, DIN, ELOT, SR, SRPS, BDS, HRN standards</p>
Stomana Industry (Pernik, Bulgaria) & the Port Svishtov West (Bulgaria)	<ul style="list-style-type: none"> • SD concrete reinforcing steel • Steel quarto plates • Special Bar Quality steels (SBQ) • Merchant bars • Steel balls • Special profiles • Beams • Continuously cast semi-products (billets, blooms and slabs) 	<p>Meltshop: 1,400,000 tons</p> <p>Long products rolling mill: 1,200,000 tons</p> <p>Plate products rolling mill: 400,000 tons.</p>	<p>ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 SustSteel</p> <p>Products meet requirements of EN, DIN, ASTM, JIS, BS, Lloyd's Register and Germanischer Lloyd</p>
Erlikon (Thessaloniki, Greece)	<ul style="list-style-type: none"> • Welding electrodes 	Electrodes: 4,000 tons	ISO 9001:2015
	<ul style="list-style-type: none"> • Copper-plated wires (In D.S. also) 	Copper-plated wires: 3,000 tons	OHSAS 18001:2007
	<ul style="list-style-type: none"> • Galvanized wires 	Galvanized wires: 32,000 tons	Products meets the requirements of BS, EN, DIN, ASTM, AWS, DIN, LRS, GL, ABS
	<ul style="list-style-type: none"> • Galvanized steel wire armor for submarine power cables (round and flat) 		
	<ul style="list-style-type: none"> • Galvanized mesh in rolls and sheets (D.S.) 		
	<ul style="list-style-type: none"> • Galvanized concrete reinforcing mesh for offshore fuel pipes (D.S.) 		

	<ul style="list-style-type: none"> • Black hard and annealed wires 	Drawing machines: 40.000 tons	
	<ul style="list-style-type: none"> • Concrete reinforcing steel fibres 	Steel Fibres: 1.300 tons	
Dojran Steel (Nikolic, North Macedonia)	<ul style="list-style-type: none"> • SD concrete reinforcing steel • Merchant bars • Wire mesh • Double-twist hexagonal mesh(serasanetti) 	Long products rolling mill: 200,000 tons Wire mesh production: 20,000 tons Lattice girders: 10,000 tons	ISO 9001:2015 ISO 14001: 2015 OHSAS 18001:2007 ISO 50001:2011 Products certified according to EN, DIN, SRPS, BDS standards
Domoplex Ltd (Limassol, Cyprus)	<ul style="list-style-type: none"> • All types of mesh made of welded wires or straight steel reinforcement bars 	12,000 tons	ISO 9001:2015 The facility also maintains its own quality control laboratory on site

Financial charts

Summary consolidated figures for the steel segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	815,568	916,581
Gross profit	30,386	69,626
Gross profit (%)	3.7%	7.6%
EBITDA	26,428	74,002
EBITDA (%)	3.2%	8.1%
a-EBITDA	53,309	72,336
a-EBITDA (%)	6.5%	8.1%
EBIT	-13,057	37,812
EBIT (%)	-1.6%	4.1%
a-EBIT	13,824	36,146
a-EBIT (%)	1.7%	4.2%
Profit/ Loss (-) before tax	-41,993	9,115

- All percentages are vs. revenue

2019 Financial performance

Since the end of 2018, the European steel industry has been adversely impacted by a number of factors. These include the slowing of industrial production, the increase in imports of low price steel products from outside the EU, the reduction of international prices as result of the trade wars and the higher raw materials and energy prices. EU trade protection measures (quotas) only partially mitigated the impact of these factors. As a result, steel segment **revenue** amounted to EUR 816 million in 2019 (2018: EUR 917 million), while **loss before income tax** amounted to EUR 42 million (2018: profit of EUR 9.1 million). During 2019, the segment strengthened its market position in the Balkan area, with Romania becoming a major market, and also maintained its market share in Greece.

The price of plates and special steels was suppressed due to a slowdown in the EU automotive industry, following the introduction of new emissions and fuel efficiency measurement rules. Increased raw materials and energy prices (especially CO₂ extra cost) made spot market sales challenging or even completely inaccessible.

Outlook

A gradual increase in demand for residential, commercial and tourist real estate was expected to drive a recovery in Greece's domestic construction industry between 2020-2022, despite low levels of public investment allocated to infrastructure projects in 2020. However, the implications of the COVID-19 outbreak on the economy have impacted these expectations and forecasts.

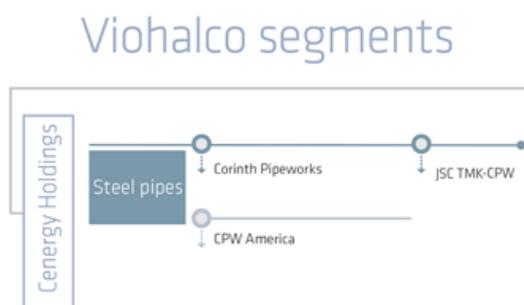
In 2020, companies in the segment will continue to adapt to this volatile environment, further enhancing cost competitiveness and operational efficiency.

Further information on the steel segment is available on the Sidenor Steel Industry website: www.sidenor.gr

Steel Pipes

Activities

Corinth Pipeworks Pipe Industry S.A. ('Corinth Pipeworks') produces steel pipes for the transportation of natural gas, oil and water, and steel hollow sections used in construction projects. It is a subsidiary of Cenergy Holdings, which was formed through the cross-border merger of Corinth Pipeworks Holdings S.A. and Hellenic Cables S.A Holdings Société Anonyme. With a manufacturing plant in Greece and extensive expertise in delivering complex projects on a global scale, Corinth Pipeworks is the supplier of choice for oil, gas and international construction companies.



Corinth Pipeworks' three main product categories are:

- Line pipes - manufactured at either the high frequency induction welding unit ('HFW'), the helically submerged arc welding unit ('HSAW'), or the longitudinal submerged arc welding unit ('LSAW/JCOE').
- Casing pipes - used in oil and gas extraction drills.
- Hollow structural sections - used in the construction sector.

Services

- Internal and external coating of pipes produced by other pipe manufacturers.
- Accredited laboratory for raw material and pipe testing, in accordance with ISO 17025:2006.
- In-house corrosion testing laboratory for sour service applications.
- Weld on connector facilities for casing pipes.
- Pipe storage.
- Supply of pipes or assignment of pipe coating to third party authorised subcontractors in the context of major project implementation.
- Pipe transportation.

Corinth Pipeworks' operates two production plants:

Plant	Production focus	Annual production capacity	Quality certifications
Corinth Pipeworks plant and port (<i>Thisvi, Greece</i>)	<ul style="list-style-type: none"> • Welded pipes for oil and gas transportation • Hollow structural sections for the construction industry • Concrete weight coating (enabling the supply of a complete offshore pipeline package in one location) 	925,000 tons	ISO 9001:2015, ISO 14001:2015, OHSAS18001:2007, ISO50001:2011 API Q1 API-SCT-0509 API-5L-0396 CPW ISO 3834-2

			DNV AD 2000-Merkblatt W0 & HPO (WZ 2537 HH 1) DNV PED 2014-68-EC (DZ 134 HH 1) DNVGL EN 10219-1 REV.5 ISO 17025 ZETOM CERTIFICATE
JSC TMK-CPW (Polevskoy, Russia)	<ul style="list-style-type: none"> • High frequency welded pipes • Hollow structural sections 	200,000 tons	Compliant with all international standards

The Corinth Pipeworks plant has dedicated port facilities at Thisvi Port, just 1.5km away, enabling the company to reduce raw material transportation costs, offer more competitive product pricing and facilitate faster delivery. The port includes cranes, forklifts and other machinery, in line with the provisions of the International Ship and Port Facility Security Code.

Financial charts

Summary consolidated figures for the steel pipes segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	376,084	470,174
Gross profit	32,532	33,029
Gross profit (%)	8.7%	7.0%
EBITDA	25,541	25,536
EBITDA (%)	6.8%	5.4%
a-EBITDA	27,045	27,245
a-EBITDA (%)	7.2%	6.2%
EBIT	15,113	17,918
EBIT (%)	4.0%	3.8%
a-EBIT	16,617	19,627
a-EBIT (%)	4.4%	4.6%
Profit/ Loss (-) before tax	4,262	8,612

- All percentages are vs. revenue

2019 Financial performance

Operating within adverse market conditions, characterized by strong protectionism, particularly in the US, **revenue** in the steel pipes segment amounted to EUR 376 million in 2019, a 20.0% decrease year-on-year (2018: EUR 470 million). **Profit before income tax** amounted to EUR 4 million, compared to EUR 9 million in 2018, mainly attributable to an increase in net finance costs of EUR 2.4 million.

During the year, Corinth Pipeworks leveraged its reputation for quality to increase its market share and successfully enter new markets. In addition to this, during 2019 Corinth Pipeworks produced pipes for Karish, its first deep sea offshore project and an important breakthrough for the steel pipes segment. This was a strategic project in the SE Mediterranean, at a maximum depth of 1,750m, a highly complex work only a limited number of companies worldwide could have accomplished.

In 2019, Corinth Pipeworks successfully completed:

- Various reeling North Sea and US projects, as well as Zinia, the first small LSAW offshore project for Total;
- Baltic Connector linking Finland to Estonia;
- NET4GAS in Czech Republic and Izostal in Poland, summing 34 kTns;

- Projects in Italy of Snam and SGI, including the milestone TAP connection to the Italian grid (3 projects of 56" won by Corinth Pipeworks).

The company was also awarded several major projects, including the following:

- Energinet, Baltic Pipe, a 114 km gas pipeline of 32-36" pipes;
- Midia Gas Development Project, a 145 km of 8" & 16" offshore pipeline in Romania;
- Snam, 150 km of gas pipeline of 26" pipes in Italy;
- I.G.B. (Gas Interconnector Greece-Bulgaria) project, a 187km gas pipeline of 32" pipes.

Throughout the year, Corinth Pipeworks successfully progressed its intense programme of qualifications from the major oil and gas companies, and launched innovative programmes to enhance competitiveness.

Outlook

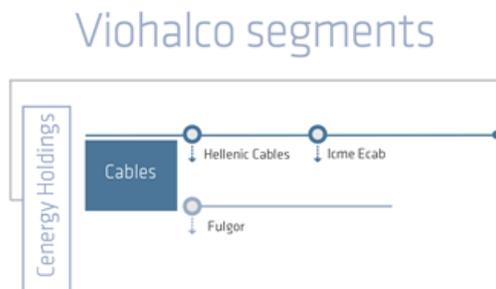
In the steel pipes segment, the global economic environment in which Corinth Pipeworks operates remains volatile. The imposition of tariffs and antidumping duties by the US triggered severe competitive pressure from local US mills on worldwide pipe makers. Despite these headwinds, Corinth Pipeworks enters 2020 with a significant backlog of projects and expects to maintain high capacity utilization. 2020 is also expected to be a transitional year with new or ongoing projects undertaken with greater efficiency, operational excellence and digitalization.

Further information on Corinth Pipeworks is available on its corporate website: www.cpw.gr

Cables

Activities

The cables segment of Viohalco comprises three companies (hereafter collectively referred to as '*Hellenic Cables companies*') - Hellenic Cables S.A. Hellenic Cables Industry ('*Hellenic Cables*') and its subsidiary Fulgor S.A. ('*Fulgor*'), which operate in Greece; and Icme Ecab S.A. ('*Icme Ecab*'), which operates in Romania.



Hellenic Cables companies are an approved supplier of the largest international electricity network operators and have one of the largest and most advanced submarine cable plants in the world, located in Corinth, Greece. They provide a variety of products including underground and submarine power cables (from low to high and extra high voltage), telecommunications cables, enameled wires, copper wires and compounds.

Over the past decade, Hellenic Cables companies have constituted the largest producer of cables in Greece and southeastern Europe, with a strong international focus, exporting to more than 50 countries worldwide.

The key product categories are as follows:

- Power cables: low, medium, high and extra high voltage submarine and land cables, umbilical cables, subsea flexible pipes, control cables, cables for industrial applications and external installations, fire-retardant, fire-resistant and halogen-free cables, marine cables, copper and aluminum conductors, ACSR and ACSS/TW conductors.
- Telecommunications cables: conventional telephone cables, telephone exchange and data transmission cables (LAN), fibre-optic (single-mode and multi-mode), submarine cables, and signaling cables.
- Enameled wires: enameled copper and aluminum wires (round and rectangular) for electric motors and transformers, and copper wires for grounding, earthing and welding applications (can industry).
- Plastic and rubber compounds: PVC-based plastic compounds, low smoke halogen free polyolefin-based plastic compounds and rubber compounds.

Hellenic Cables companies have established a Project Management Office ('PMO') and, where appropriate, use their own specialised assets, trained personnel and experienced subcontractors to offer complete "turnkey" projects in Greece and abroad.

The cable companies' capabilities include the following:

- System design and engineering.
- Cable route survey.
- Design and manufacture of suitable underground and submarine cable types.
- Loading and transportation of cables to the project site.
- Installation of cables (with the use of specialised cable laying vessels for submarine cables).
- Protection of cables along the cable route.
- Supply and installation of repair joints, transition joints and cable terminations.
- Supply and installation of terminal equipment.
- System testing and commissioning.

- Project management.
- Training of customer personnel in the operation of the system.
- Provision of maintenance and repair solutions.

Hellenic Cables and its subsidiary, Fulgor, were recently awarded several high-profile projects by major utilities companies across Europe. This is testament to the leading position that Hellenic Cables companies have established in both the submarine cable manufacturing market and the wider global offshore energy industry.

The cables segment's production base comprises six plants:

Plant	Production focus	Annual production capacity	Quality certifications
Hellenic Cables Power and Optical Fibres Cable plant (Thiva, Greece)	<ul style="list-style-type: none"> • LV power cables • MV power cables • HV power cables • EHV power cables up to 500 kV; • Fibre optic cables 	60,000 tons	VDE (Germany) BASEC (UK) LCIE (France) IMQ (Italy) DNV (Norway) for ship cables CTL (USA) for wind turbine cables ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2015 ISO 50001:2011 ISO 220301:2012 ISO 27001:2013 VCA/SCC Petrochemicals 2017/6.0 Safety Culture Ladder
Fulgor Submarine cable plant and port (Corinth, Greece)	<ul style="list-style-type: none"> • MV submarine power cables • HV submarine power cables • Fiber optic submarine cables • LV, MV & HV power cables • Copper and aluminium wire rods 	<ul style="list-style-type: none"> • 450km of HV AC export submarine cables • 700km inter array submarine cables • 90,000 tons of 8mm diameter copper wire rod 	ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 ISO 50001:2011 ISO 22301:2012 ISO 27001:2013 VCA/SCC Petrochemicals Safety Culture Ladder

<p>lcme Ecab power and telecom cables plant (Bucharest, Romania)</p>	<ul style="list-style-type: none"> • Cables for indoor installations, energy, control, industrial and external applications, • LV and MV power cables • Fire-retardant, fire-resistant and halogen-free cables • Mine cables • Marine and special-requirement cables • Telecommunication cables (including signaling, remote control and data transmission) • Copper and aluminium conductors • Plastic and rubber compounds 	50,000 tons	<p>ISO 9001 :2015 ISO 14001 :2015 ISO 45001:2018</p>
<p>Cablel Wires enameled wires plant* (Livadia, Greece)</p>	<ul style="list-style-type: none"> • Copper and aluminium enameled wires (round and rectangular) 	12,500 tons	<p>ISO 9001 :2015 ISO 14001 :2015 OHSAS 18001 :2007 IATF 16949:2016 ISO 50001:2011 ISO 22301:2012 ISO 27001:2013</p>
<p>Hellenic Cables plastic and rubber compounds plant (Oinofyta, Greece)</p>	<ul style="list-style-type: none"> • PVC and rubber compounds 	24,000 tons	<p>ISO 9001:2015 ISO 14001:2015 OHSAS 18001:2007 ISO 50001:2011 ISO 27001:2013</p>
<p>Lesco Ltd wooden packaging products plant (Blagoevgrad, Bulgaria)</p>	<ul style="list-style-type: none"> • Wooden reels and pallets 	16,500 tons	

*During 2019, Cablel Wires absorbed the enameled sector of Hellenic Cables. Cablel Wires is the sole manufacturer of enameled wires in Greece. In December 2019, Cablel Wires was sold to ElvalHalcor.

Financial charts

Summary consolidated figures for the cables segment Amounts in EUR thousands	For the year ended 31 December	
	2019	2018
Revenue	567,785	474,734
Gross profit	70,133	40,880
Gross profit (%)	12.4%	8.6%
EBITDA	63,641	32,208
EBITDA (%)	11.2%	6.8%
a-EBITDA	66,816	35,871
a-EBITDA (%)	11.8%	7.5%
EBIT	47,152	18,541
EBIT (%)	8.3%	3.9%
a-EBIT	50,326	22,204
a-EBIT (%)	8.9%	4.6%
Profit/ Loss (-) before tax	24,488	-3,961

- All percentages are vs. revenue

2019 Financial performance

The cables segment's 2019 results reflect a positive performance by all its businesses. **Revenue** grew by 20% to EUR 568 million (2018: EUR 475 million), as a result of a solid performance from the energy projects unit, which boosted the segment's profitability, and high capacity utilization levels at all production units. Adjusted EBITDA increased 86% year-on-year to EUR 67 million (2018: 36 EUR million), the highest ever for the segment. **Profit before income tax** amounted to EUR 24 million, compared to a loss before income tax of EUR 4 million in 2018.

For the projects business unit, 2019 is best portrayed by the following events:

- The extension of the 400kV power grid system in the Peloponnese is progressing on schedule: production of the extra-high voltage submarine cables was completed in the early summer and, during August, the installation of the first 400kV submarine cable in Greece was completed (seabed clearance, trenching, cable laying and protection) in the Rio-Antirio area.
- The production for the Hollandze Kust Alpha project in the Netherlands and the interconnection of Crete – Peloponnese commenced, while those for the second phase of Cyclades islands' interconnection project and the Seamade-Mermaid project in Belgium were concluded. The installation of both projects is expected to take place during 2020.
- The submarine cables for the Modular Offshore Grid project in the North Sea, Belgium and the interconnection of the Kafireas wind park in Evia, Greece with the national power grid via submarine cables, were successfully finished.

During the second half of 2019, Hellenic Cables participated in tenders across a number of geographies and markets and, among other awarded projects, secured their first US project (Mayflower Wind project) with Shell / EDPR and their first contract for inter-array cables with Ørsted, the global leader in offshore wind.

Finally, Hellenic Cables consolidated its presence in the US offshore wind market with the establishment of Hellenic Cables America Inc., a wholly owned subsidiary, providing US customers with direct support and expertise throughout entire lifetime of their projects.

Outlook

Given the strong pipeline of new projects and the potential to expand into new markets, the considerable backlog of orders and the growth potential of the offshore cables sector, the overall outlook for the cables segment remains positive for 2020, despite volatility in the global economic environment. The Corinth plant is expected to retain high utilization through 2020 and this will be the main driver for the segment's profitability. The Thiva plant is also expected to operate at high utilization levels throughout 2020.

Further information is available on the Hellenic Cables website: www.hellenic-cables.com

Cenergy Holdings S.A.

Cenergy Holdings S.A. ('Cenergy Holdings') is a Belgium-based holding company which invests in industrial companies at the forefront of high growth sectors, including energy transfer, renewables and data transmission.

Cenergy Holdings' portfolio comprises two business segments:

- Hellenic Cables, its subsidiaries and Icme Ecab constitute the Hellenic Cables companies, one of the largest cable producers in Europe. Hellenic Cables companies manufacture mainly power, telecommunication and submarine cables.
- Corinth Pipeworks, a manufacturer of steel pipes for natural gas, oil and water networks, and steel hollow sections for construction projects.

Both entities have state-of-the-art production facilities, and market and product diversification.

The companies in Cenergy Holdings' portfolio:

- have a long history of implementing big projects in more than 70 countries;
- have served major customers worldwide for almost 70 years;
- operate seven production units and four supporting facilities in four countries; and
- provide value added products for niche markets.

Cenergy Holdings is listed on Euronext Brussels Exchange and the Athens Stock Exchange (CENER).

Real Estate

Activities

Viohalco derives value from the real estate assets of its subsidiaries by developing and managing large-scale commercial and industrial properties.

Noval Property is a Real Estate Investment Company (R.E.I.C.) active in the real estate development and investment sectors, while Steelmet Property Services S.A. provides a wide range of real estate, property and facility management services at a centralized level.



Noval Property owns a diversified and mature portfolio of real estate assets, such as office buildings, hospitality properties, shopping centres, retail parks, and industrial complexes. With a modern real estate portfolio, with both high marketability and a significant geographical distribution, Noval Property is currently the 2nd largest R.E.I.C. in Greece in terms of portfolio value (EUR 298.5 million).

Underpinned by its strong capital structure, Noval Property has designed and is implementing a strategic and investment growth plan, with attractive prospects aimed at enhancing and enriching the balanced mix of its real estate portfolio. Investment opportunities are mainly located in Greece and selectively in certain Southeastern European countries.

At the end of 2019, Noval Property's portfolio comprised 41 properties. The main income producing properties within Noval Property's portfolio are the following:

1	Retail	River West shopping centre and IKEA megastore	96-98-100 Kifissou Avenue, Egaleo, Athens
2	Office	The Orbit office complex	115 Kifissias Avenue, Athens
3	Hospitality	Wyndham Grand Athens Hotel	Karaiskaki Square, Athens
4	Office	33 Amarousiou Chalandriou Street office building	Marousi, Athens
5	Retail	Mare West retail park	Corinth
6	Office	57 Ethnikis Antistaseos Street office buildings	Chalandri, Athens
7	Office	16 Himaras Street office building	Maroussi, Athens
8	Office	The Butterfly office building	26A Apostolopoulou Street, Chalandri, Athens
9	Office	53 Nicola Vapsarov Boulevard office building	Sofia, Bulgaria
10	Hospitality	K29 apartment hotel	29 Agiou Konstantinou Street, Athens

Noval Property is also in the process of developing its captive pipeline by converting a number of former industrial assets, mainly in Athens, into single and/or mixed-use projects. Examples include:

1. 252 Pireos Street, Athens: Conversion of a former 73,000 sq.m. industrial property, located in the centre of Athens, into a mixed use hotel / office / retail / cultural development.

- 40-42 Ardittou Street, Athens: Conversion of an unfinished building of c. 4,300 sq.m. in the centre of Athens, into an apartment hotel. It is located next to the Panathenaic Stadium with breathtaking views of the Acropolis, the Temple of Zeus, Lycabettus, and Zappeion.

Noval Property's developments lead to modern and energy efficient buildings, mainly in the retail, office and hotel sectors, in line with international sustainability standards related to the environment and the local communities.

Noval Property has a highly experienced internal management team with in-depth knowledge of the Greek and SEE real estate markets, supporting and underpinning its active asset management and development approach and sourcing ability.

Financial charts

Summary consolidated figures for the real estate segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	11,197	8,388
Gross profit	3,325	3,024
Gross profit (%)	29.7%	36.1%
EBITDA	7,771	4,607
EBITDA (%)	69.4%	54.9%
a-EBITDA	8,259	4,597
a-EBITDA (%)	73.8%	54.8%
EBIT	932	297
EBIT (%)	8.3%	3.5%
a-EBIT	1,420	287
a-EBIT (%)	12.7%	3.4%
Profit/ Loss (-) before tax	-2,022	-1,507

- All percentages are vs. revenue

2019 Financial performance

Revenue for the segment amounted to EUR 11 million in 2019, while **profit before income tax** amounted to a loss of EUR 2 million, remaining flat versus 2018.

The River West | IKEA Shopping Center recorded increases in rental income and footfall of 18% and 10%, respectively, and its occupancy stands at 100%. Expansion works at River West commenced in mid-2019 with the construction of an additional retail and entertainment building with a gross buildable area ('GBA') of c.25,000 sqm. Construction works are progressing well and leases with anchor tenants have already been signed. Meanwhile, the Mare West Retail Park achieved rental income and footfall increases of 31% and 17%, respectively, and an occupancy of 99%. Construction of Mare West's outdoor athleisure park (total area: 6,000 sq.m) was also completed and has been successfully operating since September 2019.

Regarding office properties, the construction of two Leadership in Energy and Environmental Design ('LEED') certified office buildings in Athens, "The Orbit" (GBA: 39,650 sq.m) and "The Butterfly" (GBA: 10,150 sq.m), was completed during the year, with both buildings leased to blue-chip tenants. In hospitality, the "Wyndham Grand Athens" Hotel and "K29" apartment hotel, both in the center of Athens, performed very well throughout the year.

Noval Property evolved its captive pipeline in 2019 by developing several of its former industrial assets, mainly in Athens, into single and/or mixed-use projects and continued to source investment and development opportunities in Greece and other countries in Southeastern Europe. Finally, Noval Property is also progressing the conversion of the former industrial property at 252 Pireos Street in Athens (GBA: c.73,000 sq.m) into a

mixed use development (hotel, office and retail). The Greek Government awarded “Strategic Investment” status to this project in Q4 2019.

Outlook

Looking ahead into 2020 and beyond, Noval Property is targeting acquisition of third party properties, along with the further development of its captive pipeline, while continuing the active asset management of its portfolio.

Further information is available on the Noval Property website: www.noval-property.com

R&D&I and Technology

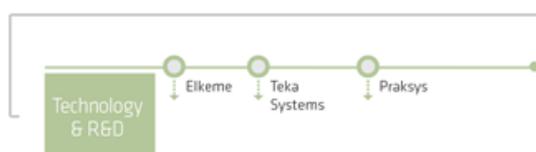
Activities

Viohalco's dedicated research and development and innovation ('R&D&I') companies and in-house production plant R&D departments focus on:

- developing new and high value added products;
- providing efficient solutions to optimise business and industrial processes;
- improving the efficiency and environmental performance of plants; and

developing innovative applications for industry, energy and environment (including pioneering solutions in the fields of ERP, CRM, BI, traceability and others).

Viohalco segments



The activities are supported by three companies:

- 1) Elkeme Hellenic Research Centre for Metals S.A. ('Elkeme'): focuses on applied industrial research and the technological development and analysis of the four major metals sectors (aluminium, copper, steel and zinc). Elkeme provides R&D services and technical solutions for new products, as well as the optimization of existing products and business and plant production processes. Elkeme is certified according to ISO 9001:2015. In addition, Elkeme runs an ISO 17025:2017 accredited lab for various chemical analyses.
- 2) Teka Systems S.A. ('Teka Systems'): undertakes engineering and construction projects in the steel, aluminium, copper, power and telecommunication cables industries, commissions industrial equipment, drives process automation through technologies in integrated projects and implements IT projects in ERP, CRM, BI, analytics, among others.
- 3) Praksys S.A. ('Praksys'): develops, markets and oversees the implementation of new technologies in structural and concrete reinforcing steel. Among others, it has developed Synthesis™, a unique system for the industrial-scale prefabrication of reinforcing steel. Praksys has also developed a complete software package to accompany the technology, including components, such as product design, machine operation control, e-ordering, production planning and logistics.

The technology departments of the Viohalco companies concentrate their R&D&I work on following areas:

- *Elval Technology Centre*: develops customized alloys, highly resistant special products with non-skid properties, extra flat sheets with top-quality lacquer-coatings, products made of 100% recycled aluminium and deep drawing and extrusion products.
- *Symetal's Technology Department*: develops innovative surface design, while controlling the aluminium foil affinity for laminates and coatings, as well as customized mechanical characteristics for flawless forming. Symetal also focuses on the development of battery foil, which is used in the automotive rechargeable batteries industry.
- *Halcor Tube Heat Transfer laboratory*: Halcor Tube Heat Transfer laboratory: tests the thermal performance of inner grooved copper tubes ('IGT') enabling Halcor to meet a wide range of customer specifications and product applications in the manufacturing of IGT and Talos® ACR copper tubes.
- *Sofia Med Technology Department*: Increasing quality levels regarding surface quality by adding two surface inspection systems in production lines. Controlling with state of the art equipment all Tinned

material that is produced from HDT line and is for automotive use. Supporting sales by widening the range of products in extrusion with more wide products in coil shape.

- *Hellenic Cables Companies*: A team of highly skilled R&D engineers, supported by advanced software tools and modern testing facilities, pursue core research on product development, innovation, redesign/optimization of existing products and technical support in four business units, three in Greece and one in Romania. This effort supports further the strategy to more green products, with less environmental impact. In 2019, Fulgor was invited to participate in a new “Horizon 2020” consortium and Hellenic Cables was awarded part of the Carbon Trust research and development tender with regard to the Floating Wind Joint Industry Project. This aims at designing and developing commercial-scale floating wind farms and the necessary dynamic export cables for the transmission of power from wind farms to shore, a new critical technology for their commercial deployment.
- *Etem Center*: Develops, simulates and homologates heat treatable aluminium alloys and relative customized extrusion and heat treatment process, press lines and tooling to be applied to automotive end use parts. Co-develops and homologates with Global Automotive OEM’s and Tier1’s tailor fit product solutions to answer specific performance requirements (namely crash behaviour, weight reduction, formability, corrosion resistance, post joining process requirements). Designs, develops, simulates and homologates product specific processes, customized machinery, tooling and quality controls both in process and in the laboratories to meet the quality, safety, volumes and cost requirements. Through R&D efforts and collaborations, Etem has become a Tier 2 and Tier 1 supplier to the automotive industry, certified to produce aluminium profiles and parts for crash relevant systems.
- *Sidenor Steel Industry Center*: in addition to the development of Synthesis™, a unique system for industrial-scale prefabrication of reinforcing steel, Sidenor supports innovation and research through considerable investment in hi-tech machinery and has implemented new production solutions. These include induction reheating furnaces which replace gas-fired furnaces, leading to significantly reduced carbon emissions, natural gas conservation and energy demand reduction.
- *Corinth Pipeworks R&D Center*: optimises a large array of pipe manufacturing and coating properties by (a) continuous internal trial productions and (b) modelling of specific processes, aiming to develop products for extreme applications (e.g. sour service, offshore, high strain applications such as reeling); improves working range to achieve enhanced product uniformity and broaden mill’s production range; develops advanced destructive, corrosion and non-destructive specialized testing techniques providing state-of-the-art solutions.

2019 Financial performance

R&D&I expenditure (both expensed and capitalized) in 2019 amounted to EUR 17 million. The reported amount has been based mainly on the provisions of the Frascati manual (OECD standard of conduct for R&D surveys and data collection) and on the relevant International Financial Reporting Standards.

Resource recovery

Activities

Viohalco's resource recovery segment produces and trades secondary raw materials and undertakes waste management and environmental projects, providing services to consumers, corporations and the public sector.

Viohalco segments



Initially established as part of Viohalco's long-term commitment to sustainable resource management for its plants, the segment has evolved to expand the scope of its activities and customer portfolio, which currently includes multinational companies, public utilities, municipalities and extended producer responsibility schemes.

Through the following companies, the segment handles more than 700,000 tons of waste per year:

Aeiforos S.A. ('Aeiforos') provides waste management and other services to steelmaking plants, non-ferrous metals smelters, refineries and scrap shredders. Aeiforos processes 400,000 tons of industrial waste per year through two recycling plants in Greece. Secondary raw materials produced by Aeiforos are used in the manufacture of metals and roads, and in cement plants.

Aeiforos Bulgaria S.A. ('Aeiforos Bulgaria') focuses on the recovery of steelmaking residues such as steel slag, heavy shredder fraction, used refractories and scrap sorting residues. Aeiforos Bulgaria's products are recycled for use in road construction, cement production and metals production. The Bulgaria-based company has expanded into other waste management activities including waste stabilization. Aeiforos Bulgaria processes more than 100,000 tons of industrial waste per year.

Anamet S.A. ('Anamet') is a leading metal scrap trading company offering a wide range of waste management services to both Viohalco companies and third parties. These services include the recovery and offtake of secondary raw materials, the servicing of industrial sites and the safe disposal of non-recyclable process residues. It retains contractual agreements with most of the extended producer responsibility schemes operating in Greece and carries out various corporate social responsibility initiatives to promote recycling, counter illegal activities and establish win-win practices for all stakeholders. These include programmes, such as 'Metal Alert', 'Car4Care' and 'Green Auto Parts'.

Vianatt S.A. ('Vianatt') specialises in the processing and depollution of Waste Electrical and Electronic Equipment ('WEEE') such as fridges and other large and small domestic appliances. Vianatt operates under an ongoing contract with Appliances Recycling, the collective take-back system for WEEE in Greece, and can process up to 15,000 tons of WEEE per year. Vianatt is committed to promoting a culture of responsible WEEE management and as such, organizes educational programmes for schools and offers a free website library on recycling.

Inos Balkan Doo ('Inos Balkan') processes and trades ferrous and non-ferrous scrap metals. Through its two main facilities in the port of Belgrade and Valjevo, Inos Balkan purchases from both individuals and small businesses, and also undertakes off-site projects.

Novometal Doo ('Novometal') is based in Skopje and is one of North Macedonia's major recycling companies. It collects and processes different types of waste materials including metals, electrical and electronic equipment (WEEE), end-of-life vehicles (ELVs) and demolition waste.

The segment's companies all hold the relevant environmental, quality and regulatory certifications:

Company	Relevant certifications
Aeiforos S.A.	ISO 9001:2015, OSHAS18001:2007, ISO 14001:2015, all required waste collection permits, hazardous waste management license. CE certified products for the construction industry.
Aeiforos Bulgaria S.A.	ISO 9001:2015, ISO 14001:2015. CE certified products for the construction industry.
Anamet S.A.	ISO 9001:2015, OHSAS 18001:2007, ISO 14001:2015, ISO 39001:2012, Regulation 2009/1221/EC (EMAS), Regulation 2011/333/EC
Vianatt	ISO 9001:2015, OHSAS 18001:2007, ISO 14001:2015, ISO 27001:2013, Regulation 2009/1221/EC (EMAS)
Inos Balkan Doo	ISO 9001:2015, OHSAS 18001:2007, ISO 14001:2015
Novometal Doo	ISO 9001:2015, ISO 14001:2015, OHSAS 18001:2007 and EU regulations 333/2011 and 715/2013 for defining criteria for end of waste of scrap metal.

Financial charts

Summary consolidated figures for the resource recovery segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	42,160	45,626
Gross profit	10,748	14,227
Gross profit (%)	25.5%	31.2%
EBITDA	267	2,952
EBITDA (%)	0.6%	6.5%
a-EBITDA	199	2,950
a-EBITDA (%)	0.5%	7.1%
EBIT	-2,452	273
EBIT (%)	-5.8%	0.6%
a-EBIT	-2,520	272
a-EBIT (%)	-6.0%	1.3%
Profit/ Loss (-) before tax	-4,366	-1,807

- All percentages are vs. revenue

2019 Financial performance

Resource recovery segment **revenue** decreased by 8% year-on-year, while **loss before income tax** amounted to EUR 4.4 million, compared to a loss of EUR 1.8 million in 2018. Continued pressure on commodity prices, especially ferrous and plastic, had a negative impact on the segment's financial performance throughout the year. Furthermore, the negative effects of protectionist trade policies carried over to 2019. The activity of Industrial waste continued to generate positive results, though limited compared to previous years as volume declined. Finally, end-of-life waste streams decreased losses, supported by cost cutting efforts and ad-hoc projects.

Outlook

In 2020, the market environment is expected to remain challenging as commodity prices continue to face pressure on the back of slowing global demand. Against this background, the segment will look to restructure its operations in an effort to reduce costs and minimize losses.

Other activities

Other activities mainly encompass expenses incurred by the parent (holding) company, along with the results of companies which operate in the Technology and R&D segment and in ceramic trade activities (Vitruvit). **Loss before income tax** amounted to EUR 7 million, broadly flat versus 2018.

Summary consolidated figures for the other segment <i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Revenue	29,654	27,860
Gross profit	8,458	9,015
Gross profit (%)	28.5%	32.4%
EBITDA	-4,379	-5,027
EBITDA (%)	-14.8%	-18.0%
a-EBITDA	-4,245	-3,480
a-EBITDA (%)	-14.3%	-12.1%
EBIT	-6,266	-6,068
EBIT (%)	-21.1%	-21.8%
a-EBIT	-6,131	-4,521
a-EBIT (%)	-20.7%	-15.8%
Profit/ Loss (-) before tax	-6,512	-6,238

- All percentages are vs. revenue

F. Subsequent events

-On March 12th 2020, the subsidiary ElvalHalcor received notice for the commencement of the preliminary phase for antidumping investigation and countervailing duty (CVD) investigation by the United States International Trade Commission (USITC) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened or the establishment of an industry in the United States is materially retarded by reason of imports of common alloy aluminum sheet from Greece and seventeen other countries (Bahrain, Brazil, Croatia, Egypt, Germany, India, Indonesia, Italy, Korea, Oman, Romania, Serbia, Slovenia, South Africa, Spain, Taiwan and Turkey). On the date of publication of the financial statements there were no available information in order to estimate the potential impact on its financial results.

-On March 19th 2020, Stomana Industry SA, Bulgarian subsidiary of Viohalco operating in steel segment, announced a business restructuring plan aiming to address the continuously declining trend in sales volume and profit margins of steel industry. In response to these challenging circumstances, Stomana Industry SA plans to downsize its operations, in accordance to the current and forecasted demand and consequently proceed to a respective personnel reduction, using objective criteria, while demonstrating social responsibility. Based on management assessment, there is no impact on financial statements.

-On March 27th, 2020, Viohalco S.A. subsidiaries of steel segment in Greece, (Sidenor S.A., Sovel S.A., Erlikon S.A., Praksys S.A. and Etil S.A.) decided the temporary suspension of their main production activities, assigning their employees a non-active status, for one month starting from April 2, 2020 and ending on May 3, 2020, while at the same time administration staff will work on a part-time basis. During the aforementioned period, the commercial activities and delivery of raw materials at these companies will remain unaffected. The companies reached these decisions, due to the ongoing difficult conditions prevailing in the international steel market, which sharply deteriorated as a result of the recent COVID-19 pandemic, reducing demand for their products due to the severe downturn in the construction sector and in activities using steel as a raw material.

-On April 1st, 2020, Viohalco's subsidiary ElvalHalcor acquired, the ownership of 1,610,000 common registered shares, issued by the company under the trade name "Viomal S.A.- Aluminium Industry" which represent the 25% of its paid up share capital, in consideration of EUR 2.2 million. Following the aforementioned purchase, ElvalHalcor's participation in Viomal's paid up share capital amounts to 75%.

-In early 2020, due to the global outbreak of coronavirus (COVID-19) changes occurred in global supply and demand, including Greece and other countries in which the subsidiaries of Viohalco operate. The spread of the COVID-19 is a non-adjusting post balance sheet event as of 31 December 2019.

As the outbreak of COVID-19 continues to progress and evolve rapidly, the prediction of the full extent and duration of its business and economic impact remains challenging and the range of potential outcomes for the global economy are difficult to predict. Viohalco companies have already activated protection mechanisms for their human resources and their partners in compliance with health authorities' guidelines, while closely monitoring the developments and assessing the implications on their operations. At the same time, governments in the countries in which Viohalco companies operate (mainly Greece) have also announced the implementation of measures which may mitigate the impact of the COVID-19 outbreak on results and liquidity. Viohalco companies currently investigate the extent to which such government assistance can be applied.

A prolonged spread of COVID-19 is expected to influence both business and financial results of 2020, but the extent of the impact depends on a number of factors amongst which the most important relate to government restrictions, the duration of such restrictions and logistics constraints.

In copper and aluminium segments, although production and business are not expected to be affected significantly, the global slowdown in demand might have an impact on the second semester of 2020. Regarding the energy projects business of cables and steel pipes segments, given the existing backlog and the nature of projects assigned, the impact from COVID-19 outbreak on the long-term business plan and its short-term financial results is expected to be limited, based on currently available data and information. The business

products of these segments will be affected more, as short-term demand, linked to the construction sector, is expected to decrease.

Steel segment is expected to be affected from April and 2020 onwards as short-term demand which is linked to construction sector is expected to experience a decline, as a result of government restrictions aiming at limiting the spread of COVID-19. Without any complacency, the steel companies are constantly monitoring developments in order to proceed to all necessary action that maintain their position. Several programs have already been announced by the government and financial institutions both in Greece and abroad to boost economy that steel companies can be benefited from.

Real Estate business will be affected primarily on the retail and hospitality side. The operation of shopping centers and most of the retail shops has been ceased, accompanied by an obligatory 40% discount on monthly rents for the first months of COVID-19 expansion; both measures on Greek government orders.

In order to assess the potential impact on Viohalco companies' liquidity and profitability, management has carried out a stressed scenario on all segments. This assessment addressed what we believe to be all the potential risks that our segments may encounter. The risks were addressed under the following pillars:

1 Workforce protection and continuity of production

2 Supply chain continuity

3 Liquidity

4 Sales & customer orders continuity

5 Capital expenditure

The "stress test", is expected to be a worst-case scenario and incorporates sharp sales volume declines for an extended period of up to 4 months and smaller decline in sales thereafter up to the end of 2020. The stress test also included impact on DSO, inventories, working capital, and Capex. Cost containment was also taken into consideration in production activities where appropriate. The purpose of this scenario was to test the liquidity needs and estimate the earnings under very stressed conditions. The results of the Test carried out by the companies showed that the copper, aluminum, cable, steel pipes and real estate segments can withstand the stressing scenario revealing a tolerance by maintaining and generating adequate liquidity even at reduced profitability. As regards the steel sector, our stress test revealed that there was adequate liquidity to meet working capital requirements and bank repayments, however also resulted in potential breach of certain bank loan covenants. Under the terms of the loan agreements, subsidiaries of steel segment must comply with certain conditions (including financial covenants), and such compliance is tested on an annual basis for majority of the loans. The management has considered the measures that need to be taken to mitigate the risk relating to these potential breaches. Accordingly, management expects that in the event that these covenants are breached, they will request waivers to overcome these breaches.

Management is confident that the waivers which may be requested from the banks that relate to the loans, will be provided. These covenants, which may be breached, relate to loan agreements from Greek banks with which Viohalco companies have many years of excellent cooperation, and have in the past provided waivers on all occasions. Furthermore, based on recent official announcements measures have been announced relating to their support of existing customers impacted by the effects of the COVID19 virus.

Our analysis and our projections confirm our confidence that the subsidiaries can mitigate the decline in the profitability, overcome any emerging operational issues that may arise ensuring the availability of raw materials for smooth operation during the forthcoming months. In addition, the available cash of Viohalco companies, their operating cash flows and the unutilized credit lines, will provide the necessary liquidity for the following twelve months.

The management concludes that although COVID-19 may have a significant impact on Viohalco companies' operations in 2020, such impact will be absorbable and does not endanger its long-term viability.

G. Risks and Uncertainties

Viohalco's Board of Directors is responsible for assessing the risk profile of the Company's subsidiaries. Since Viohalco is a holding company and does not have itself any production operations, customers, suppliers, or personnel (besides employees for administrative tasks), the risks affecting it are attributed to its subsidiaries and their operations, suppliers, clients and personnel. Each of Viohalco companies is therefore responsible for the identification, measurement, analysis, response (mitigation), control and monitoring of its own risks.

Still, a set of common guidelines for an Enterprise-wide Risk Management (ERM) framework across Viohalco companies exist: these include principles for effectively managing risks, in all subsidiaries. Furthermore, the framework provides guidelines on how best to address these risks and facilitates discussion on risk management issues.

In turn, Viohalco's executive management in consultation with the Board of Directors is responsible with successfully exploring business opportunities, whilst at the same time assessing possible risks and their control mechanisms across subsidiaries, with the help of an independent Internal Audit department. The objective of this evaluation is to enable the Company to determine whether the subsidiaries have managed risks in a proactive and dynamic way to mitigate them down to an acceptable level.

The ERM process in Viohalco companies comprises the following steps:

- a) Identify key risks and measure / analyse their potential impact and likelihood. This is done at company level as all financial, operational, compliance and strategic risks are associated with each company's operation.
- b) Manage (i.e., respond to) those risks by considering existing controls as well as selecting, prioritising and implementing appropriate actions. This step is also done at company level, following the general principles outlined in the ERM framework.
- c) Control and monitor internal and external environment for potential changes to risks, ensuring risk responses continue to be effective. Each company monitors its risks and risk responses, using the common ERM guidelines but separate procedures, systems and mechanisms put in place by each company's management.

A consolidated review of all the subsidiaries' financial performance including potential risks takes place at Viohalco executive management level by the internal Audit department, the outcome of which is presented to the Audit Committee and the Board of Directors. The Audit Committee monitors the effectiveness of the subsidiaries internal control and looks into specific aspects of internal control and risk management on an on-going basis.

Key risks

Risks are classified into two major families, **Financial** and **Business** Risks. The former includes different types of market risk affecting the activity of each subsidiary (mainly, exchange rate, interest rate and commodities risk) as well as credit risk, counterparty risk and liquidity risk. The **Business** Risks family, broadly defined as all risks that are not balance-sheet related, is broken down into further sub-categories, to help better understand and react to the different risk events:

- A. **Operational and technology risks** defined as the risk of loss resulting from inadequate or failed processes, people and systems or from external events. Operations risks comprise all risks associated with the day-to-day operations such as Health & Safety, environmental issues, legal risk (as it refers to processes) but not strategic or reputational risks.
- B. **Compliance and Reputational risks** include possible negative impacts (economic – fines, penalties, etc. and other – exclusion from markets, etc.) from noncompliance with existing regulations and standards. Potential impacts to the subsidiary's brand image and business¹ reputation, as well as accounting risk², are included.

¹ The set of perceptions about the company by the different stakeholders with whom it interacts, both internal and external.

² The risk which concerns the proper and true economic and financial reflection of the companies' reality as well as compliance with all related regulations (IFRS, etc.).

- C. **Strategic risks** include risks related to the wider business environment (e.g. the macroeconomic environment, the sector / industry conditions, etc.) the market and the competition, and medium to long-term decision making that may impact on business continuity and profitability.

Financial risks

– *Interest rate risk*

It is clear that significant movements in interest rates may expose subsidiaries to higher borrowing costs, lower investment yields and/or decreased asset values. As a central rule, entities do not enter into speculative positions on interest rates of any kind but always try to follow natural immunization strategies i.e., matching durations of assets and liabilities and keep away from fair value shocks. On the other hand, given the current low interest rate environment, each entity tries, in the measure possible, to secure fixed (and low) rate financing lines to avoid variations in cash flows and facilitate capital budgeting.

If absolutely necessary, subsidiaries use derivatives to hedge any remaining interest rate risk; strict rules and limits, internal to each entity, regulate the use of such instruments.

– *Currency risk*

Viohalco holds stakes in a large number of companies with production plans and commercial relations spanning the globe. As such, they are exposed to financial (transaction), accounting (translation) and economic losses due to volatility in foreign exchange rates.

Companies manage this risk in a prudent manner, trying for natural hedges whenever possible (i.e. matching currencies in anticipated sales and purchases, as well as receivables and liabilities) and using standard hedging products, such as forward contracts, if necessary.

– *Commodity risk*

Most of Viohalco's entities are industrial companies, using ferrous and non-ferrous raw materials as inputs. Fluctuations in commodity prices (esp. metals and particularly copper, zinc and aluminum) may therefore expose them to lower product margins or trading losses.

Future contracts traded in the London Metal Exchange (LME) offer the obvious hedging choice for companies active in such metals: first, all metal price fixing sales and purchase contracts are netted daily and the change in the net open commodity is generally hedged by LME future contracts so that Viohalco companies are not exposed to commodity price risk.

– *Liquidity risk*

For industrial companies, such as those forming the largest part of Viohalco's holding portfolio, liquidity risk is the risk that a business will have insufficient funds to meet its financial commitments in a timely manner. Its two key elements are short-term cash flow risk and long-term funding risk. The latter includes the risk that loans may not be available when the business requires them or that such funds will not be available for the required term or at acceptable cost.

Such risk may come from seasonal fluctuations, business disruptions, unplanned capital expenditure, an increase in operational costs, a narrow funding market and other reasons causing inadequate cash management. Viohalco companies constantly monitor cash flow needs and quarterly report monthly rolling forecasts to ensure sufficient cash on hand to meet its operating needs. Through monthly financial reports, they closely follow operating cash flow indicators, liquidity and leverage ratios and continuously assess available funding, both in the local and international markets.

Finally, companies mitigate liquidity risk by careful cash flow management including optimising working capital and by maintaining unused, committed financing facilities from a diversified number of financial institutions. These allow their business to easily meet its future requirements or contingencies.

– *Credit risk*

Selling to a large number of customers spanning vast geographical regions and many sectors across the world, unavoidably creates an important credit risk for Viohalco companies as their customers may default on their obligations. Such credit risk may be accentuated if a significant portion of business is concentrated on a specific area, sector or small number of clients.

This risk is greatly mitigated by (a) avoiding receivables concentration of any kind (e.g. no customer may represent more than 10% of any company's revenue), (b) executing robust creditworthiness checks for customers via credit rating agents, (c) setting relevant payment terms and credit limits, (d) demanding real or other security (e.g. letters of guarantee) for receivables whenever possible, and, finally, (e) using credit insurance extensively.

Business Risks

Operations and technology

– *Channel effectiveness risk*

Poorly performing or positioned distribution channels may threaten subsidiaries capacity to effectively and efficiently access current and potential customers and end users.

Subsidiaries manage the channel effectiveness risk through commercial executives per project / market. Periodic budget reviews are the main tools used for the setting up and monitoring of distribution channel objectives.

– *Procurement / Sourcing risk*

Limited sources of energy, metals and other key commodities, raw materials and component parts may threaten Viohalco companies' ability to produce quality products at competitive prices on a timely basis. Hence, all companies continuously aim to minimize the likelihood of such a risk occurring. Relevant measures include maintaining a wide and diverse supplier base (esp. from different geographies, where possible), the existence of alternate material lists, the establishment of Service Level Agreements with key vendors and the reduction of exposure to the spot market through long term contracts.

– *Operation Interruption risk*

The unexpected unavailability of raw materials, skilled labour, information technologies, or other resources and the danger for equipment breakdowns may threaten Viohalco companies' capacity to continue operations. This being central to industrial production, all subsidiaries maintain thoroughly their equipment via specialized maintenance departments for every single plant that follow a well-planned maintenance schedule. Plant equipment and production lines are also upgraded systematically to integrate new technologies and reduce obsolescence risk. All spare parts and consumables are gauged on criticality and safety stock levels are monitored. Some of the plants, facilities and production lines are interchangeable and have been mapped to ensure shifting and continuation of production if such a need arises. This risk is greatly mitigated by the companies by using business interruption insurance policies.

– *Product failure risk*

Faulty or non-performing products may expose Viohalco companies to customer complaints, warranty claims, field repairs, returns, product liability claims, litigation and loss of revenues, market share and business reputation.

In order to proactively mitigate the risk arising from actual or claimed defects in its products, companies have established rigorous quality management systems at their plants, by applying fixed and formalised quality control procedures, while maintaining appropriate insurance coverage against such claims. The quality control procedures include sample testing per production batch or at item level at specific phases of production, establishment of monitoring equipment at set production phases and production lines and work centres to capture defects, implementation of end-to-end traceability systems, etc. In addition, companies have applied product liability insurance policies.

– *Information technology (IT) risk*

IT risk is usually defined as the likelihood of occurrence of a particular threat (accidentally triggered or by intentionally exploiting a vulnerability) and the resulting impact of such an occurrence.

Most of Viohalco companies are capital intensive and seriously rely on IT systems to guide and optimize their production. IT systems bear a number of risks that arise naturally in their production environment and thus the commercial environment overall and may result to losses or legal liability. Such risks can revolve around IT disruptions due to IT equipment failure, disasters, human errors as well as unauthorized use, disclosure, modification, destruction of information, etc.

The need to adequately identify the gaps that may result in risks, assess the maturity of the existing controls and identify risk mitigation actions is an ongoing process that must take into consideration the ever-changing threats, control and regulatory landscape. The continuous identification and application of appropriate and proportional controls that limit exposure against the aforementioned threats is vital to the integrity of IT systems in all companies as well as against legal requirements.

Viohalco has taken the initiative to conduct such gap analyses against IT and information security risks in order to comply with 2016/679 EU General Data Protection Regulation, but taking also this opportunity to evaluate and ameliorate its overall IT risk posture, beyond the requirements of the said Regulation.

Besides using industry standards for data and systems protection, companies request the services of Teka Systems, a subsidiary of Viohalco focused on the implementation, customization and support of information systems. Teka is the official competence centre of Viohalco and offers tailor-made applications and software support to Viohalco's industrial companies as necessary.

Compliance and Reputational risks

In regards with the requirements arising from its stock exchange listings, Viohalco has established the necessary structures and procedures in order to ensure continuous compliance and protect reputation, including the adoption of its Corporate Governance Charter, which covers issues such as directors' and managers' accountability, good governance principles, insider dealing, and conflicts of interest.

Laws and regulations apply to many aspects of subsidiaries' operations including but not limited to, labour laws, Health and Safety, environmental regulations, building and operational permits, etc.

Viohalco requires all companies in its holding portfolio to abide by all laws and regulations, whether at the local, European or international level accordingly, regarding Health and Safety in the production plants, labor and human rights, the protection of the environment, anti-corruption, bribery and financial fraud. Being a holding company, Viohalco requires its subsidiaries to develop their own policies for all such matters and the subsidiaries are exclusively responsible for the compliance with these policies.

Additional details are further given in the Non-Financial Information Report section of this Report.

Strategic risks

- Country risk

Adverse political actions may threaten subsidiaries' resources and future cash flows in a country in which each subsidiary has invested, is dependent on for a significant volume of business or has entered into a significant agreement with a counterparty subject to the laws of that country.

Companies address this exogenous risk in particular by differentiating their manufacturing and market reach. Viohalco companies currently have manufacturing sites in eight countries, a commercial network in 21 countries and products distributed in more than 100 countries worldwide.

They also follow closely and on a continuous basis the developments in the international and domestic environment and timely adapt their business strategy and risk management policies in order to minimize the impact of the macroeconomic conditions on their operations.

- Industry risk

Changes in opportunities and threats, capabilities of competitors, and other conditions affecting the subsidiaries' industries may threaten the attractiveness or long-term viability of these industries. Industry risk of the subsidiaries which is related with the specific industry they operate in, is primarily associated with the cyclicity of demand and the substitution rate of some of its subsidiaries' products.

Companies manage the former by expanding their exports to global markets, to differentiate cyclical exposure across geographical areas. The risk of substitution is addressed through the differentiation of their product mix, for example by shifting part of the production to products where the substitution rate is lower.

- Competitor risk

The actions of competitors or new entrants to the market may impair any company's competitive advantage or even threaten its ability to survive. Hence, strategic issues regarding response to competition are assessed as part of the annual budget process of all Viohalco companies and the strategic markets plan by each company. Exposure to competitor risk is captured through daily review of market information. Relevant mitigating actions include a strong commitment to quality throughout the production phase, a competitive pricing policy in commodity products and a targeting on high-margin products.

- Technological innovation risk

In a world of rapidly changing technology, companies in Viohalco's holding portfolio risk not efficiently following the technology wave or investing in the information technology (IT) infrastructure necessary to effectively support current and future business requirements. This may seriously affect sales, costs and revenues.

On the other hand, companies may not be leveraging advancements in technology in their business model to achieve or sustain competitive advantage or may be exposed to the actions of competitors or substitutes that do leverage technology to attain superior quality, cost and/or time performance in their products, services and processes.

This strategic risk is primarily managed by Viohalco companies through the establishment of technical assistance and knowledge transfer agreements with global leaders in various sectors where the subsidiaries are active. All companies invest strongly in research and development (R&D) and cooperate with scientific bodies and prominent international research centres. This strong focus on technology and innovation is additionally demonstrated through dedicated R&D departments at a number of Viohalco companies.

H. Non-financial information

This non-financial statement (the **Statement**) addresses the requirements of the Belgian Code of Companies and Associations (art. 3:32), as recently introduced by the Belgian Law of September 3, 2017, on the disclosure of non-financial and diversity information by certain large companies and groups, and relates to the financial year ended on December 31, 2019.

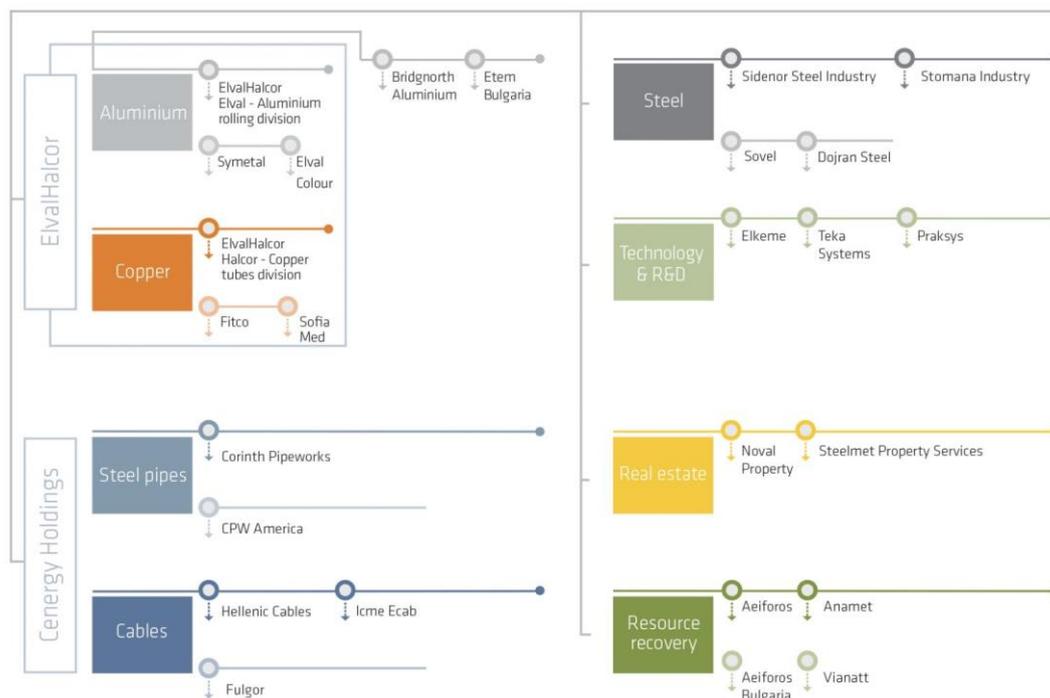
The Statement has been drawn up in accordance with the UN's Sustainable Development Goals (SDGs) reporting framework. The SDGs reporting framework serves as the basis for the reporting structure of non-financial matters of the Company. This Statement comprises non-financial information for Viohalco S.A. and its material companies in all major operating segments; it focuses on core values and management's approach, due diligence, performance monitoring and main risks related to these non-financial matters.

Business Model

Viohalco S.A. (**Viohalco**) is a Belgian listed holding company of various metal processing companies in Europe. Uniquely diversified in metal sector activities and with a global presence, Viohalco companies are committed to sustainable manufacturing of quality, innovative and value-added products for building and construction, energy and telecommunication networks, oil and gas, transportation, food and pharmaceutical packaging, heating and air conditioning, lithography and numerous industrial applications. Viohalco's portfolio includes companies active in other sectors, such as real estate development, mechanical engineering applications and recycling.

More precisely, Viohalco operates under the following organisational structure, comprising eight business segments.

Viohalco segments



A thorough description of each business segment activity is provided on pages 13 to 40.

Management Approach

Core Values

Viohalco as a holding company of a predominantly industrial portfolio believes that its companies must demonstrate the same responsibility and share the same values and commitment in sustainability matters in order to preserve long-term value for its shareholders.

The core values on which the Company bases its actions and requires all its subsidiaries to embrace are the following:

- **Excellence.** Viohalco aims to achieve excellence, encouraging and aspiring continuous improvement in all its activities.
- **Respect.** respect for persons is at the center of all action undertaken by the Company; it is within the Company's philosophy to make the most of the characteristics, dignity and uniqueness of each individual.
- **Trust.** Viohalco aims to establish a relationship of trust with its counterparties and to meet expectations by keeping faith with commitments undertaken.
- **Responsibility.** Viohalco companies aim to establish a relationship of responsibility and trust with its counterparties and to meet expectations by keeping faith with commitments undertaken. The responsible operation of the subsidiaries is considered a primary goal and fundamental for the sustainable operations of the subsidiaries.
- **Prevention.** The companies are required to develop a proper risk management approach in all their transactions and daily operation in order to resolve potential issues on a forward looking basis and before these issues create disruptive conditions for the sustainable operation of the companies.

Reference Code – Sustainability Policy

Viohalco's core values are reflected in its sustainability policy which constitutes a "reference code" that its companies should follow, at a minimum, regarding sustainability matters. The companies in turn should develop their own respective policies based on this reference code and ensure compliance.

Viohalco's "Sustainability policy" ("<https://www.viohalco.com/718/> ") covers the sustainability and non-financial matters required by Belgian Code of Companies and Associations.

[Business Ethics and Anti-Corruption](#)

Viohalco and its companies are committed to conducting its business with honesty and integrity and in compliance with all relevant laws. Viohalco and its companies ensure transparency in all interactions and acknowledges that it has a moral and legal obligation to act responsibly in all jurisdictions. Viohalco and its companies cannot tolerate illegal or unethical business activity. The performance and competitiveness are strengthened solely through lawful conduct.

Viohalco and its companies are fully opposed to all kinds of bribery and corruption and are determined to maintain a culture of honesty and opposition to fraud and corruption. Viohalco maintains a system of internal accounting controls and keep its books and records, in reasonable detail that accurately and fairly reflect transactions and dispositions of assets.

[Environment](#)

Viohalco companies are committed to operate with absolute responsibility and respect for the environment and the society. Sound environmental management of all production and storage installations is one of the most important targets and is absolutely essential to the sustainability of the companies' s activities.

Companies shall operate in full compliance with applicable national and EU environmental legislation, as well as with the specific environmental operational terms of each plant, always in a state of absolute transparency and participation in an open dialogue on environmental matters with all the stakeholders.

Labour

Viohalco and its companies do not tolerate any discrimination of race, gender, religion, age, nationality, social or ethnic origin, disability, belief, sexual orientation, or political and trade union engagement. These principles apply to the recruitment of new employees, to employees with an employment contract and to the professional promotion of their employees. The only decisive factors of employment are performance, experience, personality, efficiency, skills and qualifications.

Viohalco and its companies reject any form of forced labour. All work performed in the companies must be voluntary. The employment of individuals under the applicable statutory minimum age for workers is prohibited.

Viohalco companies are committed to continually promote health and safety for their employees as well as for their partners, including customers, suppliers, contractors and visitors. All the companies shall strictly comply with all applicable legislation and fully implement all suitable standards, instructions and procedures regarding health and safety.

Human rights

Viohalco and its companies recognise the right of all employees and stakeholders to work with dignity and believe that everyone in the Companies is responsible for having due regard for human rights.

Viohalco and its companies support and respect the fundamental principles, as articulated in the Universal Declaration of Human Rights as well as the protection of international human rights within the sphere of their influence, and will not be complicit in human rights abuses. The Companies' policies and procedures adhere to all applicable domestic laws concerning freedom of association and collective bargaining, non-discrimination, forced labour and underage workers in the workplace.

Social

All the companies are committed to operate responsibly in all their business activities while at the same time expecting the same responsibility from its business partners. Concern for employee health and safety, respect and protection of the environment, comprehensive coverage of customer needs, responsible business practices from its suppliers and harmonious coexistence with the local communities in which they operate are the main matters with a wider social impact.

Operational Due Diligence

All companies operate in full compliance with applicable European and local environmental and labor laws.

The policies' implementation is ensured by due diligence actions performed by Steelmet S.A. (**Steelmet**) a subsidiary of Viohalco companies, which is responsible, among other things, for the monitoring of Viohalco companies' performance in these matters. Steelmet employs proficient auditors in their respective field of expertise and they perform periodic reviews and assessments of the subsidiaries. During their periodic business reviews, the top management of Viohalco companies reports to Steelmet on performance metrics, where applicable, and analyses risks and challenges as well as corrective actions that they deem necessary. Steelmet reports on a regular basis to Viohalco's Audit Committee identifying potential risks on these matters.

In addition, due diligence in the matters of environment and health and safety is also performed by external auditors during periodic management system certification reviews. The entirety (100%) of Viohalco production companies under the scope of this report are certified with the environmental Management System ISO 14001:2015 and the Occupational Health and Safety Management System OHSAS 18001:2007 while 73% of the companies under the scope are certified with the Energy Management System 50001:2015.

Based on the above assessments, the principles of Viohalco's sustainability policy are all in compliance although there is a continuous process for further improvement in several areas that are elaborated in the risks section.

Performance Outcome

Viohalco is the major shareholder of most of its companies as described on pages 13 to 40 and hence the scope of this non-financial information statement focuses on the companies with the largest production facilities, in terms of revenue and personnel employed. The selection has been made on the basis of their comparatively large labor force, raw materials used, energy intensity, extensive business impact as well as the potential overall impact in terms of non-financial matters under the scope of this statement. The two quantitative criteria that these companies meet are: a) on at least 3% contribution to the Viohalco total consolidated revenue, and b) minimum 200 employees. The outcome of this selection is the following eleven companies:

1 ElvalHalcor	Industrial producer of aluminium and copper. ElvalHalcor aluminium rolling division (Elval) produces a broad range of flat rolled aluminium products for diverse markets and applications. Halcor, the copper tubes division of ElvalHalcor, manufactures copper tubes for building installation and a variety of industrial applications.
2 Bridgnorth Aluminium	Producer of lithographic aluminium coils, semi-finished aluminium coils and electrical aluminium strip for transformer windings, headquartered in the United Kingdom.
3 Symetal	Manufacturer of aluminium foil and converted products, located in Greece.
4 Sofia Med	Producer of copper, copper alloy and high-performance alloys rolled, as well as copper extruded products, headquartered in Bulgaria.
5 Hellenic Cables	Key cable plant in the cables segment in Greece; manufactures low, medium, high and extra high voltage land and submarine power cables, telecommunication cables, enamelled wires and plastic, as well as rubber compounds, individually tailored to customers' specifications.

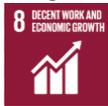
6 Fulgor	Key cable plant in the cables segment in Greece; manufactures medium, high and extra high voltage submarine cables, submarine fibre optic cables, composite cables, special purpose cables, and copper and aluminium wires and rods.
7 Icme Ecab	Producer of power and telecom cables in Romania
8 Corinth Pipeworks	Producer of steel pipes for oil, gas, CO2, water and slurry pipelines, as well as casing pipes for drilling operations, along with a wide range of structural hollow sections for the construction sector.
9 Sidenor Steel Industry	One of the key production facilities of the steel segment located in Northern Greece.
10 Sovel	One of the key production facilities of the steel segment located in Central Greece.
11 Stomana Industry	One of the key production facilities of the steel segment located in Sofia, Bulgaria.

The list above evidences that all Viohalco's segments are represented in this Statement except Resource recovery segment and Real estate segment which do not meet the two criteria and due to their activity nature are more services-oriented, unlike with the selected companies, which have production facilities. Indicatively, the above companies include approximately 92% of total revenue and 69% of Viohalco's companies' employees.

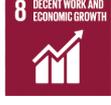
Due to the various geographic locations of each company and the varying degree of material environmental matters each company may be facing (i.e. energy and water intensities vary among subsidiaries), it was deemed necessary that a separate materiality analysis is performed for each company. The selection of the material issues reported in this Statement was based on an extensive materiality analysis performed separately by each company. Based on these materiality analyses from each company, the major and more commonly found non-financial matters were selected to be further reported in this Statement.

As a next step, the different challenges and non-financial issues identified in the materiality analysis phase of the companies were then correlated to the UN's Sustainable Development Goals (SDGs) reporting framework which serves as the basis for the reporting structure of this Statement.

The **Sustainable Development Goals (SDGs)** are a list of 17 interconnected global goals designed to be a "blueprint to achieve a better and more sustainable future for all" that address current challenges facing societies all over the globe. The 17 goals have underlying 169 more specific targets that to stimulate action in areas of concern. Viohalco, as previously mentioned, has identified the major and more commonly found areas of material impact that have been selected by the individual companies' materiality analysis as well as stakeholder assessment, and has concluded that the main non-financial areas of concern are the those listed in Table 1. These topics have then been associated with the relevant SDGs and fall under the topics required to be addressed in the Belgian Code of Companies and Associations. Based on the SDGs selected and the scope of the areas of material impact, the following KPIs were selected to be assessed for Viohalco companies.

Issue identified in MA	Issue category under Belgian Company Code	Relevant SDG	Description of SDG	Viohalco subsidiaries' areas of material impact
Water and wastewater management	Environment	Target 6 	Clean water and sanitation	Water usage and availability, quality of waste water discharged to water bodies
Energy consumption, sources of energy	Environment	Target 7 	Affordable and clean energy	Large energy consumers, availability of low carbon energy at competitive cost
Health and safety, labor rights	Social and labor, human rights, diversity	Target 8 	Decent work and economic growth	Labor conditions and safety performance, equal rights among workers
Climate change	Environment	Target 9 	Sustainable industrialization	Carbon intensity of certain production processes, carbon intensity of metals from supply chain, challenges and opportunities from the transformation of energy mix to a low-carbon future
Waste management, circularity of products	Environment, Human rights	Target 12 	Responsible consumption and production	Waste intensity, production process in order to contribute to circular economy, supply chain responsibility
Transparency and anti-corruption	Business ethics, anti bribery – anti corruption	Target 16 	Peace, justice and strong institutions	Business transactions, compliance with regulatory system

Based on the SDGs selected and the scope of the material impact, the following KPIs were selected to be assessed for Viohalco companies.

Relevant SDG	Relevant target	Relevant KPIs representing key areas of material impact
Target 6 	6.3 Improve water quality 6.4 Increase water use efficiency	6.3.1 proportion of wastewater safely treated and discharged 6.4.1 <i>Change in water use efficiency over time</i>
Target 7 	7.2 Increase share of renewable energy in energy mix	7.2.1 Renewable energy share of energy consumption
Target 8 	8.5 Achieve decent work for all 8.8 Promote safe working environment	-SAR C.2.1 Average hours of training per employee per year ¹ 8.8.1 Frequency incident rates of occupational injuries (LTIR, SR, fatalities) Annual employee turnover ² % of women in labor force ² incidents of discrimination ²
Target 9 	9.4 Adapt clean technologies and industrial processes	9.4.1 Total greenhouse gas emissions per unit product
Target 12 	12.5 Reduce waste generation	<i>ISAR B.2.1 Reduction of waste generation¹</i> <i>ISARB.2.2 Waste reused, remanufactured and recycled¹</i>
Target 16 	16.5 Reduce corruption and bribery 16. b Enforce non discriminatory policies	<i>ISAR D.2.1 Fines paid due to settlements¹</i> <i>Incidents of corruption or bribery²</i>

1. Matters in italics originate from the “Guidance on Core Indicators for Entity Reporting on Contribution Towards Implementation on the Sustainable Development Goals” by the UN Conference on Trade and Development (UNSTAD, 25 July 2019).

2. KPI is considered a standard indicator according to industrial practice

In case a relevant SDG indicator already exists from the SDG reporting framework, the indicator is used. Otherwise, other indicators are used such as UNSTAD's indicators or other standard KPIs commonly used by standard industrial practice.

The reporting structure for each of the companies in the scope will be analyzed per selected SDG.

SDG 6 – Water and waste water management

The two critical issues regarding water management are the issues of adequate treatment of waste water and the water intensity, especially in water stressed areas. The discharge of waste water is a very important issue especially for the companies discharging treated directly to a water receptor and not to a waste water network for further treatment. During 2019, there was only one sample of waste water from a single plant (Stomana Industry) that did not meet water discharge limits. The sample did not have any significant impact to the environment and there were not administrative penalties. All the remaining plants had 100% compliance with all samples taken during 2019.

The majority of the plants improved their water intensity as there are continued efforts to decrease water consumption as part of the companies' long term improvement of their environmental footprint. The plant of ICME ECAB in which its water intensity is over an order of magnitude of the other cables producing plants, partly due to the particular technology (steam curing) its product (rubber cables) mix requires, but also due to extensive leaks from the aging plumbing infrastructure, has already set in place an action plan to improve the current status setting a goal for improvement in the immediate future of at least 30%.

	ElvalHalcor			Bridgnorth			Symetal			Sofia Med		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Waste Water safely treated/discharged*	100	100	100	100	100	100	100	100	100	100	100	100
Water consumption intensity**	1.73	1.81	1.96	1.63	1.47	1.47	0.59	0.56	0.63	9.27	7.92	6.74

	Hellenic Cables			Fulgor			ICME ECAB			CPW		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Waste Water safely treated/discharged*	100	100	100	100	100	100	100	100	100	100	100	100
Water consumption intensity **	0.60	0.55	0.49	0.28	0.43	0.19	11.32	9.49	10.24	0.23	0.24	0.22

	Sidenor			Sovel			Stomana Industry		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019
Waste Water safely treated/discharged*	100	100	100	100	100	100	92.6	94.4	98.1
Water consumption intensity**	2.48	2.53	2.71	1.09	1.18	1.17	2.36	2.31	2.66

*Proportion of waste water safely treated and discharged shown as % of total amount of waste water

** Water consumption intensity: m³/ tn core products

SDG 7 – Energy consumption and clean energy

The Viohalco companies generally purchase electricity from the main energy suppliers of the countries they operate as none of the companies own their own energy source. The numbers shown in the following table reflect the grid energy mix and renewable energy share for the respective grid. In 2019, five companies shown below, ElvalHalcor, Symetal, Hellenic Cables, Fulgor and CPW managed to source 100% of their electricity needs from renewable sources in order to provide products with minimal carbon footprint and supporting the renewable energy market for further investments in the years to come.

	ElvalHalcor			Bridgnorth			Symetal			Sofia Med		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019***
Renewable energy share in electricity*	24.7	28.3	100	27.8	31.1	36.9	24.7	28.3	100	18.7	20.5	23.0

	Hellenic Cables			Fulgor			ICME ECAB			CPW		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Renewable energy share in electricity	24.7	28.3	100	24.7	28.3	100	15.6	15.7	14.5	24.7	28.3	100

	Sidenor			Sovel			Stomana Industry		
year	2017	2018	2019**	2017	2018	2019**	2017	2018	2019***
Renewable energy share in electricity	24.7	28.3	26.0	24.7	28.3	26.0	18.7	20.5	23.0

*Renewable energy share expressed as a proportion of total electrical energy consumed

** Number is an estimation as final figures for the Greek energy grid are not finalized as of the date of publication

*** Number is an estimation as final figures for the Bulgarian energy grid are not finalized as of the date of publication

SDG 8 – Health and safety, labor issues

The nature of the diversified portfolio of Viohalco companies results in a different occupational health and safety risk profile for each company. The difference is attributed to many factors, namely technology of production, infrastructure, manufacturing processes and materials used. Irrespective of the different nature of the company activity, the health and safety of the companies' personnel is of utmost priority and the companies invest significant amount of resources in order to improve and create a safer working environment.

During 2019, a tragic accident led to single fatality occurred in one of the subsidiaries, the steel works company of Stomana Industry in Bulgaria. The main metric used for the safety performance of Viohalco companies is the LTIR which reflects the number of incidents per working hours that led to an employee's absence from work. Seven out of the eleven companies showed improvement in this main category and although there was improvement since 2018, it is very clear to all the companies' management that there is still much work to be done in order to create a safer working environment.

	ElvalHalcor			Bridgnorth			Symetal			Sofia Med		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
LTIR*	4.7	7.5	6.1	15.7	7.9	12.1	9.8	3.4	9	6.5	8.8	7.9
SR**	107	126	130	120	66	125	162	159	126	362	126	429
# fatalities	0	0	0	0	0	0	0	0	0	0	0	0

	Hellenic Cables			Fulgor			ICME ECAB			CPW		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
LTIR*	11.9	10.5	6.8	11.2	11.6	8.0	6.4	5.7	2.1	3	3.4	1.0
SR**	116	283	169	335	300	147	116	78	77	375	118	106
# fatalities	0	0	0	0	0	0	0	0	0	0	0	0

	Sidenor			Sovel			Stomana Industry		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019
LTIR*	4	13	12.5	4	5.2	7.9	2.5	2	2.6
SR**	92	559	417	145	64	541	215	287	100
# fatalities	0	0	0	0	0	0	1	0	1

* LTIR: Lost time incident rate (number of LTI incidents per million working hours)

** SR: Severity rate (number of lost work days per million working hours)

Viohalco companies recognise the decisive contribution of their people in their successful business performance and future growth. In line with this approach, the companies are committed to implementing responsible working practices.

With a sense of responsibility, all Viohalco companies seek to offer their employees a workplace of equal opportunities that respects the personality of each employee, by investing materially and systematically, in their training and development. Steadily oriented to human values, the companies strive to implement responsible management practices with regard to human resources.

As shown in the table below, the employee turnover is relatively stable for all the companies except those located in Bulgaria (Stomana Industry and Sofia Med) and Romania (ICME ECAB) where the employee turnover is significantly above industry standard. The particular trend in these countries has been stable over the last few years and it is attributed to the low availability of industrial workers due to the low unemployment in urban centers and increased competition from the services sectors in these countries.

The percentage of women in the workforce also varies based on the geographic location of the companies. From the table below, it is evident that the companies located in Bulgaria (Stomana Industry and Sofia Med) and Romania (ICME ECAB) women constitute a much higher percentage of the workforce and this is attributed to the cultural acceptance of women in industry-related jobs whereas in Greece and the UK where the other companies are located, women pursue industrial jobs significantly less.

	ElvalHalcor			Bridgnorth			Symetal			Sofia Med		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Employee Turnover*	8.2	5.1	8.0	8	7	8	6.3	4.7	5.6	19.2	18.8	16.2
% of women	8.3	7.7	7.9	9	10	10	10.3	9.6	10.6	19.3	19.6	18.8
Hours of Training**	12.8	13.2	13.2	5.3	18.6	27.2	12.8	13.9	18.3	13.1	11.3	12.3

	Hellenic Cables			Fulgor			ICME ECAB			CPW		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Employee Turnover*	6.9	6.1	6.9	9.7	12.6	10.1	39	35	34	2.8	2.7	3.1
% of women	7	8	8	10.4	7.9	7.8	22.6	22.2	22.3	8.5	8.6	9.7
Hours of Training**	8	7.5	7.6	8	12	22.6	8.3	8.9	17.4	12.0	19.3	14.8

	Sidenor			Sovel			Stomana Industry		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019
Employee Turnover*	2.3	2.5	3.5	1.4	3.3	4.0	18.4	12,5	18.5
% of women	9.7	10.7	11.7	4.2	3.3	3.2	30.8	31.5	27
Hours of Training**	1.5	10	6.5	5	2.8	6.6	10.0	9.0	1.0

* Turnover rate: Percentage of employees who left the company (due to resignation, dismissal, retirement, etc.) in total company's workforce.

** Hours of training: Average hours of training per employee per year

Viohalco companies focus on areas of material impact such as creating a work environment of fair reward, respecting human rights and diversity, providing equal opportunities for all employees, applying objective evaluation systems, and ensuring ongoing employee training and education.

During 2019, as in previous years, no incident of discrimination was recorded or reported and there has been no incident of forced or voluntary child labour.

SDG 9 – Climate change

The Viohalco companies' commitment to sound environmental management is founded on risk management and the minimisation of environmental footprint and is reflected on the implementation of management systems that regulate the environmental protection during daily operations. The common biggest challenges the companies face is the minimisation of carbon emissions. It is noted that the carbon footprint is inclusive of the direct and indirect emissions (generated from the electricity supplier).

From the table below, it is apparent that nine out of the eleven companies improved their carbon footprint due to a combination of energy efficiency measures as well as the decarbonization of the energy grid. It is important to note that five companies managed to decrease their carbon footprint by a very significant margin, between 62-99%, because of their procurement of electricity from renewable sources. The companies are committed to continuously purchase energy from environmentally friendly sources in order to produce products with minimal carbon footprint.

	ElvalHalcor			Bridgnorth			Symetal			Sofia Med		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Total Carbon Emissions	0.752	0.765	0.291	0.414	0.414	0.371	0.465	0.466	0.077	0.634	0.683	0.687

	Hellenic Cables			Fulgor			ICME ECAB			CPW		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Total Carbon Emissions	0.462	0.427	0.010	0.417	0.439	0.126	0.414	0.376	0.356	0.074	0.086	0.007

	Sidenor			Sovel			Stomana Industry		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019
Total Carbon Emissions	0.775	0.940	0.896	0.611	0.635	0.623	0.542	0.519	0.563

* Total Carbon Emissions: the sum of direct and indirect CO₂ emissions (tn CO₂/ tn products). For the calculation of the indirect emissions CO₂ for the years 2018, 2019, the coefficients of the European Residual Mixes 2018 have been used as the final carbon footprint of the energy grids for 2019 are not available as of the date of the report publication.

SDG12 – Waste management and circular economy

Viohalco companies are committed to robust waste management and aim primarily at waste generation reduction and improvements related with reuse and recycling, as well as hazardous materials suitable treatment.

Although waste generation intensity varies significantly depending on the production process, the waste intensity per company has remained at similar levels in the past three years with fluctuations due to the product mix and shipments of waste accumulated over time that may affect the waste intensity for a single year. However, the portion of the generated waste that is sent for reuse, remanufactured or recycling is steadily increasing in the majority of the companies (seven out of eleven) supporting the transformation to a circular economy.

	ElvalHalcor			Bridgnorth			Symetal			Sofia Med		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Waste generation (kg/tn product)	127	125	137	87	89	48	188	191	278	30	51	57
Waste reused, re manufactured and recycled (%)	97.8	97.5	97.6	98.2	97.2	95.3	99.7	99.4	99.8	83.1	84.9	82.9

	Hellenic Cables			Fulgor			ICME ECAB			CPW		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019	2017	2018	2019
Waste generation (kg/tn product)	103	99	117	60	72	58	119	122	106	73	83	86
Waste reused, re manufactured and recycled	94.7	93.1	93.9	94.6	92.6	92.9	91.2	90.4	88.6	99.3	99.5	99.3

	Sidenor			Sovel			Stomana Industry		
year	2017	2018	2019	2017	2018	2019	2017	2018	2019
Waste generation (kg/tn product)	270	363	329	281	308	279	190	198	209
Waste reused, re manufactured and recycled	99.9	99.9	99.9	99.9	99.9	100	69.4	70.8	75.1

*Waste generated expressed in Kg of waste/ ton of production

**Waste reused, remanufactured, recovered and recycled measured versus total waste generated

SDG 16 – Transparency and anti-corruption

Viohalco companies acknowledge the significance of business ethics and anti-corruption matters. In order to ensure the implementation of the respective policy, they have applied the proper internal controls and procedures of operation demonstrating accountability, fairness and transparency in the relationship with all stakeholders.

During 2019, no incident of corruption or bribery was recorded or reported. In addition, there were no fines paid due to settlements for unethical business practices or corruption matters.

Key Non-Financial Risks

Viohalco is a holding company without any industrial operation and all non-financial risks are associated with the operation of its companies. Managing the non-financial risks is considered to be a very critical task by the companies' management as these risks have the potential to create a direct or indirect impact on the companies' continuous operation as well as to create future liabilities.

The companies have their own skilled personnel and consultants managing these matters and they implement certified management systems ISO 14001:2015 and OHSAS 18001:2007 as well as the energy management system 50001:2015, thus providing an additional management tool for all related risks. The management systems are the pillars for taking the proper preventive steps, specific plans and actions, and provide the continuous improvement culture necessary to ensure improving performance and risk management.

The risks associated with the non-financial matters reported above are described below.

Environment

The major risks related to environmental issues are **climate change** and **water supply and management**. These risks are also critical to the supply chain of Viohalco's companies as the raw materials used by Viohalco companies carry more than 80% of the environmental footprint of the final products while in certain cases the footprint is close to 90% (aluminium rolled and extruded products).

Climate change

Viohalco companies consider that climate is an area with a material impact not only in respect of financial materiality (negative impact on the company) but also from an environmental and social perspective (negative impact to climate, hence to the environment and society).

The financial materiality stems from the fact that the companies have transition as well as physical risks. Transition risks relate to risks arising from the transition to a low carbon economy such as policies that:

- Require demanding energy efficiency measures,

- Impose carbon pricing mechanisms which intend to increase carbon price, thus, increase cost of electricity
- Impose carbon border adjustments that can disrupt supply chains as well as cause retributions from other countries where customers are currently located.

Physical risks relate to risks associated with long chronic effects such as rising sea levels and reduced fresh water availability.

The risk mitigation measures taken by the companies are, among others, the following:

- early policy trend identification;
- close cooperation with national and European federations for proper representation of the matters faced by the subsidiaries;
- development of action plans and long term targets for investments in energy efficient equipment and carbon abatement measures;
- procurement of electricity from producers of clean, renewable energy;
- increase of capacity for utilization of secondary raw materials instead of primary; and
- proper budget management practices that incorporate projected carbon costs.

From an **environmental and social perspective**, Viohalco companies directly emit greenhouse gases in the atmosphere due to their routine production operations and indirectly through consumption of electricity. There are currently seven companies (ElvalHalcor, Sidenor, Sovel, Stomana Industry, Bridgnorth Aluminium, Sofia Med, CPW) in the European Trading Scheme and these companies have made a series of investments in the past 15 years for carbon emissions reduction. In addition, all these companies are included in the EU's carbon leakage sectors so protective measures are taken at EU level for the protection of these sectors from carbon leakage. The sum of the direct and indirect footprint of Viohalco companies is shown in the previous chapter as these are the most closely observed KPIs at each company level.

Upstream activities include raw materials extraction, such as aluminium, copper and steel and amount to significant emissions to the environment. Selection of raw materials suppliers is critical to identify areas of improvement and is considered the highest contributor to the overall emissions of the subsidiaries' products. As mentioned earlier, the carbon footprint attributed to upstream activities amount to over 80% in most cases. The subsidiaries are in the process of identifying and evaluating different suppliers and their potential exposure to higher carbon costs as the increasing cost of carbon will eventually affect their competitiveness.

Water management

Water management related risks include the availability of fresh water for production purposes and the quality of wastewater discharged to water receptors.

Certain Viohalco companies are relatively water intensive as shown in the Performance and KPIs section. These companies treat the water supply risk as a business continuity issue that can ultimately have a financial materiality (negative impact on the company). The risk is mainly mitigated through continuous efforts to improve the water footprint of the companies and have multiple sources of water so there are alternative sources of supply.

As for the quality of wastewater discharge, Viohalco companies have made the appropriate investments in modern equipment in order to have the ability to meet and comply with very strict discharge limits.

Social and labor issues

The major risks related to social and labor matters are the occupational health and safety of the labor force and employee matters.

With regards to occupational health and safety risks, Viohalco companies have management systems in place following a comprehensive approach for improvement which is translated into equipment upgrading, implementation of management principles (safety audits, guidelines, work instructions, etc.), the establishment of a targeted safety training program and the direct involvement of management. The companies' management have a clear understanding of the importance of providing a safe working environment to the labor force and how vital it is to continuously strive for improvement as this is fundamental for good labor relations and business performance.

Employee related risks entail potential violations of equal treatment and statutory working hours as social action by personnel that may lead to operation interruption risks. These risks are mitigated by the companies through a comprehensive employee Code of Conduct, personnel evaluation and training, and regular internal audits.

Human rights

The major risks related to human rights are related to the supply chain of the companies provided that many suppliers are not located in Europe or North America. Viohalco companies are in the process of developing a proper and comprehensive supplier evaluation management system in order to ascertain that all major suppliers meet certain sustainability standards such as standards in minimum environmental performance and compliance, worker safety, labor conditions, human rights and business ethics.

Anti-bribery and corruption

The risks related to anti-bribery and corruption lies in the failure to conduct business/operations ethically and comply with the laws and regulations in the jurisdictions in which Viohalco and its companies operate. To prevent and mitigate such risks, Viohalco ensures that its "reference code" is applied by its companies in order to raise employee awareness to Viohalco's corporate values and related anti-corruption practices. The internal audit function is responsible for monitoring and reporting timely and properly any related deviation or misconduct. Simultaneously, subsidiaries separately organize training courses and communication actions in order to increase awareness and encourage compliance.

Detailed information on Viohalco companies' actions can be found in their standalone sustainability reports which are published on an annual basis.

I. Corporate governance statement

Introduction

As a company incorporated under Belgian law and listed on Euronext Brussels, Viohalco applies standards that are compliant with the provisions of the 2009 Belgian Corporate Governance Code (the **2009 Code**), which is the reference code and is publicly available on the website of the Corporate Governance Committee (www.corporategovernance-committee.be).

The 2009 Code is structured around principles, provisions, guidelines, and the «comply or explain» principle. Belgian listed companies must abide by the 2009 Code but may deviate from some of the Code's provisions, if they provide a considerate explanation for any such deviation. During the 2019 financial year, the company complied with the principles of the 2009 Belgian Corporate Governance Code, except for the following:

- **Principle 6.2** "The executive management comprises at least all executive directors".

Explanation: certain directors are considered to be executive directors due to the management functions they assume in one of the subsidiaries of Viohalco, without being part of the Company's Executive Management.

- **Principle 7.11** "For the interests of an executive manager to be aligned with those of the Company and its shareholders, an adequate part of an executive manager's remuneration package is structured in such a way as to be linked to both the individual and corporate performance".

Explanation: The remuneration policy of the Company is set out in the remuneration report. Such policy does not include variable remuneration. The board of directors will consider the proposals submitted by the Nomination and Remuneration Committee in order to determine whether, and to what extent, a modification of this policy is justified in light of the Company's specific nature and strategy.

As from financial year 2020, the Company has adopted the 2020 Belgian Corporate Governance Code as its reference code. Any deviations to such code during year 2020 will be reported in the 2020 corporate governance statement.

Viohalco's board of directors has also adopted a Corporate Governance Charter in order to reinforce its standards for the Company in accordance with the recommendations set out in the 2009 Code. It aims at providing a comprehensive and transparent disclosure of the Company's governance which is reviewed and updated from time to time. The Corporate Governance Charter (the **Charter**) is available on the Company's website (www.viohalco.com).

In order to have a complete overview of Viohalco's corporate governance rules, the Corporate Governance Statement must be read in conjunction with the Company's articles of association, the Charter as well as the corporate governance provisions laid down in the Belgian Code on Companies and Associations (the **BCCA**).

As a company secondary listed on the Athens Stock Exchange (Athex), Viohalco also complies with the provisions of the applicable Greek capital market laws and regulations.

Board of Directors

1. Role

The board of directors (the **Board**) is vested with the power to perform all acts that are necessary or useful for the Company's purpose, except for those actions that are specifically reserved by law or the articles of association to the Shareholders' Meeting or other management bodies.

In particular, the Board is responsible for:

- defining the general orientations of the Company;
- deciding on all major strategic, financial, and operational matters of the Company;
- deciding on the Executive Management structure and determining the powers and duties entrusted to them;
- taking all necessary measures to guarantee the quality, integrity, and timely disclosure of the Company's financial statements and other material financial or non-financial information about the Company;
- monitoring and reviewing the effectiveness of the Audit Committee and the Nomination and Remuneration Committee;
- approving a framework of internal control and risk management set up by the Executive Management and reviewing its implementation;
- monitoring the quality of the services provided by the statutory auditor(s) and the internal audit, taking into account the Audit Committee's review;
- approving the remuneration report submitted by the Nomination and Remuneration Committee; and
- any other issue reserved to the Board by the BCCA.

The Board has delegated part of its powers related mainly to the day-to-day management of the Company to the members of the Executive Management.

2. Composition of the Board

In accordance with article 8 of the articles of association, the Board is composed of 15 members as follows:

Name	Position	Term started	Term expires
Nikolaos Stassinopoulos	President - Non-executive member of the Board	May 2019	May 2020
Jacques Moulart	Vice-President - Executive member of the Board	May 2019	May 2020
Evangelos Moustakas	CEO - Executive member of the Board	May 2019	May 2020
Michail Stassinopoulos	Executive member of the Board	May 2019	May 2020
Ippokratis Ioannis Stasinopoulos	Executive member of the Board	May 2019	May 2020
Jean Charles Faulx	Executive member of the Board	May 2019	May 2020
Thanasis Molokotos	Executive member of the Board	May 2019	May 2020
Xavier Bedoret	Non-executive member of the Board	May 2019	May 2020
Marion Steiner Stassinopoulos	Non-executive member of the Board	May 2019	May 2020
Margaret Zakos	Non-executive member of the Board	May 2019	May 2020
Efthimios Christodoulou	Independent , Non-executive member of the Board	May 2019	May 2020
Francis Mer	Independent, Non-executive member of the Board	May 2019	May 2020
Kay Breeden	Independent, Non-executive member of the Board	May 2019	May 2020
Kalliopi Tsolina	Independent, Non-executive member of the Board	May 2019	May 2020
Astrid de Launoit	Independent, Non-executive member of the Board	May 2019	May 2020

The mandates of all members of the Board will expire at the end of the Annual Ordinary Shareholders' Meeting to be held in 2020.

3. Information on the members of the Board

Over the past five years, the members of the Board have held the following positions (apart from their directorship in the Company) and maintained relationships with the following bodies which, in theory, could become the source of conflict of interests:

Nikolaos Stassinopoulos, President - Non-executive member of the Board. Mr. Stassinopoulos holds a Master's degree from the Athens University of Economics and Business. He served as President and Vice-President of Viohalco Hellenic.

Jacques Moolaert, Vice- President - Executive member of the Board. Mr. Moolaert holds a Ph.D. in law from the University of Ghent and a Master's degree in Public Administration from Harvard University. He serves as honorary managing Director at Groupe Bruxelles Lambert S.A. and as honorary President of the Board of ING Belgium S.A./NV. He is a founder and honorary Vice-president of the Louvain Foundation. In the past, Mr. Moolaert served as visiting professor at the Catholic University of Louvain (UCL).

Evangelos Moustakas, CEO - Executive member of the Board. Mr. Moustakas joined Viohalco in 1957 where he held various technical and managerial positions, in particular the position of President of the Board of Directors of several subsidiaries of Viohalco, such as Hellenic Cables S.A. and Etem S.A. He serves as President of the Board of Directors of the Hellenic Copper Development Institute and as a member of the Board of Directors of the International Wrought Copper Council (IWCC) and the European Copper Institute (ECI). He is also corporate representative in the International Association "Intercable", the International Cablemakers Federation (ICF, since 1990), and Europacable (since 1991) and is active in the development and promotion of copper and cable products around the world.

Michail Stassinopoulos, Executive member of the Board. Mr. Stassinopoulos graduated from Athens College (1985) and holds a Bachelor's Degree in Management Sciences from London School of Economics (1989). He also holds a postgraduate diploma (MSc) in Shipping, Trade and Finance from City University Business School (UK). Mr. Stassinopoulos is a member of the Board of Directors of Viohalco since 2013. He was a member of the Board of Directors of Elval S.A. Aluminium Industry for 11 years. He also participates in the Board of Directors of the Hellenic Federation of Enterprises since 2016 and was previously a member during 1996-2006. He is a member of the Board of Directors of the "Hellenic Production - Industry Roundtable for Growth", a newly established nongovernmental organization.

Ippokratis Ioannis Stasinopoulos, Executive member of the Board. Mr. Stasinopoulos holds a Bachelor's degree in Management Sciences from City University and a Master's degree in Shipping, Trade and Finance from City University's Business School (UK). He serves as a member of the General Council of SEV (Hellenic Federation of Enterprises), the Young Presidents Organisation, and the Board of Directors of Endeavor Greece. Mr. Stasinopoulos holds a managerial position at Viohalco Hellenic since 1995.

Jean Charles Faulx, Executive member of the Board. Mr. Faulx holds a Master's degree in Economic Sciences from the Catholic University of Louvain (UCL). He is a member of the Board of Directors of International Trade S.A., Genecos S.A. (Paris), Terra Middle East (Dusseldorf), Base Metals (Istanbul), and Metal Agencies (London). He was also member of the Board of Directors of Cofidin and Cofidin Treasury Center S.A. prior to their absorption by Cofidin in August 2013. Mr. Faulx also serves as CEO of Tepro Metall AG, a subsidiary of Viohalco, Strega sprl, Airicom France SAS and Airicom Middle East. In the past, Mr. Faulx served as CEO of Studio58 S.A. and Promark SPRL and held various positions at Techno Trade S.A, JCT Invest and Elval Automotive S.A.

Thanasis Molokotos, Executive member of the Board. Mr. Molokotos holds a Master's degree in Mechanical Engineering and a Master's degree in Marine Engineering and Naval Architecture from the Massachusetts Institute of Technology (Cambridge, MA), and a Master's degree in Mechanical Engineering from Tuft University (Medford, MA); he is President and chief executive officer (CEO) of Assa Abloy Americas. In the past, he has served as General Manager of Molokotos Textile Corporation and design specialist at Rangine Corporation.

Xavier Bedoret, Non-executive member of the Board. Mr. Bedoret holds a Master's degree in Law and Psychology from the Catholic University of Louvain (UCL) and is certified public accountant. Before joining Viohalco, he served as senior audit manager at KPMG and member of the Audit and Risk Management Division at ENGIE S.A.

Marion Steiner Stassinopoulos, Non-executive member of the Board. Mrs. Marion Steiner Stassinopoulos holds a Master's degree and a Ph.D in Psychology from the University of Zurich. She has also completed one year of postdoctoral studies at Northwestern University of Chicago (USA). In the past, she worked as psychologist at the Gerontopsychiatric Center of the Psychiatric University Clinic of Zurich. She is a member of the Advisory Board of Franz Haniel & Cie. GMBH , Duisburg-Ruhrroht in Germany.

Margaret Zakos, non-executive member of the Board. Ms. Zakos holds a Bachelor's degree from Queens University (Kingston, Ontario, Canada). She is a Registered Insurance Broker in Ontario and previously owned Harbour Insurance Services Limited. She is currently active in Real Estate Holding Companies. In the past, she was a consultant with Medicus Systems Corporation (Chicago), and was Associate Director of Nursing (Mt. Sinai Medical Centre, New York). Her philanthropic work included serving on the Board of Directors of Kingston General Hospital, participating as a member of the Finance Committee and the Audit Committee, and as well serving on the Board of the Community Foundation for Kingston. She is presently a member of the Health Sciences Campaign Cabinet Board (Queens University).

Efthimios Christodoulou, Independent, non-executive member of the Board. Mr. Christodoulou holds a Bachelor's degree in Economics from Hamilton College and a Master's degree in Economics from Columbia University. He has served on the staff of the National Bureau of Economic Research (New York) and was a lecturer at New York University. Mr. Christodoulou was Governor of the National Bank of Greece, President of the Union of Hellenic Banks, and Director General of the National Investment Bank for Industrial Development (ETEBA), Governor of the Bank of Greece (Central Bank of Greece). He has also acted as President of the Board and CEO of Olympic Airways, Executive President of Hellenic Petroleum S.A., and was a member of the European Parliament. He was Minister of Foreign Affairs and Minister of National Economy in Greece. Until June 2013, Mr. Christodoulou also served as President of EFG Eurobank. He is also President of various philanthropic institutions.

Francis Mer, Independent, non-executive member of the Board. Mr. Mer holds a Master's degree from Ecole Polytechnique and a Master's degree in engineering from Ecole des Mines. He serves as honorary President of Safran Group. In the past, Mr. Mer has held various positions at Usinor Sacilor Group, including President of the Board of Directors and CEO, and served as President of Cockerill Sambre, Eurofer (European Steel Association) and the International Iron and Steel Institute. He was President of the French Steel Federation, the National Technical Research Association, EpE (Entreprises pour l'Environnement) and the Cercle de l'Industrie, and co-president of the Board of Arcelor. Mr. Mer was the French Minister of Economy, Finance and Industry from 2002 to 2004.

Kay Breeden, Independent non-executive member of the Board. Ms. Breeden holds a Bachelor's degree in Biology and a Master's degree in Bio-medical Engineering from the University of Illinois and has attended the Management Executive Education Programme of Stanford University. Ms. Breeden has gained unique perspective through key leadership roles in government, corporate and management consulting environments, including eleven years spent at two top tier management consulting firms,

Booz Allen and A.T. Kearney; more than fifteen years with large global corporations including CBRE, Seagate, and Digital Equipment Corporations in executive positions in Environmental, Health, Safety and Corporate Social Responsibility, Business Excellence and Corporate Facilities and Real Estate; and five years with the United States Environmental Protection Agency. Ms. Breeden has a broad array of industry experience including high tech, biotech, consumer products, energy, utilities, chemicals, construction and engineering, environmental services, aerospace, real estate, metals and mining; and significant international business experience in Europe, Asia, North and South America.

Kalliopi Tsolina, Independent non-executive member of the Board. Ms. Tsolina attended classical studies and is a graduate of the Faculty of Philosophy of the University of Athens. She was responsible for the Foreign Relations department of Viohalco and its subsidiaries throughout 1984 – 2010. She has been a member of the Board of Directors of Viohalco Hellenic Copper and Aluminium Industry S.A and of Sidenor Steel Industry S.A.

Astrid de Launoit, Independent non-executive member of the Board. Mrs. de Launoit holds a Bachelor's degree in Economics and Finance from the University of Lille (Université Catholique de Lille) and a Master's degree in Management specialized in Luxury. She is also a graduate of the Gemological Institute of America. She has worked in several positions in the luxury and education sectors.

4. Appointment of the members of the Board

The members of the Board are appointed by the Shareholders' Meeting under the quorum and majority conditions applicable to an amendment of the articles of association of the Company, upon proposal by the Board. The members of the Board are appointed for a term of one year and their term of office is renewable.

In case a seat of member of the Board becomes vacant, such vacancy may be filled temporarily by virtue of a unanimous vote of the remaining members of the Board, until the next Shareholders' Meeting which will proceed to the definitive appointment of a Board member.

Any proposal for the appointment of a Board member originating from the shareholders must be accompanied by a Board recommendation based on the advice of the Nomination and Remuneration Committee. The Nomination and Remuneration Committee reviews all the candidacies and seeks to ensure that a satisfactory balance of expertise, knowledge, and experience is maintained among the Board members.

The Board decides which candidates satisfy the independence criteria set by law. To be considered independent, a member of the Board must fulfil the criteria set forth in Principle 3.5 of the Corporate Governance Code. Any independent member of the Board who no longer fulfils the above criteria of independence is required to immediately inform the Board.

The Board of Viohalco, having reviewed the independence criteria pursuant to the BCCA and the 2020 Code, has decided that Mr. Efthimios Christodoulou, Mr. Francis Mer, Ms. Kay Breeden, Ms. Kalliopi Tsolina, and Ms. Astrid de Launoit fulfil these criteria and are independent non-executive members.

Pursuant to Article 7:86 of the BCCA, Viohalco's Board currently consists of 10 male and 5 female Board members. The Company's Board with the assistance of the Nomination and Remuneration Committee took the appropriate measures in order to ensure compliance with the legal requirement.

However, as a holding company in the industrial sector, Viohalco does not have in place a concrete diversity policy for its Board of Directors or its senior executives. The nature of the business and the required expertise limits the possibility of gender diversification. It is common worldwide that in an industrial environment in metals processing the vast majority of personnel consists of males. Nevertheless, Viohalco employs skilled and experienced personnel without any discrimination and make efforts to ensure diversity in terms of nationality, age, religion, and ethnic origin.

5. Functioning

The Board has elected among its members Mr. Nikolaos Stassinopoulos as President of the Board (the **President**).

The President directs the Board's works. He sets the agenda of its meetings after consultation with the Executive Management. The President is responsible for ensuring that all members of the Board receive accurate, clear and timely information.

The Board has appointed a company secretary, Mr. Jacques Moulaert, to advise the Board on all corporate governance matters (the **Corporate Governance Secretary**).

The Board meets as frequently as the interests of the Company require so and in any case at least four times a year. The majority of the meetings in any year take place at the Company's registered offices.

The meetings of the Board can also be held by teleconference, videoconference, or by any other means of communication that allow the participants to hear each other continuously and to actively participate in these meetings. Participation to a meeting through the above-mentioned means of communication is considered as physical presence to such meeting.

In exceptional circumstances, duly justified by the urgency of the matter and the corporate interest, the Board can adopt unanimous written decisions, expressing its consent on a written document, a facsimile or an e-mail, or by any other similar means of communication. However, this procedure may not be used for the approval of the annual accounts.

The following table provides an overview of the Board meetings held in 2019:

Date and Place	Attendance
March 21, 2019 (Brussels)	Present: 15 Represented: 0 Absent: 0
April 19, 2019 (videoconference call)	Present: 14 Represented: 1 Absent: 0
May 29, 2019 (Brussels)	Present: 14 Represented: 1 Absent: 0
September 5, 2019 (videoconference call)	Present: 13 Represented: 2 Absent: -
September 26, 2019 (Athens)	Present: 14 Represented: 0 Absent: 1
December 5, 2019 (Brussels)	Present: 13 Represented: - Absent: 2
December 20, 2019 (conference call)	Present: 13 Represented: 0 Absent: 2

Committees of the Board of directors

The Board has set up two committees to assist and advise the Board on specific areas: the Audit Committee and the Nomination and Remuneration Committee. The competences of these committees are primarily set out in the Charter.

1. The Audit Committee

The Audit Committee is composed of Mr. Efthimios Christodoulou, acting as President of the Committee, Mr. Xavier Bedoret, and Ms. Kalliopi Tsolina. All members are non-executive members of the Board and two of them are independent.

The majority of the members of the Audit Committee have sufficient experience and expertise, notably in accounting, auditing and finance, acquired through their previous or current professional assignments.

Pursuant to the Charter, the Audit Committee meets at least four times a year, and at least twice a year it meets with the Company's statutory auditor.

The Audit Committee advises the Board on accounting, audit and internal control matters. In particular, the Audit Committee:

- monitors the financial reporting process;
- monitors the effectiveness of the Company's system of internal control and risk management as well as the internal audit function;
- monitors the conducting of the statutory audit of the annual and the consolidated financial statements, including the follow-up on questions and recommendations made by the statutory auditor;
- reports regularly to the Board on the exercise of its duties, and at least when the Board sets up the annual and the consolidated financial statements, as well as the condensed financial statements intended for publication;
- presents recommendations to the Board with respect to the appointment of the statutory auditor; and
- reviews and monitors the independence of the statutory auditor, in particular regarding the provision of non-audit services to the Company.

The Audit Committee reports regularly to the Board on the exercise of its duties, identifying any matters in respect of which it considers that action or improvement is needed, and at least when the Board sets up the annual and the consolidated accounts intended for publication.

In 2019, the Audit Committee met five times: on March 21, in Brussels, with all members present; on April 19, via videoconference call, with two members present; on May 29, in Brussels, with all members present; on September 24, in Athens, with all members present, and on December 5, in Brussels, with all members present.

2. Nomination and Remuneration Committee

The Nomination and Remuneration Committee is composed of Mr. Nikolaos Stassinopoulos, acting as President of the Committee, Mr. Francis Mer, and Mr. Efthimios Christodoulou. All members are non-executive members of the Board, and two of them are independent.

Pursuant to the Charter, the Committee meets at least twice a year, and whenever necessary in order to carry out its duties.

The Nomination and Remuneration Committee advises the Board principally on matters regarding the appointment and the remuneration of the members of the Board and the Executive Management. In particular, the Nomination and Remuneration Committee:

- makes recommendations to the Board with regard to the appointment and the remuneration of the members of the Board and the Executive Management;
- identifies and nominates, for the approval of the Board, the candidates to fill vacancies as they arise;
- advises on appointment proposals originating from the shareholders;
- periodically assesses the composition and size of the Board and submits recommendations to the Board with regard to any changes; and
- drafts and submits a remuneration report to the Board, including proposals regarding the remuneration policy and recommendations based on its findings.

In 2019, the Nomination and Remuneration Committee met two times: on March 21 the Committee, in Brussels, with all members present, and on December 18, decided by a circular decision .

Evaluation of the Board of Directors and its Committees

The Board regularly (at least every two or three years) assesses its size, composition, performance and those of its committees, as well as its interaction with the Executive Management. On March 30, 2017, the Board, with the assistance of the Nomination and Remuneration Committee, concluded that it operates in an efficient way, consistently encouraging the continuous improvement of the Company's governance.

The non-executive members of the Board assess their interaction with the Executive Management on a regular basis.

Executive Management

The Executive Management comprises four persons: the chief executive officer (CEO), Mr. Evangelos Moustakas; an executive vice-President, Mr. Jacques Moolaert; the chief financial officer (CFO), Mr. Efstratios Thomadakis; and the Financial Manager of the Greek Branch, Mr. Panteleimon Mavrakis.

In the past five years, the members of the Executive Management held the following directorships and memberships of administrative, management or supervisory bodies and/or partnerships:

Jacques Moolaert, Vice-President - executive member of the Board. Please see above section no 3, Information on the members of the Board, Board of Directors.

Evangelos Moustakas, CEO - executive member of the Board. Please see above section no 3, Information on the members of the Board, Board of Directors.

Efstratios Thomadakis, CFO. Mr. Thomadakis studied Business Administration and holds an MBA from the University of Piraeus. He joined Viohalco Hellenic in 2000. Since then, he has held various managerial positions in the financial department, whilst in 2010 became the CFO of the Sidenor Group, Viohalco's steel business segment. He is also member of the board of directors of several Viohalco subsidiaries, such as Sidenor Industry S.A.

Panteleimon Mavrakis, Financial Manager of the Greek Branch. Mr. Mavrakis studied Economics at the University of Piraeus. He joined Viohalco in 1979 and since then has held executive positions in the financial department of several Viohalco companies. From 2000 to 2013, he served as CFO of Viohalco Hellenic and some of its subsidiaries, and since 2013 he is responsible for the accounting and fiscal affairs of the Greek Branch of Viohalco.

The Executive Management is vested with the day-to-day management of the Company. They are also entrusted with the implementation of the resolutions of the Board.

In particular, the Board has assigned the following missions to the Executive Management:

- preparing strategic proposals for the Board;
- putting internal controls in place;
- monitoring and managing the Company's results and performance against strategic and financial plans;
- giving direction, guidance, and support to the Company's business;
- presenting to the Board a timely and reliable set of the Company's draft financial statements, in accordance with applicable accounting standards, as well as the related press releases;
- providing the Board with a balanced and comprehensive assessment of the Company's financial situation;
- making recommendations to the Board with respect to matters within its competency; and
- reporting to the Board on the performance of the Company.

Remuneration report

1. Remuneration policy

The policy regarding the remuneration of executive and non-executive members of the Board is determined by the Board, based on a proposal from the Nomination and Remuneration Committee. It leads to proposals that must be approved by the shareholders during the Annual Ordinary Shareholders' Meeting. The Nomination and Remuneration Committee bases its proposals on a review of the prevailing market conditions for comparable companies.

Viohalco does not foresee any significant change in its actual remuneration policy for 2020.

2. Board of directors

The remuneration policy for the year 2019-2020 foresees a fixed fee for each member of the Board amounting to EUR 25,000, plus an equal sum in case they are members of a committee.

These fees are allocated on a "pro rata temporis" basis for the period extending from the Annual Ordinary Shareholders' Meeting until the Annual Ordinary Shareholders' Meeting of the following year, and are due at the end of such period. No variable remuneration is foreseen.

The following table provides an overview of the fees paid to the Board members during their term of office (2019-2020):

Name for members (amounts in EUR)	Fixed amount for members of the Board	Fixed amount for members of the Audit Committee	Fixed amount for the members of the Nomination and Remuneration Committee	Total
Nikolaos Stassinopoulos	25,000.00	0.00	25,000.00	50,000.00
Jacques Moulaert	25,000.00	0.00	0.00	25,000.00
Evangelos Moustakas	25,000.00	0.00	0.00	25,000.00
Michail Stassinopoulos	25,000.00	0.00	0.00	25,000.00
Ippokratis Ioannis Stasinopoulos	25,000.00	0.00	0.00	25,000.00
Jean Charles Faulx	25,000.00	0.00	0.00	25,000.00
Xavier Bedoret	25,000.00	25,000.00	0.00	50,000.00
Marion Steiner Stassinopoulos	25,000.00	0.00	0.00	25,000.00
Margaret Zakos	25,000.00	0.00	0.00	25,000.00
Efthimios Christodoulou (*)	0.00	0.00	0.00	0.00
Francis Mer	25,000.00	0.00	25,000.00	50,000.00
Thanasis Molokotos	25,000.00	0.00	0.00	25,000.00
Kay Marie Breeden	25,000.00	0.00	0.00	25,000.00
Kalliopi Tsolina (*)	0.00	0.00	0.00	0.00
Astrid de Launoit	25,000.00	0.00	0.00	25,000.00
Total Remuneration	325,000.00	25,000.00	50,000.00	400,000.00

(*) These members of the Board have waived all remuneration.

The total remuneration of non-executive members of the Board is presented in the above table, with the exception of Mr. Nikolaos Stassinopoulos, who is entitled to additional remuneration of EUR 450k by Viohalco and Mr. Bedoret, who is entitled to additional remuneration of EUR 270k by Viohalco and EUR 50k by Cenergy Holdings.

3. Executive members of the Board and Executive Management

The remuneration policy for the executive members of the Board and the Executive Management of Viohalco is made up of a fixed fee. They are entitled to neither stock options nor a supplementary pension scheme. No contingent or deferred compensation has been paid by the Company to the executive members of the Board or the Executive Management. They do not have any contract with the Company which would entitle them to benefits by the end of their term of office.

The remuneration scheme for the CEO and the Executive Vice-President does not include a variable part. The remuneration of other executive members of the Board and legal representatives is not determined by the Company, but by its subsidiaries.

The CEO's remuneration for the fiscal year 2019 amounts to EUR 1,253k (in addition to his remuneration as a member of the Board).

The remuneration granted in 2019 to the executive members of the Board (in addition to their remuneration as members of the Board) and the Executive Management, excluding the CEO, amounts to EUR 2,263k.

External Audit

The statutory auditor, appointed by the Shareholders' Meeting among the members of the Belgian Institute of Certified Auditors, is entrusted with the external audit of the Company's consolidated financial statements.

The statutory auditors' mission and powers are those defined by the law. The Shareholders' Meeting sets the number of statutory auditors and determines their remuneration in compliance with the law. The statutory auditor is appointed for a renewable term of three years.

On May 29, 2019, the Company appointed PriceWaterhouseCoopers - Reviseurs d'entreprises SCRL, in abbreviation PwC Reviseurs d'Entreprises, represented by Marc Daelman, as statutory auditor for a three-year period.

Company's Risk Management and Internal Audit Function

The Belgian legislative and regulatory framework on risk management and internal control is set out in the law of 17 December 2008 on the establishment of an audit committee, and the law of 6 April 2010 on the enhancement of corporate governance, as well as in the 2009 Code.

As mentioned in the chapter "Risks and Uncertainties" of this annual report, the Executive Management is responsible for the risk management and the system of internal control. Under the high supervision of the Executive Management, the Management of each Company's subsidiary is in charge of developing an adequate organisation and an appropriate system of internal control for running the subsidiary's operations and managing risk.

The Audit Committee is responsible for monitoring the effectiveness of the Company's risk management, its system of internal control and its internal audit function.

- *Company's Risk Management*

Risk management is a responsibility delegated by the Board to the Management of the subsidiaries. The latter report on business risks and challenges to the Executive Management on a regular basis; they provide the Board and the Audit Committee with a detailed business review which analyses risks and challenges. The Internal Audit under the supervision of the Audit Committee ensures the monitoring and the effectiveness of their risk management systems.

- *Internal Audit Function*

The Audit Committee supervises the internal audit function. Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve the organization's operations. It helps the organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes. Internal audit is conducted in accordance with the International Standards for the Professional Practice of Internal Auditing (IPPF).

The internal audit function is responsible for performing audit engagements in accordance with its annual internal audit plan, which is prepared and reviewed in order to assist the organization to effectively mitigate risk throughout its operations. The audit engagements follow the audit methodology described in the internal audit charter and the internal audit manual as well as aim at ensuring that subsidiaries comply with shared processes with regards to their operations, industrial production and consolidation guidelines. At the end of each audit engagement, the internal audit function issues an audit report containing its audit findings and recommendations. The subsidiaries' management is responsible to design and implement remedial actions towards each of the internal audit findings and recommendations in due time.

The internal audit function reports to the Audit Committee. The Audit Committee ensures that the internal audit work is focused on the activities and the risk areas it deems critical. It ensures that the internal audit function reduces the probability of fraud and error and provides effective mitigation of risk.

Control and Relationship with Subsidiaries

Viohalco is a holding company that operates in a decentralized manner. Each of Viohalco companies is responsible for its performance and results. The management of the subsidiaries is organised around solid global and regional teams, with responsibility assigned to the members of their respective Executive Management team.

All Viohalco's companies are accountable for their own organization, risk management and system of internal control as these are developed and implemented depending on the business segment, the geographical location and the type of production plant concerned.

Financial Reporting and Monitoring

Viohalco has established procedures for the adequate recording and reporting of financial and non-financial information. The objective is to ensure that financial and non-financial information produced by each entity is homogeneous, coherent, and comparable, and that consolidated financial information is fair, reliable, and can be obtained in a timely manner.

Each subsidiary reports financial information on a monthly basis. This includes the balance sheet, the income statement, the statement of cash flows, and a working capital analysis.

A review covering each business segment is presented to the Board. The review includes "actual versus budget", financial and non-financial information, the highlights of the semester, the business segment perspectives, and is a key component of Viohalco's decision-making process.

Conflict of interests

Pursuant to Article 10 of the Charter, in the event a conflict of interests with a member of the Board, a shareholder, or another Viohalco subsidiary, may arise, the Board is required to implement the specific procedures of conflict resolution set forth in articles 7:96 and 7:97 of the BCCA.

Each member of the Board and the Executive Management is required to always act without conflict of interests and always put the interest of Viohalco before his individual interest. Each member of the Board and the Executive Management is required to always arrange his or her personal business so as to avoid direct and indirect conflict of interests with Viohalco.

All members of the Board are required to inform the Board of conflicts of interests as they arise. If the conflict of interests is of proprietary nature, they will abstain from participating in the discussions and deliberations on the matter involved in accordance with article 7:96 of the BCCA. If the conflict of interests is not covered by the provisions of the BCCA and involves a transaction or contractual relationship between Viohalco or one of its related entities, on the one hand, and any member of the Board or the Executive Management (or a company or entity with which such member of the Board or the Executive Management has a close relationship), on the other hand, such member will inform the Board of the conflict. The Board is under the obligation to check that the approval of the transaction is motivated by Viohalco's interest only and that it takes place at arm's length.

In all cases involving a conflict of interests not covered by article 7:96 of the BCCA, the member of the Board affected by the conflict of interests is required to judge whether he or she should abstain from participating in the discussions and the vote.

Since the listing of the Company, the Board has not been notified of any transaction or other contractual relationship between Viohalco and its Board members which caused a conflict of interests within the meaning of articles 7:96 and 7:97 of the BCCA.

Shareholders

1. Capital Structure

On December 31, 2019, the Company's share capital amounted to EUR 141,893,812.84 represented by 259,189,761 shares without nominal value. There is no authorised share capital.

All shares of the Company belong to the same class of securities and are in registered or dematerialised form. Shareholders may select, at any time, to have their registered shares converted into dematerialised shares and vice versa.

Share transfers are not restricted in the Company's articles of association; all Company's shares are freely transferable.

Each share entitles the holder to one voting right.

2. Restrictions on Voting Rights

The articles of association do not provide for special restrictions on the shareholders' voting rights. Provided that the shareholders are admitted to the Shareholders' Meeting and their rights are not suspended, they enjoy unrestricted freedom in exercising their voting rights. The relevant provisions governing the shareholders' admission to the Shareholders' Meeting are set out in article 19 of Viohalco's articles of association.

Article 7.3 of the articles of association provides that the Company's shares are indivisible and that it recognises only one holder per share. The Board has the right to suspend the exercise of all rights attached to jointly owned shares until a single representative of the joint owners has been appointed.

3. Transparency

Pursuant to the Belgian law of 2 May 2007 on the disclosure of major holdings in issuers whose shares are admitted to trading on a regulated market and laying down miscellaneous provisions (the Transparency Law), the Company requires that all any natural and legal person, who directly or indirectly acquires voting securities in the Company, notifies the Company and the Financial Services and Markets Authority (FSMA) of the number and proportion of existing voting rights they hold, where the voting rights attached to the voting securities reach 5% or more of the total existing rights. A similar notification is required in the following cases:

- direct or indirect acquisition or disposal of voting securities, or change of the breakdown of the voting rights, where the proportion of voting rights attached to the securities held reaches or exceeds 10%, 15%, 20% and so on, by increments of 5%, of the total existing voting rights;
- first admission of the Company's shares to trading on a regulated market, where the voting rights attached to the voting securities represent 5% or more of the total existing voting rights;
- conclusion, modification or termination by natural or legal persons of an agreement to act in concert where the proportion of the voting rights that are the subject of the agreement, or the proportion of the voting rights held by a party to the agreement, reaches, exceeds or falls below one of the thresholds provided for in § 1, or the nature of the agreement to act in concert is modified;
- crossing of stricter notification thresholds added by the Company's articles of association.

The notification must be made as soon as possible and, not later than four trading days following the acquisition or disposal of the voting rights triggering the reaching of the initial threshold. The Company must publish the information so notified within three trading days following receipt of the notification.

At Shareholders' Meetings, shareholders cannot cast more votes than those attached to the securities or rights they have notified to the Company, in pursuance to the Transparency Law, before the date of the Shareholders' Meeting, subject to certain exceptions.

The form, on which such notifications must be made, together with additional explanations, is available on the FSMA website (www.fsma.be).

The voting rights held by the major shareholders of the Company are available on the website of Viohalco (www.viohalco.com).

Viohalco is not aware of the existence of any agreement between its shareholders concerning the transfer or the exercise of the voting rights attached to the shares of the Company.

Shareholders' Meeting

1. Meetings

The Annual Ordinary Shareholders' Meeting of the Company is held on the last Tuesday of May at 12:00 p.m. or, if the day is a public holiday in Belgium, on the previous business day, at the same time. It takes place in Brussels, at the registered office of the Company or at a place indicated in the convening notice of the Shareholders' Meeting.

The other Shareholders' Meetings of the Company must take place on the date, hour and place indicated in the convening notice of the Shareholders' Meeting. They may take place in locations other than the Company's registered office.

The Annual, the Special and Extraordinary Shareholders' Meetings of the Company may be convened by the Board or by the statutory auditor of the Company, or at the request of shareholders representing at least the one fifth (1/5) of the Company's share capital.

2. Quorum and Majority required for modification of the articles of association

The modification of Viohalco's articles of association requires that two thirds (2/3) of the share capital are present or represented, and that it is approved by a qualified majority of 75% of the votes cast. If the quorum of two thirds is not reached during a first Shareholders' Meeting, a second Meeting can be convened with the same agenda and shall lawfully meet if 60% of the Company's share capital is present or represented.

If this second Meeting quorum is not reached, a third Meeting can be convened and shall lawfully meet if 58% of the Company's share capital is present or represented.

Share information and evolution of the shares

The share capital of Viohalco is set at EUR 141,893,811.46 and is divided into 259,189,761 shares without nominal value, further to the completion of the cross-border merger by absorption by Viohalco of the Greek companies, Elval Holdings Société Anonyme (Elval), Diatour, Management and Tourism Société Anonyme (Diatour), Alcomet Copper and Aluminium Société Anonyme (Alcomet) and the Luxembourg company Eufina S.A. (Eufina) on 26 February 2016.

The shares have been issued in registered and dematerialised form. All the shares are freely transferable and fully paid up. The Company has not issued any other category of shares, such as non-voting or preferential shares.

All the shares representing the share capital have the same rights. In accordance with the articles of association of the Company, each share entitles its holder to one vote.

Viohalco's shares are listed under the symbol "VIO" with ISIN code BE0974271034 on the regulated market of Euronext Brussels and on the main market of the Athens Stock Exchange (Athex) with the same ISIN code and under the symbol "VIO" (in latin characters) and "BIO" (in Greek characters).

Market data

The table below sets forth, for the periods indicated the maximum and minimum year-end closing prices, and the end of the year closing prices of Viohalco S.A. on Euronext Brussels and Athens Stock Exchange.

Share price EURONEXT BRUSSELS in EUR	2018	2019
At the end of the year	2.65	3.72
Maximum	3.97	4.40
Minimum	2.48	2.48
Share price ATHENS EXCHANGE in EUR	2018	2019
At the end of the year	2.54	3.61
Maximum	4.00	4.50
Minimum	2.44	2.45

Investor relations contact details

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Market NYSE Euronext Brussels

Ticker VIO

ISIN code BE0974271034

Market Athens Stock Exchange

Ticker VIO (in latin characters) and BIO (in Greek characters)

ISIN code BE0974271034

Viohalco remains committed to high-quality and transparent financial reporting. Viohalco's consolidated financial statements have been prepared in accordance with International Financial Reporting Standards as adopted by the EU ("IFRSs as adopted by the EU").

Shareholding structure

Based on the last Transparency Declarations, the shareholding structure of Viohalco is as follows:

Name (Shareholders)	% voting rights
Evangelos Stassinopoulos	42.81%
Nikolaos Stassinopoulos	32.27%

Distribution and dividend policy

As a holding company with majority participations in industrial and commercial companies, Viohalco's dividend policy depends on the ability of these companies to generate profit and cash flows sufficient to secure capital invested, to support growth and long term sustainability and pay dividends.

As a matter of corporate policy, and based on careful evaluation of each year's financial results and of the wider economic and business context, the Company assesses whether it is sounder to re-invest the totality or part of the annual profits and dividends received into the operating companies' businesses or to pay dividends to its shareholders.

The Company can give no assurance that it will make any dividend payment, for any given year in the near or distant future. Such payment will always be conditional on the complex interplay of a broad number of factors, which include Viohalco's overall strategy and business prospects, evolution of earnings, capital requirements and surplus, general financial conditions, existing contractual restrictions, as well as other factors which the Board of Directors may each time deem relevant.

Financial Calendar

The Annual General Meeting 2020 has been postponed. A new press release will be published once the date of the Annual General meeting of 2020 is set.

Date	Event
23 April 2020	Viohalco - Conference call for investors and analysts – FY 2019
24 September 2020	Viohalco - Half yearly 2020 results

J. Appendix – Alternative Performance Measures (APMs)

Introduction

Viohalco management has adopted, monitors and reports internally and externally P&L alternative performance measures ('APMs'), namely EBITDA, EBIT, adjusted EBITDA (a-EBITDA) and adjusted EBIT (a-EBIT) on the basis that they are appropriate measures reflecting the underlying performance of the business. These APMs are also key performance metrics on which Viohalco prepares, monitors and assesses its annual budgets and long-range (5 year) plans. However, it must be noted that adjusted items should not be considered as non-operating or non-recurring.

Relating to balance sheet items, Viohalco management monitors and reports the net debt measure.

General Definitions

APM definitions have been slightly changed, compared to those applied as at 31 December 2018. The changes are minor and have been made in order to simplify the definitions, align the calculations of EBIT/EBITDA and a-EBIT/a-EBITDA, and assist in reflecting business performance more accurately. Comparatives have been restated.

The changes are the following:

- The calculation of a-EBIT and a-EBITDA excludes net finance cost, instead of net interest cost, in order to be aligned with the calculation of EBIT and EBITDA.
- Adjustment "unrealized gains/losses on derivatives and on foreign exchange differences" has been removed from the calculation of a-EBIT and a-EBITDA, since it was concluded that these amounts are connected with the business performance of Viohalco companies.

The current definitions of APMs are as follows:

EBIT

EBIT is defined as profit for the period before:

- income taxes,
- Share of profit/loss of equity-accounted investees, net of tax
- net finance cost

a-EBIT

a-EBIT is defined as EBIT, excluding:

- metal price lag,
- impairment / reversal of impairment of fixed and intangible assets
- impairment / reversal of impairment of investments
- gains/losses from sales of fixed assets, intangible assets and investments,
- exceptional litigation fees and fines,
- other exceptional or unusual items

EBITDA

EBITDA is defined as profit for the period before:

- income taxes,
- Share of profit/loss of equity-accounted investees, net of tax
- net finance cost,
- depreciation and amortization

a-EBITDA

a-EBITDA is defined as EBITDA excluding the same line items as a-EBIT.

Detailed reconciliation between APMs as published in 2018 and comparatives of this press release, is presented in the Reconciliation tables' section.

Net Debt

Net Debt is defined as the total of:

- Long term borrowings,
- Short term borrowings,

Less:

Cash and cash equivalents.

Metal Price Lag

Metal price lag is the P&L effect resulting from fluctuations in the market prices of the underlying commodity metals (ferrous and non-ferrous) which Viohalco's subsidiaries use as raw materials in their end-product production processes.

Metal price lag exists due to:

1. the period of time between the pricing of purchases of metal, holding and processing the metal, and the pricing of the sale of finished inventory to customers,
2. the effect of the inventory opening balance (which in turn is affected by metal prices of previous periods) on the amount reported as cost of sales, due to the costing method used (e.g. weighted average),and
3. certain customer contracts containing fixed forward price commitments which result in exposure to changes in metal prices for the period of time between when our sales price fixes and the sale actually occurs.

Most of **Viohalco's** subsidiaries use back to back matching of purchases and sales, or derivative instruments in order to minimize the effect of the Metal Price Lag on their results. However, there will be always some impact (positive or negative) in the P&L, since inventory in the non-ferrous segments (i.e. aluminum, copper and cables) is treated as being held on a permanent basis (minimum operating stock), and not hedged, in the ferrous segments (i.e. steel and steel pipes), no commodities hedging occurs.

Reconciliation Tables

EBIT and EBITDA

Amounts in EUR thousands						2019				Total
	Aluminium	Copper	Cables	Steel	Steel pipes	Real Estate	Resource recovery	Other activities		
EBT (as reported in Statement of Profit or Loss)	45,943	12,123	24,488	-41,993	4,262	-2,022	-4,366	-6,512	31,924	
Adjustments for:										
Share of profit/loss (-) of equity-accounted investees	-718	2,286	-	262	-1,488	-	-	-	343	
Net Finance Cost	14,218	15,506	22,664	28,674	12,339	2,954	1,914	246	98,515	
EBIT	59,444	29,916	47,152	-13,057	15,113	932	-2,452	-6,266	130,782	
Add back:										
Depreciation & Amortization	49,629	15,117	16,489	39,485	10,428	6,839	2,719	1,886	142,592	
EBITDA	109,073	45,033	63,641	26,428	25,541	7,771	267	-4,379	273,374	

Amounts in EUR thousands						2018				Total
	Aluminium	Copper	Cables	Steel	Steel pipes	Real Estate	Resource recovery	Other activities		
EBT (as reported in Statement of Profit or Loss)	70,278	21,119	-3,961	9,115	8,612	-1,507	-1,807	-6,238	95,612	
Adjustments for:										
Share of profit/loss (-) of equity-accounted investees	-322	1,957	-	952	-653	-	-	-	1,934	
Net Finance Cost	19,609	18,630	22,502	27,745	9,959	1,804	2,081	170	102,499	
EBIT	89,565	41,706	18,541	37,812	17,918	297	273	-6,068	200,044	
Add back:										
Depreciation & Amortization	54,515	11,795	13,667	36,190	7,618	4,310	2,678	1,041	131,813	
EBITDA	144,079	53,500	32,208	74,002	25,536	4,607	2,952	-5,027	331,857	

a-EBIT and a-EBITDA

<i>Amounts in EUR thousands</i>	2019								Total
	Aluminium	Copper	Cables	Steel	Steel pipes	Real Estate	Resource recovery	Other activities	
EBT (as reported in Statement of Profit or Loss)	45,943	12,123	24,488	-41,993	4,262	-2,022	-4,366	-6,512	31,924
Adjustments for:									
Net finance cost	14,218	15,506	22,664	28,674	12,339	2,954	1,914	246	98,515
Metal price lag	-4,379	2,579	3,088	26,215	-	-	-	-	27,502
Impairment/ Reversal of Impairment (-) on fixed assets	-10	671	80	-	-	86	-	144	972
Exceptional litigation fees and fines / income (-)	29	-	-	-16	-	-	1	-	14
Gains (-) /losses from sales of fixed assets and intangibles	-89	-248	7	-12	16	-5	-67	-10	-409
Other exceptional or unusual income (-) /expenses	-	-	-	956	-	407	-1	1	1,362
a-EBIT	55,712	30,632	50,326	13,824	16,617	1,420	-2,520	-6,131	159,881
Add back:									
Depreciation & Amortization	49,629	15,117	16,489	39,485	10,428	6,839	2,719	1,886	142,592
a-EBITDA	105,340	45,749	66,816	53,309	27,045	8,259	199	-4,245	302,473

<i>Amounts in EUR thousands</i>	2018								Total
	Aluminium	Copper	Cables	Steel	Steel pipes	Real Estate	Resource recovery	Other activities	
EBT (as reported in Statement of Profit or Loss)	70,278	21,119	-3,961	9,115	8,612	-1,507	-1,807	-6,238	95,612
Adjustments for:									
Net finance cost	19,609	18,630	22,502	27,745	9,959	1,804	2,081	170	102,499
Metal price lag	-22,041	-545	1,679	9,110	173	-	-	-	-11,624
Impairment/ Reversal of Impairment (-) on fixed assets	-22	-	-	-	-	-	-	1,100	1,078
Exceptional litigation fees and fines / income (-)	120	-	-	-	906	-	3	-	1,028
Gains (-) /losses from sales of fixed assets and intangibles	-105	-305	-16	-3	-23	-10	-4	-11	-478
Other exceptional or unusual income (-) /expenses	-	-	2,000	-9822	-	-	-	458	-7,364
a-EBIT	67,838	38,899	22,204	36,146	19,627	287	272	-4,521	180,752
Add back:									
Depreciation & Amortization	54,515	11,795	13,667	36,190	7,618	4,310	2,678	1,041	131,813
a-EBITDA	122,353	50,693	35,871	72,336	27,245	4,597	2,950	-3,480	312,565

<i>Amounts in EUR thousands</i>	2018 a-EBIT Restatement Reconciliation								<i>Total</i>
	<i>Aluminium</i>	<i>Copper</i>	<i>Cables</i>	<i>Steel</i>	<i>Steel pipes</i>	<i>Real estate</i>	<i>Resource recovery</i>	<i>Other activities</i>	
As reported 31/12/2018	68,151	38,863	21,898	38,122	21,727	287	577	-4,413	185,212
Excluding:									
Interest Cost (Net)	-19,462	-18,799	-22,188	-28,568	-10,136	-1,804	-2,265	-266	-103,488
Including:									
Finance cost (Net)	19,609	18,630	22,502	27,745	9,959	1,804	2,081	170	102,499
Unrealized gains (-) /losses on foreign currency balances and derivatives (fx and commodity)	-459	204	-7	-1,153	-1,923	-	-121	-12	-3,471
Restated figure 31/12/2018	67,838	38,899	22,204	36,146	19,627	287	272	-4,521	180,752

<i>Amounts in EUR thousands</i>	2018 a-EBITDA Restatement Reconciliation								<i>Total</i>
	<i>Aluminium</i>	<i>Copper</i>	<i>Cables</i>	<i>Steel</i>	<i>Steel pipes</i>	<i>Real estate</i>	<i>Resource recovery</i>	<i>Other activities</i>	
As reported 31/12/2018	122,665	50,658	35,564	74,312	29,345	4,597	3,256	-3,372	317,025
Excluding:									
Interest Cost (Net)	-19,462	-18,799	-22,188	-28,568	-10,136	-1,804	-2,265	-266	-103,488
Including:									
Finance cost (Net)	19,609	18,630	22,502	27,745	9,959	1,804	2,081	170	102,499
Unrealized gains (-) /losses on foreign currency balances and derivatives (fx and commodity)	-459	204	-7	-1,153	-1,923	-	-121	-12	-3,471
Restated figure 31/12/2018	122,353	50,693	35,871	72,336	27,245	4,597	2,950	-3,480	312,565

Segmental Information

2019	Aluminium	Copper	Cables	Steel	Steel pipes	Real Estate	Resource recovery	Other activities	Total
Revenue	1,318,774	1,036,972	567,785	815,568	376,084	11,197	42,160	29,654	4,198,194
Gross profit	124,132	68,052	70,133	30,386	32,532	3,325	10,748	8,458	347,766
Operating profit	59,444	29,916	47,152	-13,057	15,113	932	-2,452	-6,266	130,782
Net finance cost	-14,218	-15,506	-22,664	-28,674	-12,339	-2,954	-1,914	-246	-98,515
Share of profit/loss (-) of Associates	718	-2,286	-	-262	1,488	-	-	-	-343
Profit/Loss (-) before tax	45,943	12,123	24,488	-41,993	4,262	-2,022	-4,366	-6,512	31,924
Income tax	-19,181	-3,309	-7,524	1,279	-782	7,571	-462	7,223	-15,184
Profit/Loss (-)	26,762	8,815	16,964	-40,714	3,481	5,549	-4,828	711	16,740

2018	Aluminium	Copper	Cables	Steel	Steel pipes	Real Estate	Resource recovery	Other activities	Total
Revenue	1,397,322	1,065,500	474,734	916,581	470,174	8,388	45,626	27,860	4,406,185
Gross profit	149,335	77,638	40,880	69,626	33,029	3,024	14,227	9,015	396,775
Operating profit	89,565	41,706	18,541	37,812	17,918	297	273	-6,068	200,044
Net finance cost	-19,609	-18,630	-22,502	-27,745	-9,959	-1,804	-2,081	-170	-102,499
Share of profit/loss (-) of Associates	322	-1,957	-	-952	653	-	-	-	-1,934
Profit/Loss (-) before tax	70,278	21,119	-3,961	9,115	8,612	-1,507	-1,807	-6,238	95,612
Income tax	-7,654	-11,578	5,733	3,910	1,177	317	-498	-1,166	-9,760
Profit/Loss (-)	62,624	9,541	1,772	13,025	9,789	-1,190	-2,306	-7,404	85,852

Net Debt

Amounts in EUR thousands	As at	
	31 December 2019	31 December 2018
Long term		
Loans & borrowings	943,522	874,802
Lease liabilities	42,518	22,004
Short term		
Loans & borrowings	830,455	899,468
Lease liabilities	10,903	3,087
Total Debt	1,827,398	1,799,361
Less :		
Cash and cash equivalents	-214,499	-163,676
Net Debt	1,612,899	1,635,685

K. Consolidated Financial Statements 2019

Contents

CONSOLIDATED STATEMENT OF FINANCIAL POSITION	87
CONSOLIDATED STATEMENT OF PROFIT OR LOSS	88
CONSOLIDATED STATEMENT OF OTHER COMPREHENSIVE INCOME.....	89
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY.....	90
CONSOLIDATED STATEMENT OF CASH FLOWS	91
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS.....	92
1. Reporting entity.....	92
2. Basis of accounting.....	92
3. Functional currency and presentation currency	92
4. Use of estimates and judgements.....	92
5. Significant accounting policies.....	93
6. Changes in accounting policies	109
7. Operating segments	112
8. Revenue	115
9. Other income and expenses	118
10. Net finance cost	120
11. Earnings per share.....	120
12. Employee benefits	121
13. Employee benefit expenses.....	123
14. Income tax expense.....	124
15. Inventories	127
16. Trade and other receivables.....	127
17. Cash and cash equivalents	128
18. Property, plant and equipment.....	129
19. Goodwill and intangible assets.....	131
20. Investment property.....	134
21. Equity-accounted investees.....	136
22. Other investments.....	138
23. Assets held for sale.....	138
24. Derivatives.....	139
25. Capital and reserves	140
26. Capital management.....	141
27. Loans and borrowings	142
28. Trade and other payables	144
29. Grants	145
30. Provisions.....	145
31. Financial instruments	146
32. Subsidiaries.....	157
33. Joint operations.....	160
34. Non-controlling interests.....	160
35. Leases.....	161
36. Commitments	163
37. Contingent liabilities	163
38. Related parties	163
39. Auditor's fees.....	165
40. Subsequent events.....	166

Consolidated Statement of Financial Position

Amounts in EUR thousands	Note	As at	
		31 December 2019	31 December 2018
ASSETS			
Property, plant and equipment	18	1,878,221	1,783,812
Right of use assets	35	42,652	0
Intangible assets and goodwill	19	36,226	32,346
Investment property	20	195,003	173,710
Equity-accounted investees	21	37,742	32,066
Other investments	22	5,829	8,538
Deferred tax assets	14	17,618	20,193
Derivatives	24	1	3
Trade and other receivables	16	6,023	6,315
Contract costs	8	84	108
Non-current assets		2,219,399	2,057,091
Inventories	15	1,060,009	1,142,309
Trade and other receivables	16	438,734	551,205
Contract assets	8	121,186	117,428
Contract costs	8	512	1,872
Derivatives	24	1,522	7,009
Assets held for sale	23	4,223	4,223
Current tax assets		2,826	872
Cash and cash equivalents	17	214,499	163,676
Current assets		1,843,511	1,988,594
Total assets		4,062,910	4,045,685
EQUITY			
Share capital	25	141,894	141,894
Share premium	25	457,571	457,571
Translation reserve		-21,711	-26,227
Other reserves	25	426,607	404,370
Retained earnings		184,854	196,142
Equity attributable to owners of the Company		1,189,214	1,173,749
Non-controlling interests	34	145,859	130,875
Total equity		1,335,073	1,304,624
LIABILITIES			
Loans and borrowings	27	943,522	874,802
Lease liabilities	35	42,518	22,004
Derivatives	24	185	101
Deferred tax liabilities	14	82,317	88,402
Employee benefits	12	37,362	31,624
Grants	29	35,409	39,618
Provisions	30	2,777	4,071
Trade and other payables	28	4,183	8,324
Contract liabilities	8	7,551	19
Non-current liabilities		1,155,824	1,068,965
Loans and borrowings	27	830,455	899,468
Lease liabilities	35	10,903	3,087
Trade and other payables	28	649,981	661,544
Contract liabilities	8	60,975	77,847
Current tax liabilities		14,962	16,115
Derivatives	24	4,100	13,498
Provisions	30	636	538
Current liabilities		1,572,012	1,672,096
Total liabilities		2,727,837	2,741,061
Total equity and liabilities		4,062,910	4,045,685

*Viohalco has initially applied IFRS 16 at 1 January 2019. Under the transition method chosen, comparative information is not restated. See Note 6.

The notes on pages 92 to 168 are an integral part of these Consolidated Financial Statements.

Consolidated Statement of Profit or Loss

Amounts in EUR thousands	Note	For the year ended 31 December	
		2019	2018
Revenue	8	4,198,194	4,406,185
Cost of sales	9	-3,850,427	-4,009,411
Gross profit		347,766	396,775
Other income	9	26,638	24,533
Selling and distribution expenses	9	-83,165	-82,835
Administrative expenses	9	-131,528	-117,586
Impairment loss on trade and other receivables, including contract assets	31	-78	-328
Other expenses	9	-28,851	-20,516
Operating result (EBIT)		130,782	200,044
Finance income	10	1,790	3,335
Finance cost	10	-100,305	-105,834
Net finance income / costs (-)		-98,515	-102,499
Share of profit/ loss (-) of equity-accounted investees, net of tax	21	-343	-1,934
Profit/Loss (-) before income tax expense		31,924	95,612
Income tax expense (-)	14	-15,184	-9,760
Profit/Loss (-)		16,740	85,852
Profit/Loss (-) attributable to:			
Owners of the Company		8,206	76,112
Non-controlling interests		8,534	9,740
		16,740	85,852
Earnings per share (in EUR per share)			
Basic and diluted	11	0.0317	0.2937

*Viohalco has initially applied IFRS 16 at 1 January 2019. Under the transition method chosen, comparative information is not restated. See Note 6.

The notes on pages 92 to 168 are an integral part of these Consolidated Financial Statements.

Consolidated Statement of Other Comprehensive Income

Amounts in EUR thousands	Note	For the year ended 31 December	
		2019	2018
Profit / Loss (-)		16,740	85,852
<i>Items that will never be reclassified to profit or loss:</i>			
Equity investments at FVOCI - net change in fair value	22	572	-395
Remeasurements of defined benefit liability	12	-4,527	-808
Related tax	14	1,511	226
Total		-2,443	-977
<i>Items that are or may be reclassified to profit or loss</i>			
Foreign currency translation differences		6,001	-2,164
Changes in fair value of cash flow hedges –effective portion	31	-1,067	315
Changes in fair value of cash flow hedges - reclassified to profit or loss	31	6,290	-7,010
Related tax	14	-1,134	1,598
Total		10,090	-7,261
Total comprehensive income / expense (-) after tax		24,387	77,614
Total comprehensive income attributable to			
Owners of the Company		13,778	69,253
Non-controlling interests		10,609	8,361
Total comprehensive income / expense (-) after tax		24,387	77,614

*Viotalco has initially applied IFRS 16 at 1 January 2019. Under the transition method chosen, comparative information is not restated. See Note 6.

The notes on pages 92 to 168 are an integral part of these Consolidated Financial Statements.

Consolidated Statement of Changes in Equity

2019

<i>Amounts in EUR thousands</i>	Note	Share capital	Share premium	Other reserves	Translation reserve	Retained earnings	Total	Non-controlling interests	Total equity
Balance as at 1 January 2019		141,894	457,571	404,370	-26,227	196,142	1,173,749	130,875	1,304,624
Total comprehensive income									
Profit/loss (-)		0	0	0	0	8,206	8,206	8,534	16,740
Other comprehensive income		0	0	4,013	4,487	-2,929	5,572	2,075	7,647
Total comprehensive income		0	0	4,013	4,487	5,277	13,778	10,609	24,387
Transactions with owners of the Company									
Capitalization of reserves	25	0	0	25,868	0	-25,868	0	0	0
Share capital increase of subsidiary	32	0	0	0	0	0	0	9,500	9,500
Mergers & absorptions		0	0	-8,310	0	8,310	0	333	333
Dividends		0	0	0	0	0	0	-2,120	-2,120
Total		0	0	17,558	0	-17,558	0	7,712	7,712
Changes in ownership interests:									
Acquisition of NCI		0	0	602	0	808	1,410	-3,060	-1,650
Other changes in ownership interests		0	0	64	29	185	277	-277	0
Balance as at 31 December 2019		141,894	457,571	426,607	-21,711	184,854	1,189,214	145,859	1,335,073

2018

<i>Amounts in EUR thousands</i>	Note	Share capital	Share premium	Other reserves	Translation reserve	Retained earnings	Total	Non-controlling interests	Total equity
Balance as at 1 January 2018		141,894	457,571	406,616	-24,535	125,087	1,106,633	122,585	1,229,218
Adjustment on initial application of IFRS 15, (net of tax)		0	0	0	-34	3,213	3,179	732	3,911
Adjustment on initial application of IFRS 9, (net of tax)		0	0	0	0	-4,780	-4,780	-222	-5,002
Restated balance at 1 January 2018		141,894	457,571	406,616	-24,569	123,520	1,105,031	123,095	1,228,126
Total comprehensive income									
Profit/loss (-)		0	0	0	0	76,112	76,112	9,740	85,852
Other comprehensive income		0	0	-4,733	-1,642	-484	-6,859	-1,379	-8,238
Total comprehensive income		0	0	-4,733	-1,642	75,628	69,253	8,361	77,614
Transactions with owners of the Company									
Transfer of reserves & other movements	25	0	0	2,532	0	-2,492	40	0	40
Dividends		0	0	0	0	0	0	-896	-896
Total		0	0	2,532	0	-2,492	40	-896	-856
Changes in ownership interests:									
Acquisition of NCI		0	0	25	0	-239	-214	-46	-260
Other changes in ownership interests		0	0	-69	-17	-274	-361	361	0
Balance as at 31 December 2018		141,894	457,571	404,370	-26,227	196,142	1,173,749	130,875	1,304,624

The notes on pages 92 to 168 are an integral part of these Consolidated Financial Statements.

Consolidated Statement of Cash Flows

<i>Amounts in EUR thousands</i>	Note	For the year ended 31 December	
		2019	2018
Cash flows from operating activities			
Profit / loss (-) for the period		16,740	85,852
<i>Adjustments for:</i>			
Income tax expense/ credit (-)	14	15,184	9,760
Depreciation of PP&E	9	127,697	128,088
Depreciation of right of use assets		8,569	0
Depreciation of intangible assets	9	4,838	4,083
Depreciation of investment property	9	5,430	3,612
Impairment loss/ Reversal of impairment loss (-) and write off of PP&E	9	5,840	2,383
Impairment loss/ Reversal of impairment loss (-) and write off of investment property	9	-3,339	0
Profit (-) / loss from sale of PP&E and intangibles	9	-409	-478
Amortization of grants	29	-3,942	-3,970
Finance cost	10	100,306	105,834
Finance income	10	-1,790	-3,335
Impairment loss on trade and other receivables, including contract assets	31	78	328
Share of profit of equity accounted investees	21	343	1,934
		275,544	334,090
Decrease / increase (-) in inventories		82,300	-170,946
Decrease / increase (-) in receivables		112,763	-77,692
Decrease / increase (-) in contract assets		-3,758	-47,077
Decrease / increase (-) in contract costs		1,384	-769
Decrease (-) / increase in liabilities		-15,772	104,476
Decrease (-) / increase in employees benefits liability		1,211	1,091
Decrease (-) / increase in provisions		-1,196	-457
Decrease (-) / Increase in contract liabilities		-9,340	65,929
		167,592	-125,444
Interest paid		-95,331	-103,755
Tax expense paid		-12,358	-13,151
Net cash flows from operating activities		335,448	91,740
Cash flows from investing activities			
Acquisition of PP&E and intangible assets		-260,442	-175,571
Acquisition of investment property	20	-23,788	-10,791
Proceeds from sales of PP&E and intangible assets		2,436	1,543
Acquisition of / increase in share capital of equity accounted investees	21,38	5,544	-7,680
Acquisition of other investments	22	-129	-13
Proceeds from sale of other investments		3,355	569
Interest received		2	649
Dividends received	10,21	929	581
Proceeds from collection of grants	29	169	501
Cash acquired from business combination		-394	0
Net cash flows used in investing activities		-272,318	-190,214
Cash flows from financing activities			
Proceeds from new borrowings	27	302,364	369,963
Repayment of borrowings	27	-298,820	-271,341
Principal elements of lease payments	27	-12,992	-4,801
Acquisition of NCI		-1,650	-260
Dividends paid to non-controlling interest		-2,120	-896
Net cash flows from/used in (-) financing activities		-13,218	92,664
Net decrease (-)/ increase in cash and cash equivalents		49,912	-5,810
Cash and cash equivalents at the beginning of period		163,676	168,239
Foreign exchange effect on cash and cash equivalents		911	1,248
Cash and cash equivalents at the end of period		214,499	163,676

The notes on pages 92 to 168 are an integral part of these Consolidated Financial Statements.

Notes to the Consolidated Financial Statements

1. Reporting entity

Viohalco S.A. (hereafter referred to as “the Company” or “Viohalco S.A.”) is a Belgian Limited Liability Company. The Company’s registered office is located at 30 Avenue Marnix, 1000 Brussels Belgium. The Company’s Consolidated Financial Statements include those of the Company and its subsidiaries (together referred to as “Viohalco”).

Viohalco S.A. is the holding company and holds participations in approximately 100 subsidiaries, two of which are listed, one on Euronext Brussels and the other on Athens Stock Exchange. With production facilities in Greece, Bulgaria, Romania, North Macedonia and the United Kingdom, Viohalco companies specialise in the manufacture of steel, copper and aluminium products. In addition, Viohalco owns substantial real estate properties in Greece. Its shares are traded on Euronext Brussels and has since February 2014 its secondary listing on the Athens Stock exchange (trading ticker “VIO”).

The Company’s electronic address is www.viohalco.com, where the Consolidated Financial Statements have been posted.

2. Basis of accounting

Statement of compliance

The Consolidated Financial Statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union and authorized by the Company’s Board of Directors on 15 April 2020.

Details of the Viohalco’s accounting policies are included in Note 5.

Basis of measurement

The Consolidated Financial Statements have been prepared in accordance with the historical cost principle, with the exception of the following assets and liabilities, which are measured on an alternative basis on each reporting date.

1. Derivative financial instruments (fair value)
2. Other Investments - Equity instruments (fair value)
3. Net defined benefit liability (present value of the obligation)
4. Provisions (present value of the expected future cash flows)

3. Functional currency and presentation currency

The functional and presentation currency of the parent Company is Euro. All amounts in the Consolidated Financial Statements are rounded to the nearest thousand, unless otherwise indicated. As such, due to rounding, figures shown as totals in certain tables may not be arithmetic aggregations of the figures that precede them.

4. Use of estimates and judgements

Preparing Financial Statements in line with IFRS requires that Management makes judgements, estimates and assumptions that affect the application of Viohalco’s accounting policies and the reported amounts of assets, liabilities, income and expenses. The actual results may differ from these estimates.

Management’s estimates and judgements are reviewed on an ongoing basis. Revisions to estimates are recognised prospectively.

Information about judgements, assumptions and estimation uncertainties that have significant risk of resulting in a material adjustment in the year ended 31 December 2019 is included in the following notes:

- Note 8 – revenue recognition;
- Note 12 – Measurement of defined benefit obligations: key actuarial assumptions;
- Note 14 – Recognition of deferred tax assets: availability of future taxable profits against which carried forward tax losses can be used;
- Note 19 – Impairment loss test: key assumptions underlying recoverable amounts;
- Note 31 – measurement of ECL allowance for trade receivables and contract assets: key assumptions in determining loss rates;

5. Significant accounting policies

The accounting principles described below have been consistently applied to all periods presented in these Consolidated Financial Statements (with the exception disclosed in note 6) and have also been consistently applied by Viohalco and its companies (subsidiaries and equity accounted investees).

5.1. Basis of Consolidation

(a) Business combinations

Acquisition of subsidiaries is accounted for using the acquisition method on the acquisition date, i.e. the date on which control is transferred to Viohalco. To assess control, Viohalco takes into account substantive potential voting rights.

Viohalco and its companies measure goodwill on the acquisition date as follows:

- the fair value of the consideration paid, plus
- the value of any non-controlling interests in the acquired subsidiary, less
- the fair value of identifiable assets and liabilities assumed.

Any goodwill that arises is tested annually for impairment loss. Any gain on a bargain purchase is immediately recognized in the Consolidated Statement of Profit or Loss. Any expenses directly linked with acquisition are directly posted in the Consolidated Statement of Profit or Loss. Any contingent consideration is recognized at its fair value on the acquisition date.

(b) Subsidiaries

Subsidiaries are entities controlled by Viohalco. Viohalco controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of the subsidiaries are included in the consolidated financial statements from the date on which control commences, until the date on which control ceases.

(c) Non-controlling interests

NCI are measured at fair value or at their proportionate share of the acquiree's identifiable net assets at the date of acquisition. This measurement is done on an acquisition by acquisition basis.

Changes in Viohalco's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

(d) Loss of control

When Viohalco and its companies lose control over a subsidiary, they derecognise the assets and liabilities of the subsidiary and any related NCI and other components of equity. Any resulting gain or loss is recognised in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

(e) Interests in equity-accounted investees

Associates are those entities in which Viohalco has significant influence, but not control or joint control, over the financial and operating policies. This is generally the case where Viohalco holds between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost.

Investments in joint arrangements are classified as either joint operations or joint ventures. The classification depends on the contractual rights and obligations of each investor, rather than the legal structure of the joint arrangement.

Joint operations: Viohalco recognises its direct right to the assets, liabilities, revenues and expenses of joint operations and its share of any jointly held or incurred assets, liabilities, revenues and expenses. These have been incorporated in the financial statements under the appropriate headings.

Joint ventures: A joint venture is an arrangement in which Viohalco has joint control, whereby Viohalco has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities. Interests in joint ventures are accounted for using the equity method, after initially being recognised at cost in the consolidated balance sheet.

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise Viohalco's share of the post-acquisition profits or losses of the investee in profit or loss, and Viohalco's share of movements in other comprehensive income of the investee in other comprehensive income, until the date on which significant influence or joint control ceases. Dividends received or receivable from associates and joint ventures are recognised as a reduction in the carrying amount of the investment.

When Viohalco's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, Viohalco does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity.

(f) Transactions eliminated on consolidation

Intra group balances and transactions and any unrealised income and expenses arising from intra group transactions are eliminated. Unrealized gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of Viohalco's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

5.2. Foreign currency

(a) Foreign currency transactions

Transactions in foreign currencies are translated into the respective functional currencies of Viohalco's companies at the exchange rates at the dates of the transactions.

Monetary assets and liabilities denominated in foreign currencies are translated into functional currency at the exchange rate at the reporting date. Non-monetary assets and liabilities that are measured at fair value in a foreign currency are translated into the functional currency at the exchange rate, when the fair value was determined. Foreign currency gains and losses are recognized and classified in the consolidated statement of profit or loss based on the nature of the related item of the consolidated statement of financial position.

Non-monetary items that are measured based on historical cost in a foreign currency are translated at the exchange rate at the date of the transaction.

Foreign currency differences arising from the translation of the following items are recognised in OCI:

- qualifying cash flow hedges to the extent that the hedges are effective;
- an investment in equity securities designated as at FVOCI.

(b) Foreign operations

The assets and liabilities of foreign operations, including goodwill and fair value adjustments arising on acquisition, are translated into Euro at the exchange rates of the reporting date. The income and expenses of foreign operations are translated into Euro at the exchange rates at the date of the transactions. The average rate for the period is deemed to be an appropriate rate.

Foreign currency differences are recognised in OCI and accumulated in the translation reserve, except to the extent that the translation difference is allocated to NCI.

5.3. Revenue

Viohalco recognizes revenue from the following major sources:

- Sale of customized products and revenue from projects;
- Sale of standard products;
- Rendering of services.

Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. Viohalco recognizes revenue when it transfers control of a product or service to a customer.

Consideration can vary because of trade discounts, volume rebates, returns or other similar items. Depending on the type of variable consideration the most appropriate method for measuring this variable consideration is used.

Sales of customized products and revenue from projects

Regarding contracts for projects and for customized products produced for the exclusive use of certain customers and with no alternative use, there is an enforceable right to payment for performance completed to date if the contract is terminated by the customer or another party for reasons other than Viohalco's subsidiaries' failure to perform as promised. Hence, it is concluded that the client controls all of the work in progress, as the goods are being produced.

Therefore, for such contracts revenue is recognised progressively based on the most appropriate output or input method, to measure progress towards completion.

The most common methods used are the following:

- For performance obligations related to production of customized products, depending on the type of contract concerned, the methods to measure progress is estimated based on:
 - i. Production time elapsed, i.e. the ratio between the actual time spent on the production and the total number of scheduled production time. This method is used for submarine cables produced in long continuous lengths, since the production of such products normally last for significant period of time and as a result the related performance obligations are satisfied as production time elapses.
 - ii. The quantity of manufactured and tested products compared with the total quantity to be produced according to the contract. This method is used for customized land cables, steel pipes and aluminium products, since the production is performed in batches and as a result the performance obligations related are satisfied as certain batches of agreed quantities have been produced.
- For installation phases of cables segment's turnkey projects, the method to measure progress is based on appraisal of results achieved or milestones reached, based to clearly defined technical milestones, such as transport or meters of cables installed. When milestones are being used as a method to measure progress, these milestones faithfully depict the performance.

Sales of standard products

For products which are not considered customized, customers do not take control of the product until production is completed, therefore revenue is recognised at a point of time, when the control of the goods sold has been transferred.

The timing of the transfer of control usually occurs when the goods have been shipped to the customers' location, unless otherwise specified in the terms of the contract. The terms defined on the contracts with customers are according to Incoterms.

Revenue recognised at a point in time is invoiced either simultaneously with its recognition, or within a short time period from its recognition. A receivable is recognised when the control is transferred to the customer, as this represents the point in time at which the right to consideration becomes unconditional.

Rendering of services

Revenue is recognised using the stage-of-completion method. The total consideration in the service contracts is allocated to all performance obligations in the contract based on their stand-alone selling prices.

The stand-alone selling prices are determined based on the list prices at which Viohalco sells the services in separate transactions.

Contract assets and contract liabilities

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets), and customer advances (contract liabilities). These contract assets and contract liabilities are presented on the Consolidated Statement of Financial Position in the lines 'Contract assets' and 'Contract liabilities,' respectively. For products and services for which revenue is recognised over time, amounts are billed as work progresses in accordance with agreed-upon contractual terms, either upon achievement of contractual milestones, or at the final delivery and acceptance of the manufactured items.

Generally, billing occurs subsequent to revenue recognition for customized products and services performed over time resulting in contract assets. However, when advances from customers are received before revenue is recognized, a contract liability is recognized.

Contract costs

Viohalco's subsidiaries recognize the incremental costs of obtaining contracts with customers and the costs incurred in fulfilling contracts with customers that are directly associated with the contract as an asset, if those costs are expected to be recoverable and record them in the line "Contract costs" in the Consolidated Statements of Financial Position. Incremental costs of obtaining contracts are costs incurred to obtain a contract with a customer that would not have been incurred if the contract had not been obtained.

Fulfilment costs are only capitalized if they generate or enhance resources that will be used to satisfy performance obligations in the future.

Assets arising from contract costs are amortized using either the straight-line method over a period based on the estimated contract duration or based on the portion of revenue recognised during the execution of the related contract.

Incremental costs of obtaining contracts are recognised as an expense when incurred, if the amortisation period of the assets would be one year or less.

5.4. Employee benefits

(a) Short-term employee benefits

Short-term employee benefits are expensed as the related service is provided. A liability is recognised for the amount expected to be paid if Viohalco and its companies have a present legal or constructive obligation to pay this amount, as a result of past service provided by the employee and the obligation can be estimated reliably.

(b) Defined contribution plans

Defined-contribution plans are plans for the period after the employee has ceased to work during which Viohalco and its companies pay a defined amount to a third legal entity without any other obligation. The accrued cost of defined-contribution programs is recorded as an expense in the period that it concerns.

(c) Defined benefit plans

Viohalco and its companies' net obligation in respect of defined benefit plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in the current and prior periods, discounting that amount and deducting the fair value of any plan assets. The discount rate is based on high-quality corporate bonds that are denominated in the currency in which the benefits will be paid.

The calculation of defined benefit obligations is performed annually by a qualified actuary using the projected unit credit method.

Remeasurements of the net defined benefit liability, which comprise actuarial gains and losses, are recognised immediately in OCI. Viohalco and its companies determine the net interest expense on the net defined benefit liability for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability, taking into account any changes in the net defined benefit liability during the period as a result of contributions and benefit

payments. Net interest expense and other expenses related to defined benefit plans are recognised in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss on curtailment is recognised immediately in profit or loss. Viohalco and its companies recognise gains and losses on the settlement of a defined benefit plan when the settlement occurs.

(d) Termination benefits

Termination benefits are expensed at the earlier of when Viohalco and its companies can no longer withdraw the offer of those benefits and when they recognise costs for a restructuring. If benefits are not expected to be settled wholly within 12 months of the reporting date, then they are discounted.

5.5. Government Grants

Grants from the government are recognized at their fair value where there is a reasonable assurance that the grant will be received and Viohalco's companies will comply with all attached conditions.

Government grants relating to costs are deferred and recognized in the statement of profit or loss over the period necessary to match them with the costs that they are intended to compensate.

Government grants relating to the purchase of property, plant and equipment are included in non-current liabilities as deferred government grants and are credited to the statement of profit or loss (line "other income") on a straight line basis over the expected useful lives of the related assets.

5.6. Finance income and finance cost

Viohalco and its companies finance income and finance costs mainly include:

- interest income;
- interest expense;
- dividend income;
- Foreign currency gains and losses from loans and deposits.

Interest income or expense is recognised using the effective interest method. The 'effective interest rate' is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument to:

- the gross carrying amount of the financial asset; or
- the amortised cost of the financial liability.

In calculating interest income and expense, the effective interest rate is applied to the gross carrying amount of the asset or to the amortised cost of the financial liability.

Dividend income is recognised in profit or loss on the date on which Viohalco's right to receive payment is established.

5.7. Income tax

Income tax expense comprises current and deferred tax. It is recognised in profit or loss except to the extent that it relates to a business combination, or to items recognised directly in equity or in OCI.

A. Current tax

Current tax comprised the expected tax payable or receivable on the taxable income or loss for the year and any adjustment to the tax payable or receivable in respect of previous years. It is measured using tax rates enacted or substantively enacted at the reporting date. Current tax also includes any tax arising from dividends.

Current tax assets and liabilities are offset only if certain criteria are met.

B. Deferred tax

Deferred tax is recognised in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes.

Deferred tax is not recognised for:

- Temporary differences on the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting nor taxable profit or loss;
- Temporary differences related to investments in subsidiaries, associates and joint arrangements to the extent that Viohalco and its companies are able to control the timing of the reversal of the temporary differences and it is probable that they will not reverse in the foreseeable future; and
- Taxable temporary differences arising on the initial recognition of goodwill.

Deferred tax assets are recognised for unused tax losses, unused tax credits and deductible temporary differences to the extent that it is probable that future taxable profits will be available against which they can be used. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised; such reductions are reversed when the probability of future taxable profits improves.

Unrecognised deferred tax assets are reassessed at each reporting date and recognised to the extent that it has become probable that future taxable profits will be available against which they can be used.

Deferred tax is measured at the tax rates that are expected to be applied to temporary differences when they reverse, using tax rates enacted or substantively enacted at the reporting date.

The measurements of deferred tax reflect the tax consequences that would follow from the manner in which Viohalco and its companies expect, at the reporting date, to recover or settle the carrying amount of its assets and liabilities.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority.

5.8. Inventories

Inventories are stated at the lower of cost and net realisable value. The cost is determined by applying the method of weighted average cost and includes the production and conversion cost and all direct expenses required to bring inventories at their current condition. The net realisable value is estimated based on the inventory's current sales price, in the ordinary course of business activities, less any possible selling expenses, whenever such a case occurs.

The write-down of inventories to net realisable value and any reversals are recognized in 'cost of sales' in the period in which the write-downs occur.

5.9. Property, plant and equipment

A. Recognition and measurement

Property, plant and equipment are presented at their acquisition cost less accumulated depreciation and impairment. The acquisition cost includes all expenses that are directly associated with the asset's acquisition or self-construction. The cost of self-constructed fixed assets includes the cost of direct labour, materials and any other cost that is required for the fixed asset to be ready for use as well as any borrowing costs.

Subsequent expenditure is capitalised only if it is probable that the future economic benefits associated with the expenditure will flow to Viohalco and its companies. Repair and maintenance costs are recorded in the Consolidated Statement of Profit or Loss when these are incurred.

On the sale of property, plant and equipment, any difference that may arise between the price that is received and the carrying value thereof is recorded through profit or loss in the category 'Other operating income/expenses'.

Borrowing costs related to the construction of qualifying assets are capitalised during the period required for the construction to be completed.

B. Depreciation

Depreciation is calculated to write off the cost of items of property, plant and equipment less their estimated residual values using the straight-line method over their estimated useful lives and is generally recognised in profit or loss. Land is not depreciated.

Buildings	10-33 years
Plants	50 years
Machinery	2-35 years
Furniture and other equipment	2-8 years
Transport means	4-15 years

Computers are included in the category "Furniture and other equipment".

Depreciation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

C. Reclassification to investment property

When the use of a property changes from owner-occupied to investment property, the property is reclassified to investment property.

The item is reclassified at its net book value at the date of reclassification which becomes its deemed cost for subsequent accounting purposes.

D. Reclassification to assets held for sale

Non-current assets and disposal groups are reclassified as held for sale when their carrying amount will be recovered principally through a sale transaction rather than continuing use.

5.10. Intangible assets and goodwill

A. Recognition and measurement

Goodwill: Goodwill arising on the acquisition of subsidiaries is measured at cost less accumulated impairment losses.

Research and development: Expenditure on research activities is recognised in profit and loss as incurred. Development expenditure is capitalised only if the expenditure can be measured reliably, the product or process is technically and commercial feasible, future economic benefits are probable and Viohalco's companies intend and have sufficient resources to complete development and to use or sell the asset. Otherwise, it is recognised in profit or loss as incurred. Subsequent to initial recognition, development expenditure is measured at cost less accumulated amortisation and any accumulated impairment losses.

Software programs: Software licenses are recorded at their acquisition cost less accumulated amortisation. These assets are amortised on the straight line method over their estimated useful lives, which ranges between 3 to 5 years. Expenses that are associated with the software's maintenance are recognised in profit or loss in the year in which they are incurred.

Other intangible assets: Other intangible assets, including customer relationships, patents and trademarks, that are acquired by Viohalco and its companies and have finite useful lives are measured at cost less accumulated amortisation and any accumulated impairment losses. Other intangible assets having indefinite useful lives are measured at cost less accumulated impairment losses.

B. Subsequent expenditure

Subsequent expenditure is capitalised only when it increases the future economic benefits embodied in the specific asset to which it relates. All other expenditure, including expenditure on internally generated goodwill and brands, is recognised in profit or loss as incurred.

C. Amortisation and useful lives

Amortisation is calculated to write off the cost of intangible assets less their estimated residual values using the straight-line method over their estimated useful lives and is recognised in profit or loss. Goodwill and other intangible assets with indefinite useful lives are not amortised.

The estimated useful lives for the current and comparative periods are as follows:

- Trademarks and licenses 10 – 15 years
- Software programs 3 – 5 years

Some intangible assets included in “Trademarks and licences” have indefinite useful lives and are therefore not amortised, but subject to an impairment testing. See Note 19 for detailed information.

Amortisation methods, useful lives and residual values are reviewed at each reporting date and adjusted if appropriate.

5.11. Investment property

Investment property, which includes land, buildings and right of use assets, is owned by Viohalco and its subsidiaries for the collection of rents and is not used for owner purposes. Investment property is presented at cost less depreciation. When the carrying amounts of investment property exceed their recoverable value, the difference (impairment loss) is directly recorded in profit and loss as an expense. The reversal of impairment losses is also recognised in profit and loss as income. Land is not depreciated. The buildings are depreciated by applying the straight-line method. The expected useful life of buildings is 18-33 years.

Management exercises judgement to determine whether a property qualifies as investment property or not. The criteria related to this judgement are as follows:

- Whether a property generates cash flows derived from rentals and capital appreciation largely independently of the other assets held by Viohalco;
- Whether a property does not generate cash flows from the production or supply of goods or services or the use of property for administrative purposes that are attributable not only to property, but also to other assets used in the production or supply process;
- Whether a building that is vacant will be held to be leased out or for capital appreciation;
- Whether a property that is being constructed or developed for future use as investment property;
- Whether Viohalco holds land for a currently undetermined future use.

5.12. Assets held for sale

Non-current assets or disposal groups comprising assets and liabilities are classified as held-for-sale, if it is highly probable that they will be recovered primarily through sale rather than through continuing use.

Such assets or disposal groups are generally measured at the lower of their carrying amount and fair value less costs to sell. Any impairment loss on a disposal group is allocated first to goodwill and then to the remaining assets and liabilities on a pro rata basis, except that no loss is allocated to inventories, financial assets or employee benefits which continue to be measured in accordance Viohalco and its companies' other accounting policies. Impairment losses on initial classification as held-for-sale and subsequent gains and losses on remeasurement are recognised in profit or loss.

Once classified as held-for-sale, intangible assets and property, plant and equipment are no longer amortised or depreciated and any equity-accounted investee is no longer equity accounted.

5.13. Impairment

A. Non-derivative financial assets

Financial instruments and contract assets

Viohalco recognises loss allowances for ECLs on:

- financial assets measured at amortised cost;

- contract assets;
- lease receivables.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs, except for cash and cash equivalents (12-month expected credit loss).

Viohalco considers a financial asset to be in default when the borrower is unlikely to pay its credit obligations in full, without recourse by Viohalco companies to actions such as realizing security (if any is held).

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

12-month ECLs are the portion of ECLs that result from default events that are possible within the 12 months after the reporting date (or a shorter period if the expected life of the instrument is less than 12 months).

The maximum period considered when estimating ECLs is the maximum contractual period over which Viohalco companies are exposed to credit risk.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that Viohalco expects to receive).

ECLs are discounted at the effective interest rate of the financial asset.

Presentation of allowance for ECL in the statement of financial position

Loss allowances for financial assets measured at amortised cost are deducted from the gross carrying amount of the assets. Impairment losses related to trade and other receivables, including contract assets, are presented separately in the statement of profit or loss.

Write-off

The gross carrying amount of a financial asset is written off when Viohalco has no reasonable expectations of recovering a financial asset in its entirety or a portion thereof. For all customers, Viohalco individually makes an assessment with respect to the timing and amount of write-off based on whether there is a reasonable expectation of recovery. Viohalco expects no significant recovery from the amount written off. However, financial assets that are written off could still be subject to enforcement activities in order to comply with Viohalco's procedures for recovery of amounts due.

B. Non-financial assets

At each reporting date, Viohalco and its companies review the carrying amounts of its non-financial assets (other than inventories and deferred tax assets) to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Goodwill and intangible assets with indefinite useful life is tested annually for impairment loss.

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or CGUs. Goodwill arising from a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination.

The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. Value in use is based on the estimated future cash flows, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset or CGU.

An impairment loss is recognised if the carrying amount of an asset or CGU exceeds its recoverable amount. Impairment losses are recognised in profit or loss under 'Other expenses'. They are allocated first to reduce the carrying amount of any goodwill allocated to the CGU and then to reduce the carrying amounts of the other assets in the CGU on a pro rata basis.

An impairment loss in respect of goodwill is not reversed. For other assets, an impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

5.14. Leases

The policies applicable for 2018 are described in the 2018 consolidated financial statements of Viohalco and are available on the website. The policies in the present section are the ones applicable from 1 January 2019. The changes in the accounting policy due to application of IFRS 16 are disclosed in Note 6.

From 1 January 2019, at inception of a contract, Viohalco assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the Viohalco companies use the definition of a lease in IFRS 16.

Accounting for lease contracts as a lessee

Viohalco companies lease various offices, warehouses, machinery and cars. Rental contracts are usually made for fixed periods of 1 to 5 years, with some exceptions like lease of specialized machinery, ports, gas cylinders and land which are leased for longer periods.

Viohalco recognises a right-of-use asset and a lease liability at the lease commencement date.

The right-of-use asset is initially measured at cost, comprising the following:

- the amount of the initial measurement of lease liability;
- any lease payments made at or before the commencement date less any lease incentives received;
- any initial direct costs; and
- restoration costs.

Subsequently, the right-of-use asset is measured at cost less any accumulated depreciation and impairment losses and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable;
- variable lease payment that are based on an index or a rate;
- amounts expected to be payable by the lessee under residual value guarantees;
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option; and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

Lease payments are discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the incremental borrowing rate of the component that entered into the lease agreement. Generally, Viohalco uses its incremental borrowing rate as the discount rate.

This is the rate that the lessee, i.e. each subsidiary of Viohalco, would have to pay on the commencement date of the lease for a loan of a similar term, and with similar security, to obtain an asset of similar value to the right-of-use asset in similar economic environment.

The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payment made. It is remeasured if there is a modification that is not accounted for as a separate lease; when there is a change in future lease payments arising from a change in an index or rate; a change in the estimate of the amount expected to be payable under a residual value guarantee; and changes in the assessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised.

Lease liabilities and right-of-use assets are presented separately in the statement of financial position. Right-of-use assets that meet the definition of investment property are presented within 'Investment property'. Viohalco has elected not to separate non-lease components from lease components.

Payments associated with leases of 12 months or less and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Low-value assets comprise IT-equipment and small items of office furniture.

Viohalco applies judgement to determine the lease term for some lease contracts in which it is a lessee that include renewal options. The assessment of whether Viohalco is reasonably certain to exercise such options impacts the lease term, which significantly affects the amount of lease liabilities and right-of-use assets recognised.

Viohalco has elected to present interest paid related to lease liabilities in the Consolidated Statement of Cash Flows, within the line 'Interest charges & related expenses paid' in operating activities.

Accounting for lease contracts as a lessor

Leases in which Viohalco companies do not transfer substantially all the risks and rewards incidental to ownership of an asset are classified as operating leases. Rental income is recognised as revenue on a straight-line basis over the term of the lease. Lease incentives granted are recognised as an integral part of the total rental income, over the term of the lease. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income.

5.15. Financial instruments

(a) Recognition and initial measurement

Trade receivables and debt securities issued are initially recognised when they are originated. All other financial assets and financial liabilities are initially recognised when Viohalco becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

(b) Classification and subsequent measurement

Financial assets

On initial recognition, a financial asset is classified as measured at: amortised cost; FVOCI – debt investment; FVOCI – equity investment; or FVTPL.

Financial assets are not reclassified subsequent to their initial recognition unless Viohalco changes its business model for managing financial assets, in which case all affected financial assets are reclassified on the first day of the first reporting period following the change in the business model.

A financial asset is measured at amortised cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A debt investment is measured at FVOCI if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trading, Viohalco may irrevocably elect to present subsequent changes in the investment's fair value in OCI. This election is made on an investment-by-investment basis.

All financial assets (except derivatives to which cash flow hedging is applied) not classified as measured at amortised cost or FVOCI as described above are measured at FVTPL. On initial recognition, Viohalco may irrevocably designate a financial asset that otherwise meets the requirements to be measured at amortised cost or at FVOCI as at FVTPL, if doing so eliminates or significantly reduces an accounting mismatch that would otherwise arise.

Financial assets – Business model assessment:

Viohalco makes an assessment of the objective of the business model in which a financial asset is held at a portfolio level because this best reflects the way the business is managed and information is provided to management.

Transfers of financial assets to third parties in transactions that do not qualify for derecognition are not considered sales for this purpose, consistent with Viohalco companies' continuing recognition of the assets.

Financial assets – Assessment whether contractual cash flows are solely payments of principal and interest:

For the purposes of this assessment, 'principal' is defined as the fair value of the financial asset on initial recognition. 'Interest' is defined as consideration for the time value of money and for the credit risk associated with the principal amount outstanding during a particular period of time and for other basic lending risks and costs (e.g. liquidity risk and administrative costs), as well as a profit margin. In assessing whether the contractual cash flows are solely payments of principal and interest, Viohalco considers the contractual terms of the instrument. This includes assessing whether the financial asset contains a contractual term that could change the timing or amount of contractual cash flows such that it would not meet this condition. In making this assessment, Viohalco considers:

- contingent events that would change the amount or timing of cash flows;
- terms that may adjust the contractual coupon rate, including variable-rate features;
- prepayment and extension features; and
- terms that limit the claim to cash flows from specified assets (e.g. non-recourse features).

Financial assets – Subsequent measurement and gains and losses:

Financial assets at FVTPL	These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognised in profit or loss.
Financial assets at amortised cost	These assets are subsequently measured at amortised cost using the effective interest method. The amortised cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairment are recognised in profit or loss. Any gain or loss on derecognition is recognised in profit or loss.
Debt investments at FVOCI	These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairment are recognised in profit or loss. Other net gains and losses are recognised in OCI. On derecognition, gains and losses accumulated in OCI are reclassified to profit or loss.
Equity investments at FVOCI	These assets are subsequently measured at fair value. Dividends are recognised as income in profit or loss unless the dividend clearly represents a recovery of part of the cost of the investment. Other net gains and losses are recognised in OCI and are never reclassified to profit or loss.

Financial liabilities – Classification, subsequent measurement and gains and losses:

Financial liabilities are classified as measured at amortised cost or FVTPL. A financial liability is classified as at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition. Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognised in profit or loss. Other financial liabilities are subsequently measured at amortised cost using the effective interest method. Interest expense and foreign exchange gains and losses are recognised in profit or loss. Any gain or loss on derecognition is also recognised in profit or loss.

(c) Derecognition

Financial assets

Viohalco derecognises a financial asset when the contractual rights to the cash flows from the financial asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or in which Viohalco neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

Viohalco enters into transactions whereby it transfers assets recognised in its statement of financial position, but retains either all or substantially all of the risks and rewards of the transferred assets. In these cases, the transferred assets are not derecognised.

Financial liabilities

Viohalco derecognises a financial liability when its contractual obligations are discharged or cancelled, or expire. Viohalco also derecognises a financial liability when its terms are modified and the cash flows of the modified liability are substantially different, in which case a new financial liability based on the modified terms is recognised at fair value.

On derecognition of a financial liability, the difference between the carrying amount extinguished and the consideration paid (including any non-cash assets transferred or liabilities assumed) is recognised in profit or loss.

(d) Offsetting

Financial assets and financial liabilities are offset and the net amount presented in the statement of financial position when, and only when, Viohalco currently has a legally enforceable right to set off the amounts and it intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(e) Derivatives and hedge accounting

Viohalco has elected not to adopt the provisions of IFRS 9 regarding the hedge accounting and will continue applying IAS 39.

Viohalco's companies hold derivative financial instruments designated as fair value or cash flow hedges. Derivatives are used to cover risks arising from changes in prices of metals, fluctuations of foreign exchange rates and changes in interest rates on borrowings.

Derivatives are initially measured at fair value; any directly attributable transaction costs are recognised in profit or loss as incurred. Subsequent to initial recognition, derivatives are measured at fair value and changes therein are generally recognised in profit or loss, unless the instrument qualifies for cash flow hedge accounting. Gain or losses from derivatives are classified as operating or financing expense according to the classification of the hedged item.

Fair value hedge

Derivatives are designated as fair value hedges when the exposure to changes in the fair value of a recognized financial asset or liability is hedged.

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognised in the Consolidated Statement of Profit or Loss, along with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

Cash flow hedge

The effective portion of changes in the fair value of derivatives designated as cash flow hedges is recognised in the 'Hedging reserve'. Any ineffective proportion is recognized immediately in profit or loss.

The amounts recorded in "Hedging Reserve" are reclassified to the consolidated statement of profit or loss in the same period or periods during which the hedged forecast cash flows affect profit or loss or the hedged item affects profit or loss.

When a hedge item is sold or when the hedging proportion no longer meets the hedge accounting criteria, hedge accounting is discontinued prospectively, the amounts recorded in 'Hedging reserve' remain as a reserve and are reclassified to the consolidated statement of profit or loss when the hedged asset affects profits or losses.

In the case of a hedge on a forecast future transaction which is no longer expected to be realized, the amounts recorded in 'Hedging reserve' are reclassified to the consolidated statement of profit or loss.

Viohalco's companies examine the effectiveness of the cash flow hedge at inception (prospectively) by comparing the critical terms of the hedging instrument with the critical terms of the hedged item, and then at every reporting date (retrospectively), the effectiveness of the cash flow hedge by applying the dollar offset method on a cumulative basis is examined.

5.16. Cash & cash equivalents

Cash and cash equivalents comprise cash on hand and deposits held at call with financial institutions and short-term highly liquid deposits with a maturity of three months or less, that are readily convertible to a known amount of cash and subject to an insignificant risk of changes in value.

5.17. Share capital

Shareholder's equity is composed of ordinary shares.

Incremental costs directly attributable to the issue of ordinary shares are recognised as a deduction from equity. Income tax relating to transaction costs of an equity transaction is accounted in equity (see note 5.7).

5.18. Provisions

Provisions are measured by discounting the expected future cash flows at a pre-tax rate. The discount rate used for the determination of present value reflects current market assessments of the time value of money and the risks specific to the obligation.

Provisions are recognised when:

- (a) There is a present legal or constructive obligation as a result of past events.
- (b) Payment is probable to settle the obligation.
- (c) The amount of the payment in question can be reliably estimated.

More specifically:

Provisions for pending court rulings are recognised when it is more likely than not, that a present obligation from this litigation exists, and payment is probable.

Assurance warranty provisions are recognised when the product is sold and according to historical experience (probability that sold products will need to be replaced). The initial estimate of warranty-related costs is revised annually.

Restructuring provisions are recognised only when Viohalco has a constructive obligation, which is when a detailed formal plan identifies the business or part of the business concerned, the location and number of employees affected, a detailed estimate of the associated costs and an appropriate timeline, and the employees affected have been notified of the plan's main features or when the company has already started to implement the plan.

A provision for onerous contracts is measured at the present value of the lower of the expected cost of terminating a contract and the expected net cost of continuing with the contract. Before the provision is established, Viohalco recognises any impairment loss on the associated assets with the contract.

5.19. Earnings per Share

Viohalco presents basic and diluted earnings per share. Basic earnings per share are calculated by dividing the net profit/ loss attributable to holders of the Company's ordinary shares by the average weighted number of outstanding ordinary shares during each period.

Diluted earnings per share are determined by adjusting the profit or loss attributable to holders of ordinary shares and the average weighted number of outstanding ordinary shares by the effect of all diluted eventual ordinary shares consisting of convertible notes and shares with options granted to the staff.

5.20. Operating profit

Operating profit is the result generated from the continuing principal revenue-producing activities of Viohalco as well as other income and expenses related to operating activities. Operating profit excludes net finance costs, share of profit of equity-accounted investees and income taxes.

5.21. Fair value measurement

'Fair value' is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date in the principal or, in its absence, the most advantageous market to which Viohalco has access at that date. The fair value of a liability reflects its non-performance risk.

A number of Viohalco's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities.

When one is available, Viohalco measures the fair value of an instrument using the quoted price in an active market for that instrument. A market is regarded as 'active' if transactions for the asset or liability take place with sufficient frequency and volume to provide pricing information on an ongoing basis.

If there is no quoted price in an active market, then Viohalco uses valuation techniques that maximise the use of relevant observable inputs and minimise the use of unobservable inputs. The chosen valuation technique incorporates all of the factors that market participants would take into account in pricing a transaction.

If an asset or a liability measured at fair value has a bid price and an ask price, then Viohalco measures assets and long positions at a bid price and liabilities and short positions at an ask price.

The best evidence of the fair value of a financial instrument on initial recognition is normally the transaction price – i.e. the fair value of the consideration given or received. If Viohalco determines that the fair value on initial recognition differs from the transaction price and the fair value is evidenced neither by a quoted price in an active market for an identical asset or liability, nor based on a valuation technique for which any unobservable inputs are judged to be insignificant in relation to the measurement, then the financial instrument is initially measured at fair value, adjusted to defer the difference between the fair value on initial recognition and the transaction price. Subsequently, that difference is recognised in profit or loss on an appropriate basis over the life of the instrument but no later than when the valuation is wholly supported by observable market data or the transaction is closed out.

5.22. New standards, amendment to standards and interpretations of IFRS's

Certain new standards, amendments to standards and interpretations have been issued that are mandatory for periods beginning during the current financial year and subsequent years. Viohalco's evaluation of the effect of these new standards, amendments to standards and interpretations is set out below.

Standards and Interpretations effective for the current financial year

The impact of the adoption of the leasing standard and the new accounting policies are disclosed below. The other standards mentioned below did not have any impact on Viohalco's accounting policies and did not require retrospective adjustments.

IFRS 16 "Leases"

IFRS 16 has been issued in January 2016 and supersedes IAS 17. The objective of the standard is to ensure the lessees and lessors provide relevant information in a manner that faithfully represents those transactions. IFRS 16 introduces a single lessee accounting model and requires a lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value. IFRS 16 substantially carries forward the lessor accounting requirements in IAS 17. Accordingly, a lessor continues to classify its leases as operating leases or finance leases and to account for those two types of leases differently. Viohalco initially applied IFRS 16 on 1 January 2019. For further details, refer to note 6.

IFRS 9 (Amendments) "Prepayment Features with Negative Compensation"

The amendments allow companies to measure particular prepayable financial assets with so-called negative compensation at amortised cost or at fair value through other comprehensive income if a specified condition is met instead of at fair value through profit or loss.

IAS 28 (Amendments) "Long term interests in associates and joint ventures"

The amendments clarify that companies account for long-term interests in an associate or joint venture, to which the equity method is not applied, using IFRS 9.

IFRIC 23 "Uncertainty over income tax treatments"

The interpretation explains how to recognise and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment. IFRIC 23 applies to all aspects of income tax accounting where there is such uncertainty, including taxable profit or loss, the tax bases of assets and liabilities, tax losses and credits and tax rates.

Based on the analysis performed by the Group, there was no significant impact on income tax treatments applied due to the adoption of IFRIC 23.

IAS 19 (Amendments) "Plan amendment, curtailment or settlement"

The amendments specify how companies determine pension expenses when changes to a defined benefit pension plan occur.

Annual Improvements to IFRS (2015 – 2017 Cycle)

The amendments set out below include changes to four IFRSs.

IFRS 3 'Business combinations'

The amendments clarify that a company remeasures its previously held interest in a joint operation when it obtains control of the business.

IFRS 11 'Joint arrangements'

The amendments clarify that a company does not remeasure its previously held interest in a joint operation when it obtains joint control of the business.

IAS 12 'Income taxes'

The amendments clarify that a company accounts for all income tax consequences of dividend payments in the same way.

IAS 23 'Borrowing costs'

The amendments clarify that a company treats as part of general borrowings any borrowing originally made to develop an asset when the asset is ready for its intended use or sale.

Standards and Interpretations effective for subsequent periods:

IFRS 3 (Amendments) 'Definition of a business' (effective for annual periods beginning on or after 1 January 2020)

The amended definition emphasizes that the output of a business is to provide goods and services to customers, whereas the previous definition focused on returns in the form of dividends, lower costs or other economic benefits to investors and others. The amendments have not yet been endorsed by the EU.

IAS 1 and IAS 8 (Amendments) 'Definition of material' (effective for annual periods beginning on or after 1 January 2020)

The amendments clarify the definition of material and how it should be applied by including in the definition guidance which until now was featured elsewhere in IFRS. In addition, the explanations accompanying the definition have been improved. Finally, the amendments ensure that the definition of material is consistent across all IFRS.

IFRS 9, IAS 39 and IFRS 7 (Amendments) 'Interest rate benchmark reform' (effective for annual periods beginning on or after 1 January 2020)

The amendments modify some specific hedge accounting requirements to provide relief from potential effects of the uncertainty caused by the IBOR reform. In addition, the amendments require companies to provide additional information to investors about their hedging relationships which are directly affected by these uncertainties. The amendment is not expected to have significant impact on the consolidated financial statements.

IAS 1 (Amendment) 'Classification of liabilities as current or non-current' (effective for annual periods beginning on or after 1 January 2022)

The amendment clarifies that liabilities are classified as either current or non-current depending on the rights that exist at the end of the reporting period. Classification is unaffected by the expectations of the entity or events after the reporting date. The amendment also clarifies what IAS 1 means when it refers to the 'settlement' of a liability. The amendment has not yet been endorsed by the EU.

6. Changes in accounting policies

IFRS 16 Leases

Viohalco has adopted IFRS 16 retrospectively from 1 January 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transitional provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019.

i. Viohalco leasing activities and how these are accounted for prior to IFRS 16 transition

Viohalco companies lease various offices, warehouses, machinery and cars. Rental contracts are usually made for fixed periods of 1 to 5 years, with some exceptions like lease of specialized machinery, ports, gas cylinders and land which are leased for longer periods. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. Lease agreements do not impose any covenants, but leased assets may not be used as security for borrowing purposes.

Until 2018 financial year, leases of property, plant and equipment were classified as either finance or operating leases. Payments made under operating leases were charged to profit or loss on a straight-line basis over the period of the lease. There was no impact for lease contracts in which Viohalco is a lessor.

ii. Adjustments recognised on adoption of IFRS 16

On adoption of IFRS 16, Viohalco recognised lease liabilities in relation to leases which had previously been classified as ‘operating leases’ under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the lessee’s incremental borrowing rate at the date of initial application.

Viohalco companies’ incremental borrowing rate of interest is determined by using maturity-related risk-free interest rates for the period specified on the lease contract, which are increased with the subsidiary’s specific derived credit spread and adjusted with a liquidity risk premium. On 1 January 2019, the weighted average discount rate applied was between 2% and 5.1% depending mainly on the duration and the specific characteristics of each lease contract (besides the credit profile of each subsidiary and the country where the subsidiary is located).

For leases previously classified as finance leases Viohalco recognised the carrying amount of the lease asset and lease liability immediately before transition as the carrying amount of the right of use asset and the lease liability at the date of initial application. The measurement principles of IFRS 16 are only applied after that date. Based on the specific characteristics, of each lease contract previously classified as finance leases, no measurement adjustments were deemed necessary, on or after the transition related to such lease contracts.

<i>Amounts in EUR thousands</i>	
Operating lease commitments disclosed as at 31 December 2018	24,908
Discounted using the incremental borrowing rate of at the date of initial application	22,824
Add: finance lease liabilities recognised as at 31 December 2018	25,092
Add: adjustments as a result of a different treatment of extension and termination options	2,902
Lease liability recognised on 1 January 2019	50,818
<i>Of which are:</i>	
Current lease liabilities	9,275
Non-current lease liabilities	41,543

Right-of use assets were measured at the amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognised in the Consolidated Statement of Financial Position on 31 December 2018. There were no onerous lease contracts that would have required an adjustment to the right-of-use assets at the date of initial application.

The recognised right-of-use assets relate to the following types of assets:

<i>Amounts in EUR thousands</i>	31 December 2019	1 January 2019
Land	511	287
Buildings	3,838	4,404
Machinery	26,386	30,211
Motor vehicles	11,866	10,914
Other equipment	52	211
Total Right-of-use assets	42,652	46,026

The change in accounting policy affected the following items in the Consolidated Statement of Financial Position on 1 January 2019:

-Property, plant and equipment – decrease by EUR 20,300 thousand

-Right-of-use assets – increase by EUR 46,026 thousand

-Loans and borrowings – decrease by EUR 25,092 thousand

-Lease liabilities – increase by EUR 50,818 thousand

The net impact on equity on 1 January 2019 was zero.

The adoption of IFRS 16, did not impact the ability of Viohalco companies to comply with loan covenants.

iii. Impact on segment disclosures and profit before tax

EBITDA, segment assets and segment liabilities for the period ended and on 31 December 2019 all increased as a result of the change in accounting policy. Viohalco segments were affected by the change in policy as follows:

<i>Amounts in EUR thousands</i>	EBITDA	Segment assets	Segment liabilities
Aluminium	1,727	4,306	4,363
Copper	998	2,519	2,399
Cables	846	2,092	2,206
Steel	2,962	9,716	9,990
Steel pipes	474	1,408	990
Real estate	50	104	99
Resource recovery*	622	1,094	1,183
Other activities	680	2,106	2,137
Total	8,358	23,345	23,366

**formerly named "Recycling" segment*

Depreciation of RoU assets for lease agreements previously accounted for as operating leases was EUR 7,380 thousand for 2019, while interest charged on lease liabilities for lease agreements previously accounted for as operating lease amounted to EUR 979 thousand. Overall, profit before tax decreased by EUR 56 thousand for the year ended 31 December 2019, as a result of the adoption of IFRS 16.

iv. Practical expedients applied

In applying IFRS 16 for the first time, Viohalco has used the following practical expedients permitted by the standard:

- the use of a single discount rate to a portfolio of leases with reasonably similar characteristics
- the accounting for operating leases with a remaining lease term of less than 12 months as at 1 January 2019 as short-term leases;
- the exclusion of initial direct costs for the measurement of the right-of-use asset at the date of initial application; and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate the lease.

Viohalco has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date Viohalco relied on its assessment made applying IAS 17 and IFRIC 4 Determining whether an Arrangement contains a Lease.

7. Operating segments

A. Basis for the division into segments

For management purposes, Viohalco is split into eight major strategic reportable segments which operate in different industries:

- Aluminium;
- Copper;
- Steel;
- Cables;
- Steel pipes;
- Real estate development;
- Resource recovery (formerly named 'Recycling' segment) and
- Other activities

These segments offer different products and services, and are managed separately because they require different technology and marketing strategies.

Such structural organization is determined by the nature of risks and returns associated with each business segment. It is based on the management structure, as well as the internal reporting system. It represents the basis on which Viohalco reports its segmental information.

The segment analysis presented in these consolidated financial statements reflects operations analysed by business. This is the way the chief operating decision maker of Viohalco regularly reviews its' operating results in order to allocate resources to segments and in assessing their performance.

For the purposes of segmental reporting, all Viohalco companies, except those operating as trading companies, have been assigned to a specific reportable segment.

Regarding the trading companies of Viohalco, their profit or loss and balance sheet figures haven been allocated to the reportable segments, according to the nature of their transactions.

A brief description of the segments is as follows:

Aluminium: ElvalHalcor through its aluminium rolling division (Elval), its subsidiaries Symetal S.A., Elval Colour S.A. and Vepal S.A. along with Bridgnorth Aluminium and Etem Bulgaria deliver a wide variety of products from aluminium coils and sheets for general applications and aluminium foil for household use, to special products, such as, rolled and extruded aluminium products for shipbuilding, automotive and construction industries, and lithographic coils.

Copper: ElvalHalcor through its copper tubes division (Halcor) and its subsidiaries Fitco S.A. and Sofia Med S.A. produce a wide range of copper and copper alloy products that span from copper and brass tubes, copper strips, sheets and plates, to copper bus bars and rods.

Steel: Sidenor Steel Industry, Stomana Industry and their subsidiaries manufacture long, flat and downstream steel products.

Cables: The Cablel[®] Hellenic Cables Group is one of the largest cable producers in Europe, manufacturing power, telecommunication and submarine cables, as well as enamelled wires and compounds.

Steel Pipes: Corinth Pipeworks engages in the production of steel pipes for the transportation of natural gas, oil and water networks, as well as steel hollow sections which are used in construction projects.

Real estate: Viohalco creates value through the development of its former industrial real estate properties in Greece and Bulgaria.

Resource Recovery: Viohalco's resource recovery segment trades and processes secondary raw materials, undertakes waste management and environmental operations, and provides services to consumers and corporate companies.

Other: Viohalco also holds investments in smaller companies in other segments, such as ceramic sanitary ware and tiles (Vitrouvit S.A.), Technology and R&D (TEKA, Elkeme) and insurance brokerage.

None of these segments met the quantitative thresholds for reportable segments in 2019 or 2018.

B. Information about reportable segments

The information disclosed in the tables below is derived directly from the internal financial reporting system used by the executive management (i.e. chief operating decision maker) to monitor and evaluate the performance of the operating segments separately.

The following tables illustrate the information about the reportable segments profit or loss, assets and liabilities at 31 December 2019 and 2018, and for the years then ended.

Revenue and operating profit per segment for 2019 is as follows:

<i>Amounts in EUR thousands</i>	Aluminium	Copper	Cables	Steel	Steel pipes	Real estate	Resource recovery*	Other activities	Total
Total revenue per segment	2,030,080	1,496,596	994,897	1,413,268	459,625	14,877	122,143	101,739	6,633,225
Inter-company revenue	-711,306	-459,624	-427,112	-597,700	-83,541	-3,680	-79,983	-72,086	-2,435,031
Revenue from external customers	1,318,774	1,036,972	567,785	815,568	376,084	11,197	42,160	29,654	4,198,194
Gross profit	124,132	68,052	70,133	30,386	32,532	3,325	10,748	8,458	347,766
Operating result (EBIT)	59,444	29,916	47,152	-13,057	15,113	932	-2,452	-6,266	130,782
Finance income	1,256	39	19	251	-34	2	104	154	1,790
Finance cost	-15,474	-15,545	-22,683	-28,925	-12,305	-2,956	-2,018	-400	-100,305
Share of profit/ loss (-) of equity-accounted investees, net of tax	718	-2,286	0	-262	1,488	0	0	0	-343
Profit/loss (-) before income tax expense	45,943	12,123	24,488	-41,993	4,262	-2,022	-4,366	-6,512	31,924
Income tax expense (-)	-19,181	-3,309	-7,524	1,279	-782	7,571	-462	7,223	-15,184
Profit/Loss (-)	26,762	8,815	16,964	-40,714	3,481	5,549	-4,828	711	16,740

Other information per segment for 2019 is as follows:

<i>Amounts in EUR thousands</i>	Aluminium	Copper	Cables	Steel	Steel pipes	Real estate	Resource recovery*	Other activities	Total
Equity-accounted investees	8,234	11,555	0	5,207	12,745	0	0	0	37,742
Other assets	1,203,625	559,710	599,175	830,723	378,440	315,586	35,628	102,281	4,025,168
Segment assets	1,211,859	571,265	599,175	835,930	391,186	315,586	35,628	102,281	4,062,910
Segment liabilities	626,273	437,235	544,439	700,963	264,240	70,779	51,017	32,891	2,727,837
Capital expenditure	158,098	20,176	42,502	24,824	10,859	24,643	2,635	494	284,230
Depreciation and amortization	-51,512	-15,333	-17,226	-40,498	-10,428	-6,839	-2,774	-1,926	-146,535

Revenue and operating profit per segment for 2018 is as follows:

<i>Amounts in EUR thousands</i>	Aluminium	Copper	Cables	Steel	Steel pipes	Real estate	Resource recovery*	Other activities	Total
Total revenue per segment	1,976,733	1,367,499	803,831	1,531,492	684,873	11,751	146,632	90,113	6,612,924
Inter-company revenue	-579,411	-301,998	-329,097	-614,911	-214,699	-3,363	-101,005	-62,254	-2,206,739
Revenue from external customers	1,397,322	1,065,500	474,734	916,581	470,174	8,388	45,626	27,860	4,406,185
Gross profit	149,335	77,638	40,880	69,626	33,029	3,024	14,227	9,015	396,775
Operating result (EBIT)	89,565	41,706	18,541	37,812	17,918	297	273	-6,068	200,044
Finance income	392	61	608	1,449	273	0	358	195	3,335
Finance cost	-20,001	-18,691	-23,110	-29,194	-10,232	-1,804	-2,438	-365	-105,834
Share of profit/ loss (-) of equity-accounted investees, net of tax	322	-1,957	0	-952	653	0	0	0	-1,934
Profit/loss (-) before income tax expense	70,278	21,119	-3,961	9,115	8,612	-1,507	-1,807	-6,238	95,612
Income tax expense (-)	-7,654	-11,578	5,733	3,910	1,177	317	-498	-1,166	-9,760
Profit/Loss (-)	62,624	9,541	1,772	13,025	9,789	-1,190	-2,306	-7,404	85,852

Other information per segment for 2018 is as follows:

<i>Amounts in EUR thousands</i>	Aluminium	Copper	Cables	Steel	Steel pipes	Real estate	Resource recovery*	Other activities	Total
Equity-accounted investees	560	15,909	0	5,363	10,234	0	0	0	32,066
Other assets	1,168,817	536,579	547,826	873,319	463,591	293,503	41,065	88,918	4,013,619
Segment assets	1,169,377	552,488	547,826	878,682	473,825	293,503	41,065	88,918	4,045,685
Segment liabilities	611,776	435,466	513,137	709,128	331,314	59,877	54,309	26,054	2,741,061
Capital expenditure	67,459	34,238	44,039	22,580	6,207	14,857	2,620	1,397	193,398
Depreciation and amortization	-56,473	-12,025	-14,448	-37,072	-7,618	-4,310	-2,756	-1,082	-135,783

*formerly named "Recycling" segment

C. Geographic information

Viohalco's segments are managed on a worldwide basis, but operate manufacturing facilities and sales offices are located primarily in Greece, Germany, United Kingdom, France, Bulgaria, Romania, Serbia, North Macedonia and U.S.A.

The segmental information below is based on the segment assets were based on the geographic location of the assets. In Europe, assets' information for Greece and Belgium is reported separately.

Property, plant and equipment

<i>Amounts in EUR thousands</i>	Balance at 31 December	
	2019	2018
Belgium	1,447	1,506
Greece	1,401,623	1,303,132
Other	475,152	479,173
Total	1,878,221	1,783,812

Intangible assets and goodwill

<i>Amounts in EUR thousands</i>	Balance at 31 December	
	2019	2018
Belgium	48	68
Greece	30,603	29,223
Other	5,575	3,055
Total	36,226	32,346

Investment property		
<i>Amounts in EUR thousands</i>	Balance at 31 December	
	2019	2018
Greece	194,182	167,567
Other	821	6,143
Total	195,003	173,710

Right of use assets		
<i>Amounts in EUR thousands</i>	Balance at 31 December	
	2019	2018
Belgium	214	0
Greece	35,632	0
Other	6,807	0
Total	42,652	0

8. Revenue

Revenue is derived from contracts with customers and from investment property rental income.

<i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Rental income from investment property	11,197	8,388
Revenue from contracts with customers	4,186,997	4,397,797
Total	4,198,194	4,406,185

A. Disaggregation of revenue

In the following table revenue from contract with customers is disaggregated by primary geographical market and timing of revenue recognition. The table includes a reconciliation with the Viohalco's reportable segments (see Note 7).

<i>Amounts in EUR thousands</i>	for the year ended 31 December 2019							
	Aluminium	Copper	Cables	Steel	Steel pipes	Resource recovery*	Other activities	Total
Primary geographical markets								
Greece	110,070	48,228	222,074	178,012	12,253	6,816	19,221	596,674
European Union	812,919	753,163	289,757	472,749	267,922	14,005	8,204	2,618,719
Other European countries	92,772	95,296	8,338	155,402	12,696	995	837	366,335
Asia	72,989	65,136	38,120	4,706	-1	19,803	435	201,189
America	218,243	46,658	2,190	78	83,214	538	360	351,281
Africa	11,342	25,044	7,250	4,622	0	2	181	48,442
Oceania	439	3,447	56	0	0	0	416	4,357
Total	1,318,774	1,036,972	567,785	815,568	376,084	42,160	29,654	4,186,997
Timing of revenue recognition								
Revenue recognised at a point in time	1,315,211	1,033,409	347,125	803,959	29,472	39,443	12,044	3,580,663
Products transferred over time	2,843	0	217,787	0	345,589	0	140	566,359
Services transferred over time	720	3,563	2,873	11,609	1,024	2,717	17,469	39,974
Total	1,318,774	1,036,972	567,785	815,568	376,084	42,160	29,654	4,186,997

<i>for the year ended 31 December 2018</i>								
<i>Amounts in EUR thousands</i>	Aluminium	Copper	Cables	Steel	Steel pipes	Resource recovery*	Other activities	Total
Primary geographical markets								
Greece	122,943	44,258	127,300	178,010	11,813	7,861	18,000	510,186
European Union	879,387	763,890	293,476	527,084	186,502	16,272	7,726	2,674,337
Other European countries	94,469	98,986	14,547	162,883	13,494	3,928	735	389,041
Asia	78,569	62,075	33,549	43,602	4,328	16,735	448	239,305
America	209,831	60,420	3,296	2,530	249,898	829	357	527,160
Africa	11,437	31,048	2,444	2,473	4,139	1	63	51,605
Oceania	686	4,825	122	0	0	0	532	6,164
Total	1,397,322	1,065,500	474,734	916,581	470,174	45,626	27,860	4,397,797
Timing of revenue recognition								
Revenue recognised at a point in time	1,372,648	1,061,393	371,068	908,176	39,749	43,427	11,855	3,808,316
Products transferred over time	24,309	0	101,756	0	430,301	0	0	556,367
Services transferred over time	365	4,107	1,909	8,406	124	2,199	16,005	33,115
Total	1,397,322	1,065,500	474,734	916,581	470,174	45,626	27,860	4,397,797

**formerly named "Recycling" segment*

Viohalco's consolidated revenue for 2019 amounted to EUR 4,198 million, slightly down by 4.7% compared to previous year (2018: EUR 4,406 million). This trend was mainly driven by decline in metal prices mainly in aluminium and steel segments and by lower volumes at certain segments due to market slowdown recorded in the last quarter of 2019.

B. Contract balances

Contract assets primarily relate to the rights to consideration for work completed but not billed at the reporting date on customized products or energy projects. Contract assets are transferred to receivables when the rights become unconditional. This is usually occurs when Viohalco companies issue an invoice to the customer (unless the invoice is issued in advance).

Contract liabilities primarily relate to the advance consideration received from customers for construction of customized products or energy projects for which revenue is recognized over time.

Contract assets mainly relate to cables and steel pipes segments, where amounts are billed as work progresses in accordance with agreed-upon contractual terms, either upon achievement of contractual milestones, or at the final delivery and acceptance of the products.

The following table provides information about contract assets and contract liabilities from contracts with customers.

<i>Amounts in EUR thousands</i>	As at	
	31 December 2019	31 December 2018
Contract assets	121,186	117,428
Contract liabilities	-68,526	-77,866
Total	52,660	39,562

Significant changes in the contract assets and the contract liabilities balances during the period are as follows:

<i>Amounts in EUR thousands</i>	Contract assets	Contract liabilities
Balance at 1 January 2019	117,428	77,866
Increases due to unbilled receivables and changes in measure of progress	114,905	0
Revenue recognised relating to downpayments and deferred income balances as at the beginning of the period	0	-47,833
Transfers from contract assets recognised at the beginning of the period to receivables	-111,735	0
New downpayments and deferred income outstanding at year end	0	38,522
Reversal of impairment allowance	126	0
Write-offs	-376	0
Foreign exchange differences	838	-29
Balance at 31 December 2019	121,186	68,526

<i>Amounts in EUR thousands</i>	Contract assets	Contract liabilities
Balance at 1 January 2018	0	0
Amounts recognised as a result of change in accounting policy	70,351	11,918
Increases due to unbilled receivables and changes in measure of progress	114,277	0
Revenue recognised relating to downpayments and deferred income balances at the beginning of the period	0	-11,851
Transfers from contract assets recognised at the beginning of the period to receivables	-68,673	0
New downpayments and deferred income outstanding at year end	0	77,799
Impairment allowance	-93	0
Foreign exchange differences	1,567	0
Balance at 31 December 2018	117,428	77,866

Revenue expected to be recognised in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the reporting date amounts to EUR 305 million, from which EUR 298 million is expected to be recognised during 2020 and the remaining EUR 7 million is expected to be recognized during 2021.

C. Contract costs

Viohalco companies' recognized contracts costs, expect that fees, commissions and other costs associated with obtaining contracts for energy projects are recoverable.

Therefore, as at 31 December 2019 Viohalco has recorded as contract costs an amount of EUR 0.6 million, out of which an amount of EUR 84 thousand is classified as non-current assets. During the year, amortization of contract costs was equal to EUR 1.9 million.

D. Significant judgements in revenue recognition

In recognizing revenue, Viohalco companies make judgements regarding the timing of satisfaction of performance obligations, the identification of distinct performance obligations, as well as the transaction price and the amounts allocated to performance obligations.

The most significant of these estimates are described below:

- Contracts including multiple performance obligations are mainly identified in cables segment for turnkey projects and for customized products in cables, steel pipes and aluminium segments, as described in Note 5.3. In such cases the total transaction price is allocated to these performance obligations on the basis of the relative standalone selling prices of the promised goods and services. If these goods and services are not sold separately, a cost plus margin approach is used to estimate the standalone selling price.

- Some contracts with customers involve a variable transaction cost as they include a volume or trade discount based on the total sales to the customer within a time period. In such case revenue is recognized based on the anticipated sales to the customer throughout the year, as these sales are realized and new orders are received and up to an extent it is highly probable that a significant reversal of cumulative revenue recognized will not be needed.

- A significant portion of contracts with customers, include transportation service. Transportation is considered as a separate performance obligation, if the customer can benefit from the offered transportation service and the promise to transport the goods to the customer is separately identifiable from the production of these customized products.

Revenue for orders of standardized products is recognized at a specific point in time and transportation is not considered a separate performance obligation.

9. Other income and expenses

A. Other Income

<i>Amounts in EUR thousands</i>	Note	For the year ended 31 December	
		2019	2018
Government grants/subsidies		811	517
Amortization of grants received	29	3,942	3,970
Rental income		1,103	1,123
Foreign exchange gains		19	105
Income from fees, commissions and costs recharged		750	648
Damage compensation		328	4,337
Gain on sale of PP&E and intangible assets		490	488
Income from consulting services		290	393
Reversal of provisions	30	143	148
Reversal of impairment loss of PP&E and investment property		10,825	22
Gain on sale of EU ETS allowances		0	9,822
Other		7,935	2,960
Total other income		26,638	24,533

B. Other Expenses

<i>Amounts in EUR thousands</i>	Note	For the year ended 31 December	
		2019	2018
Impairment loss or write-off of PP&E and investment property		13,311	2,405
Production cost not allocated to cost of goods sold		285	294
Loss on sale of PP&E		81	10
Foreign exchange losses		43	122
Damages incurred		200	1,770
Other taxes		535	812
Out-of-court settlement		0	2,000
Consulting fees		0	563
Employee benefits	13	2,747	2,050
Depreciation and amortization		6,278	4,340
Other		5,370	6,150
Total other expense		28,851	20,516
Net other income/ expense (-)		-2,213	4,018

Net other income/expenses for the year ended in 31 December 2019 amounted to a loss of EUR 2.2million compared to a gain of EUR 4 million during 2018. This variation is mainly attributed to the following:

- During 2018, EUR 9.8 million gain recorded in the steel segment from sale of EU "Emission Trading System" allowances (EUA's). These allowances were initially allocated to the subsidiaries of Viohalco pursuant to the annual national allocation plans.

- During 2018, Vohalco's subsidiary Hellenic Cables entered into an out-of-court settlement with a factoring company for an amount of EUR 2.0 million. This amount concerns a credit-related loss from a supplier of the subsidiary, shared between the subsidiary and the factor, due to a contract default of the supplier against both counterparties. The out-of-court settlement was wiser than embarking into court proceedings with the factor's Group, as it avoided both legal costs and a lengthy dispute with a long-term partner of Hellenic Cables.

Impairment loss and reversal of impairment loss are explained in notes 18 and 20.

C. Expenses by nature

<i>Amounts in EUR thousands</i>		For the year ended 31 December	
		2019	2018
Cost of inventories recognized as an expense		2,962,963	3,188,117
Employee benefits	13	333,085	303,169
Energy		134,954	139,564
Depreciation and amortisation		140,257	131,443
Amortization of contract costs		1,905	0
Taxes and duties		15,953	13,990
Insurance expenses		24,686	19,837
Rental fees		5,654	9,357
Transportation costs (goods and materials)		128,124	136,965
Promotion and advertising		5,331	5,494
Third party fees and benefits		203,480	153,279
Other provisions		146	162
Gains (-)/losses from derivatives		7,146	11,294
Storage and packing		9,727	13,097
Commissions		12,431	12,266
Foreign exchange gains (-)/losses		-586	-223
Maintenance expenses		48,753	40,883
Royalties		1,056	1,105
Consumption of production tools		5,578	3,088
Other expenses		24,477	26,944
Total		4,065,121	4,209,831

The decrease in sales volumes and metal prices during 2019, affected cost of sales and operating expenses which have dropped proportionally.

Employee benefits increase compared to previous year is attributed to the increase of employee number to 9,843 (2018: 9,527), throughout all Viohalco segments.

The increase in third party fees and benefits is attributed mainly to fees paid to subcontractors and installers for turnkey contracts executed during 2019 by subsidiaries in cables segment.

The aggregate amount of research and development expenditure recognized as an expense during 2019 amounts to EUR 12 million (2018: EUR 10 million).

10. Net finance cost

<i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Income		
Interest income	190	863
Foreign exchange gains	1,373	2,287
Dividend income	227	185
Finance income	1,790	3,335
Expense		
Interest expense and related charges	95,523	102,110
Interest on leases	2,645	1,552
Foreign exchange losses	1,595	2,027
Losses from derivatives	172	0
Other finance expense	370	144
Finance cost	100,305	105,834
Net finance income/cost (-)	-98,515	-102,499

Credit spread reductions have been implemented gradually in all short and long term facilities across all Viohalco companies during the last years. On a consolidated level, this reduction led to a EUR 6.6 million decrease of interest expense.

11. Earnings per share

Considering that there are neither share options, nor convertible bonds, basic and diluted earnings per share are identical and have been based on the following profit/loss (-) attributable to the ordinary shareholders and weighted-average numbers of ordinary shares outstanding.

A. Profit/loss (-) attributable to ordinary shareholders

<i>Amounts in EUR thousands</i>	For the year ended 31 December	
	2019	2018
Profit/loss (-) attributable to the owners of the Company	8,206	76,112

B. Weighted-average number of ordinary shares outstanding

<i>In thousands of shares</i>	2019	2018
Issued ordinary shares at 1 January	259,190	259,190
Effect of shares issued related to the mergers	0	0
Weighted average number of ordinary shares at 31 December	259,190	259,190

The number of equity shares in 2019 remains equal to 2018, as no share capital increase occurred during the year.

C. Earnings per share

The basic and diluted earnings per share are as follows:

<i>Earnings per share (in EUR per share)</i>	2019	2018
Basic and diluted	0.0317	0.2937

12. Employee benefits

<i>Amounts in EUR thousands</i>	Note	2019	2018
Net defined benefit liability		37,362	31,624
Liability for social security contributions	28	11,332	10,918
Total employee benefit liabilities		48,695	42,542
Non-current		37,362	31,624
Current		11,332	10,918

For details on the related employee benefit expenses, see Note 13.

A. Post-employment plans

The following post-employment plans exist:

Defined contribution plans

All employees of Viohalco companies are insured for their main pension by the respective social insurance organizations as required by the local legislation. Once the contributions have been paid, Viohalco companies have no further payment obligations. The regular contributions constitute net periodic costs for the year in which they are due, and as such are included in employee benefit expenses.

Defined benefit plans

The employees of Viohalco's companies in some countries, mainly in Greece and Bulgaria, are entitled to receive a lump sum when they retire. This lump sum is determined in accordance with the years of service and the salary at the retirement date. This obligation meets the definition of defined benefit plans and charges the accumulated benefits through profit or loss in each period with a corresponding increase of the retirement liability. Benefits paid to pensioners during each period are charged against this liability. Viohalco's companies' liability for personnel benefits as of 31 December 2019 and 2018 is EUR 37,362 thousand and EUR 31,624 thousand respectively. These plans are unfunded.

B. Movement in net defined benefit liability

The following table shows the reconciliation from the opening balance to the closing balances for net defined benefit liability and its components.

<i>Amounts in EUR thousands</i>	2019	2018
Balance at 1 January	31,624	29,724
Included in profit or loss		
Current service cost	1,605	1,436
Past service cost	246	80
Termination loss	1,855	1,636
Interest cost/income (-)	483	419
	4,188	3,572
Included in OCI		
Remeasurement loss/gain (-)		
Actuarial loss/gain (-) arising from:		
-Demographic assumptions	-459	-261
-Financial assumptions	4,446	184
-Experience adjustments	539	885
	4,527	808

Other		
Benefits paid	-2,956	-2,478
Division/ segment spin off	-19	0
Foreign exchange differences	-1	-2
	-2,977	-2,480
Balance at 31 December	37,362	31,624

During the financial year 2019, Viohalco and its companies paid EUR 3 million (2018: EUR 2.5 million) in benefits in respect of employees who left during the year. An additional cost that arose due to these payments was recognized (termination loss of EUR 1.9 million – 2018: EUR 1.6 million). More specifically, in the cases of dismissal, voluntary withdrawals with benefit payment and retirement, the additional cost is the difference between the benefit paid and the amount recorded in the defined benefit liability for the respective employees.

C. Defined benefit obligation

(a) Actuarial assumptions

The following were the weighted average principal actuarial assumptions at the reporting date:

	2019	2018
Discount rate	0.76%	1.59%
Price inflation	1.32%	1.52%
Future salary growth	1.82%	1.64%
Plan duration (in years)	13.90	12.77

Assumptions regarding future mortality have been based on Swiss mortality table EVK2000.

(b) Sensitivity analysis

The sensitivity analysis for each significant actuarial assumption which was reasonably possible, at the end of the reporting period, shows how the defined benefit obligation (DBO) would have been affected by those changes as follows:

	2019	2018
Sensitivity 1 (discount rate plus 0.5%) - % Difference in DBO	-6.77%	-6.11%
Sensitivity 2 (discount rate minus 0.5%) - % Difference in DBO	7.56%	6.22%
Sensitivity 3 (salary growth rate plus 0.5%) - % Difference in DBO	7.02%	6.35%
Sensitivity 4 (salary growth rate minus 0.5%) - % Difference in DBO	-6.44%	-5.88%

The above sensitivity analysis is based on a change in one assumption while all other assumptions remain constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated.

When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the pension liability recognized on the statement of financial position. The methods and the formula of the assumptions used for the defined analysis have not changed compared to the previous year.

The expected maturity analysis of undiscounted pension benefits is as follows:

<i>Amounts in EUR thousands</i>	2019	2018
Less than a year	1,594	1,715
Between 1 and 2 years	749	536
Between 2 and 5 years	4,828	3,365
Over 5 years	31,720	32,846
Total	38,891	38,463

13. Employee benefit expenses

<i>Amounts in EUR thousands</i>	Note	2019	2018
Wages and salaries		260,850	239,094
Social security contributions		55,765	51,601
Defined contribution plans		1,123	971
Defined benefit plans	12	4,188	3,572
Other employee benefits		15,682	12,454
Total		337,608	307,692

Employee benefits have been allocated as follows:

Cost of goods sold	9	233,254	212,283
Selling and distribution expenses	9	46,528	43,474
Administrative expenses	9	53,303	47,412
Other expenses	9	2,747	2,050
Capitalised employee benefits in projects under construction		1,775	2,473
Total		337,608	307,692

The number of employees, as well as their profile and gender, employed by Viohalco companies is presented in the following tables:

2019				
	18 - 30	30-50	51+	Total
Male	985	4,912	2,362	8,259
Female	236	1,008	340	1,584
Total	1,221	5,920	2,702	9,843
	Office employees & professionals	Workers	Management	Total
Number of Employees	2,733	6,207	903	9,843

2018				
	18 - 30	30-50	51+	Total
Male	1,037	4,863	2,098	7,998
Female	215	1,011	303	1,529
Total	1,252	5,874	2,401	9,527
	Office employees & professionals	Workers	Management	Total
Number of Employees	2,485	6,121	921	9,527

14. Income tax expense

A. Amounts recognised in profit or loss

<i>Amounts in EUR thousands</i>	2019	2018
Current tax	-18,577	-20,410
Deferred tax	3,393	10,650
Income tax expense (-)	-15,184	-9,760

B. Amounts recognised in OCI

2019			
<i>Amounts in EUR thousands</i>	Before tax	Related tax	Net of tax
<i>Amounts recognized in the OCI</i>			
Remeasurements of defined benefit liability	-4,527	1,213	-3,313
Equity investments in FVOCI - net change in fair value	572	298	870
Foreign currency translation differences	6,001	0	6,001
Gain / Loss (-) of changes in fair value of cash flow hedging - effective portion	-1,067	365	-702
Gain / Loss (-) of changes in fair value of cash flow hedging - reclassified to profit or loss	6,290	-1,499	4,791
Total	7,270	377	7,647

2018			
<i>Amounts in EUR thousands</i>	Before tax	Related tax	Net of tax
<i>Amounts recognized in the OCI</i>			
Remeasurements of defined benefit liability	-808	193	-615
Equity investments in FVOCI - net change in fair value	-395	33	-362
Foreign currency translation differences	-2,164	0	-2,164
Gain / Loss (-) of changes in fair value of cash flow hedging - effective portion	315	183	498
Gain / Loss (-) of changes in fair value of cash flow hedging - reclassified to profit or loss	-7,010	1,415	-5,596
Total	-10,062	1,824	-8,238

C. Reconciliation of effective tax rate

<i>Amounts in EUR thousands</i>	2019	2018
Profit/loss (-) before income tax expense	31,924	95,612
Statutory income tax expense rate in Greece	-7,662	-27,727
Non-deductible expenses for tax purposes	-13,600	-7,127
Tax-exempt income	4,280	1,233
Recognition of previously unrecognised tax losses, thin capitalization allowance or temporary differences of a prior period	2,175	8,987
Effect of tax rates in foreign jurisdictions	-1,908	4,603
Current-year losses for which no deferred tax asset is recognised	-3,082	-3,482
Tax-exempt reserves recognition	0	1,007
Change in tax rate or composition of new tax	794	13,635

Other taxes		39		-154
Derecognition of previously recognised deferred tax assets		-5,805		-473
Prior year income tax adjustments		-831		-261
Change in tax consideration due to business transformation		10,416		0
Income tax expense reported in the statement of profit or loss (-) at the effective tax rate	48%	-15,184	10%	-9,760

According to the Greek law N. 4646/2019, the corporate income tax rate for legal entities in Greece for the fiscal year 2019 and onwards is set at 24%. The consolidated effective tax rate for 2019 was 48% (2018: 10%) as a result of the following:

The consolidated effective tax rate for 2019 was 48% (2018: 10%) due to the fact the loss-making companies, following a prudent assessment, did not recognize further deferred tax asset on tax losses, while at the same time derecognized the amounts that it is not probable they can be offset against future taxable profits.

As a result of the business transformation of Noval Property into a Real Estate Investment Company (REIC), Viohalco derecognized EUR 10 million of deferred tax liability relating to investment property, which had been accumulated at both consolidation and stand-alone level, given that Noval Property is subject to different tax consideration.

D. Movement in deferred tax balances

2019								Net balance at 31 December		
<i>Amounts in EUR thousands</i>	Net balance at 1 January	Recognised in profit or loss	Recognised in OCI	Foreign exchange differences	Division/segment spin off	Change in tax rate recognised in profit or loss	Change in tax rate recognised in OCI	Net	Deferred tax assets	Deferred tax liabilities
Property, plant & equipment	-118,241	7,397	0	-213	-38	3,983	0	-107,111	241	-107,353
Right of use asset	0	-699	0	0	0	0	0	-699	0	-699
Intangible assets	624	1,599	0	0	0	-709	0	1,514	3,858	-2,344
Investment property	-13,557	12,534	0	0	0	408	0	-615	1,738	-2,353
Other investments	1,206	-619	310	0	0	-36	-13	850	935	-86
Derivatives	1,770	-681	-1,032	10	0	-29	-102	-64	370	-434
Inventories	-846	1,403	0	0	0	-10	0	547	547	0
Loans and borrowings	-2,524	325	0	0	0	305	0	-1,894	413	-2,307
Employee benefits	7,186	-650	1,184	0	0	288	30	8,037	8,203	-165
Provisions / Accruals	8,399	-3,499	0	1	0	-1,413	0	3,489	3,723	-235
Contract with customers	5,459	-12,514	0	188	0	-751	0	-7,617	29	-7,646
Contract liabilities	0	-9	0	0	0	0	0	-9	0	-9
Other items	3,753	-1,744	0	-193	0	216	0	2,032	2,032	0
Thin capitalisation	26,913	722	0	-6	0	-831	0	26,799	26,799	0
Tax losses carried forward	11,648	-967	0	-9	0	-627	0	10,044	10,044	0
Tax assets/liabilities (-) before set-off	-68,209	2,599	462	-223	-38	794	-85	-64,699	58,932	-123,631
Set-off tax									-41,314	41,314
Net tax assets/liabilities (-)								-64,699	17,618	-82,317

<i>Amounts in EUR thousands</i>	Net balance at 1 January	Recognised in profit or loss	Recognised in OCI	Foreign exchange differences	Change in accounting policy	Other	Net balance at 31 December		
							Net	Deferred tax assets	Deferred tax liabilities
Property, plant and equipment	-140,453	22,212	0	0	0	0	-118,241	1,444	-119,684
Intangible assets	694	-71	0	0	0	0	624	3,551	-2,927
Investment property	-14,196	639	0	0	0	0	-13,557	152	-13,709
Other investments	1,182	-9	33	0	0	0	1,206	1,212	-6
Derivatives	-1,075	1,247	1,598	1	0	0	1,770	2,597	-827
Inventories	999	-1,663	0	0	-181	0	-846	1,581	-2,427
Loans and borrowings	-2,696	172	0	0	0	0	-2,524	706	-3,230
Employee benefits	7,392	-411	193	12	0	0	7,186	7,269	-82
Provisions / accruals	7,919	139	0	0	342	0	8,399	8,561	-161
Contract with customers	0	12,457	0	-145	-6,854	0	5,459	6,227	-768
Other items	-1,504	-410	0	-51	5,719	0	3,753	4,983	-1,229
Thin capitalisation	33,159	-6,245	0	-1	0	0	26,913	26,913	0
Tax losses carried forward	29,052	-17,406	0	2	0	0	11,648	11,648	0
Tax assets/liabilities (-) before set-off	-79,527	10,650	1,824	-182	-975	0	-68,209	76,842	-145,051
Set-off tax								-56,649	56,649
Net tax assets/liabilities (-)							-68,209	20,193	-88,402

Deferred tax assets relating to tax losses carried forward are recognised only if it is probable that they can be offset against future taxable profits. At each balance sheet date, Viohalco and its subsidiaries assess whether the realization of future tax benefits is sufficiently probable based on approved business plans. On 31 December 2019, the accumulated tax losses carried forward available for future use amounted to EUR 81 million (31 December 2018 EUR 445 million). Viohalco companies have recognised cumulatively a deferred tax asset of EUR 10 million (31 December 2018: EUR 12 million) on tax losses because management considered it probable that future taxable profits would be available against which such losses can be used. EUR 9 million relate to Viohalco subsidiaries located in Greece and the rest EUR 1 million to subsidiaries in other jurisdictions. This deferred tax asset corresponds to losses equal to EUR 43 million (31 December 2018: EUR 46 million).

Based on these estimates regarding future taxable profits, deferred tax assets have not been recognised in respect of tax losses carried forward for an amount of EUR 37 million (EUR 399 million in 2018). Out of these, tax losses equal to EUR 7 million expire in 2020, while the rest expire between 2021 and 2024.

According to the provisions of articles 49 and 72 of the Greek Law 4172/2013 concerning thin capitalization, net interest expense is deductible from current year's tax profits, if it is equal or less than 30% of EBITDA and any excess can be settled with future tax profits without time limitations. Based on the current approved business plans, the balance of the respective tax asset was equal to EUR 26.8 million, as at 31 December 2019 (31 December 2018: EUR 26.9 million).

15. Inventories

<i>Amounts in EUR thousands</i>	2019	2018
Merchandise	30,860	33,938
Finished goods	332,607	350,102
Semi-finished goods	182,697	210,285
By-products & scrap	51,966	45,595
Work in progress	20,409	21,997
Raw and auxiliary materials, consumables and packaging materials	441,469	480,393
Total	1,060,009	1,142,309

The amount of inventories recognised as expense during 2019 and included in 'Cost of sales' was EUR 3 billion (2018: EUR 3.2 billion).

Inventories have been reduced by EUR 5.2 million in 2019 as a result of the write-down to net realizable value (2018: EUR 9.4 million). This amount was charged to profit or loss in 'Cost of sales'. Besides the write-down, inventories were lower as at 31 December 2019, compared to 2018, due to decrease in metal prices reflected in raw materials.

Inventories with a carrying amount of EUR 119 million are pledged as security for borrowings received by Viohalco's companies (See Note 27).

16. Trade and other receivables

<i>Amounts in EUR thousands</i>	Note	2019	2018
Current Assets			
Trade receivables		327,228	455,071
Less: Impairment losses		-59,226	-59,069
Net trade receivables		268,003	396,002
Advance payments		9,647	9,121
Cheques and notes receivables & cheques overdue		31,202	33,482
Receivables from related parties	38	38,455	33,832
VAT and other tax receivables		51,869	42,630
Receivables from dividends of equity-accounting investees	38	446	0
Other debtors		53,101	50,529
Less: Impairment losses		-13,989	-14,392
Net other receivables		170,731	155,203
Total current assets		438,734	551,205
Non-current assets			
Other non-current receivables		6,023	6,315
Total non current assets		6,023	6,315
Total receivables		444,757	557,520

Viohalco and its companies have not concentrated their credit risk in relation to receivables from customers, since they have a wide range and a large number of customers.

A. Transfer of trade receivables

The carrying amount of receivables includes amounts that are subject to factoring arrangements. Viohalco and its subsidiaries, enter into factoring agreements (with recourse) to sell trade receivables for cash proceeds. These trade receivables are not being derecognised from the statement of financial position, because substantially all of the risks and rewards are still retained by Viohalco - primarily credit risk. The amount received on transfer by the factor is recognised as a secured bank loan.

The following table presents the carrying amount of trade receivables at the year-end that have been transferred, but have not been derecognised and the associated liabilities.

<i>Amounts in EUR thousands</i>	2019	2018
Carrying amount of trade receivables transferred to banks	67,789	152,790
Carrying amount of associated liabilities	47,932	105,822

The fair value of trade receivables transferred approximates their carrying amount.

As at 31 December 2019 and 2018, Viohalco companies had not used the total amount of credit line provided by the factoring companies.

Related loans are included in the line 'Secured bank loans' in Note 27 'Loans and Borrowings'.

B. Credit and market risks and impairment losses

During 2010, the subsidiary Corinth Pipeworks S.A. initiated in Greece and Dubai legal actions against a former customer in the Middle-East regarding the recovery of an overdue receivable of USD 24.8 million (EUR 22.1 million as at 31 December 2019), plus legal interest.

Following a series of court proceedings, the Dubai Court of Cassation issued its final judgment in 2017 and ruled to reject any counterclaim of the former customer and to confirm the amount due to Corinth Pipeworks.

In order to recover this long overdue balance, Corinth Pipeworks has recently initiated the enforcement procedures against the assets of the former customer that are located within any of the countries, where the Court of Cassation judgment issued against the former customer is enforceable (i.e. UAE and various other countries in the Middle East).

Corinth Pipeworks had recorded in the past an impairment loss of USD 23.1 million. During 2019, the subsidiary recorded an impairment loss of EUR 1,65 million for the remaining unimpaired receivable including legal interest and decided to book this additional impairment to reflect the prospected recoverability of that receivable, as of today. However, the subsidiary will continue any and all actions required to collect the full amount of that receivable.

Information about Viohalco companies' exposure to credit and market risks, and impairment losses for trade and other receivables is included in Note 31.

17.Cash and cash equivalents

<i>Amounts in EUR thousands</i>	2019	2018
Cash in hand and at banks	557	2,898
Short-term bank deposits	213,942	160,778
Total	214,499	163,676

Short term deposits have duration of less than 90 days and are available for use.

18. Property, plant and equipment

A. Reconciliation of carrying amount

<i>Amounts in EUR thousands</i>	Land, plants & other buildings	Machinery	Furniture & other equipment	Under construction	Total
Cost					
Balance as at 1 January 2019	931,720	2,512,419	68,303	134,905	3,647,348
Effect of movement in exchange rates	502	6,649	-33	-17	7,102
Additions	6,297	29,290	5,404	213,500	254,491
Disposals	-1,859	-3,314	-418	-417	-6,008
Reclass due to spin off	0	-7,126	-43	-320	-7,489
Transfer to /from investment property	0	-7	0	-19	-26
Reclassifications	18,335	102,238	-390	-122,562	-2,379
Write offs	-3,497	-8,207	-423	-225	-12,351
Change in accounting policy	-1,506	-21,479	0	0	-22,986
Balance as at 31 December 2019	949,993	2,610,463	72,400	224,846	3,857,702
Accumulated depreciation & impairment losses					
Balance as at 1 January 2019	-329,573	-1,472,012	-57,243	-4,708	-1,863,536
Effect of movement in exchange rates	-11	-3,887	-28	0	-3,925
Depreciation	-22,675	-100,988	-4,035	0	-127,697
Disposals	850	2,903	268	0	4,021
Reclass due to spin off	0	995	12	0	1,006
Write offs	3,409	7,012	416	0	10,837
Reversal of previously recognized impairment loss	1,604	10	0	0	1,614
Transfer to/from Investment Property	0	5	0	0	5
Impairment loss	-5,092	-270	0	-563	-5,925
Reclassifications	86	-37	1,224	161	1,434
Change in accounting policy	476	2,209	0	0	2,685
Balance as at 31 December 2019	-350,926	-1,564,060	-59,385	-5,110	-1,979,481
Carrying amount as at 31 December 2019	599,067	1,046,403	13,015	219,736	1,878,221

<i>Amounts in EUR thousands</i>	Land, plants & other buildings	Machinery	Furniture & other equipment	Under construction	Total
Cost					
Balance as at 1 January 2018	905,652	2,436,821	64,315	76,794	3,483,582
Effect of movement in exchange rates	381	-1,254	20	37	-817
Additions	11,345	28,704	3,726	130,568	174,342
Disposals	-104	-2,154	-147	-402	-2,807
Transfer to /from investment property	321	0	0	0	321
Write offs	-157	-4,379	-201	0	-4,737
Reclassifications	14,282	54,682	592	-72,093	-2,537
Balance as at 31 December 2018	931,720	2,512,419	68,303	134,905	3,647,348
Accumulated depreciation & impairment losses					
Balance as at 1 January 2018	-307,906	-1,373,516	-53,820	-4,708	-1,739,950
Effect of movement in exchange rates	-149	723	-17	0	557
Depreciation	-20,576	-103,950	-3,715	0	-128,240
Disposals	95	1,541	112	0	1,748
Transfer to/from Investment Property	-5	0	0	0	-5
Impairment loss	-1,100	0	0	0	-1,100
Reversal of previously recognized impairment loss	0	22	0	0	22
Write offs	67	3,168	197	0	3,432
Balance as at 31 December 2018	-329,573	-1,472,012	-57,243	-4,708	-1,863,536
Carrying amount as at 31 December 2018	602,147	1,040,407	11,060	130,197	1,783,812

The net amount of EUR 945 thousand in 'Reclassifications' movement concerns assets under construction reclassified to intangible assets (EUR 3.1 million) and transfer of inventory items to machinery (EUR 2.2 million). In particular, the amount of EUR 2.2 million mainly concern Viohalco subsidiary Corinth Pipeworks which has transferred EUR 1,7 million from inventory to the cost of its machinery.

B. Security

Property, plant & equipment with a carrying amount of EUR 1,384 million are mortgaged as security for borrowings received by Viohalco's companies (see Note 27).

C. Property, plant and equipment under construction

The most important items in property, plant and equipment under construction as of 31 December 2019 concern the following:

- Machinery not yet installed in Oinofyta's aluminium rolling plant.
- Productivity improvement investments in the copper segment's plants in Oinofyta and Sofia.
- Productivity and capacity improvement investments in the cables segment's plants which are expected to be completed during 2020.
- Steel segment's projects in Bulgaria mainly concern the Meltshop Filters system, comprising of ferroalloys and EAF ventilation systems.

Capitalized borrowing costs related to property, plant and equipment under construction amount to EUR 3 million (2018: EUR 2.2 million), which have been calculated using an average capitalization rate of 2.9% (2018: 3%).

Additions in assets under construction also include capitalized employee benefits equal to EUR 1,775 thousand (2018: EUR 2,473 thousand).

D. Transfer to and from investment property

During 2019, no significant amounts were transferred from/to investment property.

E. Impairment loss of property, plant and equipment

On 31 December 2019, an impairment test was performed for each Cash Generating Unit (further CGU) for which indications of impairment loss existed as at 31 December 2019 concerning subsidiaries from steel segment. The identified indications of impairment concerned the losses incurred by certain CGUs over the last years. For the calculation of recoverable amount per CGU, cash flow projections based on a period of five years were used. The results of this test concluded that the property, plant and equipment used by these CGUs were not impaired at 31 December 2019, since the recoverable amount of each CGU exceeded the respective carrying amount.

During 2019, machinery equipment with NBV equal to EUR 1.2 million (2018: EUR 1.2 million) mainly derived from steel and aluminium segments, were written off since they are no longer used by Viohalco companies and they are not expected to bring economic benefits in the future since these assets became obsolete.

In addition, during 2019, impairment tests were performed on all real estate assets (individual assets), either owner occupied or held as investment property. The tests were carried out in order to address the risk of negative changes in the fair value of properties and respond if necessary. The results relating to investment properties are outlined in note 20.

For owner occupied assets, an impairment loss of EUR 5 million was recorded and included in 'Other expense' in profit or loss. Impairment losses relate primarily to land and the recoverable amount was based on its fair value less costs of disposal. The fair value of these properties was determined by external, independent property valuers, having appropriate recognized professional qualifications and recent experience in the location and category of the properties being valued. The valuation technique applied was the comparative method (market approach). According to this method the valuer estimates the market value of the subject asset by comparing the factors that mostly affect it. Such factors can be location, size, quality of construction etc. This method is based on estimation of the market price and what has been paid for similar properties under similar economic conditions. Each property is valued at a price at which similar

ones in the area have recently sold with a subjective differential added (or subtracted) to adjust for the unique characteristics of the property that make it different from the benchmark properties, such as location, size, accessibility etc.

The specific valuation technique has been classified as Level 2, regarding the fair value measurement hierarchy.

For segmental classification purposes, impairment losses were reported in real estate segment. The recoverable amount of related real estate assets amounted EUR 44.7 million.

Concerning 2018, an impairment loss of EUR 1.1 million (included in other activities segment) was recorded on the carrying amount of land, because there was no possibility anymore to construct on this specific plot, therefore its value was impaired to zero.

F. Reversal of impairment loss of property, plant and equipment

A test has also been performed for CGUs, for which indications for reversal of previously recorded impairment loss existed at 31 December 2019. These indications concerned the improvement of expected performance of certain CGUs over the following years. However, the result of the test was that no impairment loss should be reversed in 2019.

In addition, previously recognized impairment losses of EUR 1.6 million were reversed (recoverable amount EUR 27 million) and included in the line "Other Income" of the consolidated statement of profit or loss, related to Investment property that has been transferred to PP&E in the previous years.

For segmental classification purposes, reversal of impairment losses reported in real estate segment.

G. Derecognition due to spin off

Assets amounting to EUR 6.5 million have been derecognized due to division spin off of Etem Bulgaria in aluminium segment and the establishment of the joint venture company Gestamp Etem Automotive Bulgaria S.A.

H. Change in estimates

During 2018, Elvalhalcor S.A. amended the useful life of certain machinery since it was concluded that recent investments affected positively the future economic benefits to be realized from existing machinery in combination with the new assets.

The previous range of useful lives of these machinery items was 2 to 25 years and now it has been extended to 2 – 31 years.

The change in accounting estimate resulted in a reduction of the depreciation charge for 2018, equal to EUR 3.6 million.

19. Goodwill and intangible assets

A. Reconciliation of carrying amount

<i>Amounts in EUR thousands</i>	Goodwill	Development costs	Trademarks and licenses	Software	Other	Total
Cost						
Balance as at 1 January 2019	3,132	1,268	26,890	36,788	2,756	70,832
Effect of movement in exchange rates	0	-1	0	-105	-4	-110
Additions	0	519	2,204	3,225	3	5,951
Disposals	0	0	0	-73	0	-73
Write-offs	0	0	0	-6	-7	-13
Reclass due to spin off	0	0	-502	-24	0	-526
Reclassifications	0	238	690	3,358	0	4,287
Balance as at 31 December 2019	3,132	2,024	29,282	43,163	2,747	80,348

Accumulated amortization and impairment loss						
Balance as at 1 January 2019	-1,500	-607	-6,366	-29,220	-792	-38,486
Effect of movement in exchange rates	0	1	0	63	4	68
Amortization for the period	0	-206	-1,370	-3,206	-56	-4,838
Disposals	0	0	0	33	0	33
Write-offs	0	0	0	1	7	8
Reclass due to spin off	0	0	253	20	0	272
Reclassifications	0	0	0	-1,179	0	-1,179
Balance as at 31 December 2019	-1,500	-812	-7,484	-33,489	-837	-44,122
Carrying amount as at 31 December 2019	1,632	1,212	21,798	9,675	1,910	36,226

Cost						
<i>Amounts in EUR thousands</i>	Goodwill	Development costs	Trademarks and licenses	Software	Other	Total
Balance as at 1 January 2018	3,132	678	22,212	32,006	2,705	60,733
Effect of movement in exchange rates	0	0	102	62	-12	152
Additions	0	523	2,865	3,163	113	6,664
Disposals	0	0	0	-6	0	-6
Reclassifications	0	67	1,710	1,563	-50	3,289
Balance as at 31 December 2018	3,132	1,268	26,890	36,788	2,756	70,832
Accumulated amortization and impairment loss						
Balance as at 1 January 2018	-1,500	-501	-5,548	-25,928	-725	-34,202
Effect of movement in exchange rates	0	0	-108	-101	7	-202
Amortization for the period	0	-107	-710	-3,191	-75	-4,083
Balance as at 31 December 2018	-1,500	-607	-6,366	-29,220	-792	-38,486
Carrying amount as at 31 December 2018	1,632	660	20,523	7,567	1,964	32,346

B. Amortisation

The amortization of trademarks and licenses with finite useful lives, software programs and other intangible assets is allocated to the cost of inventory and is included in 'Cost of sales' when inventory is sold, as trademarks and licenses and software programs are mainly used directly for the production of products and they are considered as production overheads. The amortization of intangible assets not used for production is allocated to administrative expenses.

C. Reclassifications

Reclassifications mainly relate to intangible assets recorded initially in projects under construction (in property, plant and equipment) and upon the completion of the project, they are transferred to the column which describes their nature.

D. Intangible assets with indefinite useful lives

All intangible assets have finite useful life (see Note 5.10), except for the following assets, included in trademarks and licenses category:

i. Intangible assets recognized for the CGU "Fulgor"

a. Trade Name "Fulgor" (carrying amount of EUR 1.4 million as at 31 December 2019)

It relates to the sector of medium voltage submarine cables and terrestrial high voltage cables that Fulgor was operating prior to its acquisition by Hellenic Cables in 2011 and which has revealed significant economic benefits. Based on the analysis of relevant factors (e.g. knowledge, no longstanding engagement with a wide range of clientele, future development of the sector), the useful life of the brand was considered indefinite.

b. License of Port use in Soussaki, Corinth (carrying amount of EUR 8.3 million as at 31 December 2019). Fulgor holds a license for permanent and exclusive use of a port located in the premises of the factory in Soussaki, Corinth. The port is necessary for the production of submarine cables of medium and high voltage. Since the acquisition of the subsidiary, significant investments

for the upgrade and expansion of production capacity in producing high-voltage submarine cables took place. Since 2014, the production started as planned. The useful life of the asset is considered indefinite, since the use of these port facilities is for an indefinite period of time, in the context of the significant development of the sector.

ii. Intangible assets recognized for the CGU “Reynolds” (carrying amount of EUR 1.5 million as at 31 December 2019).

Upon the completion of the acquisition of Reynolds Cuivre by Genecos, an intangible asset related to the brand name “Reynolds” was recognized, as significant economic benefits are expected from its use. Based on the analysis of relevant factors (e.g. knowledge of the relevant market, wide range of clientele, expected future developments), the useful life of the brand was considered indefinite.

E. Impairment testing

(a) Intangible assets recognized for the CGU “Fulgor”

As these intangible assets do not generate independent cash inflows, it was considered appropriate to carry out the impairment test on the basis of the Cash Generating Unit (CGU) of Fulgor submarine cables production plant, which incorporates these assets. In order to evaluate the value in use, cash flow projections based on estimates by management covering a five-year period were used. These estimates take into consideration the contracts already signed, as well as contracts estimated to be awarded in Greece and abroad.

The submarine cables CGU operates in a project-based business. Therefore, assumptions related to revenue and profitability growth are based on the contracts already signed, as well as those estimated to be undertaken in the forthcoming period. The main assumptions regarding the operations of submarine cables CGU and the projects to be executed within the five-year period are:

- Progressively high capacity utilization of Fulgor’s plant, as in 2019, based on contracts already awarded & expected awards based on tendering activity.
- Capital expenditure of EUR 43 million in the following 5 years, in order to cover estimated production and capacity needs. No additional revenue or cost savings are assumed in the value in use model as a result of the estimated capital expenditure.
- Compound annual growth rate of revenue from offshore business for the five-year period at ca. 8.4% attributable to assignment of new projects mainly in Greece, North Europe and the USA.
- Profitability per offshore project in terms of EBITDA at ca. 15%-25% of revenue. Estimated profitability per project varies mainly due to different type of cable and technical specifications, geographic region and project’s timeframe.
- Compound annual growth rate of fixed operating expenses at ca. 2.0% for the five-year period.

Cash flows after the first five years were calculated using an estimated growth rate of 1.38%, which mainly reflects management’s estimates for the growth prospects of the offshore cable sector. The pre-tax rate used to discount these cash flows is from 10.9% to 8.9% for the five year period and 9.5% for the terminal value and was based on the following:

- Risk free rate was determined according to AAA Eurozone rates in the range of -0.70% to -0.58% for the five years and -0.19% for the terminal value.
- The country risk for operating in Greece determined in the range of 1.5% to 1.7% for the first five years and 2.0% for the terminal value.
- The market risk premium was determined at 5.96%

Despite the fact that the commodity prices for copper and aluminium are part of the assumptions for the impairment test performed, due to the hedging activities undertaken and the customized nature of the products sold by Fulgor, the value of the business unit is not significantly affected by fluctuations in commodity prices. Neutral result from metal price fluctuations is assumed in the context of the impairment test.

The results of this test indicated that the recoverable amount as of 31 December 2019 exceeds the carrying amount of the CGU amounting to EUR 183 million by EUR 345 million.

A sensitivity analysis was carried out on the key assumptions of the model (discount rates and growth in perpetuity), so as to examine the adequacy of the headroom. The result of the sensitivity analysis indicated that the recoverable amount still exceeds the carrying value of the CGU.

Results of the sensitivity analysis for the impairment testing:

	Assumptions used	Change in rates (percentage points change) required for the recoverable amount to equal the carrying amount
Discount rate	10.9% to 8.9%	+13.8 ppc
Terminal growth	1.38%	-28.6 ppc

(b) Intangible assets recognized for the CGU “Reynolds”

The recoverable amount of the CGU that includes this intangible asset (Reynolds Cuivre S.A.) was estimated based on the present value of the future cash flows expected to be derived from the CGU (value in use).

Cash flows after the first five years were calculated using an estimated growth rate of 0.5%, which reflects management's estimates for the growth prospects for the market. The pre-tax rate used to discount these cash flows is 6.2% for the five year period and for the terminal value and was based on the following:

- Risk free rate was determined according to AAA Eurozone rates and has a range from -0.7% for the five years to -0.2% for the terminal value.
- The market risk premium (which includes country risk for operating in France) was determined at 5.96%

Average revenue growth rate for the five-year period is 3.32%, and the average opex increase percentage is 1.9%. Average capex equal to EUR 75 thousand.

The results of this test indicated that the recoverable amount as at 31 December 2019 exceeds the carrying value of the CGU amounting to EUR 8 million by EUR 4.5 million.

A sensitivity analysis was carried out on the key assumptions of the model (discount rates and growth in perpetuity), so as to examine the adequacy of the headroom. The result of the sensitivity analysis indicated that the recoverable amount still exceeds the carrying value of the CGU.

Results of the sensitivity analysis for the impairment testing:

	Assumptions used	Change in rates (percentage points change) required for the recoverable amount to equal the carrying amount
Discount rate	6.2%	+3.0ppc
Terminal growth	0.5%	-4.5ppc

20. Investment property

A. Reconciliation of carrying amount

Amounts in EUR thousands	2019	2018
Balance as at 1 January	173,710	165,247
Acquisitions	23,788	12,391
Disposals	-117	0
(Impairment losses) / Reversal of impairment losses	3,339	0
Transfers to property, plant and equipment	21	-315
Reclassifications	-309	0
Depreciation	-5,430	-3,612
Balance as at 31 December	195,003	173,710

Gross carrying amount	224,249	251,050
Accumulated depreciation and impairment losses	-29,246	-77,339
Net carrying amount as at 31 December	195,003	173,710

Investment property comprises of a number of commercial properties that are either leased to third parties currently or will be in the foreseeable future. Each of these leases is indexed to consumer prices.

During 2019, Viohalco invested an amount of EUR 23.8 million (EUR 12.4 million in 2018) for the acquisition and improvement of investment properties. The majority of the amount invested refers to the completion of two office buildings in Athens.

B. Measurement of fair value –Impairment loss and subsequent reversal

On December 31st 2019, an impairment test was performed on all real estate assets (individual assets), either owner occupied or held as investment property. The tests were carried out in order to address the risk of negative changes in the fair value of properties and respond if necessary. The results relating to owner occupied properties are outlined in note 18.

For investment property assets, an impairment loss of EUR 5.9 million was recorded and included in the line 'Other expense' of the consolidated statement of profit or loss. Impairment losses relate primarily to land and buildings, and the recoverable amount was based on its fair value less costs of disposal. The fair value of these properties was determined by external, independent property valuers, having appropriate recognized professional qualifications and recent experience in the location and category of the properties being valued. For land, the comparative method (market approach) was the valuation technique used, which is classified as Level 2 regarding the fair value measurement hierarchy. For further details regarding the comparative method please refer to Note 18, Property, Plant and Equipment.

For buildings, Level 3 valuation techniques were used. Valuation techniques are described in detail in the next paragraph.

For segmental classification purposes, impairment losses amounted EUR 5.9 million (recoverable amount EUR 45 million) were reported in real estate segment.

Asset valuations were also used to identify if previously recognized impairment losses could be reversed. As a result, EUR 9.2 million were reversed and included in the line 'Other Income' of the consolidated statement of profit or loss.

The recoverable amount of these assets as at 31 December 2019 was EUR 122 million and they relate to the real estate and other segments.

The accumulated impairment losses carried forward as at 31 December 2019, amounts to EUR 41.8 million (31 December 2018: EUR 45.1 million).

The fair value of all properties reported in the line 'Investment property', as at 31 December 2019, is EUR 221 million (31 December 2018: EUR 182 million).

Valuation techniques and significant unobservable inputs (Level 3)

The fair value measurement for investment property buildings has been categorized as a Level 3 regarding fair value hierarchy, based on the inputs to the valuation techniques used.

Valuations methods used to determine the fair value of these properties were reflecting the highest and best possible use.

- For buildings currently rented or expected to be rented out in the foreseeable future for which no observable prices were available, the income approach (either Discounted Cash Flow or Direct capitalization) method was used. DCF method considered the present value of net cash flows to be generated from each property, taking into account expected rental growth rate, void periods, occupancy rate, lease incentive costs such as rent-free periods and other costs not paid by tenants. The expected net cash flows are discounted using risk-adjusted discount rates that ranged between 8,00 % - 13,85 %. Among other factors, the discount rate estimation considers the quality of each building, its location, tenant credit quality, lease terms and the expected market return. The estimated fair value would decrease if either the expected market rental growth was lower or the risk-adjusted discount rates were higher. Direct capitalization uses

an All-Risk Yield in order for the current annual estimated rental value to be capitalized. ARY ranged between 7,00% - 10,50% and offers a holistic assessment of the property market's general condition.

- For buildings, which were under construction and which are intended to be used as investment property in the future, the residual method was primarily used. The fair value determined by this method reflects the value of the property in its current condition.

- For specialized properties which were vacant and which are intended to be used as investment property in the future, the depreciated replacement cost method was primarily used. The fair value determined by this method reflects the depreciated amount that currently would be required to replace or reconstruct these assets.

There has been no change to the valuation techniques during the year.

21. Equity-accounted investees

A. Reconciliation of carrying amount of associates and joint ventures

<i>Amounts in EUR thousands</i>	2019	2018
Balance as at 1 January	32,066	16,956
Share of profit / loss (-) net of tax	-343	-1,934
Dividends received	-701	-395
Effects on movement in exchange rates	1,137	-1,581
Additions	16	15,700
Share capital increase	106	3,320
Share capital reduction	-1,788	0
Division spin off	7,278	0
Reclassifications	-28	0
Balance as at 31 December	37,742	32,066

B. Financial information per associate and joint venture

The following tables present financial information per associate. The disclosed financial information reflects amounts in the financial statements of the relevant associates.

2019

Company	Principal place of business	Segment	Associate/JV	Current Assets	Non-Current Assets	Non-Current Liabilities	Current Liabilities	Revenue	Profit or loss from continuing operations	Direct Ownership interest	Ultimate ownership interest
ETEM GESTAMP AUTOMOTIVE SA	Bulgaria	Aluminium	Joint Venture	6,901	8,845	54	5,705	24,121	229	49.00%	49.00%
DOMOPLEX LTD	Cyprus	Steel	Associate	3,037	1,604	0	3,324	4,652	139	45.00%	45.00%
AO TMK-CPW	Russia	Steel Pipes	Associate	23,639	6,542	69	4,101	60,860	3,037	49.00%	39.09%
SMARTREO	Australia	Steel	Associate	4	2,088	0	39	15,877	-12,302	50.00%	50.00%
AWM SPA	Italy	Steel	Associate	12,651	6,898	5,299	6,664	17,995	-11	34.00%	34.00%
HC ISITMA A.S.	Turkey	Copper	Joint Venture	344	534	179	85	709	61	50.00%	45.72%
U.E.H.E.M GmbH	Germany	Aluminium	Associate	10,182	27	0	8,676	46,601	1,125	49.00%	44.81%
NEDZINK B.V.	Netherlands	Copper	Joint Venture	22,659	28,794	25,731	19,144	82,244	-5,046	50.00%	45.72%

Company	Principal place of business	Segment	Associate/JV	Current Assets	Non-Current Assets	Non-Current Liabilities	Current Liabilities	Revenue	Profit or loss from continuing operations	Direct Ownership interest	Ultimate ownership interest
UACJ ELVAL CONSULTING S.A.	Greece	Aluminium	Associate	133	2	0	-31	144	0	50.00%	45.72%
DOMOPLEX LTD	Cyprus	Steel	Associate	2,774	1,993	0	-3,587	4,716	70	45.00%	45.00%
AO TMK-CPW	Russia	Steel Pipes	Associate	44,813	6,070	-16	-29,981	53,565	1,432	49.00%	39.09%
SMARTREO	Australia	Steel	Associate	49	1,801	-1	-156	1,341	-1,750	50.00%	50.00%
AWM SPA	Italy	Steel	Associate	14,732	7,019	-2,332	-11,845	14,329	-320	34.00%	34.00%
HC ISITMA A.S.	Turkey	Copper	Joint Venture	1,008	465	-5	-29	530	-66	50.00%	45.72%
U.E.H.E.M GmbH	Germany	Aluminium	Associate	9,529	33	0	-8,523	41,013	644	49.00%	44.81%
NEDZINK B.V.	Netherlands	Copper	Joint Venture	26,366	25,275	21,496	-21,777	84,622	-6,492	50.00%	45.72%

On April 1st 2019, the spin-off of Etem Bulgaria S.A. was completed from which a new joint venture was created, Gestamp Etem Automotive Bulgaria S.A., of NBV equal to EUR 7.3 million and a holding percentage of 49%. The entity will focus on the commercialisation and processing of aluminium extruded profiles for the automotive industry, in which an investment program will be implemented, in the next three years.

On February 18th 2019, Elvalhalcor acquired 50% of the share capital of UACJ Elval Consulting SA (former Afsel), a consulting services company, from UACJ Corporation, for the amount of EUR 16 thousand. The company was renamed to Elvalhalcor Consulting S.A.

Aforementioned financial information is presented considering the following:

(a) There are no restrictions on the ability of joint ventures or associates to transfer funds to the entity in the form of cash dividends, or to repay loans or advances made by the entity.

(b) The financial statements of joint ventures or associates are used in applying the equity method and as of the same date with that of Viohalco.

(c) There are no unrecognized share of losses of a joint venture or associate, both for the reporting period and cumulatively.

C. Description of associates and joint ventures

UEHEM is a joint establishment between ElvalHalcor and UACJ Corp. It markets aluminium products to manufacturers of automotive heat exchangers in Europe.

HC ISITMA is a joint venture between ElvalHalcor and Cantas AS. It is active in the manufacture of pre-insulated copper tubes in Turkey.

Smartreo manufactures prefabricated reinforcing steel for the Australian market using Synthesis™ in conjunction with other state-of-the-art technologies at a high-tech facility situated in Wacol, Brisbane. The company is a joint establishment between Stomana through its subsidiary (Jodstex) and Thies, one of Australia's biggest construction companies.

AO TMK-CPW is a joint stock company between Corinth Pipeworks and AO TMK, the largest manufacturer of steel pipes in Russia and one of the top three globally. AO TMK-CPW has its production facilities in Polevskoy, Russia, where it manufactures pipes and hollow structural sections.

AWM is developing, designing and manufacturing high-technology machines for the processing of reinforcement steel such as standard and special mesh welding machines, high-speed wire straightening and cutting machines, lattice girder machines, cold rolling lines, automatic mesh cutting and bending machines and special machines for production of tunnel reinforcement.

Domoplex is a Cyprus-based company active in the manufacturing and trading of welded wire mesh for the reinforcement of concrete.

NedZink B.V. is a Netherlands based company focusing in high quality zinc applications.

Gestamp Etem Automotive Bulgaria S.A. is a joint venture between Gestamp and Etem Bulgaria S.A. that focus on the commercialisation and processing of aluminium extruded profiles for the automotive industry.

22. Other investments

Viohalco designates the investments shown below as equity securities at FVOCI because these equity securities represent investments that the Viohalco intends to hold for the long term for strategic purposes.

The movement of equity securities, as well as their analysis is presented below:

<i>Amounts in EUR thousands</i>	2019	2018
Balance as at 1 January	8,538	9,573
Additions	129	13
Disposals	-3,368	-569
Change in fair value through OCI	572	-395
Reclassifications	-42	-84
Balance as at 31 December	5,829	8,538

<i>Amounts in EUR thousands</i>	2019	2018
<u>Listed securities</u>		
-Greek equity instruments	128	132
-International equity instruments	4,228	2,511
-Mutual funds	643	1,613
<u>Unlisted securities</u>		
-Greek equity instruments	424	3,864
-International equity instruments	386	398
-Other	20	20
Total	5,829	8,538

23. Assets held for sale

The amount of EUR 4.2 million is the book value of machinery (cost EUR 5.7 million and accumulated depreciation EUR 1.5 million) recognized according to IFRS 5. The aforementioned asset classified in the copper segment. For the aforementioned equipment the provisions of paragraph 8 of IFRS 5 are in effect, providing the fact that the Management has set forth a plan for the sale which is expected to take place in 2020.

24. Derivatives

The following table sets out the carrying amount of derivatives:

<i>Amounts in EUR thousands</i>	2019	2018
Non-current assets		
Forwards	0	3
Future contracts	1	0
Total	1	3
Current assets		
Forwards	503	1,425
Future contracts	1,019	5,584
Total	1,522	7,009
Non-current liabilities		
Forwards	13	0
Interest rate swap contracts	172	0
Future contracts	0	101
Total	185	101
Current liabilities		
Forwards	543	6,278
Future contracts	3,557	7,220
Total	4,100	13,498

Hedge accounting

Viohalco's companies hold derivative financial instruments for cash flow and fair value hedges.

The abovementioned derivative financial instruments cover risks from:

- Changes in the prices of metals
- Fluctuations of foreign exchange rates
- Changes in loan interest rates

The maturity and the nominal value of derivatives held by Viohalco's companies match the maturity and nominal value of the underlying assets / liabilities (hedged items).

Derivatives held by Viohalco's companies concerns mainly:

- Future contracts to hedge the risk from the change of the price of metals listed in LME (London Metal Exchange) and used in production of Viohalco's companies (i.e. mainly copper, aluminium and zinc). Such hedges are designated as cash flow hedges.
- FX Forward and FX swaps to hedge the risk from the change in exchange rate of US Dollar and British Pound (i.e. currencies to which Viohalco's companies are mainly exposed). Such hedges are either designated as fair value or cash flow hedges depending on the item hedged. FX Forwards and FX swaps when used for hedging fx risk on outstanding receivables and suppliers denominated in foreign currency these instruments are designated under fair value hedging. FX forwards when used for hedging fx risk on the forecasted sales of goods or purchase of materials executed in foreign currency fx forward is hedging instruments designated under the cash flow method.

Derivatives are recognised when Viohalco's companies enter into the transaction in order either to hedge the fair value of receivables, liabilities or commitments (fair value hedges) or highly probable transactions (cash flow hedges).

The change in fair value recognized in equity under cash flow hedging as at 31 December 2019 will be recycled to the consolidated statement of profit or loss during the next years, as some of the hedged events are expected to occur (the forecasted transactions will take place or the hedged items will affect profit or loss statement) within 2020 and some others at a later stage.

Viohalco companies' results from the hedging activities recorded in the statement of profit or loss are presented for metal future contracts and foreign exchange contracts in the 'Revenue' and the 'Cost of sales' while for interest rate swaps in the 'Finance income/ expenses'. The amounts recognized in the consolidated statement of profit or loss are the following:

<i>Amounts in EUR thousands</i>	2019	2018
Gain / loss (-) on future contracts	644	12,555
Gain / loss (-) on FX forward contracts	-6,736	-7,946
	-6,092	4,609

Profit or loss related to derivatives used for cash flow hedging recognized in other comprehensive income (Hedging reserve) as at 31 December 2019 and it will be recycled to profit or loss during the next financial years.

25. Capital and reserves

A. Share capital and share premium

The share capital of the Company amounts to EUR 141,894 thousand divided into 259,189,761 shares without nominal value. Holders of shares are entitled to one vote per share at the general meetings of the Company.

Share premium of the Company amounts to EUR 457,571 thousand.

B. Translation reserve

The translation reserve comprises all foreign currency differences arising from the translation of the financial statements of foreign operations.

C. Nature and purpose of other reserves

(a) Statutory reserve

Pursuant to the Belgian tax legislation, the companies are obliged, from their fiscal year profits, to form 5% as a legal reserve until it reaches 10% of their paid share capital. The distribution of the legal reserve is prohibited.

Pursuant to Greek company law, the companies are obliged to allocate each year at least 5% of its annual net profits to its statutory reserve, until this reserve equals at least 1/3 of the company's share capital. The distribution of the statutory reserve is prohibited but it can be used to offset losses.

(b) Hedging reserve

The effective portion of the cumulative net change in the fair value of hedging instruments used in cash flow hedges pending subsequent recognition in profit or loss as the hedged cash flows affect profit or loss.

(c) Other fair value reserve

The cumulative net change in the fair value of the equity securities until the assets are derecognized (and therefore transferred to retained earnings).

(d) Special reserves

This category relates to reserves formed by the application of the provisions of certain developmental laws which were granting tax benefits to companies that invested their retained earnings rather than

distribute them to the shareholders. More specifically, the aforementioned reserves include profits that have already been taxed or have been permanently exempted from income tax, after the lapse of a specified period beginning from the completion of the investments they concern.

(e) Tax exempt reserves

This category relates to reserves formed by the application of the provisions of certain tax laws and are exempt from income tax, provided that they are not distributed to the shareholders. In case these reserves are distributed, they will be taxed using the tax rate applying at such time.

D. Reconciliation of other reserves

<i>Amounts in EUR thousands</i>	Statutory reserves	Hedging reserves	Other Fair Value reserve	Special reserves	Tax exempt reserves	Other reserves	Total
Balance as at 1 January 2019	37,382	-3,817	-568	59,630	297,809	13,933	404,370
Other comprehensive income	0	3,087	927	0	0	0	4,013
Capitalization of reserves	3,994	0	1,516	20,163	0	196	25,868
Reclassification	0	0	0	-60	78	-17	0
Acquisition of NCI	160	2	0	406	34	0	602
Change in ownership interests	-5	0	0	1	68	0	64
Mergers and absorptions	-1,576	0	0	0	-1,336	-5,399	-8,310
Balance as at 31 December 2019	39,955	-728	1,875	80,139	296,653	8,713	426,607

<i>Amounts in EUR thousands</i>	Statutory reserves	Hedging reserves	Other Fair Value reserve	Special reserves	Tax exempt reserves	Other reserves	Total
Balance as at 1 January 2018	35,528	571	2,811	59,753	297,941	10,012	406,616
Other comprehensive income	0	-4,378	-356	0	0	0	-4,733
Transfer of reserves and other movements	1,902	-9	-3,023	-123	-141	3,925	2,532
Acquisition of NCI	16	0	0	0	9	0	25
Change in ownership interests	-64	0	0	0	0	-5	-69
Balance as at 31 December 2018	37,382	-3,817	-568	59,630	297,809	13,933	404,370

Acquisition of NCI and change in ownership interests are further explained in note 32.

26. Capital management

Viohalco and its companies' policy consists in maintaining a strong capital structure so as to keep the confidence of investors, creditors and the market and enable the future development of their activities. The Board of Directors monitors the return on capital which is defined as net results divided by total equity less non-controlling interests. The Board of Directors also monitors the level of dividends distributed to holders of ordinary shares.

The Board of Directors tries to maintain an equilibrium between higher returns that would be feasible through higher borrowing levels and the advantages and security offered by a strong and robust capital structure. In this context, the Board of Directors monitors, the Return on Capital Employed (ROCE) index, otherwise the Return on Invested Capital (ROIC) index, which is defined as Earnings before Interest and Tax (EBIT) divided by total Capital Employed, (i.e. equity and debt). The Board of Directors seeks opportunities and examines feasibility to leverage Viohalco's companies with relatively high ROCE (in every case higher than the cost of debt) and deleverage companies that go through a relatively low ROCE performance period.

27. Loans and borrowings

A. Overview

<i>Amounts in EUR thousands</i>	31 December 2019	31 December 2018
Non-current liabilities		
Secured bank loans	202,474	209,699
Unsecured bank loans	65,895	24,351
Secured bond issues	551,446	600,298
Unsecured bond issues	123,707	40,454
Loans and borrowings – Long term	943,522	874,802
Lease Liabilities – Long term	42,518	22,004
Total Long-term debt	986,040	896,806
Current liabilities		
Secured bank loans	147,841	207,275
Unsecured bank loans	535,240	564,262
Current portion of secured bank loans	42,843	46,605
Current portion of unsecured bank loans	6,962	7,337
Current portion of secured bond issues	74,336	67,905
Current portion of unsecured bond issues	23,234	6,084
Loans and borrowings – Short term	830,455	899,468
Lease Liabilities – Short term	10,903	3,087
Total Short term debt	841,358	902,555
Total loans and borrowings	1,827,398	1,799,361

Information about the Viohalco companies' exposure to interest rate, foreign currency and liquidity risk is included in Note 31.

The maturities of non-current loans are as follows:

<i>Amounts in EUR thousands</i>	2019	2018
Between 1 and 2 years	195,511	177,602
Between 2 and 5 years	656,661	625,233
Over 5 years	133,868	93,970
Total	986,040	896,806

The effective weighted average interest rates of the main categories of loans and borrowings at the reporting date are as follows:

2019	Carrying amount	Interest rate
Bank loans (non-current)-EUR	307,069	3.21%
Bank loans (current)-EUR	650,849	3.94%
Bank loans (current)-USD	9,299	3.16%
Bank loans (current)-GBP	15,546	2.79%
Bond issues-EUR	772,723	4.04%

2018	Carrying amount	Interest rate
Bank loans (non-current)-EUR	275,656	4.10%
Bank loans (non-current)-GBP	7,825	2.41%
Bank loans (current)-EUR	655,916	4.55%
Bank loans (current)-USD	79,699	5.93%
Bank loans (current)-GBP	20,143	3.51%
Bond issues-EUR	714,742	4.25%

The majority of Viohalco companies' loans are Euro denominated.

During 2019, Viohalco subsidiaries obtained new bank loans amounting to EUR 302 million and repaid bank loans of EUR 299 million maturing within 2019. The new loans mainly were drawdowns from existing revolving credit facilities, or new ones with similar terms and conditions, for project financing purposes, as well as four new long-term loans.

During 2019, Viohalco partially re-profiled debt for its companies as follows:

Aluminium and Copper segments

- In June 2019 ElvalHalcor signed a new 7-year syndicated bond loan, of EUR 50 million with a major Greek bank.
- In August 2019, ElvalHalcor signed an amendment of the existing loan agreement of EUR 65 million with Commerzbank Aktiengesellschaft, providing additional financing of EUR 12.7 million, in order to fund the additional purchase and installation of mechanical equipment from SMS Group GmbH.
- In November 2019 ElvalHalcor signed the agreement of syndicated bond loan, of EUR 10 million with a major Greek bank. The loan has a maturity of three years.

Cables and Steel Pipes segments

- Corinth Pipeworks received a new 7-year bond loan of EUR 12.57 million by a major Greek bank.
- Fulgor received a new 5-year bond loan of EUR 10 million by a major Greek bank in order to finance constant working capital needs.
- Fulgor entered in a sales & leaseback agreement with a major Greek financial institution amounting to EUR 5.5 million, with a 7 year duration to finance part of the capital expenditure program in the Corinth plant.
- Fulgor received a new 7-year bond loan of EUR 11.4 million by a major Greek bank.

Steel segment

- Sovel received a new 5-year bond loan of EUR 3.2 million by a major Greek bank.
- Sidenor received a new 5-year bond loan of EUR 3 million by a major Greek bank.

No other significant events, related with the financing of subsidiaries occurred during 2019.

Short term facilities are predominately revolving credit facilities, which finance working capital needs and specific ongoing projects.

The average interest rate of the outstanding bank loans as at 31 December 2019 was 3.8 % (4.4 % as at 31 December 2018). Property, plant and equipment and inventories of some subsidiaries carry mortgages and liens for a total amount of EUR 1,502 million, as collaterals for long term loans and syndicated loans. For the bank loans of Viohalco's companies, there are clauses of change of control that provide the lenders with an early redemption clause.

B. Reconciliation of movements of liabilities to cash flows from financing activities

<i>Amounts in EUR thousands</i>	Loans and Borrowings	Leases	Total
Balance at 1 January 2019	1,774,232	25,129	1,799,361
Changes from financing cash flows			
Proceeds from loans and borrowings	302,364	0	302,364
Repayment of borrowings & lease liabilities	-298,820	-12,992	-311,812
Total changes from financing cash flows	3,544	-12,992	-9,448
Other changes			
Change in accounting policy – IFRS 16 adoption	0	25,726	25,726
New leases	0	13,867	13,867
Interest expense	75,182	2,645	77,826
Interest paid	-73,290	0	-73,290
Capitalised borrowing costs	3,209	0	3,209
Terminations/Modifications	-6,659	-879	-7,537
Division spin off	-3,594	-21	-3,615
Effect of changes in foreign exchange rate	1,353	-54	1,299
Total other changes	-3,799	41,284	37,485
Balance at 31 December 2019	1,773,978	53,420	1,827,398

<i>Amounts in EUR thousands</i>	Loans and Borrowings	Leases	Total
Balance at 1 January 2018	1,670,638	25,149	1,695,787
Changes from financing cash flows			
Proceeds from loans and borrowings	369,963	0	369,963
Repayment of borrowings & finance lease liabilities	-271,341	-4,801	-276,142
Total changes from financing cash flows	98,621	-4,801	93,820
Other changes			
Capitalised borrowing costs	2,219	0	2,219
New finance leases	0	3,230	3,230
Interest expense	83,342	1,552	84,894
Interest paid*	-80,027	0	-80,027
Effect of changes in foreign exchange rates	-560	-2	-562
Total other changes	4,973	4,780	9,753
Balance at 31 December 2018	1,774,232	25,129	1,799,361

*Interest paid reported in Cash Flow Statement, includes bank charges and other finance costs.

28. Trade and other payables

<i>Amounts in EUR thousands</i>	Note	2019	2018
Suppliers		471,540	522,170
Notes payable		76,228	42,810
Social security funds	12	11,332	10,918
Amounts due to related parties	38	4,483	14,570
Sundry creditors		23,274	19,969
Accrued expenses		43,067	31,860
Taxes-duties		24,240	27,571
Total		654,164	669,867

Non-current balance of trade and other payables	4,183	8,324
Current balance of trade and other payables	649,981	661,544
Balance as at 31 December	654,164	669,867

29.Grants

<i>Amounts in EUR thousands</i>	Note	2019	2018
Balance as at 1 January		39,618	43,088
Collection of grants		169	501
Transfer of grants to results		-427	0
Amortisation of grants	9	-3,942	-3,970
Foreign exchange differences		-8	0
Balance as at 31 December		35,409	39,618

Government grants have been received for investments in property, plant and equipment. All conditions attached to the grants received by Viohalco's companies were met as at 31 December 2019.

30.Provisions

Non-current			
<i>Amounts in EUR thousands</i>	Pending court rulings	Other provisions	Total
Balance as at 1 January 2019	123	3,948	4,071
Foreign exchange differences	0	52	52
Transfer to short term provisions	-98	0	-98
Reclassifications	0	-1,213	-1,213
Provisions used	0	-35	-35
Balance as at 31 December 2019	25	2,752	2,777

<i>Amounts in EUR thousands</i>	Pending court rulings	Other provisions	Total
Balance as at 1 January 2018	138	4,279	4,416
Foreign exchange differences	0	-8	-8
Additional provisions of the fiscal year	25	0	25
Provisions reversed	-40	-109	-148
Provisions used	0	-213	-213
Balance as at 31 December 2018	123	3,948	4,071

Current			
<i>Amounts in EUR thousands</i>	Pending court rulings	Other provisions	Total
Balance as at 1 January 2019	131	407	538
Foreign exchange differences	0	-2	-2
Additional provisions of the fiscal year	22	124	146
Transfer from short term provisions	0	98	98
Provisions reversed	0	-143	-143
Provisions used	0	0	0
Balance as at 31 December 2019	153	483	636

<i>Amounts in EUR thousands</i>	Pending court rulings	Other provisions	Total
Balance as at 1 January 2018	273	377	650
Foreign exchange differences	0	-6	-6
Additional provisions of the fiscal year	0	137	137
Provisions used	-141	-102	-243
Balance as at 31 December 2018	131	407	538

Other provisions mainly relate to environmental obligations for underground pollution issue in United Kingdom in aluminium segment.

31. Financial instruments

A. Accounting classifications and fair values

The following table shows the carrying amounts and fair values of financial assets and financial liabilities, including the levels in the fair value hierarchy.

31 December 2019					
<i>Amounts in EUR thousands</i>	Carrying amount	First Level	Second Level	Third Level	Total
Other investments	5,829	4,998	0	830	5,829
Derivative financial assets	1,523	1,020	503	0	1,523
	7,352	6,019	503	830	7,352
Derivative financial liabilities	-4,284	-3,729	-555	0	-4,284
	3,068	2,290	-52	830	3,068

31 December 2018					
<i>Amounts in EUR thousands</i>	Carrying amount	First Level	Second Level	Third Level	Total
Other investments	8,538	4,256	1,463	2,819	8,538
Derivative financial assets	7,012	5,199	1,814	0	7,012
	15,550	9,455	3,277	2,819	15,550
Derivative financial liabilities	-13,599	-8,277	-5,322	0	-13,599
	1,951	1,177	-2,045	2,819	1,951

The various levels are as follows:

- Level 1: Quoted prices (unadjusted) in an active market for identical assets and liabilities;
- Level 2: Inputs that are observable either directly or indirectly;
- Level 3: Unobservable inputs for assets and liabilities.

The fair value of the following financial assets and liabilities measured at amortised cost approximate their carrying amount:

- Trade and other receivables;
- Cash and cash equivalents;
- Trade and other payables;
- Loans and borrowings;
- Lease liabilities.

Specifically, the carrying amount of loans and borrowings is considered as a good approximation of their fair value as 97% of consolidated Loans and borrowings concern floating-rate debt, which are a very good approximation of current market rates.

During the first half of 2019, Viohalco disposed its' holding securities in 'EM Interfin S.A.', classified as second level in other investments.

On June 19th 2019, subsidiary Elvalhalcor signed a Share Purchase Agreement (SPA) regarding the purchase of 147,749 shares in Elpedison S.A., by Elpedison BV, that represents the 1.48% of its share capital, for an amount of EUR 1,225 thousand. The result of the valuation of this transaction recognised in Other Comprehensive Income. On July 26th 2019, Elvalhalcor received the consideration of EUR 1,225 thousand and completed the transfer of shares.

The following table shows reconciliation between opening and closing balances for Level 3 financial assets:

<i>Amounts in EUR thousands</i>	
Balance as at 1 January 2019	2,819
Additions	129
Disposals	-1,238
Fair value through OCI	-842
Reclassifications (note 14)	-37
Balance as at 31 December 2019	830
Balance as at 1 January 2018	2,945
Additions	13
Fair value adjustment through OCI	-56
Reclassifications	-84
Balance as at 31 December 2018	2,819

B. Measurement of fair values

(a) Valuation techniques and significant unobservable inputs

The fair values of financial assets that are traded in active markets (stock markets e.g. derivatives, shares, bonds, mutual funds) are set according to the published prices that are valid on the reporting date. The fair value of financial assets is determined by their offer price, while the fair value of financial liabilities is determined by their bid price.

The fair values of financial assets that are not traded in active markets are set through the use of valuation techniques and standards that are based on market data on the reporting date.

The fair values of financial liabilities, for the purpose of being recorded in financial statements, are estimated based on the present value of the future cash flows that arise from specific contracts using the current interest rate that is available for Viohalco and its companies for the use of similar financial-credit means.

Inputs that do not meet the respective criteria and cannot be classified in Level 1 but are observable, either directly or indirectly, fall under Level 2. Over-the-counter derivative financial instruments based on prices obtained from brokers are classified in this level.

The financial assets, such as unlisted shares that are not traded in an active market whose measurement is based on the Viohalco's companies' forecasts for the issuer's future profitability are classified under Level 3.

The following table shows the valuation techniques used in measuring fair values, as well as the significant unobservable inputs used:

Type	Valuation technique	Significant unobservable inputs	Inter-relationship between key unobservable inputs and fair value measurement
Derivatives	<i>Market value:</i> Price as traded in active market	Not applicable	Not applicable
	<i>Market comparison technique:</i> The fair values are based on broker quotes. Similar contracts are traded in an active market and the quotes reflect the actual transactions in similar instruments	Broker quotes	Not applicable
Equity securities traded in active markets	<i>Market value:</i> Price as traded in active market	Not applicable	Not applicable
Equity securities not traded in active markets	<i>Discounted cash flows:</i> The fair value of shares not traded in an active market is defined based on the estimates of Viohalco and its companies for the future profitability of the issuer after taking into account the expected growth rate of its operations, as well as the discounted interest rate	<ul style="list-style-type: none"> - Risk-free rate: 0.58% - Market risk premium: 7.0% - Expected tax expense rate: 24% - WACC for the most significant investment: 6.8% 	The estimated fair value would increase (decrease) if: <ul style="list-style-type: none"> • the estimated risk-free rate, market risk premium and WACC were lower (higher) • the estimated cash flows were higher (lower) • the expected income tax rate was lower (higher)

(b) Transfers between Levels 1 and 2

There were no transfers from Level 2 to Level 1 or from Level 1 to Level 2 in 2019 or in 2018.

C. Financial risk management

Viohalco and its companies are exposed to credit, liquidity and market risk due to the use of its financial instruments. This Note sets forth information on their exposure to each one of the above risks, their objectives, the policies and procedures applied to risk measurement and management and Viohalco's capital management (note 26). More quantitative particulars on these disclosures are included in the entire range of the Consolidated Financial Statements.

The risk management policies are applied in order to identify and analyze the risks facing Viohalco and its companies, set risk-taking limits and apply relevant control systems. The risk management policies and relevant systems are examined from time to time so as to take into account any changes in the market and the companies' activities.

The implementation of risk management policies and procedures is supervised by the Internal Audit department, which performs ordinary and extraordinary audits relating to the implementation of procedures, whereas the results of such audits are notified to the Board of Directors.

C.1. Credit risk

Credit risk is the risk of the financial loss to Viohalco and its companies, if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the companies' receivables from customers, contract assets and bank deposits.

The carrying amount of financial assets represents the maximum credit exposure.

<i>Amounts in EUR thousands</i>	Note	2019	2018
Trade & other receivables	16	444,757	557,520
Contract assets	8	121,186	117,428
<i>Less:</i>			
Other down payments	16	-9,647	-9,121
Tax assets	16	-51,869	-42,630
Other non-financial assets		-26,623	-12,727
		477,804	610,469
Other investments	22	5,829	8,538
Cash and cash equivalents	17	214,499	163,676
Derivatives	24	1,523	7,012
		221,851	179,226
Total		699,655	789,695

(a) Trade and other receivables

Viohalco companies' exposure to credit risk is influenced mainly by the individual characteristics of each customer. However, the companies' management also considers the factors that may influence the credit risk of its customer base, including the default risk of the industry and country in which customers operate. No client exceeds 10% of consolidated sales and, consequently, commercial risk is spread over a large number of clients.

Viohalco's companies have established a credit policy on the basis under which each new customer is examined on an individual basis in terms of creditworthiness before the standard payment and delivery terms are proposed to such customer. Viohalco's companies review includes external ratings, if they are available, and in some cases bank references. Credit limits are set for each customer, which are reviewed in accordance with current circumstances and the terms of sales and collections are readjusted, if necessary. As a rule, the credit limits of customers are set on the basis of the insurance limits received for them from insurance companies and, subsently, receivables are insured according to such limits.

When monitoring the credit risk of customers, the latter are grouped according to their credit characteristics, the maturity characteristics of their receivables and any past problems of receivability they have shown. Trade and other receivables mainly include wholesale customers of Viohalco's companies. Any customers characterized as being "high risk" are included in a special list of customers and subsequent sales must be paid in advance. Depending on the background of the customer and its status, Viohalco's companies demand real or other security (e.g. letters of guarantee) in order to secure its receivables, if possible. Viohalco's companies record an impairment loss that represents its expected credit losses in respect of trade and other receivables.

At 31 December, the maximum exposure to credit risk for trade and other receivables and contract assets by geographic region was as follows:

<i>Amounts in EUR thousands</i>	2019	2018
Greece	143,204	194,839
Other EU member states	224,268	223,017
Other European countries	60,256	65,708
Asia	19,355	28,591
America	24,967	88,404
Africa	5,703	9,561
Oceania	53	348
Total	477,804	610,469

The ageing of trade and other receivables and contract assets that were not impaired was as follows:

<i>Amounts in EUR thousands</i>	2019	2018
Neither past due nor impaired	386,559	505,659
Overdue		
- Up to 6 months	62,447	77,404
- Over 6 months	28,798	27,406
Total	477,804	610,469

Based on management assessment, the amounts that are past due up to 6 months and over 6 months are still collectible in full, based on historical payment behaviour and extensive analysis of customer credit risk, including underlying customers' credit ratings whenever they are available.

Viohalco companies insure significant portion of their receivables in order to be secured in case of default. As at 31 December 2019, 63% of the balances owed by 3rd parties were insured.

The movement in impairment of trade and other receivables and contract assets is as follows:

<i>Amounts in EUR thousands</i>	2019			2018		
	Trade & other receivables	Contract assets	Total	Trade & other receivables	Contract assets	Total
Balance as at 1 January	73,461	242	73,703	68,595	0	68,595
Adjustment on initial application of IFRS 9	0	0	0	5,224	148	5,372
Restated balance as at 1 January	73,461	242	73,703	73,818	148	73,966
Impairment loss recognized	2,848	0	2,848	922	97	1,020
Amounts written off	-758	0	-758	-1,450	0	-1,450
Division/ segment spin off	-7	0	-7	0	0	0
Impairment loss reversed	-2,643	-126	-2,770	-688	-4	-692
Foreign exchange differences	353	0	353	859	0	859
Other movements	-39	0	-39	0	0	0
Balance as at 31 December	73,215	115	73,330	73,461	242	73,703

The allowance for expected credit losses for trade receivables and contract assets are calculated at individual level when there is an indication of impairment. For receivables and contract assets without any indication of impairment the expected credit losses are based on the historical credit loss experience combined with forward-looking information in macroeconomic factors effecting the credit risk, such as country risk and customers' industry related risks. Expected loss rates are updated at every reporting date.

In 2019, the impairment loss recorded concerns mainly a former customer in the Middle-East (see Note 16.B). On the contrary, as a result of the improvement of the expected loss rates of domestic customers due to the improvement noted in Greek market an amount of EUR 370 thousand was reversed.

The following collateral exists for securing non-insured receivables from customers and contract assets:

<i>Amounts in EUR thousands</i>	2019	2018
Cash collateral	730	1,158
Letter of credit	17,821	26,999
Collateral on property	2,107	2,707
Personal guarrantees	0	69
Payables which can be offset by receivables	5,023	10,134
Other	2,403	3,668
Total	28,085	44,735

(b) Cash and cash equivalents

Viohalco and its subsidiaries held cash and cash equivalents of EUR 214 million at 31 December 2019 (2018: EUR 164 million). The cash and cash equivalents are held with bank and financial institution counterparties, which are rated from A2 to Caa2 based on ratings of Moody's.

Impairment on cash and cash equivalents has been measured on a 12-month expected loss basis and reflects the short maturities of the exposures. Viohalco considers that its cash and cash equivalents have low credit risk based on the credit assessment performed.

C.2. Liquidity risk

Liquidity risk is the risk that Viohalco companies will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The approach to manage liquidity is to ensure, as much as possible, that they will have sufficient liquidity to meet their liabilities when they are due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to their reputation.

In order to avoid liquidity risks, Viohalco companies aim to maintain the level of their cash and cash equivalents at an amount in excess of expected cash outflows on financial liabilities (other than trade payables) over the next quarter days. They also monitor the level of expected cash inflows on trade and other receivables together with expected cash outflows on trade and other payables.

This excludes the potential impact of extreme circumstances that cannot reasonably be predicted.

Viohalco's subsidiary Steelmet SA, provides support services to other subsidiaries, when agreeing financing terms with credit institutions in Greece and other countries.

Exposure to liquidity risk

Financial liabilities and derivatives based on contractual maturity are broken down as follows:

2019						
<i>Amounts in EUR thousands</i>	Carrying Amount	< 1year	1-2 years	2-5 years	> 5 years	Total
Liabilities						
Bank loans	1,001,254	751,068	63,227	183,571	43,983	1,041,849
Bond issues	772,723	161,763	123,167	512,135	65,208	862,273
Lease liabilities	53,420	23,956	11,081	20,935	1,054	57,026
Derivatives	4,284	4,100	185	0	0	4,284
Contract liabilities	68,526	61,573	7,551	0	0	69,124
Trade and other payables	654,164	657,627	2,126	217	1,133	661,103
	2,554,372	1,660,086	207,336	716,859	111,378	2,695,659

2018						
<i>Amounts in EUR thousands</i>	Carrying Amount	< 1year	1-2 years	2-5 years	> 5 years	Total
Liabilities						
Bank loans	1,059,527	840,404	59,894	160,328	41,435	1,102,061
Bond issues	714,742	93,338	154,493	512,416	58,463	818,711
Lease liabilities	25,092	4,596	4,593	12,603	28,411	50,202
Derivatives	13,599	13,498	101	0	0	13,599
Trade and other payables	669,867	661,544	4,843	2,348	1,133	669,867
	2,482,827	1,613,380	223,924	687,695	129,442	2,654,440

Viohalco companies have syndicated loans that contain certain financial covenants. The ratios most commonly used are 'Total liabilities / Total equity', 'Net debt / Total sales' and 'Current assets / Current liabilities'. A future breach of covenants may require the companies to repay the loans earlier than indicated in the above table. Under the agreement, the covenants are monitored on regular basis by Steelmet S.A. and regularly reported to companies' management to ensure compliance with the agreements.

C.3. Market risk

Market risk is the risk that changes in the market prices – such as commodity prices, foreign exchange rates and interest rates - will affect Viohalco and its companies income or the value of their financial instruments. Viohalco's companies use derivatives to manage market risk.

All such transactions are carried out through Steelmet S.A. Generally, the companies seek to apply hedge accounting to manage volatility in profit or loss.

(a) Currency risk:

Viohalco and its companies are exposed to currency risk in relation to the sales and purchases carried out and the loans issued in a currency other than the functional currency of Viohalco and its companies, which is mainly EUR. The most important currencies in which these transactions are held are mainly EUR, USD and GBP.

Over time, Viohalco's companies hedge the greatest part of its estimated exposure to foreign currencies in relation to the anticipated sales and purchases, as well as to the receivables and liabilities in foreign currency. Viohalco's companies enter mainly into forward contracts with external counterparties so as to deal with the risk of the exchange rates varying, which mainly expire within less than a year from the reporting date. When deemed necessary, these contracts are renewed upon expiry. As the case may be, the foreign exchange risk may also be covered by taking out loans in the respective currencies.

Loan interest is denominated in the same currency with that of cash flows, which arises from the Viohalco's companies' operating activities.

The investments of Viohalco and its companies in their subsidiaries are not hedged, because these exchange positions are considered to be long-term and have been made mainly in Euro.

The summary quantitative data about Viohalco and its companies' exposure to currency risk as reported is as follows.

2019									
<i>Amounts in EUR thousands</i>	USD	GBP	BGN	RSD	RON	Other	Total at risk	EUR	Total
Trade and other receivables	38,328	10,988	21,109	2,047	26,453	9,780	108,705	336,052	444,757
Contract assets	4,470	0	259	0	0	0	4,729	116,457	121,186
Loans and borrowings	-9,700	-15,913	-3,968	-504	-7,383	-9,969	-47,436	-1,779,962	-1,827,398
Trade and other payables	-63,139	-12,631	-57,653	-825	-11,738	-2,271	-148,256	-505,908	-654,164
Contract liabilities	-2,834	-157	-1,234	-116	-2,221	-14	-6,576	-61,950	-68,526
Cash & cash equivalents	26,568	2,668	7,279	516	2,339	1,331	40,700	173,798	214,499
	-6,306	-15,045	-34,207	1,119	7,450	-1,143	-48,133	-1,721,514	-1,769,647
Derivatives for risk hedging (Nominal Value)	-11,558	-14,198	0	0	0	0	-25,755	0	-25,755
Exposure	-17,864	-29,243	-34,207	1,119	7,450	-1,143	-73,889	-1,721,514	-1,795,402

<i>Amounts in EUR thousands</i>	USD	GBP	BGN	RSD	RON	Other	Total at risk	EUR	Total
Trade and other receivables	78,766	22,116	24,097	2,412	27,198	7,935	162,524	394,996	557,520
Contract assets	47,113	0	0	0	0	0	47,113	70,315	117,428
Loans and borrowings	-79,699	-27,969	-10,199	0	-5,579	-4,510	-127,955	-1,671,405	-1,799,360
Trade and other payables	-57,987	-38,283	-50,126	-571	-12,120	-1,225	-160,312	-509,556	-669,867
Contract liabilities	-719	-5	-1,175	-324	-360	-6	-2,590	-75,276	-77,866
Cash & cash equivalents	40,934	494	5,280	434	1,900	558	49,601	114,075	163,676
	28,407	-43,646	-32,122	1,951	11,039	2,752	-31,619	-1,676,851	-1,708,470
Derivatives for risk hedging (Nominal Value)	-97,085	-11,934	0	0	0	-1,251	-110,270	0	-110,270
Exposure	-68,678	-55,580	-32,122	1,951	11,039	1,501	-141,889	-1,676,851	-1,818,740

“Derivatives for risk hedging” includes also derivatives that relate to highly probable transactions, which have not been yet recognized as assets or liabilities in the consolidated statement of financial position. Euro denominated amounts are included for totals’ reconciliation purposes.

The following exchange rates have been applied during the year.

	Average exchange rate		Year end spot rate	
	2019	2018	2019	2018
USD	1.12	1.18	1.12	1.15
GBP	0.88	0.88	0.85	0.89
BGN	1.96	1.96	1.96	1.96
RSD	117.85	118.27	117.59	118.19
RON	4.75	4.65	4.78	4.66

Viohalco is primarily exposed to changes of Euro against US dollar, pound sterling, DINAR or RON. A reasonably possible strengthening (weakening) of Euro against these currencies as at 31 December would have affected the measurement of financial instruments denominated in a foreign currency and affected equity and profit or loss by the amounts shown below. This analysis assumes that all other variables, in particular interest rates, remain constant and ignores any impact of forecast sales and purchases. The Bulgarian currency LEV is not analysed below due to its fixed currency rate at 1.956 BGN/EUR.

<i>Amounts in EUR thousands</i>	Profit or loss		Equity, net of tax	
	EUR Strengthening	EUR Weakening	EUR Strengthening	EUR Weakening
2019				
USD (10% movement)	691	-691	1,358	-1,358
GBP (10% movement)	2,222	-2,222	2,222	-2,222
RSD (10% movement)	-85	85	-85	85
RON (10% movement)	-566	566	-566	566
2018				
USD (10% movement)	-2,494	2,494	3,646	-3,646
GBP (10% movement)	3,946	-3,946	3,946	-3,946
RSD (10% movement)	-784	784	-784	784
RON (10% movement)	-139	139	-139	139

(b) Interest rate risk:

Viohalco's subsidiaries during the prolonged low interests period have adopted a flexible policy of ensuring that between 0% and 20% of its interest rate risk exposure is at a fixed rate. This is achieved mostly by borrowing at a floating rate and in certain circumstances by entering into fixed-rate instruments. The interest rate profile of Viohalco companies' interest-bearing financial instruments, as reported is as follows.

<i>Amounts in EUR thousands</i>	Nominal amount	
	2019	2018
Fixed-rate instruments		
Financial liabilities	-66,734	-52,535
Variable-rate instruments		
Financial liabilities	-1,760,664	-1,746,826

Fixed-rate instruments

Viohalco does not account for any fixed-rate financial assets or financial liabilities at fair value through profit or loss. Viohalco currently uses derivatives (interest rate swaps) as hedging instruments under a cash flow hedge accounting model.

Sensitivity analysis for variable-rate instruments

A reasonably possible change of 0.25% in interest rates of variable-rate instruments at the reporting date would have increased/ decreased (-) profit or loss by the amount shown below. This analysis assumes that all other variables, in particular foreign currency exchange rate, remain constant.

<i>Amounts in EUR thousands</i>	Profit or loss	
	0.25% increase	0.25% decrease
2019		
Financial liabilities	-2,987	2,987
Cash flow sensitivity (net)	-2,987	2,987
2018		
Financial liabilities	-2,707	2,707
Cash flow sensitivity (net)	-2,707	2,707

(c) Cash flow hedges

The following table indicates the periods in which the cash flows associated with cash flow hedges are expected to occur:

<i>Amounts in EUR thousands</i>	Carrying amount at 31 December 2019	1-6 months	6-12 months	More than 1 year	31 December 2019
Interest rate Swaps					
Liabilities	-172	0	0	-172	-172
Forwards					
Assets	441	440	1	0	441
Liabilities	-369	-293	-64	-12	-369
Future contracts					
Assets	1,020	876	143	1	1,020
Liabilities	-3,557	-2,948	-609	0	-3,557
	-2,637	-1,925	-528	-184	-2,637

<i>Amounts in EUR thousands</i>	Carrying amount at 31 December 2018	1-6 months	6-12 months	More than 1 year	31 December 2018
Forwards					
Assets	563	477	82	3	563
Liabilities	-4,082	-2,067	-2,016	0	-4,082
Future contracts					
Assets	3,381	3,381	0	0	3,381
Liabilities	-7,322	-5,280	-1,940	-101	-7,322
	-7,460	-3,488	-3,874	-98	-7,460

The table below provides information about the items designated as cash flow hedging instruments during the year and also as at 31 December 2019 and the reconciliation of hedging reserve. Based on their nature, hedging instruments are included in Derivatives assets and Derivatives liabilities in consolidated statement of financial position.

2019

<i>Amounts in EUR thousands</i>	Nominal Amount	Carrying amount		Balance 1 January 2019	Changes in the value of the hedging instrument recognised in OCI	Amount reclassified from hedging reserve to profit or loss	Other move- ments	Effect of movement in exchange rates	Balance 31 December 2019
		Assets	Liabilities						
Forward foreign exchange contracts	25,765	441	-369	-3,520	166	3,571	0	-146	72
Future contracts	31,008	1,020	-3,557	-3,940	-1,233	2,719	0	-82	-2,537
Interest rate swap contracts	21,300	0	-172	0	0	0	-172	0	-172
	78,072	1,461	-4,098	-7,460	-1,067	6,290	-172	-228	-2,637

2018

<i>Amounts in EUR thousands</i>	Nominal Amount	Carrying amount		Balance 1 January 2018	Changes in the value of the hedging instrument recognised in OCI	Amount reclassified from hedging reserve to profit or loss	Effect of movement in exchange rates	Balance 31 December 2018
		Assets	Liabilities					
Forward foreign exchange contracts	-73,295	563	-4,082	-4,955	-435	1,998	-127	-3,520
Future contracts	-18,213	3,381	-7,322	4,141	751	-9,008	176	-3,940
	-91,508	3,944	-11,404	-814	315	-7,010	48	-7,460

(d) Commodity price risk

The commodity markets experience continuous price fluctuations. Viohalco companies minimize their exposure to commodity price volatility by using future contracts, when possible. Viohalco companies are exposure to the fluctuation of aluminium, copper, zinc, lead and nickel. In order to minimize the effect of the metal price fluctuations on their results, companies use back to back matching of purchases and sales or derivative instruments (future contracts).

As at 31 December 2019 the derivative net balance of future contracts per commodity as reported in the statement of financial position is:

<i>Amounts in EUR thousands</i>	2019	2018
Aluminium	-817	-5,327
Copper	-1,338	1,096
Lead	-245	291
Nickel	-136	0
Total	-2,537	-3,940

These hedges are designated in a cash flow hedge accounting relationship.

C.4. Business and Operational Risk Management

There were no changes in Viohalco companies' business and operational risk management objectives and policies during 2019.

Viohalco companies follows closely and continuously both international and domestic developments and timely adapt their business strategy and risk management policies in order to minimize the operational impact of macroeconomic conditions.

Macroeconomic environment in Greece

The macroeconomic and financial environment in Greece, where most of Viohalco companies are located, is showing continuous signs of stability, following the successful completion of the third bailout program and capital controls that were in force in Greece since June 2015 have been abolished on September. To the extent there will be no delays in the completion of key structural reforms in the country from the newly elected government, no material negative impact on the operations of Viohalco is anticipated. Additionally, Viohalco companies' strong customer base outside Greece (86% of revenue for 2019) along with their established facilities abroad minimize the liquidity risk which may arise from any uncertainty of the economic environment in Greece.

In early 2020s, the novel coronavirus has become a pandemic, severely affecting people, society and industries globally. The country has been in a state of lockdown, with schools closed, the retail shops closed and air travel from and into Greece suspended. Disruptions are more immediate and pronounced in certain industries such as tourism, hospitality, transportation, retail and entertainment, while there are also anticipated knock-on effects on other sectors such as manufacturing and the financial sector. In response to these extraordinary circumstances, several key measures have been announced by European institutions and the Greek government to support Greek businesses, the most significant of which refer to support of the liquidity of businesses and individuals, taxes and social security contribution measures and employment and compensation arrangements. The unfolding crisis is expected to have significant consequences on Greek economy, however, the magnitude and the duration of the impact of COVID-19 remains uncertain as the situation is still evolving.

Brexit

Concerning potential implications from Brexit, Viohalco closely monitors relevant developments and takes measures to mitigate any potential disruptions. Although Brexit occurred on January 31st 2020, there is no agreement yet with regards to any potential trade barriers and custom duties that may be imposed by both the EU and the United Kingdom. There is a transition period during 2020 when EU and UK will determine their future trade relation during the ongoing negotiations. Given the current crisis due to spread of Covid-19, it is likely that the transition period will be extended.

Nonetheless, Viohalco does not expect its financial position to be significantly vulnerable with regard to Brexit. Exports to the United Kingdom accounted for approximately 6.2% of total revenues for 2019 (2018: 6.4 %) while most of direct competitors in the cables and steel pipes segments operate within the Eurozone. Thus, it is likely they will react to currency fluctuations in a similar way as Viohalco companies. The analysis performed up to date shows that Brexit is not expected to have any material adverse effect on the operations of Viohalco companies.

32.Subsidiaries

Viohalco's subsidiaries and the percentages of financial interest held by the parent company at the end of the reporting period are as follows:

Subsidiary companies	Country	Financial interest 2019	Financial interest 2018
AEIFOROS S.A.	GREECE	98.94%	89.08%
AEIFOROS BULGARIA S.A.	BULGARIA	98.94%	89.08%
AL - AMAR S.A.	LIBYA	90.00%	90.00%
ALURAME SPA	ITALY	93.45%	95.13%
ANOXAL S.A.	GREECE	91.44%	91.44%
ANAMET DOO	SERBIA	98.62%	98.62%
ANAMET S.A.	GREECE	98.62%	98.62%
ANTIMET S.A.	GREECE	100.00%	99.96%
ATTIKI S.A.	GREECE	75.00%	75.00%
BASE METALS S.A.	TURKEY	70.55%	71.82%
BRIDGNORTH LTD	U.K.	75.00%	75.00%
CABLEL WIRES S.A. (former VEMET S.A.)	GREECE	91.44%	100.00%
CENERGY HOLDINGS S.A.	BELGIUM	79.78%	79.78%
CLUJ INTERNATIONAL TRADE SRL	ROMANIA	100.00%	100.00%
CORINTH PIPEWORKS S.A.	GREECE	79.78%	79.78%
CPW AMERICA Co	USA	79.78%	79.78%
DE LAIRE LTD	CYPRUS	79.78%	79.78%
DIA.VI.PE.TH.I.V S.A.	GREECE	92.92%	92.92%
DOJLAN STEEL LLCOP	NORTH MACEDONIA	100.00%	100.00%
ELVAL COLOUR S.A.	GREECE	91.44%	91.44%
ELVAL COLOUR IBERICA S.A.	SPAIN	91.44%	91.44%
ELVALHALCOR S.A.	GREECE	91.44%	91.44%
ELKEME S.A.	GREECE	90.57%	90.57%
EPIRUS METALWORKS S.A.	GREECE	91.44%	-
ERGOSTEEL S.A.	GREECE	91.08%	91.09%
ERLIKON S.A.	GREECE	100.00%	99.95%
ETEM ALBANIA S.A.	ALBANIA	100.00%	100.00%
ETEM BULGARIA S.A.	BULGARIA	100.00%	100.00%
ETEM BG S.A.	BULGARIA	100.00%	100.00%
ETEM GESTAMP EXTRUSIONS S.A.	BULGARIA	51.00%	-
ETEM COMMERCIAL S.A.	GREECE	100.00%	100.00%
ETEM SCG	SERBIA	100.00%	100.00%
ETEM SYSTEMS LLC	UCRAINE	100.00%	100.00%
ETEM SYSTEMS SRL	ROMANIA	100.00%	100.00%
ETIL S.A.	GREECE	100.00%	100.00%
FITCO S.A.	GREECE	91.44%	91.44%
FLOCOS S.A.	GREECE	93.88%	92.04%
FULGOR S.A.	GREECE	79.78%	79.78%
GENECOS S.A.	FRANCE	93.45%	95.13%
HELLENIC CABLES S.A.	GREECE	79.78%	79.78%
HELLENIC CABLES AMERICA S.A.	USA	79.78%	-
HUMBEL LTD	CYPRUS	79.78%	79.78%

Subsidiary companies	Country	Financial Interest 2019	Financial Interest 2018
ICME ECAB S.A.	ROMANIA	78.66%	78.66%
INOS BALCAN DOO	SERBIA	98.62%	98.62%
IWM S.A.	BULGARIA	98.94%	89.08%
INTERNATIONAL TRADE S.A.	BELGIUM	93.45%	95.13%
JOSTDEX LIMITED	CYPRUS	100.00%	100.00%
LESCO ROMANIA S.A.	ROMANIA	51.86%	51.86%
LESCO EOOD	BULGARIA	79.78%	79.78%
METAL AGENCIES LTD	U.K.	93.45%	95.13%
METAL VALIUS DOO	SERBIA	-	98.62%
METAL VALIUS LTD	BULGARIA	-	92.33%
METALCO S.A.	BULGARIA	100.00%	100.00%
METALIGN S.A.	BULGARIA	100.00%	100.00%
METALLOURGIA ATTIKIS S.A.	GREECE	50.00%	50.00%
NOVAL S.A.	GREECE	-	100.00%
NOVAL PROPERTY REIC	GREECE	99.27%	-
NOVOMETAL DOO	FYROM	98.62%	98.62%
PORT SVISHTOV WEST S.A.	BULGARIA	73.09%	73.09%
PRAKSIS S.A.	GREECE	61.00%	61.00%
PRAKSIS BG S.A.	BULGARIA	61.00%	61.00%
PROSAL TUBES S.A.	BULGARIA	-	100.00%
REYNOLDS CUIVRE S.A.	FRANCE	93.45%	95.13%
ROULOC S.A.	GREECE	91.44%	91.44%
SIDEBALK STEEL DOO	SERBIA	100.00%	100.00%
SIDENOR INDUSTRIAL S.A.	GREECE	100.00%	100.00%
SIDERAL SHRK	ALBANIA	99.95%	99.95%
SIDEROM STEEL SRL	ROMANIA	100.00%	100.00%
SIGMA IS S.A.	BULGARIA	100.00%	100.00%
SYMETAL S.A.	GREECE	91.44%	91.44%
SOFIA MED AD	BULGARIA	92.33%	92.33%
SOVEL S.A.	GREECE	92.95%	92.95%
STEELMET CYPRUS LTD	CYPRUS	91.08%	91.09%
STEELMET PROPERTIES S.A.	GREECE	91.08%	91.09%
STEELMET ROMANIA S.A.	ROMANIA	93.45%	95.13%
STEELMET S.A.	GREECE	91.08%	91.09%
STOMANA INDUSTRY S.A.	BULGARIA	100.00%	100.00%
TECHOR S.A.	GREECE	91.44%	91.44%
TECHOR ROMANIA S.A.	ROMANIA	91.44%	91.44%
TEPRO METAL AG	GERMANY	-	95.13%
TEPROMKC AG (former MKC)	GERMANY	93.45%	95.13%
TERRA MIDDLE EAST AG	GERMANY	93.45%	95.13%
THERMOLITH S.A.	GREECE	-	62.35%
TEKA SYSTEMS S.A.	GREECE	50.01%	50.01%
VEPAL S.A.	GREECE	91.44%	91.44%
VET S.A.	GREECE	-	79.78%
VIANATT S.A.	GREECE	98.62%	98.62%
VIENER S.A.	GREECE	96.46%	96.45%
VIEXAL S.A.	GREECE	97.72%	97.72%
VIOMAL S.A.	GREECE	45.72%	45.72%
VITRUVIT S.A.	GREECE	99.86%	100.00%
WARSAW TUBULARS TRADING SP.ZO	POLAND	79.78%	79.78%

The ultimate controlling entity is Viohalco S.A. for all the above entities. Viohalco does exercise control, by holding the majority of the voting rights, directly and/or indirectly and these entities are reported as

subsidiary companies.

The percentages reported on the above table represent the financial interest held directly and indirectly by Viohalco. For example, if Viohalco holds 70% of company A and company A holds 70% of company B, then in the table above it will be presented that Viohalco holds 49% of financial interest in company B.

Transactions that took place in 2019

Acquisition of NCI

- On January 1st 2019, subsidiary Erlikon S.A. (steel segment) completed the acquisition of 30% non-controlling interest in Viohalco's subsidiary Thermolith S.A. (resource recovery segment) at a cost of EUR 650 thousand.
- On January 1st 2019, subsidiary Anamet S.A. (resource recovery segment) acquired the 10% non-controlling interest of subsidiary Aeiforos S.A. (resource recovery segment) at a cost of EUR 1 million.
- On February 18th 2019, subsidiary Elvalhalcor acquired 50% of the share capital of UACJ Elval Consulting SA (former AFSEL), a consulting services company, from UACJ Corporation, for an amount of EUR 16 thousand. The company was renamed to Elvalhalcor Consulting SA.

Mergers & Absorptions

- On January 1st 2019, Viohalco's subsidiary Stomana absorbed its 100% subsidiary Prosal Tubes (steel segment) and Viohalco's subsidiary Inos Balkan absorbed its 100% subsidiary Metalvalious DOO (resource recovery segment).
- On January 1st 2019, Viohalco's subsidiary Vitruvit absorbed Thermolith SA which operates in resource recovery segment.
- On July 1st 2019, Viohalco's Germany based commercial companies Teprometal and MKC were merged consisting TEPROMKC AG.
- On September 30th 2019, subsidiary Sofia Med SA absorbed its 100% subsidiary Metalvalius Ltd (copper segment).

New subsidiaries establishment

- On April 1st 2019, after the completion of the spin-off of ETEM Bulgaria S.A. (wholly owned subsidiary of Viohalco) and the conclusion of the Investment Agreement with Gestamp North Europe Services S.L, a new company was established, 'Etem Gestamp Aluminium Extrusions SA', in which Viohalco holds 51% of the share capital and Gestamp Group 49% accordingly. Gestamp Group participated in the share capital increase of the new established entity by contributing an amount of EUR 9.5 million.
- On August 8th 2019, the transformation of ElvalHalcor Branch in Pogoni-Ioannina into new company under the initial trade name 'Epirus Metallworks Single Member SA.' was completed.
- On October 15th 2019, the establishment of 'Noval Property' as Real Estate Investment Company (REIC) was approved. Noval Property was formed through the merger of Noval SA and Vet SA, in parallel and simultaneously with in kind contribution of properties from other entities affiliated to the merged companies.
- On December 18th 2019, the spin-off of commercial activity of subsidiary Etem Bulgaria S.A. was completed with the establishment of new company "Etem BG S.A".
- On December 24th 2019, subsidiary Hellenic Cables S.A. sold the total shares of its 100% subsidiary Cable Wires S.A. to ElvalHalcor S.A. The date of disposal was determined as the closest to the end of month, upon the provision of the necessary approvals i.e. on 31 December 2019.
- Hellenic Cables America S.A. was established during Q4 2019, as a 100% subsidiary of Hellenic Cables S.A.

Transactions that took place in 2018

Acquisition of NCI

During 2018, Steelmet property services S.A. (subsidiary of Viohalco) acquired the non-controlling interest of its' subsidiary Ergosteel S.A. (40%) for an amount of EUR 260 thousand.

There were no other significant transactions within Viohalco during 2018.

33. Joint operations

Viohalco's subsidiary Hellenic Cables has a 62.52% interest in a joint arrangement called VO Cable VOF, which was set up as a partnership together with Van Oord. The scope of this joint operation scheme is to supply and install sea and land cables for the Hollandse Kust (South) Alpha project and Hollandse Kust (South) Beta project. The principal place of business of the joint operation is in the Netherlands.

Hellenic Cables has a 50.77% interest in a joint arrangement called V.O.F. Tideway - Hellenic Cables, which was set up as a partnership together with Tideway. The scope of this joint operation scheme is to execute a turnkey contract for the supply and installation of submarine cables for the connection of the Seamide offshore wind project to the Belgian grid. The principal place of business of the joint operation is in Belgium.

The agreements in relation to the VO Cable VOF and V.O.F. Tideway - Hellenic Cables require unanimous consent from all parties for all relevant activities. The two partners have direct rights to the assets of the partnership and are jointly and severally liable for the liabilities incurred by the partnership. These entities are therefore classified as joint operations and the Group recognises its direct right to the jointly held assets, liabilities, revenues and expenses as described in note 5.

34. Non-controlling interests

The following table summarises the information relating to each of the subsidiaries that have material NCI (at sub-group level in the cases of Cenergy, ElvalHalcor, Sidenor) before any intra-group elimination.

2019							
<i>Amounts in EUR thousands</i>	Cenergy	ElvalHalcor	Sidenor	Bridgnorth	Other	Intragroup eliminations	Total
NCI percentage (at parent company level)	20.22%	8.56%	0.00%	25.00%			
Non-current assets	488,911	828,071	310,479	77,347			
Current assets	550,814	740,910	267,800	91,224			
Non-current liabilities	234,100	527,533	260,172	5,817			
Current liabilities	581,663	444,296	315,298	48,894			
Net Assets	223,961	597,152	2,808	113,860			
Attributable to NCI by the companies	295	9,949	25,096	0			
Net attributable to the equity holders & NCI of Viohalco	223,667	587,204	-22,289	113,860			
Attributable to NCI by parent Company	45,225	50,265	0	28,465			
Carrying amount of NCI	45,520	60,213	25,096	28,465	21,115	-34,550	145,859
Revenue	958,016	2,037,278	534,607	246,786			
Profit / Loss (-)	20,170	42,162	-15,820	3,457			
Other comprehensive income	781	-1,996	-817	8,896			
Total comprehensive income	20,951	40,166	-16,637	12,353			
Attributable to NCI by the companies	-22	846	-3,486	0			
Net attributable to the equity holders & NCI of Viohalco	20,973	39,320	-13,151	12,353			
Attributable to NCI by Viohalco	4,241	3,366	0	3,088			
Total OCI of NCI	4,219	4,212	-3,486	3,088	301	2,275	10,609
Cash flows from operating activities	113,529	166,755	-4,771	17,524			
Cash flows from investing activities	-47,354	-168,707	-6,905	-2,168			
Cash flows from financing activities	-40,506	16,399	11,475	-15,893			
Net increase/ decrease (-) in cash and cash equivalents	25,669	14,448	-201	-536			

2018							
<i>Amounts in EUR thousands</i>	Cenergy	ElvalHalcor	Sidenor	Bridgnorth	Other	Intragroup eliminations	Total
NCI percentage (at parent company level)	20.22%	8.56%	0.00%	25.00%			
Non-current assets	455,044	709,808	308,738	78,430			
Current assets	603,390	779,251	303,168	101,803			
Non-current liabilities	214,781	455,667	261,461	4,293			
Current liabilities	640,618	465,147	332,125	74,437			
Net Assets	203,036	568,244	18,320	101,502			
Attributable to NCI by the companies	317	9,103	28,562	0			
Net attributable to the equity holders & NCI of Viohalco	202,719	559,141	-10,243	101,502			
Attributable to NCI by parent Company	40,990	47,862	0	25,376			
Carrying amount of NCI	41,307	56,965	28,562	25,376	14,939	-36,274	130,875
Revenue	963,797	2,117,789	617,015	289,127			
Profit / Loss (-)	6,931	61,937	11,394	5,671			
Other comprehensive income	-2,890	-2,503	-247	-1,869			
Total comprehensive income	4,041	59,434	11,147	3,802			
Attributable to NCI by the companies	28	672	1,416	0			
Net attributable to the equity holders & NCI of Viohalco	4,013	58,763	9,731	3,802			
Attributable to NCI by Viohalco	811	5,030	0	951			
Total OCI of NCI	840	5,702	1,416	951	1,525	-2,072	8,361
Cash flows from operating activities	-42,178	93,595	8,954	3,129			
Cash flows from investing activities	-48,662	-105,788	-3,156	-2,755			
Cash flows from financing activities	85,901	4,989	-10,324	726			
Net increase/ decrease (-) in cash and cash equivalents	-4,940	-7,204	-4,526	1,100			

35. Leases

A. Leases as lessee

(a) Amounts recognised in the Statement of Financial Position

The Consolidated Statement of Financial Position shows the following amounts relating to leases:

Right of Use Assets

<i>Amounts in EUR thousands</i>	31 December 2019	1 January 2019
Land	511	287
Buildings	3,838	4,404
Machinery	26,386	30,211
Transportation equipment	11,866	10,914
Other equipment	52	211
Total Right-of-use assets	42,652	46,026

Lease liabilities

<i>Amounts in EUR thousands</i>	31 December 2019	1 January 2019
Current lease liabilities	10,903	9,275
Non-current lease liabilities	42,518	41,543
Total lease liabilities	53,421	50,818

In the previous year, Viohalco companies recognised lease assets and lease liabilities in relation to leases that were classified as 'Finance leases' under IAS 17 Leases. The assets were presented in property, plant and equipment and the liabilities as part of Viohalco's borrowings. For adjustments recognised on adoption of IFRS 16 on 1 January 2019, please refer to note 6.

Additions to the right-of-use assets during 2019 were EUR 7,085 thousand.

(b) Amounts recognised in the Statement of profit or loss

The statement of profit or loss includes the following amounts relating to leases:

<i>Amounts in EUR thousands</i>	2019	2018
Depreciation charge of right-of-use assets		
Plots	21	0
Buildings	1,067	
Machinery	2,954	0
Transportation means	4,445	0
Other equipment	83	
Total	8,569	0
Interest expense (included in finance cost)	2,645	0
Variable rental fees	869	0
Low value rental fees	463	0
Short term rental fees	4,323	0

B. Leases as lessor

Viohalco and its companies in the real estate development sector lease out their investment properties (See note 20).

(a) Future minimum lease collections

At 31 December, the future minimum lease payments under non-cancellable leases were as follows.

<i>Amounts in EUR thousands</i>	2019	2018
Less than one year	18,854	18,078
Between one and two years	13,524	19,015
Between two and three years	12,723	14,981
Between three and four years	9,863	11,614
Between four and five years	9,227	10,868
More than five years	46,227	54,446
Total	110,418	129,001

(b) Amounts recognized in profit or loss

The figures below are related to investment property that has been recognised in the statement of profit or loss. Operating expenses relate mainly to maintenance cost.

<i>Amounts in EUR thousands</i>	Note	2019	2018
Rental income from investment property	8	11,197	8,388
Direct operating expenses regarding investment properties from which rents are collected		-1,339	-840
Direct operating expenses that do not generate rental income		-28	-73

36. Commitments

A. Purchase commitments

The below mentioned commitments relate to contracts that Viohalco's subsidiaries have entered into, according to their investment plans and are expected to be concluded during the next 3 years.

<i>Amounts in EUR thousands</i>	2019	2018
Property, plant and equipment	25,423	30,323
Investment property	24,600	0
Intangible Assets	3	80

B. Guarantees

<i>Amounts in EUR thousands</i>	2019	2018
Liabilities		
Guarantees to secure liabilities to suppliers	29,054	38,726
Guarantees for securing the good performance of contracts with customers	199,134	120,530
Guarantees for securing the good performance of contracts with suppliers	305	168

37. Contingent liabilities

The tax filings of the subsidiaries are routinely subjected to audit by tax authorities in most of the jurisdictions in which Viohalco and its companies conduct business. These audits may result in assessments of additional taxes. Viohalco and its subsidiaries provide for additional tax in relation to the outcome of such tax assessments, to the extent that a liability is probable and estimable.

Viohalco companies believe that their accruals for tax liabilities are adequate for all open tax years based on their assessment of underlying factors, including interpretations of tax law and prior experience.

38. Related parties

A. Equity-accounted investees and other related parties

The following transactions have been made with equity-accounted investees and other related parties.

<i>Amounts in EUR thousands</i>	2019	2018
Sale of goods/ services		
Associates	77,730	79,443
Joint ventures	20,832	14
	98,563	79,456
Purchases of goods / services		
Associates	7,264	6,573
Joint ventures	5,248	1
	12,512	6,574
Purchase of fixed assets		
Associates	124	0
Joint ventures	3	0
	127	0

Closing balances that arise from sales/purchases of goods, services, fixed assets, etc.:

<i>Amounts in EUR thousands</i>	2019	2018
Receivables from related parties:		
Associates	35,861	33,811
Joint ventures	3,040	21
	38,901	33,832
Liabilities to related parties:		
Associates	3,660	3,211
Joint ventures	823	18
	4,483	3,229
Contract liabilities to related parties:		
Joint ventures	288	285
	288	285

The outstanding balances from related parties are secured and the settlement of those balances is expected to be performed in cash during the following year, since the balances concern only short-term receivables and payables.

Services to and from related parties as well as sales and purchases of goods are carried out in accordance with the price lists applying to non-related parties. During 2019, the spin-off of Viohalco subsidiary Etem Bulgaria SA was completed from which a new joint venture was established, Gestamp Etem Automotive Bulgaria S.A. with NBV EUR 7.3 million and a holding percentage of 49%. As a result of the spin-off, transactions and balances have been increased compared to previous year.

B. Key management personnel compensation

The table below provides an overview of the transactions with Board members and executive management:

<i>Amounts in EUR thousands</i>	2019	2018
Compensation to BoD members and executives	4,870	4,535

The compensation to directors and executive management in the table above are fixed compensation. No variable compensation, post-employment benefits or share based benefits were paid in 2019 and in 2018.

39. Auditor's fees

The Company's statutory auditor (2019: PwC Réviseurs d'Entreprises scrl/ Bedrijfsrevisoren cvba & 2018: KPMG Réviseurs d'Entreprises) and a number of other member firms of the auditor's network, received fees for the following services:

<i>Amounts in EUR thousands</i>	For year ended 31 December	
	2019	2018
Statutory Auditor		
Audit	277	293
Tax related services	123	0
	400	293
Statutory Auditor Network		
Audit	1,020	806
Tax related services	4	53
Other services	174	72
	1,197	931
Total	1,597	1,234

40.Subsequent events

- a) On March 12th 2020, the subsidiary ElvalHalcor received notice for the commencement of the preliminary phase for antidumping investigation and countervailing duty (CVD) investigation by the United States International Trade Commission (USITC) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened or the establishment of an industry in the United States is materially retarded by reason of imports of common alloy aluminium sheet from Greece and seventeen other countries (Bahrain, Brazil, Croatia, Egypt, Germany, India, Indonesia, Italy, Korea, Oman, Romania, Serbia, Slovenia, South Africa, Spain, Taiwan and Turkey). On the date of publication of the financial statements there were no available information in order to estimate the potential impact on its financial results.
- b) On March 19th 2020, Stomana Industry SA, Bulgarian subsidiary of Viohalco, operating in steel segment, announced a business restructuring plan aiming to address the continuously declining trend in sales volume and profit margins of steel industry. In response to these challenging circumstances, Stomana Industry SA plans to downsize its operations, in accordance to the current and forecasted demand and consequently proceed to a respective personnel reduction, using objective criteria, while demonstrating social responsibility. Based on management' assessment, there is no impact on financial statements.
- c) On March 27th, 2020, Viohalco S.A. subsidiaries of steel segment in Greece (Sidenor SA, Sovel SA, Erlikon SA, Praksys SA and Etil SA) decided the temporary suspension of their main production activities, assigning their employees a non-active status, for one month starting from April 2, 2020 and ending on May 3, 2020, while at the same time administration staff will work on a part-time basis. During the aforementioned period, the commercial activities and delivery of raw materials at these companies will remain unaffected. The companies reached these decisions, due to the ongoing difficult conditions prevailing in the international steel market, which sharply deteriorated as a result of the recent COVID-19 pandemic, reducing demand for their products due to the severe downturn in the construction sector and in activities using steel as a raw material.
- d) On April 1st, 2020, Viohalco's subsidiary ElvalHalcor acquired, the ownership of 1,610,000 common registered shares, issued by the company under the trade name 'Viomal S.A.- Aluminium Industry' which represent the 25% of its paid-up share capital, in consideration of EUR 2.2 million. Following the aforementioned purchase, ElvalHalcor's participation in Viomal's paid up share capital amounts to 75%.
- e) In early 2020, due to the global outbreak of coronavirus (COVID-19) changes occurred in global supply and demand, including Greece and other countries in which the subsidiaries of Viohalco operate. The spread of the COVID-19 is a non-adjusting post balance sheet event as of 31 December 2019.

As the outbreak of COVID-19 continues to progress and evolve rapidly, the prediction of the full extent and duration of its business and economic impact remains challenging and the range of potential outcomes for the global economy are difficult to predict. Viohalco companies have already activated protection mechanisms for their human resources and their partners in compliance with health authorities' guidelines, while closely monitoring the developments and assessing the implications on their operations. At the same time, governments in the countries in which Viohalco companies operate (mainly Greece) have also announced the implementation of measures which may mitigate the impact of the COVID-19 outbreak on results and liquidity. Viohalco companies currently investigate the extent to which such government assistance can be applied.

A prolonged spread of COVID-19 is expected to influence both business and financial results of 2020, but the extent of the impact depends on a number of factors amongst which the most important relate to government restrictions, the duration of such restrictions and logistics constraints.

In copper and aluminium segments, although production and business are not expected to be affected significantly, the global slowdown in demand might have an impact on the second semester of 2020. Regarding the energy projects business of cables and steel pipes segments, given the existing backlog and the nature of projects assigned, the impact from COVID-19 outbreak on the long-term business plan and its short-term financial results is expected to be limited, based on currently available data and information. The business products of these segments will be affected more, as short-term demand, linked to the construction sector, is expected to decrease.

Steel segment is expected to be affected from April 2020 and onwards as short-term demand which is linked to construction sector is expected to experience a decline, as a result of government restrictions aiming at limiting the spread of COVID-19. Without any complacency, the steel companies are constantly monitoring developments in order to proceed to all necessary action that maintain their position. Several programs have already been announced by the government and financial institutions both in Greece and abroad to boost economy that steel companies can be benefited from.

Real Estate business will be affected primarily on the retail and hospitality side. The operation of shopping centers and most of the retail shops has been ceased, accompanied by an obligatory 40% discount on monthly rents for the first months of COVID-19 expansion; both measures on Greek government orders.

In order to assess the potential impact on Viohalco companies' liquidity and profitability, management has carried out a stressed scenario on all segments. This assessment addressed what we believe to be all the potential risks that our segments may encounter. The risks were addressed under the following pillars:

- a. Workforce protection and continuity of production
- b. Supply chain continuity
- c. Liquidity
- d. Sales & customer orders continuity
- e. Capital expenditure

The "stress test" is expected to be a rigorous scenario that incorporates sharp sales volume declines for an extended period of up to 4 months and smaller decline in sales thereafter up to the end of 2020. The stress test also included impact on DSO, inventories, working capital, and Capex. Cost containment was also taken into consideration in production activities where appropriate. The purpose of this scenario was to test the liquidity needs and estimate the earnings under very stressed conditions. The results of the test carried out by companies showed that the copper, aluminium, cable, steel pipes and real estate segments can withstand the stressing scenario revealing a tolerance by maintaining and generating adequate liquidity even at reduced profitability. As regards the steel sector, our stress test revealed that there was adequate liquidity to meet working capital requirements and bank repayments, however also resulted in potential breach of certain bank loan covenants. Under the terms of the loan agreements, subsidiaries of steel segment must comply with certain conditions (including financial covenants), and such compliance is tested on an annual basis for majority of the loans. The management has considered the measures that need to be taken to mitigate the risk relating to these potential breaches. Accordingly, management expects that in the event that these covenants are breached, they will request waivers to overcome these breaches.

Management is confident that the waivers which may be requested from the banks that relate to the loans amounted to EUR 318.7 million will be provided. These covenants, which may be breached, relate to loan agreements from Greek banks with which Viohalco companies have many years of excellent cooperation, and have in the past provided waivers on all occasions. Furthermore, based on recent official announcements measures have been announced relating to their support of existing customers impacted by the effects of the COVID19 virus.

Our analysis and our projections confirm our confidence that the subsidiaries can mitigate the decline in the profitability, overcome any emerging operational issues that may arise ensuring the availability

of raw materials for smooth operation during the forthcoming months. In addition, the available cash of Viohalco subsidiaries, their operating cash flows and the unutilized credit lines, will provide the necessary liquidity for the following twelve months.

The management concludes that although COVID-19 may have a significant impact on Viohalco subsidiaries' operations in 2020, such impact will be absorbable and does not endanger its long-term viability.

There are no other subsequent events affecting the consolidated financial information.

STATUTORY AUDITOR'S REPORT TO THE GENERAL SHAREHOLDERS' MEETING OF VIOHALCO SA ON THE CONSOLIDATED ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2019

We present to you our statutory auditor's report in the context of our statutory audit of the consolidated accounts of Viohalco SA (the "Company") and its subsidiaries (jointly "the Group"). This report includes our report on the consolidated accounts, as well as the other legal and regulatory requirements. This forms part of an integrated whole and is indivisible.

We have been appointed as statutory auditor by the general meeting d.d. 28 May 2019, following the proposal formulated by the board of directors and following the recommendation by the audit committee. Our mandate will expire on the date of the general meeting which will deliberate on the annual accounts for the year ended 2021. We have performed the statutory audit of the Company's consolidated accounts for 1 year.

Report on the consolidated accounts

Unqualified opinion

We have performed the statutory audit of the Group's consolidated accounts, which comprise the Consolidated Statement of Financial Position as at 31 December 2019, the Consolidated Statement of Profit or Loss, the Consolidated Statement of Other Comprehensive Income, the Consolidated Statement of Changes in Equity and the Consolidated Statement of Cash Flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies and other explanatory information, and which is characterised by a consolidated statement of financial position total of EUR 4,062,910 thousand and a profit for the year, attributable to the owners of the Company, of EUR 8,206 thousand.

In our opinion, the consolidated accounts give a true and fair view of the Group's net equity and consolidated financial position as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union and with the legal and regulatory requirements applicable in Belgium.

Basis for unqualified opinion

We conducted our audit in accordance with International Standards on Auditing (ISAs) as applicable in Belgium. Furthermore, we have applied the International Standards on Auditing as approved by the IAASB which are applicable to the year-end and which are not yet approved at the national level. Our responsibilities under those standards are further described in the "*Statutory auditor's responsibilities for the audit of the consolidated accounts*" section of our report. We have fulfilled our ethical responsibilities in accordance with the ethical requirements that are relevant to our audit of the consolidated accounts in Belgium, including the requirements related to independence.

We have obtained from the board of directors and Company officials the explanations and information necessary for performing our audit.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Emphasis of matter - subsequent event

As far as the outbreak of COVID-19 is concerned, we draw your attention to the section F. Subsequent events of the Management Report and Note 40 Subsequent events of the consolidated accounts in which the board of directors expresses their view that, although the consequences thereof may have a significant impact on the Group's operations in 2020, such consequences do not have a material impact on the Group's financial position for the year ended 31 December 2019. Our opinion is not qualified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated accounts of the current period. These matters were addressed in the context of our audit of the consolidated accounts as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter : Availability of financing resources and compliance with covenants

Description of the key audit matter

The subsidiaries of Viohalco SA have significant non-current and current financial debts. The terms and conditions of the related financing agreements often include financial covenants that are to be complied with at each balance sheet date. Any breach in such financial covenants could result in its lenders exercising the right to claim early repayment of certain non-current and/or current financial debts. For these reasons, we considered the availability of financing resources and failure to comply with covenants as most significant to our audit.

Reference is made to Note 5: Significant accounting policies: Financial instruments and Note 27: Loans and Borrowings.

How our audit addressed the key audit matter

Our testing included, amongst others, an understanding of the financing agreements and the Group's procedures and controls in place both to ensure its compliance with the financial covenants and to understand the used and unused financing resources. We tested the calculation, performed by Management, of the financial covenants related to the most significant financing agreements and assessed compliance with the terms and conditions stipulated therein. Furthermore, we evaluated both the presentation of the financial debts on the Consolidated Statement of Financial Position and the adequacy of the relevant disclosures in the Notes to the Consolidated Financial Statements. We found the tested financial covenants to be complied with.

Responsibilities of the board of directors for the preparation of the consolidated accounts

The board of directors is responsible for the preparation of consolidated accounts that give a true and fair view in accordance with International Financial Reporting Standards as adopted by the European Union and with the legal and regulatory requirements applicable in Belgium, and for such internal control as the board of directors determine is necessary to enable the preparation of consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated accounts, the board of directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the board of directors either intend to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Statutory auditor's responsibilities for the audit of the consolidated accounts

Our objectives are to obtain reasonable assurance about whether the consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a

guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated accounts.

In performing our audit, we comply with the legal, regulatory and normative framework applicable to the audit of the consolidated accounts in Belgium. A statutory audit does not provide any assurance as to the Group's future viability nor as to the efficiency or effectiveness of the board of directors' current or future business management at Group level.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated accounts, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control;
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control;
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the board of directors;
- Conclude on the appropriateness of the board of directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our statutory auditor's report to the related disclosures in the consolidated accounts or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our statutory auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern;
- Evaluate the overall presentation, structure and content of the consolidated accounts, including the disclosures, and whether the consolidated accounts represent the underlying transactions and events in a manner that achieves fair presentation;
- Obtain sufficient and appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the audit committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, we determine those matters that were of most significance in the audit of the consolidated accounts of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

Other legal and regulatory requirements

Responsibilities of the board of directors

The board of directors is responsible for the preparation and the content of the directors' report on the consolidated accounts and the other information included in the annual report on the consolidated accounts.

Statutory auditor's responsibilities

In the context of our mandate and in accordance with the Belgian standard which is complementary to the International Standards on Auditing (ISAs) as applicable in Belgium, our responsibility is to verify, in all material respects, the directors' report on the consolidated accounts and the other information included in the annual report on the consolidated accounts and to report on these matters.

Aspects related to the directors' report on the consolidated accounts and to the other information included in the annual report on the consolidated accounts

In our opinion, after having performed specific procedures in relation to the directors' report on the consolidated accounts, this directors' report is consistent with the consolidated accounts for the year under audit and is prepared in accordance with article 3:32 of the Companies' and Associations' Code.

In the context of our audit of the consolidated accounts, we are also responsible for considering, in particular based on the knowledge acquired resulting from the audit, whether the directors' report is materially misstated or contains information which is inadequately disclosed or otherwise misleading. In light of the procedures we have performed, there are no material misstatements we have to report to you.

The non-financial information is included in section *H. Non-financial information* of the annual report on the consolidated accounts. The report of non-financial information contains the information required by virtue of article 3:32, §2 of the Companies' and Associations' Code, and agrees with the consolidated accounts for the same year. The Company has prepared the non-financial information, based on the UN's Sustainable Development Goals (SDGs) reporting framework. However, in accordance with article 3:80, §1, 5° of the Companies' and Associations' Code, we do *not* express an opinion as to whether the non-financial information has been prepared in accordance with the UN's Sustainable Development Goals (SDGs) reporting framework as disclosed in the directors' report on the consolidated accounts.

Statement related to independence

- Our registered audit firm and our network did not provide services which are incompatible with the statutory audit of the consolidated accounts, and our registered audit firm remained independent of the Group in the course of our mandate.
- The fees for additional services which are compatible with the statutory audit of the consolidated accounts referred to in article 3:65 of the Companies' and Associations' Code are correctly disclosed and itemized in the notes to the consolidated accounts.

Other statements

This report is consistent with the additional report to the audit committee referred to in article 11 of the Regulation (EU) N° 537/2014.

Sint-Stevens-Woluwe, 22 April 2020

The statutory auditor
PwC Reviseurs d'Entreprises scrl / PwC Bedrijfsrevisoren cvba
Represented by



Marc Daelman
Registered auditor

L. Declaration of responsible persons

Statement on the true and fair view of the consolidated financial statements and the fair overview of the management

In accordance with the article 12, §2, 3° of the Belgian Royal Decree of 14 November 2007, the members of the Executive Management, (i.e. Jacques Moulaert, Evangelos Moustakas, Efstratios Thomadakis, Panteleimon Mavrakis) declare that, on behalf and for the account of the Company, to the best of their knowledge:

- a) the consolidated financial statements for the year ended 31 December 2019, which have been prepared in accordance with the International Financial Reporting Standards as adopted by the European Union, give a true and fair view of the Equity, Financial position and Financial Performance of the Company, and the entities included in the consolidation as a whole.
- b) the management report on the consolidated financial statements includes a fair overview of the development and performance of the business and the position of the Company, and the entities included in the consolidation, together with the description of the main risks and uncertainties with which they are confronted.

M. Condensed Statutory Balance Sheet and Income Statement

In accordance with Article 105 of the Belgian Companies Code, the non-consolidated accounts are presented hereafter in a condensed version, which does not include all the notes required by law nor the Statutory Auditor's report. The complete version of the annual accounts, as deposited with the National Bank of Belgium is available at the Company's registered offices upon request. The Statutory Auditor's report on the annual accounts was unqualified.

Statement of financial position

<i>Amounts in EUR thousands</i>	As at 31 December 2019	As at 31 December 2018
Non- current assets	1,094,536	1,044,615
Start-up costs	287	566
Intangible assets	15	332
Property, plant and equipment	19,249	80,434
Financial assets	1,072,772	961,069
Receivables	2,214	2,214
Current assets	26,507	17,308
Current receivables	7,745	8,450
Short-term cash investment	10,000	
Cash and cash equivalents	7,645	7,736
Deferred charges and accrued income	1,118	1,122
Total assets	1,121,044	1,061,923
Equity	1,116,711	1,058,575
Share capital	141,894	141,894
Share premium	528,113	528,113
Revaluation	21,054	21,054
Reserves	389,365	389,365
Retained earnings	36,286	-21,850
Liabilities	4,333	3,347
Non-current payables	195	131
Current payables	3,782	2,961
Accrued charges and deferred income	356	255
Total equity and liabilities	1,121,044	1,061,923

Statement of Profit or Loss

<i>Amounts in EUR thousands</i>	For the year ended 31 December 2019	For the year ended 31 December 2018
Sales and services	13,627	6,456
Operating charges	-12,727	-13,763
Miscellaneous goods and services	-8,011	-7,550
Remuneration, social security and pensions	-1,240	-1,118
Depreciation and amounts written off on start-up costs, intangible and tangible assets	-2,190	-3,102
Other operating expenses	-1,286	-1,993
Other non-recurring operating expenses	0	0
Profit / loss (-) of operating activities	900	-7,307
Finance income	61,102	2,872
Income from financial assets	13,353	2,605
Income from current assets		1
Non-recurring financial income	47,748	266
Finance expenses	-3,866	-3,540
Debt expenses	-74	-24
Other financial expenses	-8	-2
Amounts written off financial assets	-3,784	-3,514
Profit / loss (-) before income tax expense	58,135	-7,975
Income tax expense	0	34
Profit/Loss (-)	58,135	-7,941

N. Glossary

The following explanations are intended to assist the general reader to understand certain terms used in this Annual Report. The definitions set out below apply throughout the annual report, unless the context requires otherwise.

ASTM	American Society for Testing and Material
BCCA	the Belgian Code of Companies and Associations
Belgian GAAP	the applicable accounting framework in Belgium
Board of Directors or Board	the Board of Directors of the Company from time to time appointed in accordance with the Articles of Association
BS	British Standards
Current ratio	Current Assets/Current liabilities
DIN	Deutsches Institut für Normung
EEA	the European Economic Area
EDF	EDF Energy, the UK's largest producer of low-carbon electricity
EN	European Norm
EN/ISO 17025	General requirements for the competence of testing and calibration laboratories
FSMA	Financial Services and Market Authority, which succeeded the Belgian Banking, Finance and Insurance Commission as the financial regulatory agency for Belgium on 1 April 2011
Gearing ratio	Debt/equity
Gross annual return	the gross annual return is calculated on the share price it equals to (change in price from January 1 to 31 December/share price on January)
HVAC & R	Heating, ventilation, air-conditioning and refrigeration
IAS	International Accounting Standards
IFRS	International Financing Reporting Standards, as adopted by the EU
Inventories days ratio	Inventory/Cost of goods sold * 365
Interest coverage ratio	EBITDA/Finance cost
JIS	Japanese Industrial Standards
LSAW	Longitudinal Submerged Arc Welded Mill for the production of high-strength offshore and onshore energy pipes
SAE	Society of Automotive Engineers
SD	Trade Mark
THN	Mining profiles
Transparency Law	the law of 2 May 2007 on the disclosure of significant shareholdings in issuers whose securities are admitted to trading on a regulated market
HFW	high frequency induction welding unit
HSAW	helically submerged arc welding unit
ERP application	Enterprise resource planning application

SBQ	Special bar quality steel
REIC	Real Estate Investment Company
“BEST”	Companies’ Industrial Excellence Plan
PMO	Project Management Office
LV, MV & HV power cables	Low Voltage -Medium Voltage –Hi Voltage cables
UPN	European Standard channels

The annual report, the full versions of the statutory and consolidated annual accounts, as well as the audit reports regarding said annual accounts are available on the website (www.viohalco.com)