Annual report 2016

outokumpu

working towards a world that lasts forever

This interactive report consists of several parts which are all available at www.outokumpu.com

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CEO's review

"2016 marks the year Outokumpu turned back to profitability. But the best is yet to come."

One year ago, as the newly appointed CEO of Outokumpu, I stated in the annual report that there was little reason to expect great improvement in the stainless steel market in 2016, but that Outokumpu "must and will perform better". Both statements proved to be true.

During 2016, only the European average base price held its ground compared to the levels of 2015. Everything else, from US average base prices to nickel and ferrochrome prices lagged behind. And while the antidumping measures in Europe and the US supported fair competition and market development, the global economic uncertainty led to a very moderate growth in stainless steel demand.

In the face of this market reality, we launched an ambitious vision for the company: to be the best value creator in stainless steel by 2020 through customer orientation and efficiency. We defined six clear battles that we must win to make the vision a reality: safety, high performing organization, world class supply chain, manufacturing excellence, commercial excellence and the Americas.

We entered these battles determined to win and were hungry for success after eight years of losses. However, we also knew some short-term measures were necessary to achieve a step change in our cost position, and further reduce our net debt. Although the previous management had already taken significant steps to improve the balance sheet, our financial position was still too weak for comfort.

In line with these objectives, we streamlined our organization and launched a 100-million-euro savings target on our sales, general and administrative costs – an initiative that already yielded a 69-million-euro savings in 2016 compared to 2015. Reaping the benefits of post-merger industrial restructuring as well as the new efficiency measures, Europe increased its underlying EBIT from 85 million euro to 191 million euro.

In the Americas, we made an improvement of 72 million euro from the previous year. The business area still recorded an underlying EBIT loss of 91 million euro, but the record deliveries and tremendous progress quarter after quarter showed the potential of our team and assets in the Americas.

Outokumpu's positive underlying EBIT of 45 million euros for the full year still leaves us far from our target of 500 million euro underlying EBIT in 2020. However, the good progress we made in 2016 puts us firmly on the right trajectory. Encouraged by the achievements in debt reduction, we have also set a more ambitious target for net debt, aiming at below 1.1 billion euro by the end of 2017.

Our aim to become the best value creator in the industry is also reflected in our commitment and contribution to sustainability. In 2016, we continued our record of no significant environmental incidents. We also became a member of the Science Based Targets initiative, committing to developing science-based targets that contribute to the fight against climate change and the goals of the 2015 Paris Climate Conference. Our Mexican operations treat and recycle 99 percent of the water used in the manufacturing process and the team was awarded for their water recycling efforts by International Stainless Steel Forum (ISSF).

Thanks to the remarkable effort and dedication of our employees, 2016 marks the year Outokumpu turned back to profitability. But the best is yet to come. The commitment, enthusiasm and energy, and the reignited pride and joy that I sense everywhere in the company furthers our drive and commitment to be the best value creator in stainless steel – for our customers, employees and for our shareholders.

Roeland Baan
CEO at Outokumpu

Highlights 2016

In 2016, Outokumpu returned to profitability

With a new CEO and a new vision to become the best value creator by 2020, Outokumpu completed its industrial restructuring in Europe and for the first time in eight years, recorded a positive underlying EBIT for the full year. Outokumpu's units in Finland and Mexico were renowned for their efforts in the circular economy. Stainless steel added value to numerous customers in a variety of applications – from reservoirs and high-speed trains to spillway gates, sea walls and groynes.

"Outokumpu completed its industrial restructuring in Europe and for the first time in eight years, recorded a positive underlying EBIT for the full year."

Q1

New captain

Roeland Baan took the reins of Outokumpu in January. By mid-year, it was clear that the company was gaining momentum, with the first positive underlying result for the third quarter.

Read more

Fresh water

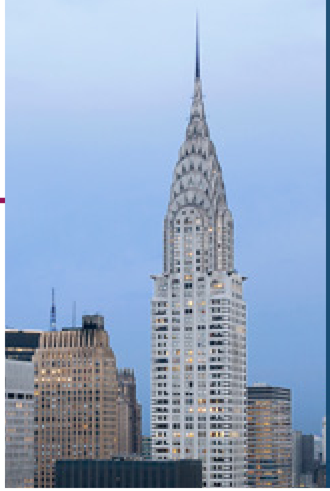
Outokumpu provides stainless steel dowel bars for the Mega Reservoirs project in Qatar. Outokumpu stainless steel dowel bars are used in expansion joints for the movement of lateral loads and manage stress within the joint. The objective of the project is to provide seven days' potable water storage to help to preserve Qatar's water quality. The new reservoirs include five primary reservoir and pumping station packages with a capacity of 100 million gallons each, making them the largest reservoirs in the world.

Closing mill in China

Outokumpu announced the sale of its remaining stake in Shanghai Krupp Stainless, its cold rolling mill in Shanghai, China. The operations were stopped due to ongoing losses and pressure in commodity stainless steel products in China. Outokumpu focused in its production operations in Europe and in the Americas, and continues to serve the Asian and Pacific market with its specialty stainless steel products through its service centres in Australia and China.

Read more

Q2



Best value creator 2020

Outokumpu's vision is to be the best value creator in stainless steel through customer orientation and efficiency by 2020. At the same time, Outokumpu announced long-term financial targets, short-term targets and immediate actions for 2016. One of the must-win battles is high-performing organization, and accordingly, Outokumpu reorganized its operations in June with fewer layers of management and a lighter cost structure, to enable the company to reach its vision.

Read more

Kemi-Tornio prime example of circular economy

The goal of the circular economy is to put an end to waste through recycling and salvaging valuable materials from processes. Outokumpu's ferrochrome and stainless steel production sites in Tornio, Finland, have worked systematically towards a zero-waste-to-landfill production system for decades. For example in the Paris Climate Talks, the Kemi-Tornio area of Northern Finland was presented by research institute Nordregio as a prime example of an industrial region implementing the circular economy approach. Today, Tornio mill is able to commercialize a full 100% of slag side streams which can be sold to private companies and households or reutilized in Outokumpu's own processes and construction projects.

99% of water recycled

International Stainless Steel Forum (ISSF) gave its annual sustainability award to Outokumpu's site in Mexico for water recycling. In San Luis Potosí, Mexico, Outokumpu's cold rolling mill is located in a dry, arid area, where groundwater is a valuable asset for people. The less it is consumed in the production of stainless steel, the more can be used for drinking, farming and vegetation. The monthly consumption of water at the site is 45,000 m^3, of which Outokumpu treats and recycles 99%. The savings in fresh water usage is equivalent to the quantity consumed by 1,100 households yearly.

Q3

2 decades down, 2 to go

Swedish railway company SJ's high-speed X2000 trains were first launched in the 1990s. Back then, Outokumpu supplied stainless steel for the train frames. Currently the trains are being upgraded, but the train frames continue to serve. "The life-time assessment and inspections determined that the frames were largely intact. Firstly, upgrading is about four times cheaper than buying a new train. Secondly, upgrading the X2 fleet instead of having to invest in new vehicles has a significant positive impact on our environmental footprint," comments Carl Jallinder-Björkman from SJ. Looking at both costs and environmental impacts, choosing stainless steel really paid off.

For fair competition

A step in favor of fair competition was taken in the United States. Together with other American producers, Outokumpu had filed for antidumping duties in the US in February. The antidumping investigation curbed the import volumes from China during the year, and in September the US Commerce Department set preliminary antidumping duties against Chinese imports.

Industrial restructuring completed

The Benrath cold rolling mill produced its last coil in September. Outokumpu completed the Benrath closure and the transfer of its operations to the cold rolling mill in Krefeld. The Benrath closure was made possible by the completion of the investment in the ferritic production at Krefeld, including a new pickling and bright annealing line, a new batch annealing facility as well as the upgrading of cold rolling and skinpass mills. The Benrath closure is a significant step in the restructuring of Outokumpu's European operations, which will altogether bring 100 million euro of annual savings starting from 2017.

Q4

Holding 500 m³ of water

Outokumpu delivered duplex stainless steel for the two locks, or spillway gates, in the upgraded Lossendammen dam structure in Central Sweden. One aim of the project was to secure the management of increasing water flows in the future in a safe manner. This year, most of the renewed dam structure is in place after a 3-year project. Lossendammen, originally built 50 years ago, is part of the critical infrastructure in Sweden. Harsh climate conditions and constant contact with flowing water called for robust solutions. The dam can hold an impressive 500 million cubic meters of water, and it serves 17 hydropower plants along the River Ljusnan.

For generations to come

Outokumpu delivers Forta DX 2304 duplex stainless steel rebar for the Cromer coast in the UK. Cromer is an English town located on the stormy North Sea coast, and it needed to rebuild its sea defences and prepare for rising sea levels. Stainless steel rebar was chosen to support the concrete because of its superior corrosion resistance. It is virtually maintenance-free, has a low life cycle cost and will maintain its corrosion resistance over the designed life of the sea defences. Now completed, the coast protection scheme ensures that Cromer coast beach and sea front are there for the next generation to enjoy.

Outokumpu turned back to profitability

For the full year, Outokumpu recorded an underlying EBIT of EUR 45 million – our first positive one in eight years. Improved profitability was driven by significant reduction in costs, as well as higher delivery volumes especially in the Americas. Outokumpu overachieved its target of EUR 200 million net working capital reduction by releasing EUR 307 million. The gearing dropped to 51.4%, and the net debt was reduced to EUR 1.2 billion. The turnaround secured in 2016, combined with the progress made in debt reduction and the positive outlook that starts the year 2017, presented the right time to start paying dividends.

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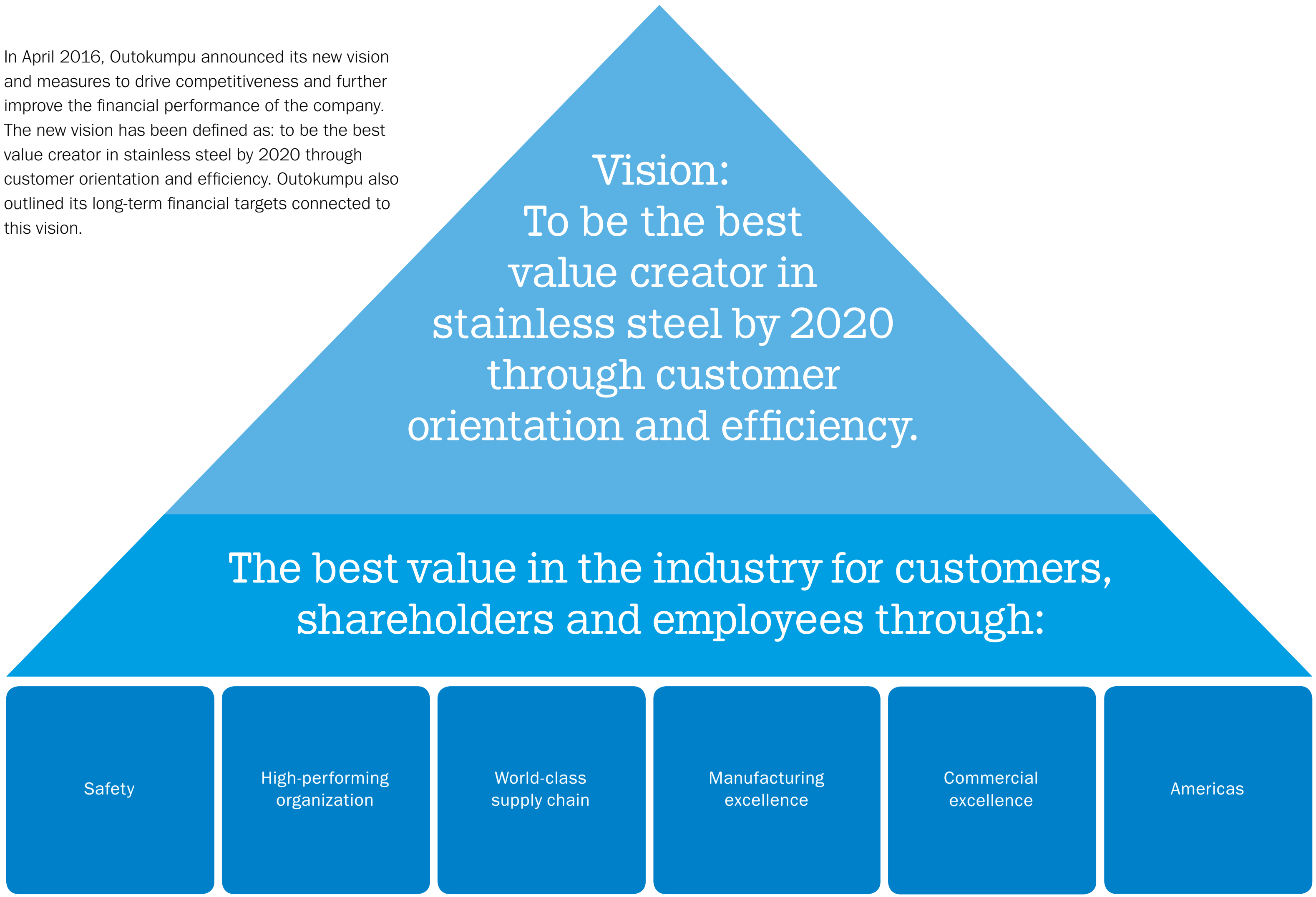
for more stories on the use of stainless steel

New vision, clear focus

In April 2016, Outokumpu announced its new vision and measures to drive competitiveness and further improve the financial performance of the company. The new vision has been defined as: to be the best value creator in stainless steel by 2020 through customer orientation and efficiency. Outokumpu also outlined its long-term financial targets connected to this vision.



Outokumpu focuses on the following must win battles to reach its vision:

1. SAFETY: A standardized and disciplined approach to safety that correlates with improved quality and operational efficiency, leading to a top decile position in the industry.

2. HIGH-PERFORMING ORGANIZATION: A lean, simple and flat organization that takes its lead from market trends and requirements, and drives a high level of individual accountability that is enforced through vigorous performance management.

3. WORLD-CLASS SUPPLY CHAIN: The role of the supply chain function elevated to drive optimal matching of market demand and manufacturing capabilities, managing manufacturing programming and planning as well as the required resources and logistics. This will allow our production units to focus on achieving a benchmark level in cost efficiency.

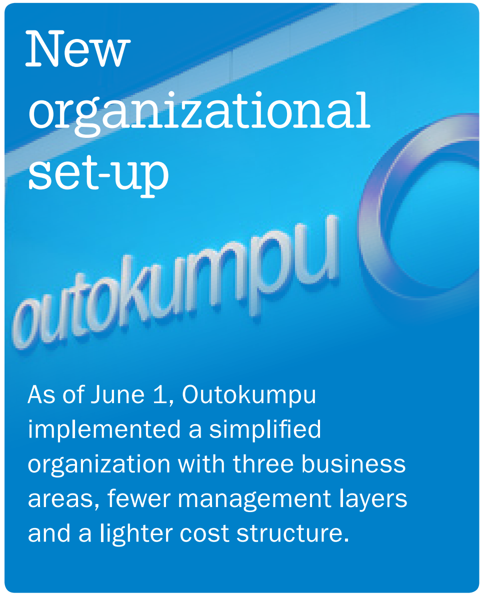
4. MANUFACTURING EXCELLENCE: Implementing a standardized operating model to ensure continuous productivity gains in all the mills across the company, leading to industry benchmark competitiveness.

5. COMMERCIAL EXCELLENCE: Clear segment-driven commercial strategy to drive margin growth. Profitability-driven product strategy to match market demand and optimal mix.

6. AMERICAS: The single biggest profitability improvement lever for Outokumpu, with significant improvement potential in both cost and market position.

Immediate measures for step change

All of these changes required fundamental changes in the way the company was organized and executed its business. Therefore Outokumpu launched a set of immediate measures to force a step change in its cost and competitive position. The clear targets and focuses yielded concrete results during the year:



New organizational set-up

As of June 1, Outokumpu implemented a simplified organization with three business areas, fewer management layers and a lighter cost structure.

Contributing to the overall target of

100 million euro

reduction in sales, general and administrative costs (SG&A) by the end of 2017 against the baseline of 400 million euro at the end of 2015, Outokumpu reduced its SG&A costs by

69 million euro

200 million euro

cash release from net working capital by the end of 2016, particularly through the reduction of inventory. Outokumpu overachieved this target and released 307 million euro from net working capital.

A reduction of net debt to below

1.1 billion euro

by the end of 2017. The target was updated because of the good progress made already in 2016. Since the progress exceeded the expectations, Outokumpu has updated its target to reduce net debt below 1.1 billion euro.

Long-term financial targets

Connected to its 2020 vision, Outokumpu has defined long-term financial targets to reflect the progress of the strategic initiatives and the development in profitability and further deleveraging:

EBIT of 500 million euro

ROCE of 12%

Gearing of <35%

These group-level targets are expected to be reached by the end of 2020 at the latest. While the global demand for stainless steel continues to grow, Outokumpu takes a conservative approach to the market growth and metal price assumptions, and expects the targeted profitability improvement to come primarily through efficiency and cost improvements in the current scope of business, supported by further strengthening of Outokumpu's cost competitiveness and market position, particularly in the Americas.

Stainless is the perfect solution to the world's challenges

Outokumpu produces stainless steel in its mills in Europe, Mexico and the US. Stainless steel is used in, for example, construction, transportation, energy production and in the production, storage and consumption of food, water and beverages. Outokumpu is known in the market for its product quality, excellence in both standard and special grades and as a global leader in technical expertise and support as well as research and development.

In 2016, the global crude stainless steel capacity, including flat and long products, totaled approximately 65.5 million tonnes, of which Outokumpu's share was approximately 5%. The total global crude stainless steel capacity was roughly 4% lower than the capacity in 2015, mainly as a result of reductions in China. The largest producers worldwide are Tsingshan, TISCO, Outokumpu, POSCO, Acerinox, Baosteel, Aperam and LISCO. Outokumpu had a cold rolled market share of approximately 30% in Europe, 24% in the NAFTA region and 7% worldwide in 2016. In Europe, Outokumpu is the market leader and in the Americas, the clear no 2 in the market.

Global crude stainless steel production is estimated to have grown by approximately 5% in 2016 compared to 2015 and reach 45.2 million tonnes. This was driven by robust growth of 9% in Asia, mainly on the back of strong growth in China, and growth of 1% in Americas, while production in Europe is estimated to have decreased by 2% in 2016.

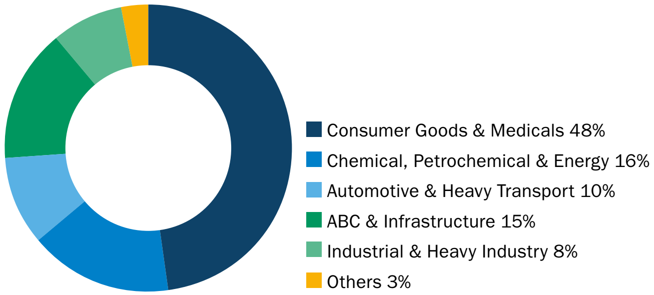
Source: Eurofer and SMR

Need for sustainable solutions

People are moving to cities that are getting bigger and bigger. Urbanization calls for infrastructure and solutions in mobility so that people are able to move around these growing cities. At the moment, people are using the resources of the world nearly twice per year. Yet these resources, such as clean water, are limited. Water scarcity currently affects around 2.8 billion people around the world and more than 1.2 billion people lack access to clean drinking water. According to estimations, by 2025 two in every three people on the planet will live in areas that face water shortages.

And corrosion is an issue with real economic consequences. According to the World Corrosion Organization, the cost of corrosion is approximately 3% of the world's gross domestic product, around the size of the gross domestic product of India. One example of the cost of corrosion is the Eiffel tower, built of carbon steel some 140 years ago. Over the years, the tower has undergone nearly 20 maintenance operations that have cost 80 million euro. With the money spent on maintenance, four stainless steel Eiffel towers could have been built. There are tonnes of long-term growth possibilities in the market: in 2016, total global steel production was 1,629 million tonnes of which approximately 3% was stainless steel.

End-uses of stainless steel in 2016



Source: SMR, stainless steel finished products*, January 2017.
* Rolled and forged products excl. 13Cr tubes, profiles.

Major stainless steel producers

million tonnes	2016	2017
Tsingshan	7.4	7.4
TISCO	4.5	4.5
Outokumpu	3.3	3.1
POSCO	2.9	2.9
Acerinox	2.9	2.9
Baosteel	2.7	2.7
Aperam	2.0	2.1
LISCO	2.0	2.0

Source: Global crude stainless steel capacity, SMR January 2017

Stainless steel is the fastest growing metal

Outokumpu's biggest contribution to a sustainable world is the stainless steel that we produce. Stainless steel is in many ways the perfect solution to the challenges the world is facing at the moment. It is corrosion resistant and strong, with a high strength-to-weight ratio. It is a hygienic and aesthetic material. It does not need constant maintenance, if any. Its strength and corrosion resistance help other materials, such as concrete, to perform better and last longer. At the end of its life-cycle, stainless steel is fully recyclable, without any loss of its quality.

These properties have ensured that stainless steel consumption has been growing more rapidly than that of any other metal in recent decades. In the longer run, the demand for stainless steel is expected to increase at an annual growth rate of around 4%.

Global real demand of stainless steel products reached 38.5 million tonnes in 2016, with the growth picking up to 2.9% compared to 2015, closer to a long-term average, after the growth of only 0.9% in 2015. Acceleration of the growth was most pronounced in the APAC region at 4.1%, driven by China returning to robust growth as a result of solid infrastructure and property sectors. Meanwhile, demand in EMEA grew by 1.4%, but decreased by 3.2% in Americas in 2016.

ABC & Infrastructure and Consumer Goods & Medical were outperforming the other end-use segments in 2016, with the real demand growing by 4.6% and 4.3%, respectively, compared to 2015. Meanwhile, Industrial & Heavy Industries segment was the weakest performer with demand declining by 3.8%. Real demand in Chemical/Petrochemical & Energy and Automotive & Heavy Transport segments were growing at 2.0% and 1.2% respectively in 2016 compared to 2015.

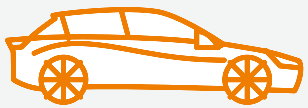
Expected global consumption of stainless steel products in 2017

40.1 million tonnes

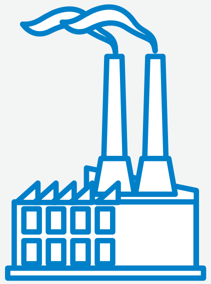
(37.4 in 2015)

CAGR(2015–2017): 3.5%

Automotive industry is pressured to innovate components and materials that are sustainable, safe and cost efficient. Outokumpu provides high-performance stainless steel materials and solutions for the vehicles and transportation of the future.



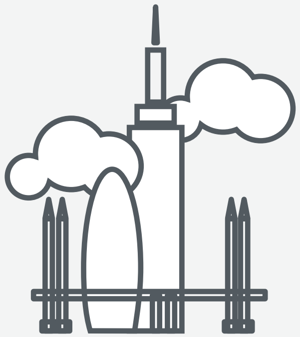
Automotive & Heavy Transport
4.0 million tonnes
(2015: 3.8)
CAGR 2.4%



Industrial & Heavy Industries
2.9 million tonnes
(2015: 3.0)
CAGR -2.7%

Current and future demand and conditions will lead to more highly engineered products that require careful selection of materials and increasingly tailored components. Stainless steel pays for itself in the long term thanks to its durability, strength, low weight and resistance to corrosion.

Others
1.1 million tonnes
(2015: 1.0)
CAGR 2.4%



ABC & Infrastructure
6.3 million tonnes
(2015: 5.6)
CAGR 5.9%

There is a need for buildings and infrastructure which are sustainable, easy to maintain, safe and last for a lifetime. Outokumpu's stainless steels and expertise help to create buildings and infrastructure that answer both aesthetic and functional needs.

Consumer Goods & Medicals
19.6 million tonnes
(2015: 17.9)
CAGR 4.8%

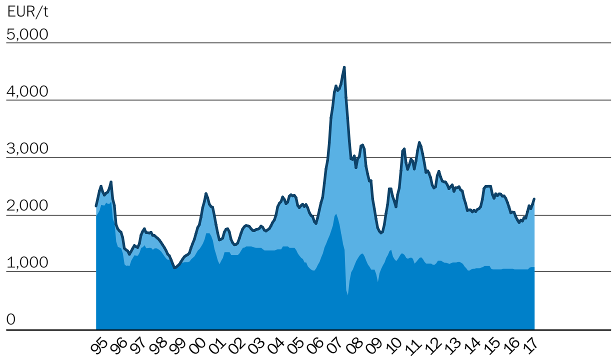
Appliances have become a commodity, and innovation and production cycles have shortened. Outokumpu provides optimal stainless steel to support our customers their fast innovation and production cycles in creating appliances for today's and tomorrow's consumers.

Chemical, Petrochemical & Energy
6.2 million tonnes
(2015: 6.1)
CAGR 1.5%

Sustainabile stainless steel solutions suit for the most demanding processes, where failure is not an option. Outokumpu's stainless steel serves as the backbone of industries like solar power, biofuels, wind energy and seawater desalination.

Source: SMR, stainless steel finished products, February 2016
CAGR = Compound Annual Growth Rate

Stainless steel price*

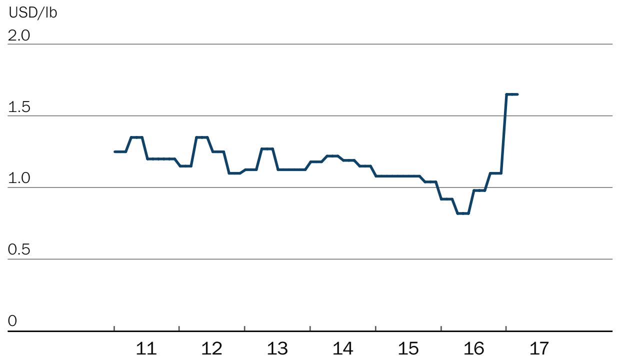


Base price
Transaction price
Alloy surcharge

Source: CRU January 2017

* Stainless steel reference price for cold rolled 304 2mm sheet in Europe.

Ferrochrome price



Source: Quarterly contract prices agreed between South African ferrochrome producers and European buyers, including Q1/2017.

Nickel price

Source: LME settlement, monthly average prices, including December 2016

Total global demand for 2017 is forecast at 40.1 million tonnes, an increase of 4.2% compared to 2016. Growth is expected to be strongest at 4.9% in APAC, whereas Americas and EMEA are expected to grow at 2.4% and 2.3%, respectively.

The long-term outlook for stainless steel demand remains positive. Key global megatrends such as urbanization, modernization, and increased mobility combined with growing global demand for energy, food, and water are expected to support the future growth of stainless steel demand. Growth in stainless steel consumption in 2017–2020 is expected be relatively well-balanced between the end-use segments. SMR forecast average annual growth rates of 5.3% in ABC & Infrastructure, 5.1% in Automotive & Heavy Transport, 4.7% in Consumer Goods & Medical, 1.9% in Chemical/Petrochemical & Energy and 0.4% in Industrial & Heavy Industries segments, respectively, in 2017–2020.

In terms of regions, SMR expects APAC to outperform other regions with the annual average growth of 4.7% in 2017–2020. Meanwhile, Americas is expected to grow at 2.8%, and EMEA at 2.3% per annum.

Price development in 2016

Average market prices in Europe were relatively flat in 2016 at EUR 1,063 per tonne compared to EUR 1,056 tonne in 2015. The prices were under pressure during the first half of the year as the distributor demand was negatively impacted by low nickel prices. Healthy end-customer demand and higher nickel prices during the second half of the year resulted in an uptick in pricing.

In the Americas, the year started with low base prices and high imports from China. After the US Commerce Department set preliminary antidumping duties against imports from China in September, Chinese import volumes were reduced particularly during the second half of the year. Together with healthy underlying stainless steel demand it resulted in increased base prices towards the year-end. However, the average market base price of USD 1,286/tonne in 2016 was clearly lower compared to USD 1,349/tonne in 2015.

The year started with weak nickel prices, slumping to a 13-year low due to the result of increasing fears over global economy and subdued demand amid oversupplied markets. However, prices rose during the year due to improving sentiment, concerns over possible disruption to nickel ore supplies from the Philippines, as well as the strong stainless steel production in China. The average price for the year of USD 9,600/tonne was still 18.7% lower than the average of USD 11,808/tonne in 2015.

The European benchmark price for ferrochrome fell clearly below USD 1.0/lb in the first half of the year as a result of deflated production costs and soft demand. Subsequently, prices recovered amid tightening markets. This was a result of slowdown in South African ferrochrome and chrome ore supply, as well as strong demand in China. The average ferrochrome price was USD 0.96/lb in 2016, 10.6% below the 2015 average of USD 1.07/lb.

Sustainability review 2016

outokumpu

working towards a world that lasts forever

Download the Sustainability review as PDF

World is in a need for sustainable alternatives

Outokumpu is producing stainless steel to contribute to the well-being of the society for a world that lasts forever while making a profit, protecting the resources of the environment and taking responsibility for social community. Outokumpu's product has the potential to solutions of the world's challenges taken up by the UN SDGs. Most contribution by operations can be given to the goal 12 "Responsible consumption and production" (indicator recycled content and energy efficiency) and goal 13 "Climate action" (indicator carbon profile) and goal 9 "Innovation and Infrastructure". In 2016 Outokumpu became a member of the Science Based Targets initiative and sent its developed target for checking to the initiative. The former long-term target on carbon profile will be replaced by the science based target in 2017.

Outokumpu's stainless steel has many distinguishing properties. Outokumpu is the only company who has an integrated stainless steel production route including its own chrome mine in Kemi, Finland and ferrochrome production at its site in nearby Tornio, Finland. The liquid ferrochrome is directly input to the stainless operation without losing solidifying heat and process gas from ferrochrome production can directly be used in the stainless operation. This saves primary energy and reduces the CO_2 emissions. From life cycle thinking Outokumpu is an excellent stainless steel supplier.

Outokumpu operates in a competitive industry where demand and supply meet in global markets. On the other hand, our production sites are often located in relatively small cities or towns. This means that Outokumpu is significant to the economies of the small local communities, and often one of very few private-sector employers in the area. Finding a balance between global market trends and responsibility towards communities is sometimes difficult, especially in economic downturns.

Reporting on sustainability

Outokumpu publishes sustainability review as part of its Annual Report 2016. Outokumpu's sustainability reporting follows the G4 guidelines published by the Global Reporting Initiative in accordance with the Core option. Outokumpu reports in this sustainability review all essential developments in 2016. The developments in this review have been assured by an independent third party (see the Independent Assurance Report on p. 28 in the Sustainability review). Additional sustainability data and information as well as the GRI content index are available at our website.

The sustainability review is structured into four sections – Nothing to hide (supply chain, safety, personnel, energy efficiency and environmental impacts), Pays for itself (product properties and R&D), Recycling maximized (resource efficiency) and Indispensable (climate change, CO_2 intensity and environmental key performance indicators).

Material issues were elaborated in 2015 and it is planned to repeat this materiality analysis after 3 years – our latest materiality analysis is available on our web pages. In 2016 stakeholder engagements continued as regular discussion with investors, exchange on sustainability with several customers and in dialogue with neighbors and communities. Employees were asked to give their feedback on Organizational Health Index (OHI).

"Finding balance between global market trends and responsibility towards communities is needed."

"Outokumpu produces stainless steel that contributes to a world that lasts for ever, protecting environmental resources and taking responsibility for social community."

Read more of our environmental management and policies

UN Sustainable development goals

SUSTAINABLE DEVELOPMENT GOALS

Outokumpu contributes to several United Nations' sustainable development goals either through the way we operate or through our products.

3 Working at Outokumpu is characterized by taking care of yourself and others. Several health prevention measures were organized locally in 2016. They include ultrasonic testing, glaucoma tests, skin carcinoma screening and influenza immunization. Young people are trained on the impacts of shift work, office workplaces, drugs and the prevention of addiction.

Products: Outokumpu's stainless is used for medical devices, implants and for hygienic reasons. It is a backbone for people's health; its inert behavior supports safe nutrition used in food contact materials.

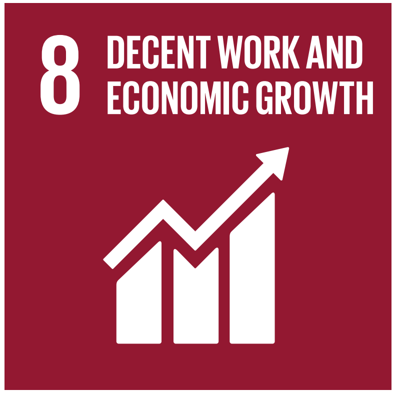
4 Outokumpu is a leading expert in stainless steel, which is why learning, expertise and talent management are very important elements in the company's performance. Outokumpu develops employees' competences, for example, through job promotion, on-the-job training as well as training programs. Cooperation with key universities, research institutes and technical colleges play a big role in the future resourcing of talent, and Outokumpu has a long tradition of offering summer jobs and traineeships in its major production locations.

6 All production sites operate water treatment plants for the extensive use of water cycles and cascade water use. No water is discharged untreated. In Mexico, San Luis Potosí, Outokumpu's cold rolling mill is located in an arid region. The less our production consumes water, the more it can be used for drinking, farming and vegetation. It is our social responsibility to prevent potential problems in water supply.

Products: Because of its hygienic properties, Outokumpu's stainless is used for fresh water pipes and treatment plants for drinking water.

7 Outokumpu follows sustainable energy supply practices to gain a secure energy supply with stable and competitive prices. We participate in low carbon power plant technologies such as hydropower, wind mills or nuclear power plants. Process gas from our ferrochrome production site in Tornio, Finland, is used in other own production furnaces.

Products: Stainless steels are used, for instance, in desulfurization equipment of waste gas from conventional power plants and in high temperature power plants, solar farms and biofuel plants.



8 Outokumpu listens to employees' requests to constantly improve their work environment. Workplace safety is one of our top priorities. The company engages in dialogue with stakeholders regarding safety and follows measures to prevent accidents or near miss incidents to draw attention to safe behavior. We ensure that we follow our principles, which are explained in our Code of Conduct and Ethical Statement.

Products: Stainless steel is used in airbag husks or handrails. Stainless steel is also used in staff canteen kitchens or coffee machines. Population growth calls for sustainable development.

9 Outokumpu continuously assesses the environmental impact and enhances the cost efficiency of its production processes. New improved stainless steels are developed and existing materials are improved constantly. Outokumpu's R&D also closely cooperates with end users of stainless steel to further work on and find completely new applications for stainless steels.

Products: Stainless steel is an important building block for sustainable industries and infrastructure. Due to its excellent properties and long lifetime, stainless steel provides the most sustainable material solution for many applications.

11 Outokumpu's most significant impacts on local communities include direct and indirect employment as well as environmental and energy issues. Outokumpu engages community members by establishing personal contact, engaging in regular dialogue also with residents or other local stakeholders. The sustainable use of the areas in closed sites is developed in cooperation with these communities.

Products: The use of stainless in buildings extends the lifetime of these structures and substantially reduces the need for maintenance.

12 Outokumpu's business is based on recycling and is a part of the circular economy. The company focuses on resource efficiency through recycled content, the use of by-products to replace natural resources, as well as increasing the energy efficiency in production processes. This sustainable approach is supported by several key performance indicators which focus on efficiency.

Products: Stainless steel is long lasting, requires low maintenance and is 100% recyclable. The main raw material is recycled steel. This makes stainless steel products a solution for responsible consumption.

13 Following the Paris Climate Agreement, Outokumpu set a science based target following the Sectoral Decarbonization Approach for the steel industry. Outokumpu committed to further reduce the emission intensity by 7.5% by 2021 against the baseline of 2015 to decouple activity growth and emissions and to contribute to the 2-degree scenario by 2050.

Products: Stainless steel is needed in production of solar energy as well as in fermenter tanks of biofuel plants. The use of stainless steels in the structures of trains, trucks or cars helps to reduce weight, fuel consumption and traffic emissions compared to existing solutions.

17 Outokumpu has a partnership with the UN Global Compact and gave a core business example to the SDG Industry Matrix. The success of the science based target initiative relies on participation and global partnership. In our daily work, we cooperate with our stakeholders as investors, suppliers and customers in sustainability development.

Outokumpu has an extensive network of external R&D partners. The partnerships give cooperative benefits.

Products: An example from such partnership is a new battery pack specifically designed for electric vehicles.

Nothing to hide

Buildings & Infrastructure

The Goldman Sachs Tower in New York has a Leadership in Energy and Environmental Design (LEED) gold certification. Commitment to sustainability is echoed in the choice of fully recyclable stainless steel cladding.

Read more ↗

Energy & Heavy industries

For many companies, managing a more transparent supply chain is a necessity driven by demand. When Valmet wanted to prove the responsibility of its supply chain, Outokumpu was able to help.

Read more ↗

Automotive & Transportation

When it comes to gas road tankers, every ounce of weight makes a difference in terms of fuel consumption and payload capacity. With Outokumpu Forta, one-third of the weight was cut.

Read more ↗

Home appliances

Glastonbury Festival wanted to close the loop on the thousands of tonnes of waste. They chose 250,000 reusable stainless pint mugs, carrying the stamp "Love the farm, leave no trace."

Read more ↗

#Choosestainless
for more stories on the use of stainless steel ↗

Responsible supply chain

Outokumpu places the most stringent requirements on itself as a supplier and also requires the same from its own suppliers.

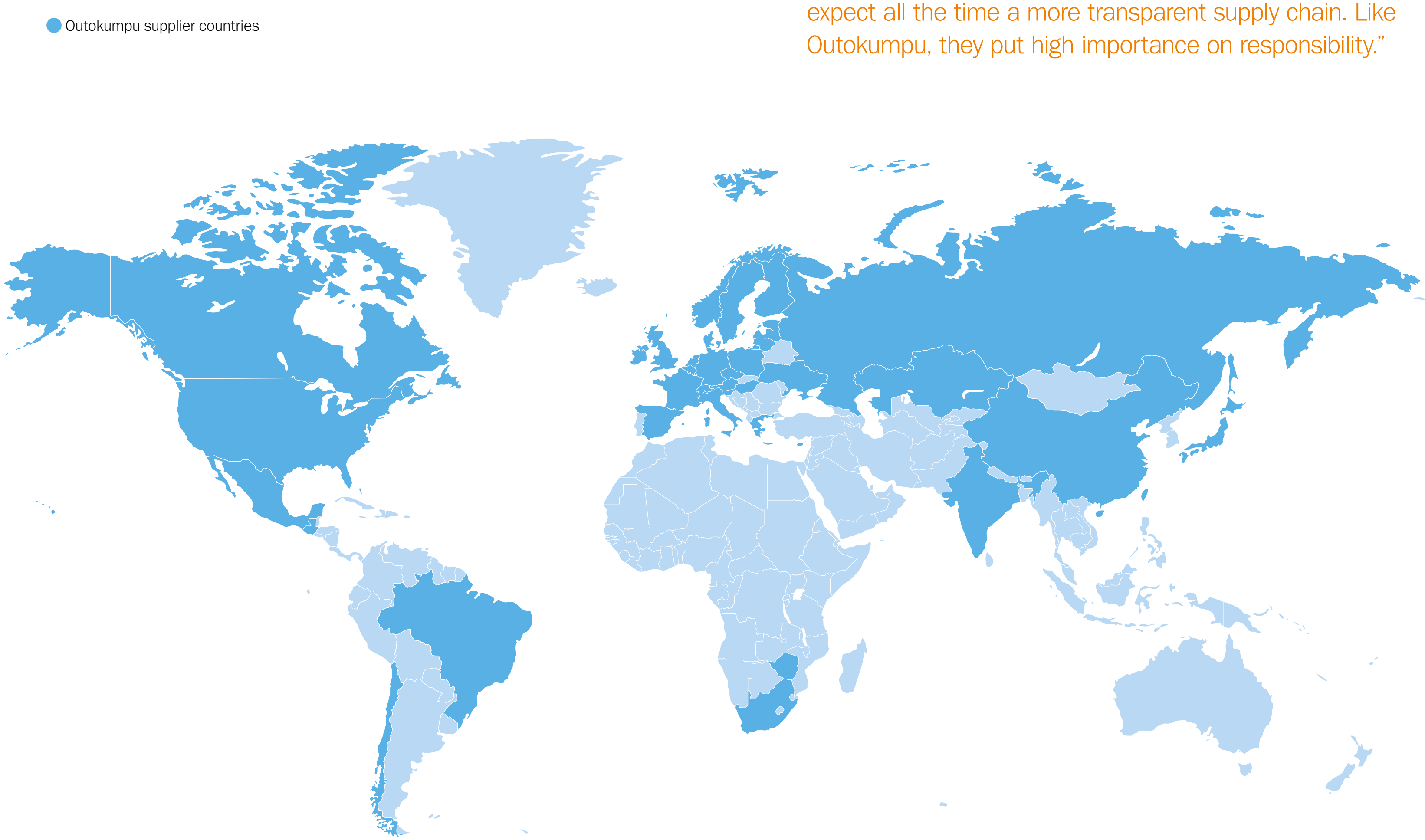
Outokumpu is a supplier to some of the most demanding industries, such as building and construction, energy production, car producers and appliance manufacturers. Traceability and quality are of the utmost importance to our customers, many of whom are leading brands in their field. Outokumpu places the most stringent requirements on itself as a supplier and also requires the same from its own suppliers.

The customers and stakeholders of our customers expect all the time a more transparent supply chain. Like Outokumpu, they put high importance on responsibility, an important part of which is of course the supply chain. They want to be assured that the materials for their applications are procured in an ethical and environmentally responsible manner. To trace the supply chain of their products through the entire chain, all the way back to the production of raw materials, customers need the cooperation of suppliers.

In 2016, Outokumpu had over 10,000 suppliers in 60 different countries. A vast majority of suppliers are located in those countries in Europe, USA, and Mexico, where Outokumpu has its production units, and there were no major supplier changes. The proportion on spending on local suppliers at significant Outokumpu locations of operation was 36% in 2016. Outokumpu started regular compliance screenings of its suppliers used in key production facilities in Europe. The target is to implement regular compliance screenings to cover the majority of Outokumpu's suppliers during 2017.

Read more about our suppliers ↗

Material and service suppliers



Includes the most important supplier countries with purchases of more than 50,000 euros.

"The customers and stakeholders of our customers expect all the time a more transparent supply chain. Like Outokumpu, they put high importance on responsibility."

Full traceability

Outokumpu provides its customers environmental and ethical profiles for its products. We have tracked data of sourcing and know the origin of our primary raw materials.

For instance, Outokumpu provides as the only stainless steel company environmental product declarations for all of its product groups. Environmental product declarations, EPDs, offer our customers information on all environmental impacts of our products throughout their life cycle. Using Outokumpu stainless steel allows our customers to decrease their environmental footprint, and that of their customer.

Outokumpu's work in creating transparency in the supply chain our customers and their customers to assess and manage the impacts of their own value chain and meet growing compliance demands.

Recycling and reducing environmental impacts

Traceability in the supply chain also gives customers the necessary data to recycle stainless steel at the end of the equipment's lifecycle. Customers can sell the material onwards instead of disposing of it as waste, gaining both environmental and cost benefits.

As Outokumpu's steel has one of the highest recycled content in the industry, using it in any applications reduces the environmental impacts of the entire value chain.

Read more about our customers ↗

Direct economic value generated and distributed

Direct economic value generated

Revenues
5,792 € million
(2015: 6,911)

Economic value distributed

Operating costs
4,600 € million (2015: 5,564)

Employee benefit expenses
713 € million (2015: 762)

Payments to providers of capital
171 € million (2015: 156)

Taxes paid to government
12 € million (2015: 35)

Community investments
0 € million (2015: 0)

Economic values retained in business
295 € million (2015: 394)

Safe and healthy working environment

At Outokumpu, safety is the number one priority. Anyone who works or visits company premises – employees, contractors and visitors – has a right to a safe and healthy environment.

Outokumpu believes that all accidents are preventable and therefore strives towards a goal of zero accidents. Our philosophy is to continuously improve our safety practices to ensure that Outokumpu is an industry leader in safety. Significant improvements have been made, but opportunities for further development still exist across the Group.

Safety was recognized as the first must win battle at Outokumpu in 2016. The goal is to create standardized and disciplined approach to safety that correlates with improved quality and operational efficiency, leading to a top decile position in the industry. Internal safety audits were executed at all major production sites during 2016. Detailed development plans were made at the sites based on the audit results. Yearly Outokumpu Safety Week was held in April. Safety Week aims to raise safety awareness and highlights selected safety topic during the week. The CEO hosts a Safety Call every month and reviews every lost time injury and recognizes positive achievements. Over the year this forum has led to the development of common approaches to preventing trapping incidents and highlighting the importance of lock-out, tag-out, test-out procedures and improved acid handling methods.

Safety and health performance

Safety and health statistics were reported to a common reporting system. Leading and lagging indicators were required to be reported monthly and formed part of a company-wide Safety Pyramid. The definitions follow an internal standard, which was

Workplace accidents by region, accident and employee type

	Outokumpu total	Europe	Americas	Asia and rest of the world	Female	Male	Employees	Contractors
TRIFR	8.7	10.3	5.4	0.0	0.7	8.0	8.6	8.9
LTIFR	2.2	2.9	0.9	0.0	0.3	2.0	2.1	3.0
TRI [number]	205	165	40	0	17	188	160	45
FA [number]	0	0	0	0	0	0	0	0
LTI [number]	53	46	7	0	7	46	38	15
RWI [number]	49	32	17	0	3	46	39	10
MTI [number]	103	87	16	0	7	96	83	20
Lost day rate	55.1	61.2	43.5	0.0	17.7	65.3	54.0	63.1

TRIFR (total recordable incidents per million working hours) includes FA, LTI, RWI and MTI.
LTIFR (lost time injuries per million working hours) includes FA and LTI.
TRI includes FA, LTI, RWI and MTI.
FA= fatal accident, LTI= lost time incident, RWI= restrictive work incident, MTI=medically treated incident.

based on external international standards. Injury rates and the rate of proactive actions (leading indicators) were reported per million working hours.

Safety

Year 2016 started with launching a new main indicator for safety: TRIFR (total recordable incidents per million working hours). The Group LTIFR (lost time injuries per million working hours) was 2.2 (2015: 3.0) and reached the target of 2.5. In 2016, the TRIFR was 8.7 (no comparable data from previous years available). The rate for all workplace accidents (total recordable incidents and first aid treated incidents per million working hours) was 33.0. Lost day rate (more than one calendar day absence from the day after the accident per million working hours) decreased significantly being 55.1 (2015: 63.4).

The reporting of proactive safety actions continued to be a focus. The frequency of proactive safety actions (per million working hours) increased being 3,013.7 (2015: 2,989.6). The total number of preventive safety actions was 71,189 (2015: 75,600), including near-miss reports, hazard reports, safety behavioral observations and other preventive safety actions.

Health

Health activities at Outokumpu focus on improving working environment and monitoring employee health using a variety of occupational health checks and fitness tests. At the production sites, Outokumpu carries out systematic occupational hygiene measurements to monitor for instance work-related exposure to noise and impurities in the ambient air. Additional surveys were made as well, for example biomonitoring to investigate chromium exposure in Tornio.

In improving and monitoring working environment Outokumpu cooperates with universities, specialist institutions and external associations.

The number of occupational diseases diagnosed in the Group increased. There were four occupational diseases (2015: 1), all occurred in Europe for own employees. The total absentee rate remained the same being 4.1% (2015: 4.1%), when in Europe the rate was 5.6% (2015: 5.5%), in Americas 0.9% (2015: 0.8%) and in Asia and the rest of the world 0.9% (2015: 1.6%).

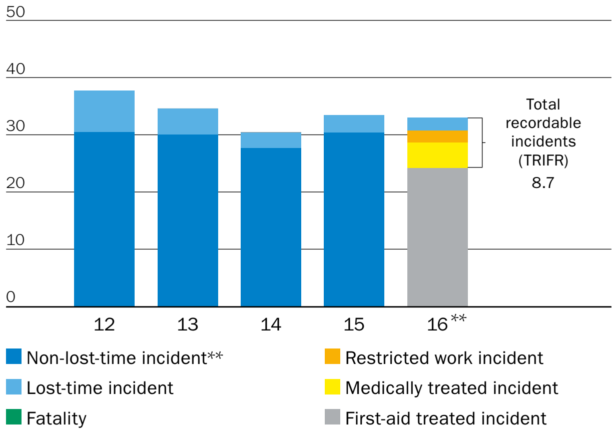
Well-being at work

Outokumpu wants every employee to return home safely after their work shift. The health of the personnel and their well-being at work are important preconditions for Outokumpu's success in day-to-day operations as well as in its long-term competitiveness. At Outokumpu, it is the responsibility of the whole workforce to foster well-being and to increase occupational health and safety.

Outokumpu's production locations promote exercise and sponsor voluntary wellness programs to ensure the health of our professionals, and offers various medical examinations and checks. In Finland, normal health examinations are done for blue-collar workers every third and for white-collar workers every fifth year. For instance Tornio, Finland arranged a project at cold rolling mill promoting healthy ways of living, doing fit tests before and after project, health examinations, information about exercise, healthy eating and so on. In local information sessions, health – shift work, stress, cardiovascular diseases and sufficient rest – is one topic for every shift in quality trainings. For example in Germany and in Americas, the company offered several preventive medical care activities such as glaucoma examinations, skin cancer examinations and influenza immunization.

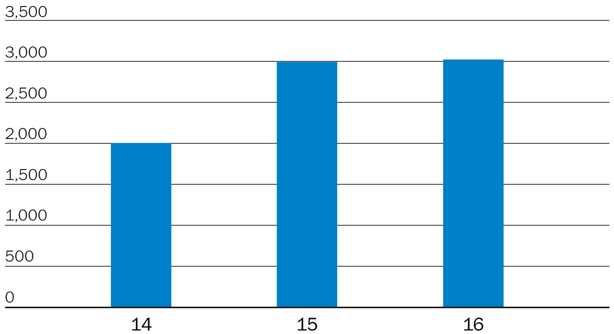
Many employees from the company's sites also participated in health and well-being actions, and the company promotes and supports exercise activities. Tornio for example offers own hours in ice-skating rink and volleyball as well as campaigns in skiing, commute cycling and so on.

Workplace accidents*



* Per 1 million working hours.
** Split between non-lost-time incident types is not available before 2016.

Proactive safety action frequency*



* Per 1 million working hours, including near-misses, hazards, SBOs and other preventive safety actions.

Towards a high-performing organization

2016 began with a new CEO, Roeland Baan, taking the reins of the company. As one of his first tasks in January, he asked three questions of the employees – what he should change, what should not be changed and what important topics he should not overlook. People answered that the organization was too complex, involving too much internal work and too much cost. There was therefore no need to persuade anybody of the following immediate targets for 2016: to simplify the organizational set-up with fewer layers of management and a lighter cost structure and to make savings of 100 million euros in sales, general and administrative costs.

While Outokumpu was able to move from the short-term agenda to mid-term targets, these efficiency measures were still needed to allow the company to sustainably develop itself to achieve the new vision. In order to strengthen the underlying culture of our company and make the change sustainable, Outokumpu started to implement the Organizational Health Index with a survey in the final quarter of 2016. The results set a baseline for the health of our company and defined the agenda and ambition for people development for 2017.

"The vision calls for Outokumpu to be the best value creator in stainless steel by 2020 through customer orientation and efficiency, and one of the six must win battles in Outokumpu's new strategy is high-performing organization."

Set-up for high-performing organization

In April, the Group announced a new vision and strategy. The vision calls for Outokumpu to be the best value creator in stainless steel by 2020 through customer orientation and efficiency, and one of the six must win battles in Outokumpu's new strategy is high-performing organization. The strategy set clear targets for 2016 for a radical shift in our business approach to reduce the debt.

The first steps in achieving the required radical change were to simplify the organization, streamlining layers of management and cost, as well as to reduce sales, general and administrative costs by 100 million euros. The new organization entered into force in June, and work is in progress to change the ways of working.

Improving organizational health

A further sense of direction from the point of view of organizational development came with Organizational Health Index, a set of behaviors which strongly influence the success of an organization. The initial survey was conducted in the autumn.

Using Organizational Health Index tool allows Outokumpu to clearly link the day-to-day behavior and mindset in the organization to its strategy and must win battles, and to benchmark its score against 1,300 other companies. The response rate was extremely high at 70%, showing that employees care about Outokumpu as their employer, and employees gave more than 15,000 open comments, recommendations and opinions. Outokumpu scored in the bottom quartile after years of restructuring, but the company has set up ambitious targets to move to

the next quartile when the next survey is carried out in 2017. Key development areas for the next 12 months were identified – role clarity, personal ownership, knowledge sharing, consequence management, rewards and recognition as well as inspirational leadership. Actions on these fronts will be closely monitored in 2017.

In cooperation with the employees

A new organization to reduce the layers of management meant that Outokumpu completed employee negotiations in Finland, Sweden and Germany in the summer and autumn of 2016 in line with the local practices in each country. The reorganization meant that 600 white-collar employees have left or are leaving Outokumpu.

Outokumpu completed its earlier announced industrial restructuring in Europe, when the Benrath site was closed in September and its operations were transferred to Krefeld, Germany. The vast majority of more than 200 employees transferred to other positions in Krefeld. Based on a local social compensation plan, the remaining employees, some 10%, moved over to a transfer company for training and new employment opportunities in accordance with German practice, or retired. There were no compulsory redundancies in Benrath.

Ongoing cooperation with personnel takes place in a joint consultative body, Personnel Forum, an information channel between management and employees. The Personnel Forum discusses issues of transnational interest, such as financial performance, employment issues, reorganization, health and safety and technology and research. The forum has 33 representatives from European countries and it appoints the Group Working Committee, which is responsible for ongoing cooperation between management and employees. Eight members represent employees and three represent the management. In 2016, the Personnel Forum met once and the working committee convened four times.

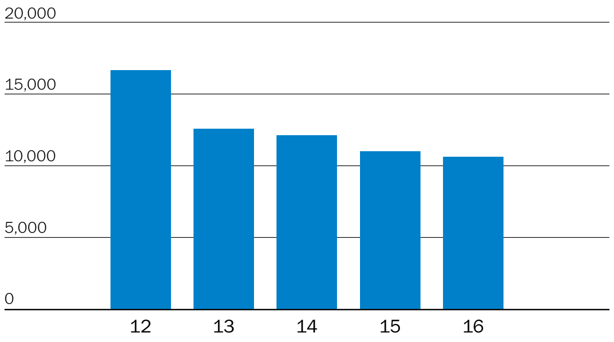
Hundreds of people trained, new talents offered new opportunities

In harmonizing business processes within the company, that has grown through acquisitions, important steps were taken in 2016. New common tools for supply chain management, procurement and customer relationship management were also taken into use. A common employee data system was built up, and it will go live in the beginning of 2017.

As Outokumpu is moving forward with new, common processes, hundreds of Outokumpu people participated in training in 2016. Training programs included an eLearning program for supply chain management and a pilot O'Leader training for leadership skills. The Outokumpu Sales Academy was launched for developing sales competences in field sales. On site, safety and on-the-job training continued. Overall, the total number of training days was 11,002 and hours 88,012, and the average number of training days was 1 and hours 8.5 during the year.

Outokumpu continued its global talent review process in the Americas and was able to promote some of the talents spotted earlier in the process in the new organization. The Outokumpu Talent Council meets quarterly. During the year, nearly a thousand Outokumpu employees were given a new challenge or opportunity through job rotation in the company in connection with the new organization for example in new global functions of sales, supply chain management, operations and human resources, where they started in a new position or in a new unit. In the process, Outokumpu promoted 27 emerging leaders that had been detected in our talent review process. Altogether 491 professionals were recruited from outside the company.

Personnel on December 31



Our people by region

	2016	2015	2014
Germany	3,004	3,186	3,586
Finland	2,363	2,396	2,408
Sweden	1,656	1,760	1,969
The United Kingdom	513	560	541
Other Europe	611	577	600
Europe	**8,147**	**8,479**	**9,104**
The United States	1,220	1,216	1,212
Mexico	1,056	1,095	1,104
South America	88	92	94
Americas	**2,364**	**2,403**	**2,410**
Asia/Rest of the World	**89**	**120**	**611**
Group total	**10,600**	**11,002**	**12,125**

Check all employee data in our reporting tool

Majority received a regular performance review

Outokumpu's clear target in performance management is that each and every employee has a regular performance and development discussion, called "My performance commitment," with their manager.

Since the Inoxum transaction, some of the employees have been outside the Group's process for performance and development discussions, but the majority of the Group's personnel received a regular performance and career development review in 2016. In 2017, once a common employee data system is taken into use in the beginning of the year, the process of performance and development discussions will be the same across the entire company and easily monitored in the system.

Outokumpu's principles and framework for salaries and incentive plans remained mostly unchanged and salary increase budgets were limited in 2016. During the year, Outokumpu launched a matching share plan in order to emphasize shareholder value creation and ownership culture and to incentivize the achievement of the 2020 vision. The participants in the top management invest 30–120% of their annual gross base salary in Outokumpu shares, and Outokumpu will match each share with two gross shares. More on remuneration on p. 14 in the Corporate Governance section.

Zero tolerance for any kind of discrimination

Outokumpu Code Conduct sets the way of operating in the Group, built on the equal treatment of all people: there is zero tolerance for any kind of discrimination, whether it is based on ethnic origin, nationality, religion, political views, gender, sexual orientation or age. Outokumpu fosters equal opportunity and diversity. Employment decisions will be based solely on business reasons and will be made according to national employment laws.

In 2016, 6 alleged incidents were recorded in Outokumpu. The Group reviews and investigates all incidents. If required, corrective actions are taken accordingly. Read more on compliance on p. 12 in the Corporate Governance section and at our website.

Outokumpu complies with international, national and local laws and regulations and respects international agreements concerning human and labor rights, such as the United Nations' Universal Declaration of Human rights, and condemns the use of forced and child labor. Outokumpu operates mainly in Europe, in the US and Mexico, where the risk related to the human rights is not considered to be high.

Outokumpu's working hours, minimum notice periods, vacation times, wages and other working conditions are consistent with applicable local laws. Outokumpu maintains a consistent policy of freedom of association. All Outokumpu employees are free to join trade unions according to local rules and regulations, and in 2016 altogether 86.5% of the Group's employees were covered by collective agreements. 18,038 hours or 2,254.8 days in 2016 were lost due to strikes (2015: 6; 2014: 170).

Outlook for 2017

2017 will be about sustaining the new ways of working set up in the past year. As negotiations in some countries ended only in the last quarter of 2016, all roles and accountabilities are not yet clear on every front, and work remains to be done on taking personal ownership and role clarity. Savings in sales, general and administration costs need to be reaped up also in 2017. But in many ways, 2017 will be about preparation for building capabilities both to sustain the ways of working established in 2016 and to further harmonize business processes in 2017–2018: training is of course training, but also common processes and infrastructure need to be in place. After the first roll-outs in 2016, a new global employee data system as well as tools and processes for performance management and learning will be built and taken into use. Secondly, Outokumpu will also follow up on the organizational health with a focus on leadership and performance. Last but not least, rewards and recognition will be a clear improvement target, with special focus on linking rewards to performance and non-financial recognition.

Goals for 2016

Target	Status	Goals for 2017
Winning behaviors	Done and evolving into a next step now that we have a new strategy and vision – mission-critical behaviors to reach our mission	Launch of mission-critical behaviors: Leadership, Sense of urgency – execution with speed, Relentless drive for improvement, Decisiveness collaboration, and Effective communication
First O'Leader pilot training	Done, continues in 2017	Learning strategy and common processes for training
Following up a previous Group-wide personnel survey and conducting a new one	Done, actions continued based on previous survey and new Organizational Health Index survey taken in the autumn of 2016	Follow-up on organizational health with focus on performance management and leadership
Employer value proposition	Work started	Continues in 2017
Sales competence development with Sales Academy	This was kicked off in 2016 and pilots were done in November	Developing sales competence, supply chain and manufacturing excellence continue
Diversity, 50/50 in recruiting	Ambition of 50/50 men and women graduate recruitments in place	Ongoing

Energy efficiency

Outokumpu was able to improve energy efficiency by 12.7% in 2016 compared to baseline 2007–2009 mainly by high capacity utilization. Corresponding savings amounts to 1.3 million MWh.

Outokumpu fosters responsible energy use by realizing the potential of efficiency improvement and by engaging in low-carbon electricity.

The company's energy efficiency has significantly improved in the long term. In recent years this improvement was mainly driven by the restructuring process of our operations. In 2016 Outokumpu concentrated and increased production and capacity utilization, improved energy efficiency and saved resources and money. Several energy efficiency projects supported this remarkable energy efficiency improvement, the results of which can be seen on p. 24 in the Sustainability review.

At Outokumpu's ferrochrome operation in Tornio, Finland, process gas is produced in the reducing process step. This CO gas is captured, cleaned and used as furnace gas in Outokumpu's other production processes at the Tornio site. Thus, the use of primary energy in Tornio site could be further replaced in 2016 saving about 1 Million MWh of primary energy resources. A small amount is also converted into heat in the CHP plant in Tornio and the heat is sent back to Outokumpu.

"The company fosters responsible energy use by realizing the potential of efficiency improvement and by engaging in low-carbon electricity."

Sustainable energy supply

Outokumpu centralized energy procurement to secure sufficient energy supply and to ensure predictable, competitive and stable energy prices for the Group. The Energy and Utilities function optimizes the energy portfolio and manages Outokumpu's energy production assets which include participation in low-carbon energy projects. Outokumpu continues with its shareholdings in:

- Rajakiiri Oy wind power with a capacity of 45 MW in Outokumpu Tornio site, Finland.
- Statkraft hydro power with a capacity of 104 MW in Rana, Norway
- Fennovoima with holding of 14.1% in the nuclear project Hanhikivi 1 in Pyhäjoki, Finland, a 1,200 MW nuclear power plant expected to begin operations in 2024 and has a minor 0.3% holding in the nuclear power plant Olkiluoto 3
- A combined heat and power (CHP) plant in Tornio which produced in 2016 328.8 GWh (1,184 TJ) heat energy for Tornio works
- Manga LNG Oy with holding of 45% in building a LNG terminal in Tornio harbor, Finland, to replace fossil fuel use by LNG. The project is supported financially by the Finnish Government. The delivery is expected in 2018

Outokumpu uses a small amount of electricity from its own hydro power plant with a capacity of 330 kW in Dahlerbrück, Germany. The site gets some 10% of its electricity from this plant.

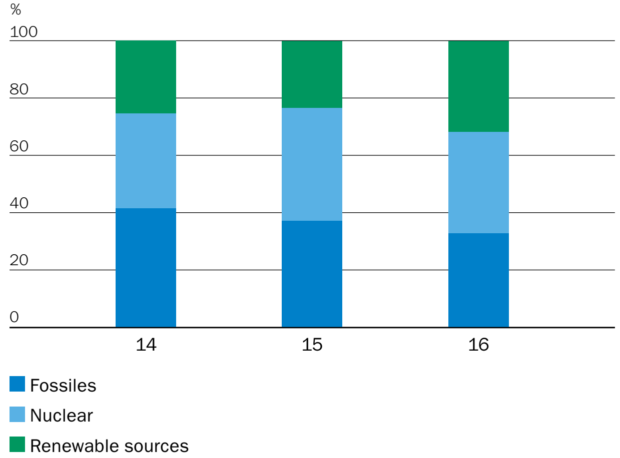
With all these measures, the aim is to lower Outokumpu's carbon profile.

Energy used

	2016	2015	2014
Electricity, TJ	16,747	16,130	17,176
Carbon monoxid gas, TJ	2,405	2,241	2,272
Natural gas, TJ	4,424	4,259	5,681
Propane, TJ	4,640	4,467	4,295
Diesel, Light and heavy fuel oil, other TJ	614	614	634
Energy, TJ	**28,830**	**27,712**	**30,056**
Energy use in GJ per tonnes crude steel	9.8	10.3	10.3

Electricity of 2015 has been restated

Origin of electricity



More information on energy use in our sustainability tool.

Environmental impact

Outokumpu reduces the environmental impact at its source by improving resource efficiency in material and energy use.

The main environmental impacts from stainless steel production are dust emissions into the air, water discharges from production plants, use of direct and indirect energy, and waste created in the production process.

Outokumpu manages environmental impacts according to Outokumpu's policy on Environment, Health, Safety, Quality and Energy Efficiency.

Stainless steel production is a melting process of recycled steel at over 1,400°C which results in thermal driven emissions of dust mainly in melt shops. Dust filtering systems are extremely efficient, removing 99% of the particles. The total particle emissions of all production processes was 570 tonnes in 2016 (328 tonnes in 2015). The increase is caused by higher production and the particle emissions mainly come from the ferrochrome operation.

As Outokumpu has reached a low level of specific dust emissions from melt shops and fulfills the required low dust emission concentration emitted after dedusting, no significant further reduction steps are expected. Rather, the estimation method based on measurement campaigns and the operation conditions during the campaigns influence the figures.

Water is needed in the equipment cooling as well as in several other processes. Outokumpu reuses the water as much as possible in water cycles and cascading use, but some water also evaporates or leaves the system. All discharged water is treated beforehand by the company's own treatment plants except when it is directed to municipal water treatment systems. The main water discharges are metals and nitrates.

While the water withdrawal increased by about 4% in 2016, Outokumpu was able to improve the water withdrawal per tonne of crude steel to limit the environmental impact on bodies of water. The metal discharges decreased in 2016 compared to the previous year. A higher nitrate water emission was caused by the implementation process of the investment in the cold rolling mill in Krefeld and the ongoing modification of the municipal water treatment plant in Dillenburg. The latter will treat the site's wastewater nitrate in the future.

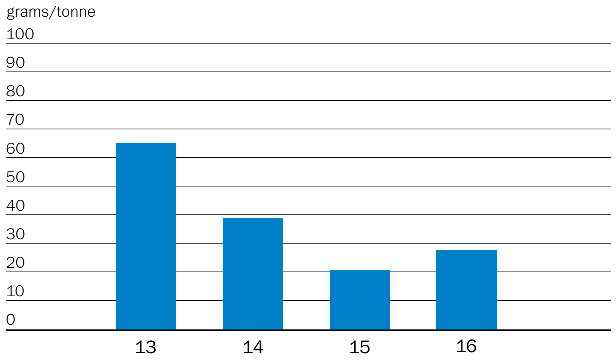
Despite all precautionary measures to avoid radioactive contamination in raw materials by radioactive control of all input to our melt shops, one incident involving radioactive material occurred in 2016. It resulted in slightly contaminated slag which was landfilled on a special landfill site according to authority requirements.

The production of stainless steel does not employ or reserve large areas of land, or have a significant effect on biodiversity in the surrounding natural environment. However, Outokumpu has identified areas of high biodiversity value that are owned by the company or adjacent to our sites. More information on biodiversity.

Costs for environment-related activities within Outokumpu totaled EUR 118 million in 2016, of which costs associated with operational environmental management totaled EUR 108 million. Operational costs include process-related treatment, disposal and remediation costs for waste and emission reduction into air and water. 35.6% of the environmental expenditures are for air and climate change, 30.3% for water protection, 12.2% for waste management, 5.4% for waste disposal and 0.5% for soil and groundwater. All others could not be sorted to one of the above mentioned groups. EUR 11 million were used to environmental investments. The biggest investments were the reconstruction of the Krefeld site and waste treatment improvement in the Kemi mine. Provisions and guarantees in connection with environmental considerations totaled EUR 64 million.

All our environmental impacts can be seen at our sustainability reporting tool.

Melt shop particle emissions



Water withdrawal and discharges

	2016	2015	2014
Surface water, million m^3	37.9	36.6	35.4
Municipal water, million m^3	1.2	1.1	1.8
Groundwater, million m^3	1.4	1.1	1.4
Rainwater, million m^3	1.7	1.7	1.0
Water withdrawal by source	**42.2**	**40.5**	**39.6**
Water discharges by type and destination			
Wastewater out, million m^3	21.6	21.0	21
Discharge to surface water, million m^3	20.2	19.6	19.2
Emissions to water, tonnes			
Metal discharges to water, t	36	50	53
Nitrogen in nitrates, t	2,399	1,767	2,408

Water discharge for 2015 is restated.

Environmental legal compliance

In order to ensure legal compliance, the Environmental Network follows quarterly environmental performance, permit status and legal compliance. Internal environmental site audits continued in 2016 according to an internal risk list. During 2016, many of the production sites received new environmental permits or updates or had a permit process ongoing.

During 2016 the only administrative fine was SEK 1,000 (some EUR 100) for the late delivery of a cooling media report in Avesta, Sweden. Outokumpu units did not receive any non-monetary sanctions during 2016.

In 2016, emissions and discharges were generally at normal levels and in compliance with environmental permits, but some spills and instances of non-compliances did occur. Environmental compliance data for 2016 shows that there were a total of 15 environmental non-compliances or breaches of permitted limits (2015:18). None of them were significant. On all these occasions, the environmental authorities were reported to according to local legislation, permit conditions and Outokumpu's internal environmental reporting rules. In these cases, corrective actions were carried out immediately or cases resolved otherwise according to the guidance of the supervising authorities. Related to these, no environmental damage was reported.

Permit processes were completed in some units. For example our cold rolling mill in Krefeld, Germany, received a permit for its revised cold rolling mill and the Wildwood site in US got a new stormwater permit and a wastewater pretreatment permit. The Kemi mine in Finland received a permit for landscaping the barren rock heaps. Permit process was ongoing in several sites. For instance, in the US the Calvert plant is waiting for the new air emission permit for NO_x and SO_2 at the melt shop. Tornio site in Finland applied for some changes regarding its environmental permit and Sheffield, UK, was undergoing a review of the permit regarding its landfill.

Outokumpu is not a party into any significant juridical or administrative proceeding concerning environmental issues, nor is it aware of any realized environmental risks that could have a material adverse effect on the corporation's financial position.

Working hard to prevent leakage and soil contamination

Soil and groundwater contamination was investigated during 2016, for example, in Sweden at the Nyby site and the closed Kloster site and in Germany at the closed Bochum and Benrath sites. Planned remediation work was ongoing at some Group sites in 2016.

Monitoring emerging legislation as a part of compliance

Many challenges in environmental initiatives and legislation were followed. In chemical and environmental areas, the challenges in 2016 were for example:

- Preparation of next phase from 2020 to 2030 of the European Emissions Trading Scheme (ETS);
- Linking other regulation to European legislation related to chemicals (REACH) and product safety (CLP);
- Implementation of the Industrial Emissions Directive in the European Union together with binding Best Available Techniques (BAT) requirements;
- EU resource efficiency and circular economy initiatives which may have impacts on legislation and many other areas.

Non-fact based or non-comprehensive definitions in classification are causing unexpected impacts. For instance the classification of nickel as potential carcinogen automatically leads to similar classification of austenitic stainless steel. It fails to recognize that stainless steel is a material with its own inherent properties, which are not the same as those of the raw material constituents. This situation is analyzed as part of the Group's annual environmental risk rating process and has required intensive communication from Outokumpu, EUROFER and other associations.

More on compliance on p. 12 in the Corporate Governance section and our website

Pays for itself

Buildings & Infrastructure

Stainless steel gives Hong Kong's landmark, the Stonecutters Bridge, its striking appearance and enough integrity to last through its designated 120-year life cycle.

Read more ↗

Energy & Heavy industries

Crescent Dunes is the world's first solar plant storing sunlight in a hot nitrate tank using molten salt. Tanks are made of Outokumpu Therma stainless steel, specifically designed for high temperatures.

Read more ↗

Automotive & Transportation

Sweden upgrades X2000 trains but original stainless steel train frames continue in use. Looking both costs and environmental impact, choosing stainless steel paid off.

Read more ↗

Home appliances

Bailey of Sheffield creates beautiful jewelry in stainless steel to last more than a lifetime. It was obvious for Bailey to source local stainless steel that comes from Sheffield.

Read more ↗

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for more stories on the use of stainless steel ↗

Product properties

People make things from stainless steel when they need them to last. Stainless steel pays for itself in the long term, thanks to its durability, strength, low weight and resistance to corrosion.

Not all stainless steels are created equally. Outokumpu's customers have access to the best expertise in the industry, to help them identify the precise material and grade for any application. Outokumpu supports its customers by providing relevant information on the choice and use of different stainless steel grades.

Selecting Outokumpu's stainless steel means making the right choice at the beginning of the life cycle to make it long-lasting, cost-efficient and sustainable. As an example, the high-strength stainless steels in Outokumpu's portfolio offer economic benefits: less material is required for a specific level of performance and fewer resources are therefore consumed in its production. High-strength steels can also absorb larger amounts of collision energy, improving safety levels in vehicles and other structural components and systems.

Improving product properties like corrosion resistance and strength is at the heart of our product development, and successful new products like Supra 316 Plus offer added value to our customers as the materials get stronger and more long-lasting.

Product, application and technical market development

The direction of Outokumpu's product, application and technical market development is driven by global trends like economic and population growth, mobility, urbanization, climate change and limited resources.

We work closely with customers to align our activities with our customers' current and future needs. The key focus is the development of long-lasting, sustainable material solutions providing advantages over the entire product life cycle. An excellent example of how the use of stainless steel extends a product's life cycle and reduces the use of natural resources is the ongoing upgrade of X2000 trains in Sweden.

The X2000 train frames were manufactured from Outokumpu stainless steel in the 1990s. Today, two and a half decades later, the trains are undergoing a full technical and interior upgrade. However, the original stainless steel frames remain intact and are expected to stay in service for another two decades. Outokumpu continues to develop even more life cycle-efficient material solutions for both existing application areas, and to open completely new markets for our steels. We also continuously improve the quality and properties of our existing steel grades. In recent years, Outokumpu has launched several new-to-market steel grades. One important milestone in 2016 was that the new steel grades Outokumpu Supra 316plus and Outokumpu Core 4622 were accepted into the European standard EN 10028-7.

Our Forta H-series high strength stainless steels have been developed to open completely new markets for stainless steels. These materials provide the automotive industry with a structural material that exhibits a superior combination of strength, formability and crash-resistance compared to the currently used materials. One example of a new application for H-series materials demonstrated during 2016 was vehicle seats.

New surface finishes and the optimization of surface properties of stainless steel is another key focus area of our product development. Outokumpu offers a wide range of aesthetically appealing stainless steel finishes for architectural applications. The latest case example is the Ping An Finance Center, the second largest skyscraper in China, representing the largest existing stainless steel curtain wall. Outokumpu delivered 1,700 tonnes of Supra 316L/1.4404 in Deco Linen finish for this building. Due to the excellent cooperation and delivered quality, Outokumpu has been selected also as the supplier for the curtain wall material of the Ping An South Tower, currently under construction next to Ping An Tower.

Meeting the growing demand for stainless steel as curtain wall material, development activities in 2016 aimed to offer new surface finishes featuring a non-directional characteristic. The non-directionality is becoming a more popular characteristic of curtain wall materials, because it gives architects more flexibility on positioning the panels on the building. Five new non-directional patterns have been designed and developed, and are currently being evaluated by architects.

Outokumpu's R&D teams work closely together with our customers and sales organization. Our R&D experts provide our customers with technical support and advice related to material selection, fabrication and material performance in customers' applications. An excellent example of the value our R&D knowledge generates to our customers was the cooperation with Jyväskylä Energy Group, where our R&D experts helped our customer in the selection and use of superaustenitic Outokumpu Ultra 254 SMO material.

"Continuous development of our stainless-steel production processes and technologies is at the core of our R&D."

Stainless steel from Outokumpu has for several years been used in bridges. Outokumpu has recently, in collaboration with the consultancy and engineering company Arup, made an inventory of duplex stainless steel bridges that have been in use for up to more than fifteen years. The inventory confirms that duplex stainless steel is a very sustainable selection for all kinds of bridges, and that there are suitable duplex stainless steels for different corrosion environments. The bridges visited could all be used as exemplar cases of the successful structural use of stainless steel.

Process and technology development

Continuous development of our stainless steel production processes and technologies is at the core of our R&D. Process and technology development focuses on the reduction of the environmental impact and the improvement of the cost efficiency of our production processes, and on the optimization of stainless steel quality. For instance, during 2016, the improvement of the slab grinding process enabled by the results of the collaborative R&D program DIMECC SIMP (System Integrated Metals Processing) resulted in a substantial reduction in the grinding loss of ferritic grades in Tornio, without affecting product quality.

An important part of our R&D mission is to develop and share technological knowhow on stainless steel making. Therefore, the job rotation program for technical experts was continued, to facilitate the transfer of technological knowhow between our production sites. The Core Technology Competence groups, group-wide expert teams on process development, continued to deliver excellent results by sharing best practices and executing joint development projects between Outokumpu production sites.

A digitalization team was established in our Tornio R&D center to even more efficiently utilize data analysis, new measurements and process models in process optimization and process control.

External R&D collaboration

Outokumpu has an extensive network of external R&D partners, and participates in both national and international research programs to supplement Outokumpu's own R&D capabilities. Outokumpu is a member of the European Steel Technology Platform (ESTEP). Outokumpu collaborates with various top-class universities and research institutes. Examples of collaboration forums in which Outokumpu is involved include the Finnish Digital, Internet, Materials & Engineering Co-Creation platform (DIMECC), Research Fund for Coal and Steel (RFCS) and Jernkontoret (the Swedish Steel Producers' Association). In Germany, we collaborate with the Fraunhofer Institute and the Max-Planck-Institut für Eisenforschung. Furthermore, Outokumpu has recently put more focus on the EU's research and innovation program Horizon 2020 and on other European-level programs.

An example of recent successful cooperation is the project in which Outokumpu's material experts are working on future-oriented stainless steel solutions in cooperation with scientists from Fraunhofer Institute ↗ for Laser Technology ILT, in Germany. Another good case example is the two-year collaborative project with Professor Levente Vitos from the KTH Royal Institute of Technology in Stockholm, enabled by a strategic mobility award from the Swedish Foundation for Strategic Research. The project has focused on investigating in detail the applicability and future possibilities of ab-initio calculations in our product development.

Recycling maximized

Buildings & Infrastructure

Waste for one industry can be a valuable resource for another. By-products of the melting processes of stainless steel industry find new use replacing virgin crushed rock in road foundations.

Read more ↗

Energy & Heavy industries

A next-generation bio product mill in Finland, producing tall oil, turpentine, wood fuel and bioelectricity, relies on Outokumpu stainless steel in its reactors and storage tanks, vital to the pulp mill's operations.

Read more ↗

Automotive & Transportation

Car fuel tank made in stainless steel weighs almost half of its plastic alternative, gains three liters of volume, and provides serious advantages to its crashworthiness. And it is fully recyclable.

Read more ↗

Home appliances

Stala aims to create products, like sinks, that are high quality, well-functioning and efficient at every stage of their life cycle. Since stainless steel can be recycled after use, it even exceeds Stala's requirements.

Read more ↗

#Choosestainless
for more stories on the use of stainless steel ↗

Resource efficiency in materials

Outokumpu's business is based on recycling. The recycled content of our stainless steel is 87.1%, among the highest in the industry.

Outokumpu aims to maximize the use of secondary raw material steel scrap. 2.45 million tonnes of recycled steel was used in 2016 (2015: 2.20 million tonnes). In addition to this Outokumpu follows a circular economy approach by recycling waste metals from outside the melt shop in the steel melt as far as reasonable. The recycled content is reported as total recycled metal input to melt shops in correlation to crude steel production. It is calculated according to ISO standard 14021. Recycled content remains on a high level of 87.1% in 2016 (87.2% in 2015).

Outokumpu also aims to reduce landfill waste. In 2016 we were able to further increase the share of recycled and recovered waste. The trend of higher percentage of waste recycled and recovered continues. The landfill waste increased by 7% compared to the previous year mainly caused by higher production and by less amount of used slags. Landfilled waste could be limited by improvement in the mining process. The amount of tailings at Kemi mine has decreased in relation to concentrate amounts due to increased recovery in the concentrator plant. Total recovery of concentrator plant has continuously increased to totally 6.6% since 2013.

The total amount of waste was 1.8 million tonnes and increased by 17% at the same time as the production increased by 12% compared to last year and the use of slag decreased.

Slags are the main by-product of Outokumpu's production, including ferrochrome production. In 2016 the company produced 1.1 million tonnes of stainless steel and ferrochrome slag (1.2 million tonnes in 2015). Our slags are, for instance, used in road construction, refractory and concrete production, or for water treatment. The use rate (use, recycling and recovery) of all slags in 2016 was 90% (92% in 2015). The use rate depends on the local market for construction materials and the acceptance of secondary mineral material instead of virgin minerals.

The new European initiative on the circular economy should support companies in utilizing by-products and recycled material. However, some definitions in the debate are counterproductive and generate the risk that the use of the secondary materials is put at a disadvantage compared to virgin materials in spite of the same, or even superior properties. If, for example, slag by-products would become waste and had to be landfilled, new deposits would be needed for the slag and at least the same amount of virgin materials would have to be mined.

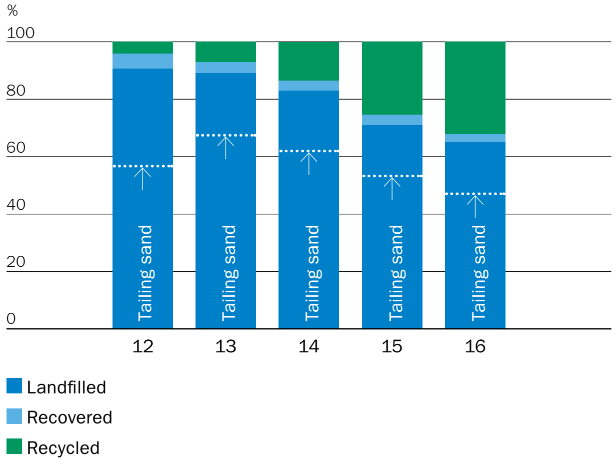
More information on raw materials and waste is in our sustainability reporting tool.

"Our slags are, for instance, used in road construction, refractory and concrete production, or for water treatment."

Total and hazardous waste in tonnes

	2016	2015	2014
Tailing sand	856,245	830,874	1,029,332
Other waste	966,281	732,342	630,182
thereof hazardous waste	139,224	127,007	147,586
recycled	13,224	14,337	16,817
recovered	43,521	44,900	48,300
landfilled	82,485	67,769	78,344

Total waste development



Indispensable

Buildings & Infrastructure

Thousands of bridges worldwide are in need of repair years ahead of their scheduled lifespan. Using stainless steel they can be renovated in a cost-efficient way with a long lifespan and low maintenance.

Read more

Energy & Heavy industries

Can desalination fix the growing problem of water scarcity? The processes are complex and highly corrosive, calling for durable solutions.

Read more

Automotive & Transportation

Metaklett is the first hook and loop fastener made of metal and used in car engines. It offers all the advantages of Velcro system combined with the strength of stainless steel.

Read more

Home appliances

Creating customized laboratory equipment for a hospital environment is not simple. There are strict hygiene requirements for materials. Outokumpu stainless steel met these requirements.

Read more

#Choosestainless
for more stories on the use of stainless steel

Climate change

Outokumpu uses resources sustainably. The company works constantly to improve the material and energy efficiency of its own operations and aims to contribute to a low-carbon energy sector.

Outokumpu is committed to reducing the greenhouse gas (GHG) emissions from all operations. The primary GHG emitted during stainless steel production is carbon dioxide (CO_2). Our target to improve resource efficiency calls for less energy and less virgin materials. This results in lower CO_2 emissions.

Carbon profile

Since 2010 Outokumpu has been working towards its target to reduce the Group's specific carbon profile in stainless steel production by 20% by 2020, with baseline figures from the 2007–2009 period. The carbon profile is calculated thus:

- For direct CO_2 emissions, as the sum of the carbon efficiency of each process such as melting, hot rolling and cold rolling, and the weighted contribution of ferrochrome production
- For indirect CO_2 emissions, by electricity use and the weighted average CO_2 emission factor of Outokumpu's electricity suppliers
- For transport and travel emissions, by distances for material and product transportation and transportation type with the correlating emission factors and business travel emissions provided by airlines and business car leasing companies

This year the carbon profile could be reduced by 13.3% compared to baseline. The profile is on the expected track of the 2020 target. This good result was caused by an improvement in energy efficiency and a significant reduction in the electricity emission factor of Outokumpu's electricity mix.

In 2016 Outokumpu committed to a science based target on CO_2 intensity. Corresponding reporting on this science based target will replace carbon profile monitoring in 2017.

European Union Emissions Trading Scheme

Besides voluntary commitments, Outokumpu's European operation sites fall under the European Union Emissions Trading Scheme. In total almost 0.94 million tonnes of total 1.22 million tonnes of CO_2 emissions are covered by the system. The input of raw materials such as recycled steel and ferroalloys as well as the use of electrodes in the electric arc furnace in melting processes during stainless steel production contains carbon, which is followed by process-related CO_2 emissions. Further direct emissions come from the use of primary energy for process heat.

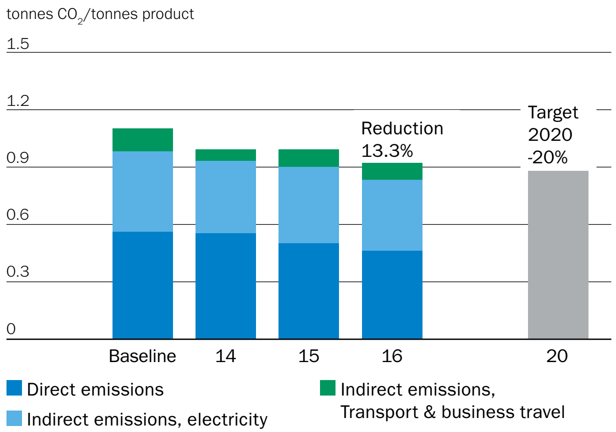
The global economic crisis at the end of the last decade resulted in very low production and therefore low emissions. As allocation is based on historical production data and benchmarks, not all allowances were needed but could be transferred to the ongoing period. By the end of the ongoing phase the total allocation for period 2013–2020 will not cover the forecasted emission needs. It is of high importance to note how the system develops in the future.

The main risk of this emissions trading system to Outokumpu involves the pass-through costs to the electricity price, which also depend on the allowance trading price. As the next trading phase intends to shorten the allowances market, a price increase in allowances is expected and intended. As Outokumpu commits to CO_2 emission reduction and contributes to reduction target of the Paris Agreement, the Group needs the emission trading scheme to establish fair conditions. This means full electricity price compensation of pass-through costs caused by allowances on a harmonized European base, free allocation at the level of real actualized benchmarks from the 10% most efficient installations without a flat rate, and no cross sectoral correction factor to the benchmark emission amount. The company communicates this position in cooperation with various steel industry associations.

Investments in recent years in terms of restructuring have made Outokumpu's production sites highly efficient. This is also an opportunity to stay competitive under the emissions trading system.

All climate change data is available in our reporting tool

Carbon profile of Outokumpu's steel



2016 data are for continuing production sites compared to baseline, electricity profile for 2015 was restated.

"Our target to improve resource efficiency calls for less energy and less virgin material. This results in lower CO_2 emissions."

Science based targets on CO_2 intensity

Outokumpu is committed to reducing the direct and indirect CO_2 intensity by a further 7.5% by 2021 against the baseline of 2015.

In April 2016 Outokumpu became a member of the Science Based Targets initiative. The members commit to contribute to the climate change goal of COP 21 held in Paris, November 2015. The parties set a goal to decouple growth and emissions and to limit the temperature increase in the atmosphere to 2 degrees compared to the pre-industrial era, called the 2 Degree Scenario (2DS). The most suitable method for Outokumpu to follow is the Sectoral Decarbonization Approach (SDA) for the steel industry as the long-term CO_2 target.

Greenhouse gas emissions of stainless steel production are limited to CO_2 caused by direct emissions and indirectly from electricity use. Emissions of all Outokumpu's production sites are included in the target setting. Outokumpu operates its own chromium mine and ferrochrome production in Finland; these are also enclosed. Our own generated emissions from transport and business travel are not included in the steel sector target. They count for some 9.3% of total emissions and will be monitored. According to the science based target approach, upstream emissions of input materials are counted in the corresponding sectors.

Outokumpu's scenario

To exclude restructuring changes, the scenario is developed against the baseline of 2015 under conditions of the steel SDA. To take into account the electricity driven production route, the indirect emissions from electricity was estimated on the development of the energy supply sector intensity target (90% reduction by 2050). The development of the electricity sector highly influences the result of Outokumpu's CO_2 emissions.

Steel industry approach

In the iron and steel sector, the target of direct emission intensity is a decrease by 55% to 0.891 t CO_2/t crude steel and the target of indirect emission intensity is estimated at 0.025 t CO_2/t crude steel by 2050 based on 2010. The whole sector's total emissions result is expected to decrease by 31% although an activity growth of 55% is assumed by 2050.

The steel industry approach reports the potential for efficiency increases coming from the phasing out of open hearth furnaces and improving blast furnaces as well as carbon capture, storage or use of direct CO_2 emissions from these processes. Further improvements are correlated to increased electric arc furnace steelmaking on a scrap basis. All these reported potentials are based on processes that are not used in stainless steel production and, therefore, cannot be applied to stainless steelmaking.

Principle

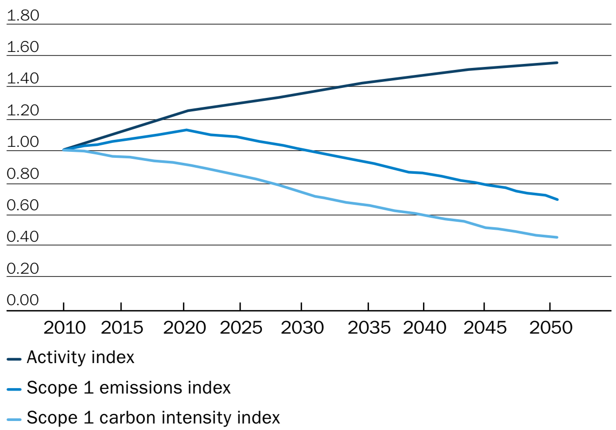
Each company in a homogeneous industry sector will converge with the sectoral intensity in 2050. SDA sets homogeneous sectors physical activity indicators. The activity indicator for the iron and steel sector and also for Outokumpu is crude steel production in tonnes. Outokumpu's forecast of direct and indirect emission intensity will end up better than the convergence criteria of steel sector.

Outokumpu's reduction in 2016

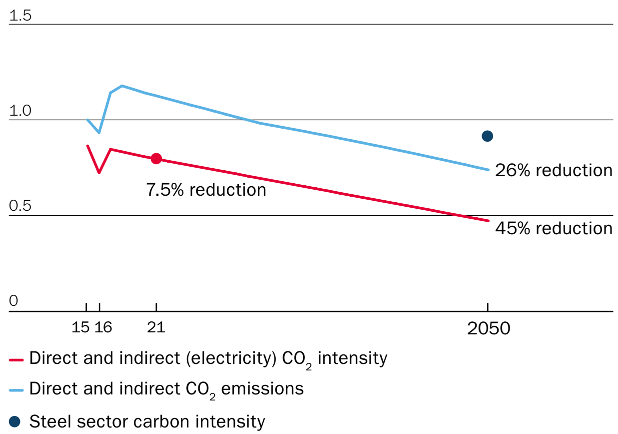
The direct and indirect CO_2 intensity could be reduced by some 16% to 0.72 tonnes CO_2 per tonne steel which corresponds to 398,000 tonnes of CO_2 savings. This high reduction is driven by the improvement of energy efficiency (see p. 13 in the Sustainability review), and by the over-proportional reduction of some 15% of emission factor for electricity in Outokumpu's electricity mix in 2016. As the capacity use was very high in 2016, and it was the first year of picking the fruits of restructuring, this result is expected to be exceptional.

All climate change data is available on our reporting tool

SDA



Science Based Target



Environmental KPIs

Outokumpu has set challenging goals and environmental key performance indicators for 2020.

Check all figures in the sustainability reporting tool ↗

Recycled content in steel

Target 2016:
88%

Result 2016:
87.1%

Outokumpu aims to raise the recycled content in stainless steel to 90% by 2020. This year the recycled content was kept on the same high level as in 2015. The 2016 target could not be reached as the decision on material input has to be in balance with economic decisions and therefore depends on the raw material market.

Decrease of Outokumpu's stainless steel direct CO_2 profile

Target 2016:
12.7%

Result 2016:
13.3%

The yearly target is embedded in the long-term carbon profile target: In 2010 Outokumpu committed to reduce the Group's specific carbon emissions in stainless steel production by 20% by 2020. This target will be replaced by science based target on direct and indirect CO_2 intensity from 2017 onward.

No significant environmental incident

Target 2016:
Zero

Result 2016:
Zero

Outokumpu has had no significant environmental incident for many years. Certified environment management systems that are implemented in all operation sites help to reduce all kinds of environmental risk.

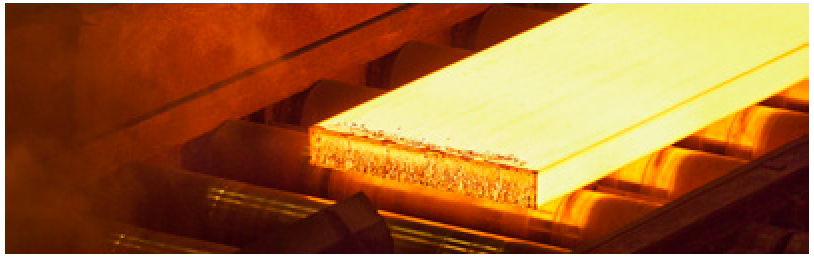
Improved energy efficiency

Target 2016:
9.4% (cumulative increase)

Result 2016:
12.7%

Outokumpu aims to improve the energy efficiency of all operations by 1% yearly until 2020 compared to the baseline of 2007–2009 which adds up to a reduction of 13% in 2020. The achieved reduction corresponds to an energy saving of 4.7 million GJ. A good utilization of capacity after implementation of the investments during the restructuring process led to this positive performance.

Examples of projects



Improvement of energy use in hot rolling, Tornio

Specific energy consumption of primary energy and electricity has decreased by more than 8% at the hot rolling mill in Tornio compared to the previous year. This counts for a comparable energy savings of 35,800 MWh in 2016. This improvement was driven by a better use of production capacity, oxygen enrichment in furnaces and an increased use of Tornio Works' own CO gas, which replaced propane use. Oxygen is produced as a by-product of onsite argon manufacturing plant from air fractioning which is needed in the melt shop. CO gas is a by-product in ferrochrome production, which is further used as fuel in the processes after treatment. A more active control of CO gas delivery and furnaces support energy efficiency improvements.

Improvement of energy use in melt shop, Calvert

The specific energy consumption of the melt shop in Calvert could be improved by 13% in 2016 compared to 2015. Comparable energy savings are calculated to be over 81,000 MWh in 2016. As the use of production capacity could be significantly increased, less natural gas for heating the production facilities was needed. But main savings were achieved in electricity use for melting. This could be reached by matching the needed power to the kind of steel in the melt, and by training all employees about the new way of operation.

Improvement of neutralization wastewater treatment plant, Sheffield

The Sheffield long products rolling mill ASR instigated a program with the aim of reducing the total chromium content in the acid neutralization wastewater plant discharge. This program used daily management and monitoring techniques to measure and correct the dosing in the neutralization process. As a result of this, ASR has reduced the annual total chromium discharge by 91% in 2016 compared to last year. This is a remarkable achievement that has not only had a positive environmental benefit, but has also totally eliminated ferrous iron contamination of the Descale 1 final rinse tank. The result of which is a direct improvement of the surface quality on the finished product.

Goals for 2017

Goal 1:

No significant environmental incident

Goal 2:

Increase recycled content to 88.5%

Goal 3:

Increase long-term energy efficiency by further 1% resulting in 10.3% energy efficiency improvement compared to baseline 2007–2009

Goal 4:

Decrease CO_2 intensity of direct and indirect emissions by 1.5% to 0.845 tonnes CO_2 per ton steel compared to 2015

Scope of the report

Outokumpu has published its sustainability report as part of the Annual Report 2016 and information is also made available at www.outokumpu.com. Outokumpu's reporting follows the Global Reporting Initiative G4 Guidelines in accordance with the Core option. The materiality assessment from 2015 was the basis for the decision on material issues and relevant indicators. The full GRI index is available at Outokumpu's website. Outokumpu reports on the material developments and changes in 2016 as part of the Annual Report, and additional information is published on its website. The Sustainability and Annual Reports for 2015 were published on March 7, 2016.

This independent practitioner's assurance report on the limited assurance conclusion on the Sustainability Reporting is available on p. 28 in the Sustainability review. The Financial statements 2016 have been audited.

Measurement/ Estimation methods

Economic responsibility

Most figures relating to economic responsibility presented in this report are based on consolidated financial statements issued by the Outokumpu Group and collected through Outokumpu's internal consolidation system. Financial data has been prepared in accordance with International Financial Reporting Standards (IFRS). Outokumpu's accounting principles for the Group's consolidated financial statements are available in note 2 to the consolidated financial statements.

All financial figures presented have been rounded, and consequently the sum of individual figures may deviate from the presented aggregate figure. Key figures have been calculated using exact figures. Using the GRI guidelines as a basis, economic responsibility figures have been calculated as follows:

Direct economic value generated

Direct economic value generated includes all revenues received by Outokumpu during the financial year. The sources of revenue include sales invoiced to customers, net of discounts and indirect taxes, revenues reported as other operating income (including gains from the disposal of Group assets), and revenues reported as financial income, mainly dividend and interest income.

Economic value distributed

Operating costs include the cost of goods and services purchased by Outokumpu during the financial year. Employee benefit expenses include wages and salaries, termination benefits, social security expenses, pension and other post-employment and long-term employee benefits, expenses from share-based payments and other personnel expenses. Taxes paid to government include income taxes. Deferred taxes are excluded from figure. Payments to providers of capital include interest costs on debt and other financial expenses during the financial year. Capitalized interest is deducted from this figure. The dividend payout is included in the payments to providers of capital according to the proposal by Outokumpu's Board of Directors.

Community investments consist of donations to and investments in beneficiaries external to the company.

Local suppliers

In this report vendors are defined as local if they are located in the same city or municipality as the Outokumpu location. Significant locations for suppliers are production units that have a melt shop, that is Avesta, Calvert, Sheffield and Tornio.

Environmental responsibility

Outokumpu's climate change target of specific carbon emissions in stainless steel production will be replaced by the science based target on CO_2 intensity of direct and indirect emissions. This report includes both targets. The ambitious 7.5% reduction target by 2021 in CO_2 intensity is comparable to a 25% reduction of the climate change target on the company's carbon profile for steel.

Social responsibility

Health and safety figures

Health and safety figures reflect the scope of Outokumpu's operations as they were in 2016.

Safety indicators (accidents and preventive safety actions) are expressed per million hours worked (frequency). Safety indicators include Outokumpu employee, a person employed by a third party (contractor) or a visitor accidents and preventive safety actions. A workplace accident is the direct result of a work-related activity and it has taken place during working hours at the workplace.

Accident types

- Lost time incident (LTI) is an accident that caused at least one day of sick leave (excluding the day of the injury or accident), as the World Steel Association defines it. One day of sick leave means that the injured person has not been able to return to work on the next scheduled working day or shift. Lost day rate is defined as more than one calendar day absence from the day after the accident per million working hours.
- Restrictive work incident (RWI) didn't cause the individual to be absent, but has resulted in that person being restricted in their capabilities so that they are unable to undertake their normal duties.
- Medically treated incident (MTI) has to be treated by a medical professional.
- First aid treated incident (FTI), where the injury is very minor and is treated by a person himself/herself or by colleague trained to administer first aid.
- Total recordable incident (TRI) includes fatalities, LTIs, RWIs and MTIs, but FTIs are excluded.

Proactive safety actions

Near-miss incidents and hazards refer to events that could have led to an accident, but where no injury occurred. Preventive actions have been taken after the report. Safety behavior observations (SBOs) are safety-based discussions between an auditor and the person being audited. Other preventive safety action includes proactive measures that are not part of previously mentioned categories.

Sick leave hours and absentee rate

Sick leave hours reported are total sick leave hours during a reporting period. Reporting units provide data on absence due to illness, injury and occupational diseases on a monthly basis. The absentee rate (%) includes the actual absentee hours lost expressed as a percentage of total hours scheduled.

Total personnel costs

This figure includes wages, salaries, bonuses, social costs or other personnel expenses, as well as fringe benefits paid and/or accrued during the reporting period.

Training costs

Training costs include external training-related expenses such as participation fees. Wages, salaries and daily allowances for participants in training activities are not included, but the salaries of internal trainers are included.

Training days per employee

The number of days spent by an employee in training when each training day is counted as lasting eight hours. (Since 2013: employee figures = FTE)

Bonuses

A bonus is an additional payment for good performance. These figures are reported without social costs or fringe benefits.

Personnel figures

Rates are calculated using the total employee numbers at the end of the reporting period. The calculations follow the requirements of GRI G4 Guidelines. The following calculation has been applied e.g.

Hiring rate = New Hires / total number of permanent employees by year-end

Average turnover rate = (Turnover + New Hires) / (total number of permanent employees by year-end * 2)

Days lost due to strikes

The number of days lost due to strikes is calculated by multiplying the number of Outokumpu employees who have been on strike by the number of scheduled working days lost. The day on which a strike starts is included.

All personnel figures of 2013 include Outokumpu personnel in the continuing operations and do not therefore include divested sites/assets, such as Terni and other remedy assets, or VDM – except for the personnel by countries of 2013, which is counted including discontinued operations. All figures from 2013 and 2014 include former Outokumpu and Inoxum employees, unless otherwise stated.

Independent assurance report

To the Management of Outokumpu Oyj

We have been engaged by the Management of Outokumpu Oyj (hereafter Outokumpu) to provide limited assurance on Outokumpu's Sustainability Review 2016 presented in Outokumpu´s Annual Report for the reporting period from January 1, 2016 to December 31, 2016 (hereafter Sustainability Information).

Global Reporting Initiative's Sustainability Reporting Guidelines G4 was used as the assurance criteria (hereafter GRI G4)

Inherent limitations on the engagement

The inherent limitations on accuracy and completeness of data related to the Sustainability Information are to be taken into account when reading our assurance report. The presented Sustainability Information is to be considered in connection with the explanatory information on data collection, consolidation and assessments provided by Outokumpu.

The Management of Outokumpu is responsible for the measuring, preparation and presentation of the Sustainability Information in accordance with the GRI G4.

Our responsibility is to express an independent conclusion on the Sustainability Information. We have conducted the engagement in accordance with ISAE 3000 (Revised). To the fullest extent permitted by law, we accept no responsibility to any party other than Outokumpu for our work, for this assurance report, or for the conclusions we have reached.

We are independent from the company according to the ethical requirements in Finland and we have complied with other ethical requirements, which apply to the engagement conducted.

We apply the International Standard on Quality Control 1 (ISQC 1) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Summary of the work performed

A limited assurance engagement consists primarily of making inquiries of persons responsible for the preparation of the Sustainability Information presented, and applying analytical and other appropriate evidence gathering procedures. The procedures performed in a limited assurance engagement vary in nature and timing from and are less in extent than for a reasonable assurance engagement and consequently the level of assurance obtained in a limited assurance engagement is substantially lower.

In our engagement we have performed the following procedures:

Interviews with Outokumpu Senior Management;

An assessment of conformity with the reporting principles of GRI G4 in the presentation of the Sustainability Information;

An assessment of coverage of the material aspects selected for the Sustainability Information and the definition of reporting boundaries in the context of Outokumpu's business operations and sector;

An assessment of data management processes, information systems and working methods used to gather and consolidate the Sustainability Information;

A review of the presented Sustainability Information with an assessment of information quality and reporting boundary definitions;

An assessment of data accuracy and completeness through a review of the original documents and systems on a sample basis;

One site visit and two video conferences conducted to Outokumpu subsidiaries.

Conclusions

Based on the assurance procedures performed, nothing has come to our attention that causes us to believe that the information subject to the assurance engagement is not prepared in accordance with the GRI G4 in all material respects.

Helsinki, 20 February 2017

KPMG Oy Ab

Virpi Halonen
Authorised Public Accountant, KHT

Nathalie Clément
Senior Manager, Advisory

Financial statements 2016

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Review by the Board of Directors

The year 2016 was a year of change for Outokumpu. The year started with a new CEO taking the lead. In April the company announced its new vision to become the best value creator in stainless steel by 2020 through customer orientation and efficiency. In addition to the vision and financial targets, the company launched a number of immediate measures in order to improve its cost position and profitability. With the new focus, ambitious targets and drive to turn the company around, Outokumpu reached a positive underlying EBIT in 2016. The improved performance was primarily a result of reduced costs, driven by the new, efficient organization. Furthermore, the business area Americas started heading in right direction as the business area reduced its losses clearly with increased delivery volumes and reduction in costs. Business area Europe, in turn, achieved its targets with EMEA restructuring program and successfully decreased SG&A costs. Outokumpu over-achieved its target to reduce net working capital by EUR 200 million in 2016: the release of EUR 307 million supported the cash flow, and Outokumpu was able to reduce its net debt significantly during the year. Outokumpu has now returned to profitability, but the clear expectation is that the company will deliver EUR 500 million EBIT in 2020 and every effort must be made to reach this goal.

Outokumpu strategy

In April 2016, Outokumpu announced its new vision and measures to drive competitiveness and further improve the financial performance of the company. The vision has been defined as: to be the best value creator in stainless steel by 2020 through customer orientation and efficiency. Simultaneously, Outokumpu outlined its long-term financial targets connected to this vision.

Outokumpu focuses on the following six areas to reach its vision:

1. Safety: a standardized and disciplined approach to safety that correlates with improved quality and operational efficiency, leading to a top decile position in the industry.
2. High performing organization: a lean, simple and flat organization that takes its lead from market trends and requirements, and drives a high level of individual accountability that is enforced through vigorous performance management.
3. Word-class supply chain: the role of the supply chain function elevated to drive optimal matching of market demand and manufacturing capabilities, managing manufacturing programming and planning as well as the required resources and logistics. This will allow our production units to focus on achieving a benchmark level in cost efficiency.
4. Manufacturing excellence: implementing a standardized operating model to ensure continuous productivity gains in all the mills across the company, leading to industry benchmark competitiveness.
5. Commercial excellence: Clear segment-driven commercial strategy to drive margin growth. Profitability driven product strategy to match market demand and optimal mix.
6. Americas: the single biggest profitability improvement lever for Outokumpu, with significant improvement potential in both cost and market position.

Long-term financial targets

In alignment with the vision, Outokumpu's long-term financial targets reflect the progress of the strategic initiatives and the development in profitability and further deleveraging:

- EBIT of EUR 500 million
- ROCE of 12%
- Gearing of <35%

These group-level targets are expected to be reached by the end of 2020 at the latest. While the global demand for stainless steel continues to grow, Outokumpu takes a conservative approach to market growth and metal price assumptions, and expects the targeted profitability improvement to come primarily through efficiency and cost improvements in the current scope of business, supported by further strengthening of Outokumpu's cost competitiveness and market position particularly in the Americas.

Short-term actions

To achieve an immediate step change in profitability, Outokumpu has set a series of short term initiatives.

- New organizational set-up: a simplified organization with three business areas, less management layers and a lighter cost structure. The new organization was implemented in June and the related personnel reductions have developed according to plans.
- A reduction of EUR 100 million in sales, general and administrative costs (SG&A) by the end of 2017 against the baseline of EUR 400 million at the end of 2015. A reduction of EUR 69 million was achieved by the end of 2016.
- A cash release of at least EUR 200 million from net working capital by the end of 2016, particularly through the reduction of inventories. The target was exceeded with a net working capital reduction of EUR 307 million at the end of the year.

Strengthening of the balance sheet remains top priority at Outokumpu. Outokumpu's stated target has been to reduce net debt to EUR 1.2 billion by the end of 2017. However, with the progress in 2016 exceeding the expectations, the company updates its target to reduce net debt to below EUR 1.1 billion by the end of 2017.

Market development

Stainless steel demand

Global apparent stainless steel consumption increased by 6.1% in 2016 compared to the previous year. APAC contributed with a growth of 7.2% followed by growth of 4.4% in EMEA and 1.2% in the Americas.

Global real demand for stainless steel products reached 38.5 million tonnes in 2016, an increase of 2.9% from 37.4 million tonnes in 2015. Overall demand growth recovered from a very low level in 2015 but still stood behind the average annual demand growth of about 8% in 2011–2014. Acceleration of the growth was most pronounced in the APAC region at 4.1%, driven by China returning to robust growth as a result of solid infrastructure and property sectors. Meanwhile, demand in EMEA grew by 1.4%, but decreased in the Americas by 3.2% in 2016.

ABC & Infrastructure and Consumer Goods & Medical outperformed other end-use segments in 2016, with real demand growing by 4.6% and 4.3%, respectively, compared to 2015. The Industrial & Heavy Industries segment was the weakest performer with demand declining by 3.8%. Real demand in Chemical, Petrochemical & Energy and Automotive & Heavy Transport segments grew at 2.0% and 1.2%, respectively.

EU cold rolled imports from third countries are expected to have reached a level of 23.9% of the total consumption in 2016, down from the average level of 24.6% in 2015. While imports from Taiwan and South Korea increased, imports from other main exporting countries, namely China, India and the US, decreased in 2016. (Source: EUROFER January 2017)

Average cold rolled imports into the US are expected to have reached a level of 23.3% of the total consumption in 2016, lower than the average of 26.6% in 2015. Chinese imports decreased significantly, while imports from almost all other main exporting countries increased compared to 2015. (Source: Foreign Trade Statistics January 2017)

Price development of alloying metals

The year started with nickel prices on a weak note that slumped to a 13-year low below USD 8,000/tonne in early February as a result of increasing fears over global economy and subdued demand amid oversupplied markets. However, prices continued to rise throughout the year due to improving sentiment, concerns over possible disruption to nickel ore supplies from the Philippines, as well as the strong stainless steel production in China. Prices hit the highest level of the year of USD 11,735/tonne in early November, before retreating to USD 10,000/tonne levels at the end of the year. The average price of the year of USD 9,600/tonne was 18.7% lower than the average of USD 11,808/tonne in 2015.

The European benchmark price for ferrochrome fell from USD 1.04/lb in the fourth quarter of 2015 to USD 0.92/lb in the first quarter of 2016 and further down to USD 0.82/lb in the second quarter, as a result of deflated production costs and soft demand. Subsequently, prices recovered to USD 0.98/lb in the third quarter and to USD 1.10/lb in the fourth quarter amid tightening markets. This was a result of slowdown in South African ferrochrome and chrome ore supply, as well as strong demand in China. The average ferrochrome price was USD 0.96/lb in 2016, 10.6% below the 2015 average of USD 1.07/lb. For the first quarter of 2017, the benchmark price followed higher prices in China and soared further to USD 1.65/lb.

Business areas

Europe

For the year 2016, the CRU reported average market base price was relatively flat at EUR 1,063/tonne compared to EUR 1,056/tonne in 2015. The prices were under pressure during the first half of the year as the distributor demand was negatively impacted by low nickel prices. However, healthy end customer demand and higher nickel prices during the second half of the year resulted in an uptick in pricing.

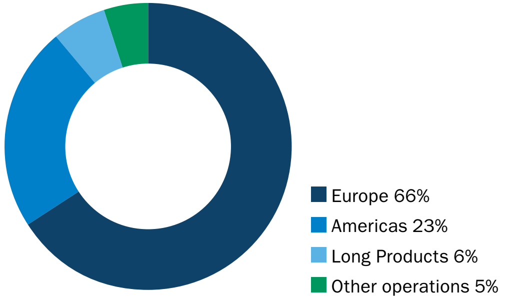
Europe’s 2016 stainless steel deliveries increased by 3.0% to 1,625,000 tonnes compared to 1,578,000 tonnes in 2015. However, sales decreased to EUR 3,924 million (2015: EUR 4,316 million) due to lower base and metal prices. The average base price in business area Europe’s coil product deliveries decreased by EUR 30/tonne compared to the previous year. Ferrochrome production amounted to 469,000 tonnes in 2016 (2015: 457,000 tonnes).

Europe’s underlying EBIT increased to EUR 191 million in 2016 compared to EUR 85 million in 2015 driven by higher volumes and significantly decreased costs. The business area achieved its targets with its EMEA restructuring program and successfully decreased its SG&A costs. Furthermore, the variable costs per tonne were also clearly reduced. These more than offset lower base prices. Adjustments in 2016 amounted to EUR -27 million, mainly related to redundancy costs.

Americas

The 2016 stainless steel market was volatile in the US. The year started with low base prices and high import from China. In February, Outokumpu joined other US stainless steel producers and filed antidumping and countervailing duty petitions against Chinese importers. In September, the US Commerce Department set preliminary antidumping duties against imports from China. These measures resulted in significantly reduced import volumes from China particularly during the second half of the year, which, together with healthy underlying stainless steel demand, resulted in increased base prices towards the end of the year. However, the CRU reported average market base price for the year was clearly lower on average at USD 1,286/tonne compared to USD 1,349/tonne in 2015.

Sales, 5,690 € million



Business area Americas' stainless steel deliveries went up by 29.5% to 690,000 tonnes in 2016 compared to 533,000 tonnes in 2015 due to strong commercial development. The average base price2 in the business area Americas' coil product deliveries decreased by USD 10/tonne in 2016 compared to the previous year. Sales increased to EUR 1,325 million (2015: EUR 1,214 million).

The business area's underlying EBIT amounted to EUR -91 million (2015: EUR -163 million). The improved financial performance was primarily a result of significantly higher deliveries and 25% reduction in variable costs per tonne. The positive impacts were partly offset by lower base prices. Adjustments in 2016 amounted to EUR 31 million.

Long Products

In 2016, the long products market was challenging. Prices were under pressure as import volumes remained at high levels in both Europe and the US. Furthermore, the Oil&Gas related investment activities remained subdued throughout the year.

Deliveries increased to 245,000 tonnes in 2016 (2015: 213,000 tonnes) driven by higher customer deliveries and increased internal slab deliveries. Despite higher deliveries, Long Products' underlying EBIT deteriorated to EUR -7 million (2015: EUR 7 million). The weakening performance was a result of lower long product prices, partly offset by cost reductions. The second-quarter derivative losses of approximately EUR 5 million impacted the business area's profitability but were offset by improved cost competitiveness as a result of weaker GBP during the second half of the year. Adjustments in 2016 amounted to EUR 18 million.

Financial performance

Deliveries

For 2016, stainless steel deliveries increased to 2,444,000 tonnes compared to 2,381,000 tonnes in 2015. The increase was mainly driven by significantly higher deliveries in the Americas. Deliveries in 2016 were higher also in Europe and Long Products compared to the previous year.

Deliveries

1,000 tonnes	**2016**	2015	2014
Cold rolled	**1,731**	1,767	1,880
White hot strip	**425**	346	373
Quarto plate	**100**	102	89
Long products	**65**	63	64
Semi-finished products	**247**	222	271
Stainless steel [1]	**121**	95	138
Ferrochrome	**126**	128	133
Tubular products	**1**	9	9
Total deliveries	**2,570**	2,509	2,686
Stainless steel deliveries	**2,444**	2,381	2,554

[1] Black hot rolled, slabs, billets and other stainless steel products.
2014 presented for continuing operations.

Sales and profitability

Sales amounted to EUR 5,690 million in 2016, 11.0% lower than EUR 6,384 million in 2015. The decrease was a result of lower base prices in both Europe and the US, partly offset by higher deliveries.

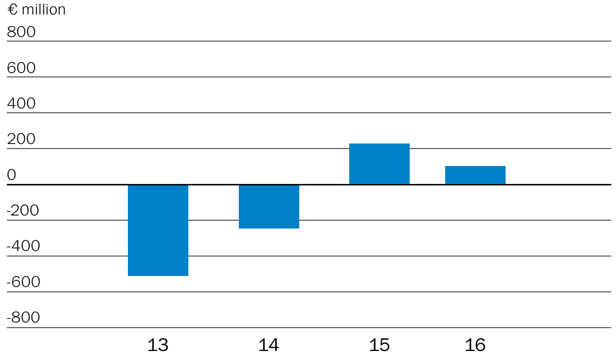
Sales

€ million	**2016**	2015	2014
Europe	**3,924**	4,316	4,685
Americas	**1,325**	1,214	1,290
Long Products	**487**	551	651
Other operations	**571**	979	1,037
Intra-group sales	**-618**	-676	-820
The Group	**5,690**	6,384	6,844

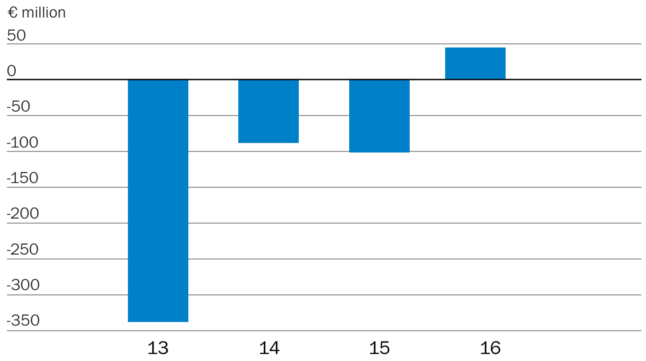
Other operations' figures for 2015 and 2014 include the divested SKS operations.

Outokumpu's profitability improved significantly in 2016 with positive underlying EBIT of EUR 45 million compared to EUR -101 million in 2015. This was driven by significant reduction in costs, as well as higher delivery volumes particularly in the Americas.

EBIT



Underlying EBIT



Profitability

€ million	2016	2015	2014
Underlying EBIT			
Europe	**191**	85	33
Americas	**-91**	-163	-91
Long Products	**-7**	7	32
Other operations and intra-group items [1]	**-48**	-30	-61
Group underlying EBIT	**45**	-101	-88
Adjustments	**58**	330	-155
EBIT	**103**	228	-243
Share of results in associated companies and joint ventures	**5**	49	7
Financial income and expenses	**-121**	-149	-223
Result before taxes	**-13**	127	-459
Income taxes	**156**	-41	8
Net result for the financial year from continuing operations	**144**	86	-450
Net result for the financial year from discontinued operations	**-**	-	11
Net result for the financial year	**144**	86	-439
EBIT margin, %	**1.8**	3.6	-3.6
Return on capital employed, % [2]	**2.6**	5.3	-5.8
Earnings per share, EUR	**0.35**	0.23	-1.24
Earnings per share, continuing operations, EUR	**-**	-	-1.27
Earnings per share, discontinued operations, EUR	**-**	-	0.03
Net cash generated from operating activities [3]	**389**	-34	-126

[1] Other operations' figures for 2015 and 2014 include the divested SKS operations.

[2] Key figure definition changed in 2016 and figure for 2015 has been restated. 2014 figure has not been restated.

[3] Year 2014 reported for continuing operations.

Income taxes for 2016 include deferred tax income of EUR 189 million related to previously unrecognized deferred tax assets from losses in Finland and Sweden in prior years. Impacted by the tax income, the net result for 2016 was EUR 144 million compared to EUR 86 million in 2015. Earnings per share was EUR 0.35 in 2016 (2015: EUR 0.23).

Additionally, Outokumpu has unutilized tax loss carry forwards of EUR 2,546 million, mainly in Germany and the US. Those can be recognized as deferred tax income when the company starts generating sufficient taxable income in these countries.

Cash flow

Outokumpu's operating cash flow was EUR 389 million in 2016, compared to EUR -34 million in 2015. The net working capital release during the year amounted to EUR 307 million (2015: EUR 223 million).

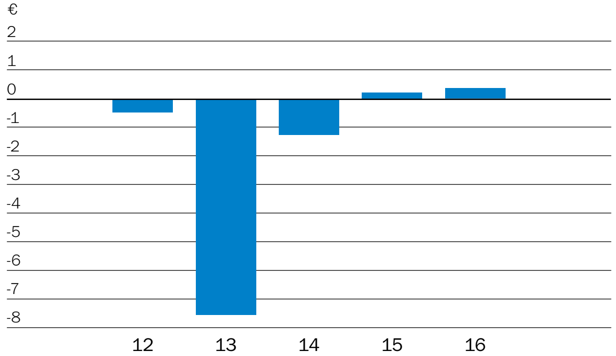
Financial position

Cash and cash equivalents were at EUR 204 million at the end of the year (2015: EUR 186 million), and the overall liquidity reserves were approximately EUR 1.0 billion (2015: EUR 1.1 billion). In addition, EUR 145 million of the revolving credit facility maturing in February 2017 was available, but as it is classified as short-term, it was not included in the reported liquidity. The overall liquidity reserves increased during the fourth quarter due to the reduction in working capital, the improvement in profitability and the increased use of commercial paper.

Net debt at the end of 2016 totaled EUR 1,242 million compared to EUR 1,610 million at the end of 2015. Gearing decreased to 51.4%, compared to 69.1% at the end of 2015, driven by lower net debt and increase in equity which was impacted by the deferred tax income.

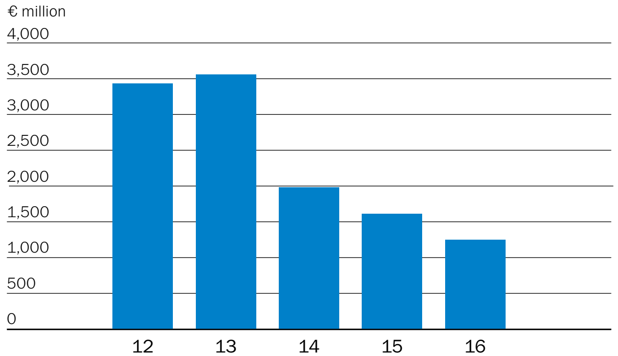
Net financial expenses added up to EUR 121 million in 2016 compared to EUR 149 million in 2015. Interest expenses decreased from EUR 130 million to EUR 105 million in 2016 as a result of the debt reduction.

Earnings per share



2014 and 2013 calculated based on the rights-issue-adjusted weighted average number of shares. 2012 has not been restated.

Net debt



Key financial indicators on financial position

€ million	2016	2015	2014
Net debt			
Non-current debt	**987**	1,249	1,597
Current debt	**458**	547	569
Cash and cash equivalents	**-204**	-186	-191
Net debt	**1,242**	1,610	1,974
Shareholders' equity	**2,416**	2,329	2,132
Return on equity, % [1)]	**6.4**	3.9	-21.8
Debt-to-equity ratio, %	**51.4**	69.1	92.6
Equity-to-assets ratio, %	**40.4**	39.6	33.3
Interest expenses	**105**	130	141

[1)] Key figure definition changed in 2016 and figure for 2015 has been restated. 2014 figure has not been restated.

Outokumpu is rated by Moody's Investors Service. In March 2016, Moody's assigned Outokumpu an issuer corporate family rating of B3 and a B3-PD probability default rating. In addition, Moody's has assigned a B2 rating to the EUR 250 million senior secured bond due in 2019 and a B2 rating to the EUR 250 million senior secured bond due in 2021. The outlook on the ratings is positive.

Capital expenditure

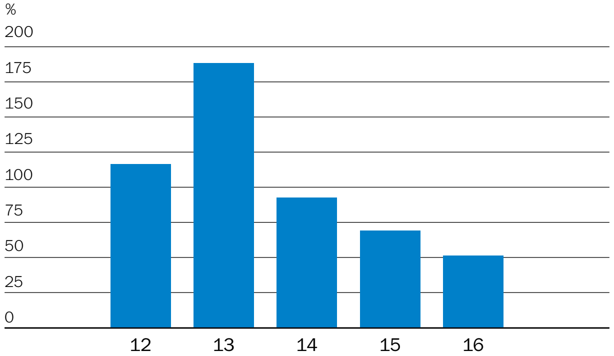
In 2016, capital expenditure was EUR 164 million, slightly higher than EUR 154 million in 2015.

Capital expenditure

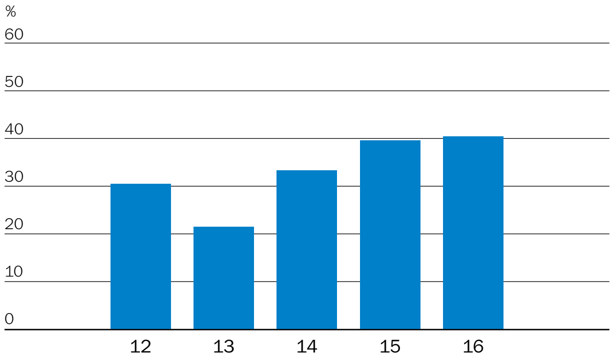
€ million	2016	2015	2014
Europe	**101**	96	83
Americas	**17**	19	15
Long Products	**8**	7	6
Other operations	**37**	32	22
The Group	**164**	154	127
Depreciation and amortization	**226**	302	320

2014 presented for continuing operations.

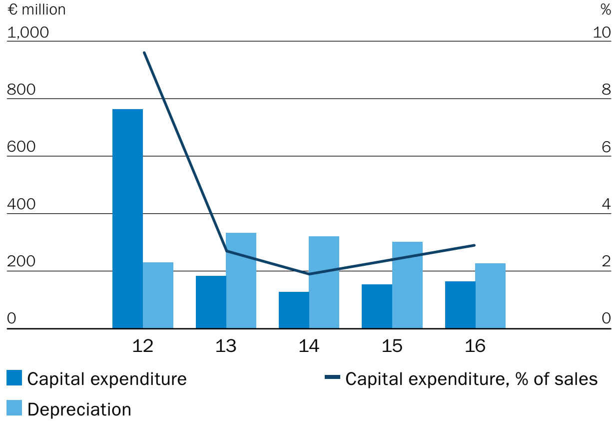
Debt-to-equity ratio



Equity-to-assets ratio



Capital expenditure and depreciation



Acquisitions and divestments

In February 2016, Outokumpu announced the divestment of its remaining 5% share in its Chinese subsidiary Shanghai Krupp Stainless which was recognized in the 2015 consolidated financial statements. In May Outokumpu agreed on the final terms and conditions of the transaction. The final transaction price for Outokumpu's 5% share rose to EUR 92 million, taking into account all adjustments. As a result, Outokumpu recognized additional gain of EUR 24 million net of taxes on the transaction into its 2016 result. In total, Outokumpu has recognized a gain of EUR 412 million net of taxes for the sale of its entire 60% share in SKS.

In April 2016, Outokumpu divested its subsidiary Outokumpu Stainless International (Guangzhou) Ltd., a service center in China. The gain on the transaction was EUR 6 million. The effect of the divestment on the Group's financial position was immaterial.

In September 2016, Outokumpu acquired Hernandez Edelstahl GmbH, a stainless steel distributor in Germany, to further optimize the Group's customer service in Europe. Prior to the acquisition, Outokumpu held 33.3% of the company's shares and it was accounted for as an associated company in the Group's consolidated financial statements. Asset acquired and liabilities assumed in the acquisition included non-current assets of EUR 15 million, current assets of EUR 21 million and current liabilities of EUR 45 million. The net amount of consideration and cash and cash equivalents acquired was EUR 9 million. The goodwill of EUR 19 million arising from the acquisition was immediately impaired. The impact of the goodwill impairment loss and other acquisition related expenditure on the Group's result was offset by the reversal of EUR 22 million of Outokumpu's credit loss allowances for Hernandez at the time of the acquisition.

Safety, people and environment

Safety

Outokumpu's safety focus continues to develop positively. From the beginning of 2016, the company follows total recordable incident frequency (TRIFR) as its main indicator for safety performance. TRIFR includes fatal accidents, lost time incidents, restrictive work incidents, and medically treated incidents. The TRIFR was 8.7 for the full year 2016 against the target of less than 12.0. In total, there were four serious incidents during 2016. All of these accidents were thoroughly investigated and corrective actions were defined.

People

Personnel

Dec 31	**2016**	2015	2014
Europe	**7,428**	7,778	8,415
Americas	**2,219**	2,265	2,259
Long Products	**628**	658	651
Other operations	**325**	301	800
The Group	**10,600**	11,002	12,125

Other operations' figure for 2014 includes the divested SKS operations.

Outokumpu's headcount decreased and totaled 10,600 at the end of 2016 (2015: 11,002 and 2014: 12,125) driven by the continued restructuring and efficiency measures. Overall, the number of employees decreased by 402 during 2016 with the majority of the headcount reduction realized in the European operations.

In April, Outokumpu announced efficiency measures that are expected to lead to the reduction of up to 600 jobs globally. In the second quarter, Outokumpu carried out related consultations with employee representatives in Finland and in Sweden, resulting in a reduction of approximately 180 jobs in these countries, and a further 150 jobs globally. In addition, Outokumpu concluded the negotiations in Germany in the third quarter resulting in a reduction of approximately 180 jobs. Approximately 90 jobs remain and are expected to be reduced during 2017. Redundancy costs of EUR 30 million have been booked related to efficiency measures and job reductions. All in all, Outokumpu plans to reduce its personnel to a level of 9,300 in the coming years.

Total wages and salaries amounted to EUR 562 million in 2016 (2015: EUR 585 million, 2014: EUR 592 million). Indirect employee benefit expenses totaled EUR 151 million in 2016 (2015: EUR 177 million, 2014: EUR 262 million). The reduction in indirect employee benefit expenses primarily resulted from the changes to Outokumpu's defined benefit pension scheme in the UK in October 2016. The scheme was closed to future pension accruals and changes were made to the terms of retirement, which resulted in a EUR 26 million gain in 2016.

Environment

Emissions and effluents remained within permitted limits, and the minor breaches that occurred were temporary, identified, and had only a minimal impact on the environment. Outokumpu is not a party to any significant judicial or administrative proceedings concerning environmental issues, nor is it aware of any realized environmental risks that could have a material adverse effect on its financial position.

The EU Emissions Trading Scheme (ETS) is continuing with the third trading period 2013–2020. Outokumpu's operations under the EU ETS will continue to receive free emissions allocations according to efficiency-based benchmarks and historical activity. The total allocation will be sufficient for the Group's operations during 2017.

Shares and shareholders

During 2016, the price of the Outokumpu share peaked at EUR 8.51 and was EUR 2.08 at its lowest. The share price averaged EUR 4.51 during 2016. The Outokumpu share price closed at end of the year at EUR 8.51, marking an increase of 211% from the closing price of 2015. At the end of 2016, the company's market capitalization was EUR 3,541 million, compared to EUR 1,138 million at the previous year's end. In total, 956 million Outokumpu shares were traded on the Nasdaq Helsinki during 2016, representing a value of EUR 4,302 million.

Outokumpu's share capital was unchanged at EUR 311 million at the end of 2016. The total number of Outokumpu shares was 416,374,448 and the average number of shares outstanding in 2016 was 414,411,287.

Between May 17, 2016 and May 26, 2016, Outokumpu repurchased 2,000,000 its own shares through public trading at Nasdaq Helsinki intending to use them for the reward under the share-based payment plans. As of December 31, 2016, Outokumpu held 2,513,848 of its own shares, i.e. treasury shares.

Management shareholdings and share based incentive programs

On December 31, 2016, the members of the Board of Directors and the members of the Outokumpu Leadership Team held altogether 1,564,043 shares, or 0.4% of the total shares outstanding.

Outokumpu has established share-based incentive programs for the Leadership Team members and for selected managers and key employees. Outokumpu's share based payment programs include Performance Share Plan 2012, Restricted Share Pool and Matching Share Plans for the CEO and other key management.

According to the Matching Share Plan, the CEO is entitled to receive in total 1,157,156 gross shares including taxes on the condition that he personally invested EUR 1 million into Outokumpu shares by February 20, 2016. The matching shares will be delivered in four equal instalments at the end of 2016, 2017, 2018 and 2019, respectively. The 2016 tranche of 185,077 shares (net after deduction of taxes) has been delivered. The CEO is required to keep at least all the shares he acquired and the first vesting portion, i.e. 25% of the net amount of the received matching shares throughout his service with Outokumpu.

Besides the CEO, 32 other key employees are taking part in the Matching Share Plan, according to which the participants have invested 30–120% of their annual gross base salary into Outokumpu shares by December 31, 2016. Outokumpu will match each share acquired by the participant with two gross shares from which applicable taxes will be deducted and the remaining net number of shares will be delivered in four equal instalments at the end of 2017, 2018, 2019 and 2020, respectively. In order to receive the matching shares, the participants are required to keep all the shares they acquire until the vesting of the each matching share tranche.

More details on the share-based incentive programs can be found in note 18 to the financial statements and in Remuneration in the Corporate Governance section.

Research and development

Outokumpu's research & development (R&D) involves process, product, application and technical market development. R&D works closely together with the customers to align the company's activities with their current and future needs. Outokumpu's R&D operations are concentrated in three research centers, located at Avesta in Sweden, at Krefeld in Germany and at Tornio in Finland. Each R&D center has its role and focus areas, which were further sharpened in 2016. R&D teams work closely together with our sales and operations. In addition to the R&D centers, R&D activities also take place at the production sites.

In 2016, Outokumpu's R&D expenditure totaled EUR 20 million, 0.4% of sales (2015: EUR 23 million and 0.4%, 2014: EUR 23 million and 0.3%).

During 2016, process development teams continued to focus on transferring technological knowledge between R&D and production units. A job rotation program and networking of technical experts was continued. Process development activities further delivered on the overall goal to ensure cost and environmental efficiency of Outokumpu's production processes and high product quality. Product development activities focused on commercialization of several recently launched steel grades, involving, for instance, application development together with customers and standardization activities. Within the technical market development activities, several successful cases have been accomplished in close cooperation between Outokumpu sales team and the customers.

Risks and uncertainties

Outokumpu operates in accordance with the risk management policy approved by the Board of Directors which defines the objectives, approaches and areas of responsibility in risk management activities. In addition to supporting Outokumpu's strategy, the aim of risk management is to identify, evaluate and mitigate risks from the perspective of shareholders, customers, suppliers, personnel, creditors and other stakeholders.

Outokumpu has defined risks as anything that could have an adverse impact on achieving the Group's objectives. Risks can therefore be threats, uncertainties or lost opportunities for the company's current or future operations. The risk management process is an integral part of overall management processes, and it is divided into four stages: risk identification, risk evaluation, risk prioritization and risk mitigation. Key risks are assessed and updated on a regular basis.

The focus in risk management during 2016 was to secure business plan e.g. by securing liquidity, reducing costs and improving the efficiency and controls of Outokumpu's operations by establishing global business services centers. Outokumpu continued its systematic fire safety and loss prevention audit programs, which also focused on machinery breakdown loss prevention during the last year.

There were no realized material risks in 2016. In the first quarter of 2016, Outokumpu completed negotiations with its insurance companies regarding the settlement of the machinery breakdown and business interruption incident at its Calvert mill in the US in June, 2014. The issue of the new bond maturing in 2021 together with the maturity extension of Finnish pension loans during the second quarter, as well as strong cash flow clearly improved liquidity and helped to reduce the refinancing risk particularly for 2017.

Strategic and business risks

Outokumpu's key strategic and business risks currently include: risks and uncertainties in implementing the announced vision, including measures to drive competitiveness and further improve the financial performance; risks and uncertainties related to developments in the stainless steel and ferrochrome market and competitor actions; the risk of changes in raw material and metal prices impacting Outokumpu's profitability and amounts of cash tied up in working capital; fluctuations of exchange rates affecting global competitive environment in stainless; and the risk of litigation or adverse political action affecting trade or changes that have an impact on environmental legislation.

Operational risks

Operational risks include inadequate or failed internal processes, employee actions, systems, or events such as natural catastrophes and misconduct or crime. Risks of these types are often connected with production operations, logistics, financial processes, major investment projects, other projects or information technology and, should they materialize, can lead to personal injury, liability, loss of property, interrupted operations or environmental impacts. Outokumpu's operational risks are partly covered by insurance. Key operational risks for Outokumpu are: a major fire or machinery breakdown and consequent business interruptions, environmental accidents; IT dependency and cyber security risks; project implementation risks; risks related to compliance, crime and reputational harm; risk of fatalities or severe incidents and other personnel-related risks. To minimize possible damage to property and business interruptions that could result from a fire occurring at some of its major production sites, Outokumpu has systematic fire and security audit programs in place.

Financial risks

Key financial risks for Outokumpu include: changes in the prices of nickel, iron, molybdenum, power and fuels; currency developments affecting the euro, the US dollar, the Swedish krona and the British pound; interest rate changes connected to the US dollar, the euro and the Swedish krona; changes in levels of credit margins; counterparty risk related to customers and other business partners, including financial institutions; risks related to liquidity and refinancing; risk of breaching financial covenants or other loan conditions leading to an event of default; and risk related to prices of equities and fixed-income securities invested under defined benefit pension plans and risks related to valuation parameters, especially long-term interest rates, of defined benefit plans.

Short-term risks and uncertainties

Outokumpu is exposed to the following risks and uncertainties in the short-term: risks and uncertainties in implementing the announced vision, including measures to drive competitiveness and further improve the financial performance; risks and uncertainties related to market development in stainless steel and ferrochrome as well as competitor actions; risk of changes in metal prices impacting amounts of cash tied up in working capital; risks and uncertainties in implementing the new organizational structure, and the loss of key personnel; changes in the prices of electrical power, fuels, nickel and molybdenum; currency developments affecting the euro, US dollar, Swedish krona and British pound; counterparty risk related to customers and other business partners, including financial institutions. Possible adverse changes in the global political and economic environment may have a significant adverse impact on Outokumpu's overall business and access to financial markets.

Significant legal proceedings

Dispute over invention rights, Outotec vs. Outokumpu

Outokumpu and Outotec have since 2013 had a dispute relating to innovations on ferroalloy technology. On January 9, 2017, the companies reached an agreement whereby both parties withdrew their claims. Outotec was granted an exclusive right to sell and license the relevant innovations and technology against an agreed license fee payable to Outokumpu. Outokumpu retains the right to use the innovations in its own business.

Cartel fine imposed by the European Commission

In March 2011, the European Court of Justice upheld a EUR 3.2 million cartel fine imposed on ThyssenKrupp Stainless AG, a legal predecessor of Outokumpu Nirosta GmbH ("Nirosta"), in a decision of the European Commission from December 2006 (the "2006 Decision"). The 2006 Decision is based on a 1998 European Commission finding (the "1998 Finding") that between 1993 and 1998, certain stainless steel producers, including Inoxum and certain of its legal predecessors, had violated Article 65 (1) of the European Coal and Steel Community Treaty by participating in a price-fixing arrangement with other stainless steel producers. The alleged price-fixing arrangement consisted of modifying and applying in a concerted fashion the reference values used to calculate the alloy surcharge to the base price of stainless steel. The 1998 Finding was appealed and subsequently annulled on procedural grounds with respect to Nirosta's liability for one of its legal predecessors. Subsequent to this annulment, the European Commission opened new proceedings, which resulted in the 2006 Decision. Nirosta's appeals of the 2006 Decision were unsuccessful. In April 2011, Nirosta filed a complaint (Verfassungsbeschwerde) with the German Constitutional Court (Bundesverfassungsgericht) requesting that the Court declare the 2006 Decision incompatible with certain fundamental rights under the German Constitution (Grundgesetz). The German Constitutional Court decided on July 19, 2016 not to accept the complaint. Outokumpu has decided not to pursue the matter further.

Claim in Spain related to the divested copper companies

Outokumpu divested all of its copper business in 2003–2008. One of the divested companies domiciled in Spain later faced bankruptcy. The administrator of the bankruptcy has filed a claim against Outokumpu Oyj and two other non-Outokumpu companies, for recovery of payments made by the bankrupt Spanish company in connection with the divestment. The Bilbao court of first instance in Spain has accepted the claim of EUR 20 million brought against Outokumpu and the two other companies. Outokumpu and the two other companies have appealed the court's decision.

Claim in Italy related to former tax consolidation group

In December 2015, Outokumpu Holding Italia and Acciai Speciali Terni (AST) entered into a dispute relating to the tax consolidation of the former ThyssenKrupp Tax Group in Italy. AST claims payment of approximately EUR 23 million resulting from the former tax consolidation of the Italian tax group managed by ThyssenKrupp. Outokumpu Holding Italia is the former ThyssenKrupp holding company and was transferred to Inoxum as part of the carve-out in 2011. The EUR 23 million claim resulted from former tax instalments paid by ThyssenKrupp Italia in 2006 which have not been properly settled towards AST in the following years. The matter is currently pending in court.

Antitrust investigation in Germany

On September 22, 2016, Outokumpu's subsidiary in Germany (Outokumpu Nirosta GmbH) received a letter from the German Federal Cartel Office stating that the company has been included in an ongoing investigation of possible infringements of antitrust laws in the past. Following an internal investigation, Outokumpu's view is that the official investigation on it is without merit.

Corporate Governance

Outokumpu's Corporate Governance statement can be found on the Outokumpu website and in this report.

Outokumpu Leadership Team

The new organizational set-up connected to Outokumpu's vision and strategy came into force on June 1, 2016, and as of that date the Outokumpu Leadership Team comprises the following persons:

- Roeland Baan, President and CEO & head of business area Europe
- Christoph de la Camp, CFO (as of July 1, 2016)
- Michael S. Williams, head of business area Americas
- Kari Tuutti, head of business area Long Products
- Olli-Matti Saksi, head of Sales Europe
- Liam Bates, head of Supply Chain Europe
- Maciej Gwozdz, head of Operations Europe (as of October 1, 2016)
- Pekka Erkkilä, Chief Technology Officer
- Jan Hofmann, Business Transformation & IT
- Johann Steiner, Human Resources & Organizational Development
- Saara Tahvanainen, Communications & Investor Relations

Annual General Meeting

Outokumpu held its Annual General Meeting on April 6, 2016. The Meeting approved the financial statements and discharged the management of the company from liability for the financial year 2015. It was also decided that no dividend be paid for 2015. The Meeting approved the proposals regarding the authorization to the Board of Directors to repurchase the company's own shares and to decide on the issuance of shares as well as special rights entitling to shares. The Meeting also approved the proposals of the Nomination Board regarding the members of the Board of Directors and their remuneration.

The Annual General Meeting decided that the number of the members of Board of Directors is nine. The Annual General Meeting decided to re-elect Markus Akermann, Roberto Gualdoni, Stig Gustavson, Heikki Malinen, Saila Miettinen-Lähde, Elisabeth Nilsson, Jorma Ollila and Olli Vaartimo of the current members and to elect Kati ter Horst as a new member for the term of office ending at the end of the next Annual General Meeting. The Annual General Meeting re-elected Jorma Ollila as the Chairman and Olli Vaartimo as the Vice Chairman of the Board of Directors.

Shareholders' Nomination Board

Outokumpu's Shareholders' Nomination Board consists of the representatives of the four largest shareholders registered in the shareholders' register of the company on October 1 and the Chairman of the Board of Directors as an expert member. The Nomination Board has been established to annually prepare proposals on the composition of the Board of Directors and director remuneration for the Annual General Meeting.

On October 1, 2016, the four largest shareholders of Outokumpu were Solidium Oy, Varma Mutual Pension Insurance Company, Ilmarinen Mutual Pension Insurance Company and The Social Insurance Institution of Finland. They have appointed the following representatives to the Nomination Board:

- Kari Järvinen, Managing Director at Solidium Oy
- Pekka Pajamo, CFO at Varma Mutual Pension Insurance Company
- Timo Ritakallio, President and CEO at Ilmarinen Mutual Pension Insurance Company
- Tuula Korhonen, Investment Director at The Social Insurance Institution of Finland

The Nomination Board proposes for the 2017 Annual General Meeting that the Board of Directors would consist of eight members and Markus Akermann, Roberto Gualdoni, Kati ter Horst, Heikki Malinen, Saila Miettinen-Lähde, Jorma Ollila and Olli Vaartimo would be re-elected, and Eeva Sipilä would be elected as new member for the term of office ending at the end of the next Annual General Meeting. Jorma Ollila would be re-elected as the Chairman and Olli Vaartimo as the Vice Chairman of the Board of Directors.

Market and business outlook

Market outlook

Total global demand for 2017 is forecast at 40.1 million tonnes, an increase of 4.2% compared to 2016. Growth is expected to be strongest in the APAC region with 4.9%, whereas the Americas and the EMEA regions are expected to grow by 2.4% and 2.3%, respectively.

The long-term outlook for stainless steel demand remains positive. Key global megatrends such as urbanization, modernization, and increased mobility combined with growing global demand for energy, food, and water are expected to support the future growth of stainless steel demand. Growth in stainless steel consumption between 2017 and 2020 is expected to be relatively well-balanced between the end-use segments. SMR forecast growth rates of 5.3% in Architecture/ Building/Construction & Infrastructure, 5.1% in Automotive & Heavy Transport, 4.7% in Consumer Goods & Medical, 1.9% in Chemical/ Petrochemical & Energy and 0.4% in Industrial & Heavy Industries segments.

Business and financial outlook for the first quarter of 2017

In line with typical seasonality, the stainless steel market is expected to be strong in the first quarter with healthy underlying demand in both Europe and the US. Consequently, the first-quarter delivery volumes are expected to be higher in Europe, and significantly higher in the Americas compared to the fourth quarter of 2016. Furthermore, the cost-saving initiatives are expected to continue according to plans and contribute positively in the first quarter. In addition, the higher ferrochrome contract price will have a significant positive impact on business area Europe's profitability.

Therefore, Outokumpu's adjusted EBITDA is expected to be over EUR 250 million in the first quarter of 2017.

Given the achievements with debt reduction, Outokumpu updates its 2017 net debt target and expects the net debt to be below EUR 1.1 billion at the end of 2017.

Board of Directors' proposal for profit distribution

In accordance with the Board of Directors' established dividend policy, the pay-out ratio over a business cycle should be at least one third of the Group's profit for the period, with the aim of having stable annual payments to shareholders. In its annual dividend proposal, the Board of Directors will, in addition to financial results, take into consideration the Group's investment and development needs.

According to the parent company's financial statements on December 31, 2016 distributable funds totalled EUR 2,247 million, of which retained earnings were EUR 123 million.

The Board of Directors is proposing to the Annual General Meeting scheduled to be held on March 21, 2017 a dividend of EUR 0.10 per share is paid for 2016 and the remaining distributable funds are allocated to retained earnings.

Events after the reporting period

Divestment of quarto plate mill in the US

On January 25, 2017, Outokumpu announced the divestment of its quarto plate mill in New Castle, Indiana, US to D'Orazio Capital Partners, a US-based private equity company and to the mill's current management. The cash consideration of the transaction is expected to be approximately EUR 28 million, depending on the amount of the net working capital at the closing. The transaction reduces Outokumpu's net debt with the approximately same amount. Outokumpu does not consider the financial impact of the transaction to be material, and reports the transaction as an adjustment in the first-quarter 2017 results. In 2016 financial statements, the New Castle mill is presented as assets held for sale.

Change in reporting practices

On January 26, 2017, Outokumpu announced that it is changing its financial reporting practices as of the first quarter 2017 interim report onwards. Going forward, Outokumpu will consider EBITDA as its main performance indicator. Furthermore, Outokumpu replaces underlying figures with adjusted figures.

Helsinki, February 2, 2017
Board of Directors

This document is an English translation of the Finnish auditor's report. Only the Finnish version of the report is legally binding.

Auditor's report

To the Annual General Meeting of Outokumpu Oyj

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of Outokumpu Oyj (business identity code 0215254-2) for the year ended 31 December, 2016. The financial statements comprise the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies, as well as the parent company's balance sheet, income statement, statement of cash flows and notes.

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial performance and financial position in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report.

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Materiality

The scope of our audit was influenced by our application of materiality. The materiality is determined based on our professional judgement and is used to determine the nature, timing and extent of our audit procedures and to evaluate the effect of identified misstatements on the financial statements as a whole. The level of materiality we set is based on our assessment of the magnitude of misstatements that, individually or in aggregate, could reasonably be expected to have influence on the economic decisions of the users of the financial statements. We have also taken into account misstatements and/or possible misstatements that in our opinion are material for qualitative reasons for the users of the financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

We have also addressed the risk of management override of internal controls. This includes consideration of whether there was evidence of management bias that represented a risk of material misstatement due to fraud.

Valuation of inventories (EUR 1,232 million) – refer to Accounting principles and Note 21 in the consolidated financial statements

Key audit matter	Our response
• The most important commodity price risk for Outokumpu is caused by fluctuation in nickel and other alloy prices. Usually, stainless steel sales contracts include an alloy surcharge clause which aims to reduce the risk arising from the time difference between raw material purchase and product delivery. There is a pricing risk because the delivery cycle in production is longer than the alloy surcharge mechanism expects. • The price for the products to be sold in the near future is known, however a significant part of the future prices for the products to be sold is based on management's best estimate in Net Realizable Value (NRV) calculations. • The NRV calculations are the basis for inventory write downs. Management judgment is required to assess the recoverability of these assets.	• We have assessed through observation, interview and sample testing the adequacy of controls over metal processing and inventory. • We have carried out testing on controls over inventory valuation to verify the Group values inventory appropriately. We have tested the appropriateness of overhead absorption in the inventory valuation by analyzing the nature of costs being absorbed and verifying the level of costs absorbed based on production data. • We have assessed the provisions for inventory loss (NRV calculation) compared to current and estimated commodity prices. We have also assessed the adequacy of excess and obsolete provisions held against inventory by understanding management's future plans to utilize the inventory. • We have observed part of physical stock takes to verify adherence to stock take procedures.

Valuation of Goodwill (EUR 467 million) – refer to Accounting principles and Note 11 in the consolidated financial statements

Key audit matter

- Goodwill amounts to 8% of the total assets and 19% of the total equity.
- Irrespective of whether there is any indication of impairment, goodwill acquired in a business combination is required to be tested for impairment annually. An impairment arises when the recoverable amount is less than the carrying value of the investment.
- The recoverable amount for each cash generating unit should be calculated based on value-in-use. The recoverable amounts use discounted future cash flow forecasts on which the management makes judgments over the key assumptions such as growth in net sales, profitability and discount rate. Due to the high level of management judgment, historical losses and the significant carrying amounts, this is one of the key areas for our audit focus.

Our response

- We have tested the principles and integrity of the Group's discounted future cash flow models, and the accuracy of the calculation derived from each forecast model. We have also reviewed the assessment of key assumptions in the calculations such as profitability level, discount rate and long-term growth rate, with reference to the medium term strategic plans and forecasts approved by the Board and industry data.
- Our valuation specialists have considered the appropriateness of the discount rate and the long term growth rates compared to industry data.
- We have considered the adequacy of the Group's disclosures in respect of impairment testing, and whether disclosures in relation to the sensitivity of the outcome of the impairment assessment to changes in key assumptions properly reflects the risks inherent in the valuations.

Valuation of Property, Plant and Equipment (EUR 2,874 million) – refer to Accounting principles and Note 12 in the consolidated financial statements

Key audit matter

- Property, Plant and Equipment amount to 48% of the total assets and 119% of the total equity.
- Due to the historical operative losses there is a risk that the carrying value of the Property, Plant and Equipment may not be recoverable, and that possible impairment may not be accounted for or disclosed appropriately in the financial statements.
- The recoverable amounts use discounted future cash flow forecasts on which the management makes judgments over the key assumptions. Due to the high level of management judgment and the significant carrying amounts, this is one of the key areas for our audit focus.

Our response

- We have assessed the Group's method for determining carrying value of Property, Plant and Equipment and whether it appropriately reflected financial forecasts and the past experience of the Group. The method is similar to methods used for goodwill impairment tests.
- We have utilized our own valuation specialists when assessing the inputs and methodology in determining the discount rates, and judgmental areas that our audit is concentrated on.

Adequacy and valuation of provisions (EUR 133 million) – refer to Accounting principles and Note 26 in the consolidated financial statements

Key audit matter

- Provisions are a key area of focus for audits. All provisions are subject to management estimate and judgment.
- Risks relate to the continuous and accurate validation and valuation of recorded and unrecorded liabilities.

Our response

- We have discussed with management the rationale and basis for any provision.
- We have assessed the reasonableness and adequacy of material provisions. Where balances are subject to claims we have made further enquiries and reviewed internal legal counsel documentation.

Valuation of deferred tax assets (EUR 204 million) – refer to Accounting principles and Note 9 in the consolidated financial statements

Key audit matter

- The Group has recognized deferred tax assets of EUR 204 million. We focused on this area because the deferred tax assets primarily arise from historical losses and a key judgement is whether there is convincing evidence of the availability of sufficient future taxable profits against which those losses can be utilized.

Our response

- We have considered whether the combination of the group entities current profitability and the managements projections provide convincing evidence that sufficient taxable profits will be available to utilize unused tax losses.

Interests in group companies in the parent company's financial statements (EUR 4,037 million) – refer to Accounting principles of the parent company's financial statements and Note 9

Key audit matter

- The recoverable amounts for interests in group companies is tested as part of group impairment testing based on the discounted cash flow model. Due to the high level of judgment incorporated in respect of the future cash flows and the significant carrying amounts involved, this is considered one of the key areas that our audit is concentrated on.

Our response

- We have tested the principles and integrity of the Group's discounted future cash flow models, and the accuracy of the calculation derived from each forecast model. We have also reviewed the assessment of key assumptions in the calculations such as profitability level, discount rate and long-term growth rate, with reference to the medium term strategic plans approved by the Board and industry data.
- Our valuation specialists have considered the appropriateness of the discount rate and the long term growth rates compared to industry data.

Responsibilities of the Board of Directors and the President and CEO for the Financial Statements

The Board of Directors and the President and CEO are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the President and CEO are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and President and CEO are responsible for assessing the parent company's and the group's ability to continue as going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance on whether the financial statements 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 good auditing practice will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, 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 parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the President and CEO's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or 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 auditor's report to the related disclosures in the financial statements 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 auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance 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 those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and 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 those charged with governance, we determine those matters that were of most significance in the audit of the financial statements 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 or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Other Information

The Board of Directors and the President and CEO are responsible for the other information. The other information comprises information included in the report of the Board of Directors and in the Annual Report, but does not include the financial statements and our auditor's report thereon. We obtained the report of the Board of Directors prior to the date of this auditor's report, and the Annual Report is expected to be made available to us after that date.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the report of the Board of Directors, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Other opinions

We support the adoption of the financial statements. The proposal by the Board of Directors regarding the treatment of distributable funds is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the President and CEO be discharged from liability for the financial period audited by us.

Helsinki 2 February, 2017

KPMG OY AB

Virpi Halonen
Authorised Public Accountant, KHT

Consolidated financial statements, IFRS

Consolidated statement of income

€ million	Note	2016	2015
Sales	3	**5,690**	6,384
Cost of sales		**-5,298**	-6,273
Gross margin		**392**	111
Other operating income	6	**88**	472
Selling and marketing expenses		**-90**	-107
Administrative expenses		**-221**	-212
Research and development expenses		**-20**	-23
Other operating expenses	6	**-46**	-13
EBIT		**103**	228
Share of results in associated companies and joint ventures	13	**5**	49
Financial income and expenses	8		
Interest income		**4**	4
Interest expenses		**-105**	-130
Market price gains and losses		**-6**	3
Other financial income		**6**	2
Other financial expenses		**-18**	-29
Total financial income and expenses		**-121**	-149
Result before taxes		**-13**	127
Income taxes	9	**156**	-41
Net result for the financial year		**144**	86
Attributable to			
Equity holders of the Company		**144**	96
Non-controlling interests		**-**	-9
Earnings per share for result attributable to the equity holders of the Company (basic and diluted), €	10	**0.35**	0.23

Consolidated statement of comprehensive income

€ million	Note	2016	2015
Net result for the financial year		**144**	86
Other comprehensive income			
Items that may be reclassified subsequently to profit or loss:			
Exchange differences on translating foreign operations			
Change in exchange differences		**-3**	75
Reclassification adjustments from other comprehensive income to profit or loss		**-2**	-17
Available-for-sale financial assets	16		
Fair value changes during the financial year		**5**	-1
Reclassification adjustments from other comprehensive income to profit or loss		**-5**	-
Cash flow hedges	20		
Fair value changes during the financial year		**-5**	3
Income tax relating to cash flow hedges	9	**1**	-1
Items that will not be reclassified to profit or loss:			
Remeasurements of defined benefit plans	25		
Changes during the financial year		**-63**	3
Income tax relating to remeasurements	9	**20**	-7
Share of other comprehensive income in associated companies and joint ventures	13	**0**	-1
Other comprehensive income for the financial year, net of tax		**-53**	56
Total comprehensive income for the financial year		**91**	142
Attributable to			
Equity holders of the Company		**91**	150
Non-controlling interests		**-**	-8

Consolidated statement of financial position

€ million	Note	2016	2015
ASSETS			
Non-current assets			
Intangible assets	11	**504**	498
Property, plant and equipment	12	**2,874**	3,005
Investments in associated companies and joint ventures	13	**67**	63
Available-for-sale financial assets	16	**53**	40
Investments at fair value through profit or loss	17	**1**	1
Deferred tax assets	9	**204**	16
Defined benefit plan assets	25	**45**	35
Trade and other receivables	22	**2**	40
		3,750	3,698
Current assets			
Inventories	21	**1,232**	1,251
Investments at fair value through profit or loss	17	**16**	16
Derivative financial instruments	20	**34**	37
Trade and other receivables	22	**687**	686
Cash and cash equivalents	23	**204**	186
		2,173	2,177
Assets held for sale	5	**67**	-
TOTAL ASSETS		**5,990**	5,874

€ million	Note	2016	2015
EQUITY AND LIABILITIES			
Equity attributable to the equity holders of the Company			
Share capital		**311**	311
Premium fund		**714**	714
Invested unrestricted equity reserve		**2,103**	2,103
Other reserves		**4**	11
Retained earnings		**-716**	-810
Total equity	24	**2,416**	2,329
Non-current liabilities			
Non-current debt	27	**987**	1,249
Derivative financial instruments	20	**4**	9
Deferred tax liabilities	9	**22**	16
Defined benefit and other long-term employee benefit obligations	25	**356**	369
Provisions	26	**118**	113
Trade and other payables	28	**37**	48
		1,525	1,805
Current liabilities			
Current debt	27	**458**	547
Derivative financial instruments	20	**63**	50
Provisions	26	**15**	23
Current tax liabilities	9	**12**	32
Trade and other payables	28	**1,459**	1,089
		2,007	1,741
Liabilities directly attributable to assets held for sale	5	**43**	-
TOTAL EQUITY AND LIABILITIES		**5,990**	5,874

Consolidated statement of cash flows

€ million	Note	2016	2015
Cash flow from operating activities			
Net result for the financial year		**144**	86
Adjustments for			
Taxes	9	**-156**	41
Depreciation and amortization	11, 12	**226**	302
Impairments	11, 12	**26**	2
Share of results in associated companies and joint ventures	13	**-5**	-49
Gain/loss on sale of intangible assets and property, plant and equipment	6	**-2**	-19
Gain/loss on sale of financial assets	8	**-5**	-0
Gain/loss on disposal of subsidiaries	4	**-34**	-409
Interest income	8	**-2**	-3
Interest expense	8	**94**	120
Exchange rate differences	8	**-4**	-8
Other non-cash adjustments		**-4**	-74
		134	-96
Change in working capital			
Change in trade and other receivables		**-17**	121
Change in inventories		**39**	318
Change in trade and other payables		**285**	-216
		307	223
Provisions, and defined benefit and other long-term employee benefit obligations paid		**-94**	-130
Interest received		**1**	4
Interest paid		**-94**	-111
Income taxes paid		**-9**	-11
Net cash from operating activities		**389**	-34

€ million	Note	2016	2015
Cash flow from investing activities			
Acquired businesses, net of cash	4	**-9**	-
Investments in associated companies and joint ventures	13	**-**	-7
Purchases of available-for-sale financial assets	16	**-14**	-15
Purchases of property, plant and equipment	12	**-116**	-120
Purchases of intangible assets	11	**-25**	-10
Proceeds from the disposal of subsidiaries, net of cash and tax	4	**72**	375
Proceeds from sale of property, plant and equipment	12	**8**	20
Proceeds from sale of intangible assets	11	**-**	4
Other investing cash flow		**3**	-8
Net cash from investing activities		**-81**	239
Cash flow before financing activities		**308**	205
Cash flow from financing activities			
Capital contribution by the non-controlling interest holder		**-**	41
Treasury share purchase	24	**-7**	-
Borrowings of non-current debt		**369**	316
Repayments of non-current debt		**-656**	-612
Change in current debt		**-13**	78
Repayments of finance lease liabilities		**-28**	-37
Other financing cash flow		**45**	0
Net cash from financing activities		**-291**	-213
Net change in cash and cash equivalents		**17**	-8
Cash and cash equivalents at the beginning of the financial year		**186**	191
Foreign exchange rate effect on cash and cash equivalents		**1**	2
Net change in cash and cash equivalents		**17**	-8
Cash and cash equivalents at the end of the financial year	23	**204**	186

Consolidated statement of changes in equity

€ million	Note	Share capital	Premium fund	Invested unrestricted equity reserve	Other reserves	Fair value reserves	Cumulative translation differences	Remeasurements of defined benefit plans	Treasury shares	Other retained earnings	Attributable to the equity holders of the Company	Non-controlling interests	Total equity
Equity on Jan 1, 2015		**311**	**714**	**2,103**	**5**	**5**	**-49**	**-89**	**-23**	**-846**	**2,132**	**0**	**2,132**
Net result for the financial year		-	-	-	-	-	-	-	-	96	96	-9	86
Other comprehensive income		-	-	-	-	1	57	-4	-	-1	55	1	56
Total comprehensive income for the financial year		-	-	-	-	1	57	-4	-	95	150	-8	142
Transactions with equity holders of the Company													
Contributions and distributions													
Convertible bond		-	-	-	-	-	-	-	-	45	45	-	45
Capital contribution by the non-controlling interest holder	24	-	-	-	-	-	-	-	-	-	-	41	41
Share-based payments	18	-	-	-	-	-	-	-	2	-0	1	-	1
Changes in ownership interests													
Disposal of non-controlling interest	4	-	-	-	-	-	-	-	-	-	-	-32	-32
Equity on Dec 31, 2015		**311**	**714**	**2,103**	**5**	**6**	**8**	**-92**	**-21**	**-704**	**2,329**	**-**	**2,329**
Net result for the financial year		-	-	-	-	-	-	-	-	144	144	-	144
Other comprehensive income		-	-	-	-	-4	-5	-43	-	0	-53	-	-53
Total comprehensive income for the financial year		-	-	-	-	-4	-5	-43	-	144	91	-	91
Transactions with equity holders of the Company													
Contributions and distributions													
Share-based payments	18	-	-	-	-	-	-	-	9	-7	3	-	3
Treasury share purchase	24	-	-	-	-	-	-	-	-7	-	-7	-	-7
Other		-	-	-	-2	-	-	-	-	2	-	-	-
Equity on Dec 31, 2016		**311**	**714**	**2,103**	**2**	**1**	**3**	**-135**	**-19**	**-564**	**2,416**	**-**	**2,416**

Notes to the consolidated financial statements

1. Corporate information

Outokumpu Oyj is a Finnish public limited liability company organized under the laws of Finland and domiciled in Espoo, Finland. The parent company, Outokumpu Oyj, has been listed on the Nasdaq Helsinki since 1988. A copy of the consolidated financial statements is available at the Group's website www.outokumpu.com, from Outokumpu Oyj/Corporate Communications, P.O. Box 245, 00181 Helsinki, Finland or via e-mail at corporate.comms@outokumpu.com.

Outokumpu is the global leader in stainless steel and creates advanced materials that are efficient, long lasting and recyclable – helping to build a world that lasts forever. Stainless steel is an ideal material to create lasting solutions in demanding applications from cutlery to bridges, energy to medical equipment. Stainless steel is 100% recyclable, corrosion-resistant, maintenance-free, durable and hygienic. Outokumpu employs some 10 000 professionals in more than 30 countries.

In its meeting on February 2, 2017 the Board of Directors of Outokumpu Oyj approved the publishing of these consolidated financial statements. According to the Finnish Limited Liability Companies Act, shareholders have the right to approve or reject the financial statements in the Annual General Meeting held after the publication of the financial statements. The Annual General Meeting also has the right to make a decision to amend the financial statements.

2. Accounting principles for the consolidated financial statements

Basis of preparation

The consolidated financial statements of Outokumpu have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union. The consolidated financial statements have been prepared in compliance with the IAS and IFRS standards as well as the SIC and IFRIC interpretations in force on December 31, 2016. The consolidated financial statements also comply with the regulations of Finnish accounting and company legislation complementing the IFRSs.

The consolidated financial statements are presented in millions of euros and have been prepared under the historical cost convention, unless otherwise stated in the accounting principles. All figures presented have been rounded, and consequently the sum of individual figures may deviate from the presented aggregate figure. Key figures have been calculated using exact figures.

The consolidated financial statements of Outokumpu for 2016 have been prepared on a going concern basis.

As from January 1, 2016 Outokumpu has applied the following amended standards.

- **Annual Improvements to IFRSs (2012–2014 Cycle):** Amendment to IAS 34 Interim financial reporting that impacted the disclosure of information in Outokumpu's interim reports.
- **Amendment to IAS 1 Presentation of Financial Statements: Disclosure Initiative.** The amendments clarify for example the guidance in relation to applying the materiality concept in regard with the consolidated financial statements. The amendments had a minor impact on presentation in Outokumpu's consolidated financial statements.

Other new or amended standards and interpretations had no impact on Outokumpu's consolidated financial statements.

Adoption of new and amended IFRS standards and interpretations

Outokumpu has not yet applied the following new and amended standards and interpretations already issued. The Group will adopt them as of the effective date or, if the date is other than the first day of the financial year, from the beginning of the subsequent financial year (* = not yet endorsed by the European Union as at December 31, 2016).

- **IFRS 15 Revenue from Contracts with Customers** (effective for financial years beginning on or after January 1, 2018) and **Amendments to IFRS 15 – Clarifications to IFRS 15 Revenue from Contracts with Customers*** (effective for financial years beginning on or after January 1, 2018): IFRS 15 introduces a five-step model to determine when to recognize revenue and at what amount. Revenue is recognized when a company transfers control of goods to a customer either over time or at a point in time. The standard also introduces new disclosure requirements. Outokumpu plans to adopt IFRS 15 as of January 1, 2018, using the retrospective approach. Outokumpu has assessed its current accounting policies and based on the assessment expects that the adoption will have no material impact on the quantitative information or on the presentation in the consolidated financial statements.
- **IFRS 9 Financial Instruments** (effective for financial years beginning on or after January 1, 2018): IFRS 9 replaces the existing guidance in IAS 39 Financial Instruments: Recognition and Measurement. IFRS 9 includes revised guidance on the classification and measurement of financial instruments, including a new expected credit loss model for calculating impairment on financial assets, and the new general hedge accounting requirements. It also carries forward the guidance on recognition and derecognition of financial instruments from IAS 39. The new standard's impact will be dependent on the financial instruments that the Group holds and economic conditions at that time. Based on the current assessment, the new standard would impact the measurement of Group's available-for-sale financial assets and application of hedge accounting.

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- **IFRS 16 Leases*** (effective for financial years beginning on or after January 1, 2019): The new standard replaces the current IAS 17 standard and related interpretations. IFRS 16 requires the lessees to recognise the lease agreements as right-of-use assets and lease liabilities in the statement of financial position. The accounting model is similar to current finance lease accounting according to IAS 17. The exceptions available relate to short-term contacts in which the lease term is 12 months or less and to low value items. The standard will increase Outokumpu's non-current assets and non-current and current debt.
- **Amendments to IAS 7 Statement of Cash Flows Disclosure Initiative*** (effective for financial years beginning on or after January 1, 2017). The changes were made to enable users of financial statements to evaluate changes in liabilities arising from financing activities, including both changes arising from cash flow and non-cash changes. The amendments will have an impact on the disclosures in Outokumpu's consolidated financial statements.
- **Amendments to IAS 12 Income Taxes – Recognition of Deferred Tax Assets for Unrealised Losses*** (effective for financial years beginning on or after January 1, 2017). The amendments clarify that the existence of a deductible temporary difference depends solely on a comparison of the carrying amount of an asset and its tax base at the end of the reporting period, and is not affected by possible future changes in the carrying amount or expected manner of recovery of the asset. The amendments are not assessed to have an impact on Outokumpu's consolidated financial statements.
- **Amendments to IFRS 2 Share-based payments – Clarification and Measurement of Share-based Payment Transactions*** (effective for financial years beginning on or after January 1, 2018). The amendments clarify the accounting for certain types of arrangements. Three accounting areas are covered: measurement of cash-settled share-based payments; classification of share-based payments settled net of tax withholdings; and accounting for a modification of a share-based payment from cash-settled to equity-settled. The Group is currently assessing the impacts of the amendments.

Other new or amended standards and interpretations are not expected to have an impact on Outokumpu's consolidated financial statements when adopted.

Management judgements and use of estimates

The preparation of the financial statements in accordance with IFRSs requires management to make judgements and make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and contingent liabilities at the reporting date, as well as the reported amounts of income and expenses during the reporting period. The management estimates and judgements are continuously monitored and they are based on prior experience and other factors, such as future expectations assumed to be reasonable considering the circumstances. Although these estimates are based on management's best knowledge of the circumstances at the end of the reporting period, actual results may differ from the estimates and assumptions. Management believes that the following accounting principles represent those matters requiring the exercise of judgement where a different opinion could result in significant changes to reported results.

Inventories

Inventories are stated at the lower of cost and net realizable value (NRV). Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. The most important commodity price risk for Outokumpu is caused by fluctuation in nickel and other alloy prices. The majority of stainless steel sales contracts include an alloy surcharge clause, with the aim of reducing the risk arising from the time difference between raw material purchase and product delivery. However, the risk is significant because the delivery cycle in production is longer than the alloy surcharge mechanism provides for. Thus, only the price for the products to be sold in near future is known. That is why a significant part of the future price for each product to be sold is estimated according to management's best knowledge in NRV calculations. Due to fluctuations in nickel and other alloy prices, the realized prices can deviate significantly from what has been used in NRV calculations on the closing date. See note 21.

Property, plant and equipment and intangible assets and impairments

Management estimates relate to carrying amounts and useful lives of assets as well as other underlying assumptions. Different assumptions and assigned lives could have a significant impact on the reported amounts. Management estimates in relation to goodwill relate to the estimation of the value in use of the cash-generating units to which goodwill has been allocated. The value in use calculation requires management to estimate the future cash flows expected to arise from the cash-generating units and a suitable discount rate in order to calculate present value. The future projections of cash flows include, among other estimates, projections of future prices and delivery volumes, production costs and maintenance capital expenditures.

Carrying amounts of non-current assets are regularly reviewed to determine whether there is any evidence of impairment as described in these accounting principles. Preparation of the estimated future cash flows and determining the discount rates for the impairment testing requires management to make assumptions relating to future expectations (e.g., future product pricing, production levels, production costs, market supply and demand, projected maintenance capital expenditure and weighted average cost of capital). A pre-tax discount rate used for the net present value calculation of projected cash flows reflects the weighted average cost of capital. The key assumptions used in the impairment testing, including sensitivity analysis, are explained further in note 11 and 12.

Income taxes

Group operates and earns income in numerous countries and is subject to changing tax laws in multiple jurisdictions within the countries. Significant judgements are necessary in determining the worldwide income tax liabilities of the Group. Although management believes they have made reasonable estimates about the resolution of tax uncertainties, the final outcome of these uncertainties could have an effect on the income tax liabilities and deferred tax liabilities in the period.

At the end of reporting period, the management assesses whether the realization of future tax benefits is sufficiently probable to recognize deferred tax assets. This assessment requires judgement with respect to, among other things, benefits that could be realized from future taxable income, available tax strategies, as well as other positive and negative factors. The recorded amount of deferred tax assets could be reduced if estimates of taxable income and benefits from available tax strategies are lowered, or if current tax regulations are enacted that impose restrictions on the Group's ability to utilize future tax benefits. See note 9.

Fair values of derivatives and other financial instruments

The fair value of financial instruments which cannot be determined based on quoted market prices and rates are based on different valuation techniques. The Group uses its judgement to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period. Factors regarding valuation techniques and their assumptions could affect the reported fair values.

The Group has used discounted cash flow analysis for various derivative contracts and in case of options Black-Scholes-Merton model has been applied. See note 15.

Employee benefits

The present value of pension obligations is subject to actuarial assumptions which actuaries use in calculating these obligations. Actuarial assumptions include, among others, discount rate, the annual rate of increase in future compensation levels and inflation rate. The assumptions used are presented in note 25.

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Provisions

The most significant provisions in the statement of financial position relate to restructuring programs and primarily include termination benefits to employees. The judgement applied mainly relates to the estimated amounts of termination benefits.

The Group has also made provisions for known environmental liabilities based on management's best estimate of the remediation costs. The precise amount and timing of these costs could differ significantly from the estimate. See note 26.

Principles of consolidation

Subsidiaries

The consolidated financial statements include the parent company Outokumpu Oyj and all those subsidiaries where over 50% of the subsidiary's voting rights are controlled directly or indirectly by the parent company, or the parent company is otherwise in control of the company at the end of the reporting period. The Group 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 subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

Acquired or established subsidiaries are accounted for by using the acquisition method. The consideration transferred and the identifiable assets acquired and liabilities assumed in the acquired company are measured at fair value at the acquisition date. The consideration transferred includes any assets transferred by the acquirer, liabilities incurred by the acquirer to former owners of the acquiree and the equity interests issued by the acquirer. Any contingent consideration related to the business combination is measured at fair value at the acquisition date and it is classified as either liability or equity. Contingent consideration classified as liability is remeasured at its fair value at the end of each reporting period and the subsequent changes to fair value are recognized in profit or loss. Contingent consideration classified as equity is not subsequently remeasured. The consideration transferred does not include any transactions accounted for separately from the acquisition. All acquisition-related costs, with the exception of costs to issue debt or equity securities, are recognized as expenses in the periods in which costs are incurred and services rendered.

Goodwill arising on an acquisition is recognized as the excess of the aggregate of the consideration transferred and the amount of any non-controlling interests or previously held equity interests in the acquiree, over the Group's share of the fair value of the identifiable assets acquired and liabilities assumed at the acquisition date. Non-controlling interest in the acquiree is measured acquisition-by-acquisition either at fair value or at value, which equals to the proportional share of the non-controlling interest in the identifiable net assets acquired. Changes in the parent company's ownership interest in a subsidiary are accounted for as equity transactions if the parent company retains control of the subsidiary.

To those business combinations, which have taken place before January 1, 2010 accounting principles effective at that time have been applied.

All intra-group transactions, receivables, liabilities and unrealized margins, as well as distribution of profits within the Group, are eliminated in the preparation of consolidated financial statements. The result for the period and items recognized in other comprehensive income are allocated to the equity holders of the company and non-controlling interests and presented in the statement of income and statement of other comprehensive income. Non-controlling interests are presented separately from the equity allocated to the equity holders of the company. Comprehensive income is allocated to the equity holders of the company and to non-controlling interests even in situations where the allocation would result in the non-controlling interests' share being negative, unless non-controlling interests have an exemption not to meet obligations which exceed non-controlling interests' investment in the company.

Associated companies and joint ventures

Companies, where Outokumpu generally holds voting rights of 20–50% and in which Outokumpu otherwise has significant influence, but not control are included in the consolidated financial statements as associated companies. Associated companies are consolidated by using the equity method from the date that significant influence was obtained until it ceases.

The Group's share of the associated company's result for the period is separately disclosed below EBIT in the consolidated statement of income. Outokumpu's share of changes recognized in the associated company's other comprehensive income is recognized in the Group's other comprehensive income. When Outokumpu's share of the associated company's losses exceeds the carrying amount of the investment, the investment is recognized at zero value in the statement of financial position and recognition of further losses is discontinued, except to the extent that the Group has incurred obligations in respect of the associated company. The interest in an associated company comprises the carrying amount of the investment under the equity method together with any long-term interest that, in substance, forms a part of the net investment in the associated company.

Joint ventures in which Outokumpu has contractually based joint control with a third party are also accounted for by using the equity method described above.

Non-current assets held for sale

Non-current assets or disposal groups are classified as held for sale if their carrying amounts are expected to be recovered primarily through sale rather than through continuing use. Classification as held for sale requires that the following criteria are met: the sale is highly probable, the asset or disposal group is available for immediate sale in its present condition subject to usual and customary terms, the management is committed to the sale and the sale is expected to be completed within one year from the date of classification.

Prior to classification as held for sale, the assets or assets and liabilities related to a disposal group in question are measured according to the respective IFRS standards. From the date of classification, non-current assets or a disposal group held for sale are measured at the lower of the carrying amount and the fair value less costs to sell, and the recognition of depreciation and amortization is discontinued.

Assets included in disposal groups but not in the scope of the measurement requirements of IFRS 5, as well as liabilities, are measured according to the related IFRS standards also after the date of classification.

Segment reporting

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses, and for which discrete financial information is available. Outokumpu has three reportable operating segments which represent the strategic business areas of the Group.

The operating segments are responsible for sales, profitability, production and supply chain management. They are managed separately and are reported separately in internal management reporting to CEO who is Outokumpu's chief operating decision maker. Outokumpu's segment information is based on the internal management reporting which is prepared according to the IFRS accounting principles.

Pricing of intersegment transactions is based on arm's length prices. EBIT of the operating segments is reported to the CEO regularly in order for him to review their performance and make decisions about resources to be allocated to the segments. EBIT is defined correspondingly in management reporting as in these accounting principles.

Other operations mainly consist of such business development and Corporate Management expenses that are not allocated to the businesses.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Foreign currency transactions

Transactions of each subsidiary included in the consolidated financial statements are measured using the currency that best reflects the economic substance of the underlying events and circumstances relevant to that subsidiary ("the functional currency"). The consolidated financial statements are presented in euros which is the functional and presentation currency of the parent company. Group companies' foreign currency transactions are translated into local functional currencies using the exchange rates prevailing at the dates of the transactions. Receivables and liabilities in foreign currencies are translated into functional currencies at the exchange rates prevailing at the end of the reporting period. Foreign exchange differences arising from interest-bearing assets and liabilities and related derivatives are recognized in finance income and expenses in the statement of income. Foreign exchange differences arising in respect of other financial instruments are included in EBIT under sales, purchases or other operating income and expenses. The effective portion of exchange differences arisen from instruments designated as hedges of the net investments in foreign operations is recognized in other comprehensive income.

For those subsidiaries whose functional and presentation currency is not the euro, the income and expenses for the statements of income and comprehensive income, and the items for statement of cash flows, are translated into euro using the average exchange rates of the reporting period. The assets and liabilities for the statement of financial position are translated using the exchange rates prevailing at the reporting date. The translation differences arising from the use of different exchange rates explained above are recognized in Group's other comprehensive income. Any goodwill arising on the acquisition of foreign operations and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition of those foreign operations are treated as assets and liabilities of those foreign operations. They are translated into euro using the exchange rates prevailing at the reporting date. When a foreign operation is sold, or is otherwise partially or completely disposed of, the translation differences accumulated in equity are reclassified in profit or loss as part of the gain or loss on the sale.

Revenue recognition

Revenue from the sale of goods is recognized after the significant risks and rewards of ownership have been transferred to the buyer, and the Group retains neither a continuing managerial involvement to the degree usually associated with ownership, nor effective control of those goods. Usually this means that revenue is recognized upon delivery of goods to customers in accordance with agreed terms of delivery.

Outokumpu ships stainless steel products to customers under a variety of delivery terms. The used terms are based on Incoterms collection of delivery terms, published and defined by the International Chamber of Commerce Terms of Trade.

The most common delivery terms used by Outokumpu are "C" terms, whereby the Group arranges and pays for the carriage and certain other costs. The Group ceases to be responsible for the goods and revenue is recognized once the goods have been handed over to the carrier to be delivered to the agreed destination.

Less frequently used are "D" terms, under which the Group is obliged to deliver the goods to the buyer at the agreed destination, in which case revenue is recognized when the goods are delivered to the buyer. Also "F" terms are less frequently used, under which the buyer arranges and pays for the carriage, and revenue is recognized when the goods are handed over to the carrier contracted by the buyer.

Income taxes

Current and deferred income taxes are determined in accordance with IAS 12 Income Taxes on entity level to the extent an entity is subject to income taxation. The Group's income tax in the statement of income includes current income taxes of the Group companies based on taxable profit for the period, together with tax adjustments for previous periods and the change in deferred income taxes. In several countries (Germany, the UK, Italy, the Netherlands, Sweden and the USA) Outokumpu companies are included in income tax consolidation groups / group taxation systems. The share of results in associated companies is reported in the statement of income based on the net result and thus including the income tax effect.

Deferred income taxes are stated using the balance sheet liability method to reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax basis at the reporting date, as well as for unused tax losses or credits carry forward. Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that future taxable profits will be available, against which deductible temporary differences can be utilized. A valuation allowance is recognized against a deferred tax asset if the realization of the related tax benefit is not probable. The ability to recognize deferred tax assets is reviewed at the end of each reporting period. Deferred tax liabilities are usually recognized in the statement of financial position in full except to the extent that the deferred taxes arise from the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction, affects neither accounting profit nor taxable profit.

Deferred taxes are calculated at the enacted or substantially enacted tax rates that are expected to apply by the end of the reporting period. Generally, deferred tax is recognized to the statement of income, except if the taxes are related to items of other comprehensive income or to transactions or other events recognized directly in equity, in which case the related income taxes are also recognized either in other comprehensive income or directly in equity, respectively.

Research and development costs

Research costs are expensed in the reporting period in which they are incurred. Development costs are capitalized when it is probable that the development project will generate future economic benefits for the Group, and certain criteria related to commercial and technological feasibility are met. These costs relate to the development of new or substantially improved products or production processes and to transformation projects with the target of developing and improving business processes. Capitalized development costs mainly comprise materials and supplies and direct labour costs as well as related overhead costs. Development costs recognized as expenses are not subsequently capitalized.

Subsequent to initial recognition, capitalized development costs are measured at cost less accumulated amortization and impairment losses. Capitalized development costs are amortized on a straight-line basis over their estimated useful lives which is generally five years. Recognition of amortization is commenced as the asset is ready for use. The accounting treatment of the government grants received for research and development activities is described below under Government grants.

Goodwill and other intangible assets

Goodwill arising on a business combination is recognized at the acquisition date at an amount representing the excess of the consideration transferred in an acquisition over the fair value of the identifiable assets acquired, liabilities assumed and any non-controlling interest and any previously held equity interests in the acquiree, if any. Goodwill is not amortized, but tested for impairment. In respect of associated companies, goodwill is included in the carrying amount of the investment. Goodwill is measured at cost less accumulated impairment losses.

Intangible assets other than goodwill include capitalized development costs, patents, licenses and software. An intangible asset is recognized only if it is probable that the future economic benefits attributable to the asset will flow to the Group and the cost of the asset can be measured reliably. All other expenditure is expensed as incurred. Intangible assets are recognized initially

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

at cost. After initial recognition, assets are measured at cost less amortizations and accumulated impairment losses if the intangible asset has a finite useful life. Cost comprises the purchase price and all costs directly attributable to bringing the asset ready for its intended use. Intangible assets acquired in a business combination are measured at fair value at the acquisition date.

Intangible assets are amortized on a straight-line basis over their expected useful lives. Assets tied to a certain fixed period are amortized over the contract term. Amortization periods used for intangible assets are the following:

- Software up to 10 years
- Capitalized development costs up to 10 years
- Intangible rights up to 20 years

Recognition of amortization is discontinued when the intangible asset is classified as held for sale. The estimated useful lives and residual values are reviewed at least at the end of each financial year. If they differ substantially from previous estimates, the useful lives are adjusted accordingly.

Gains and losses on disposal of intangible assets are included in other operating income and expenses.

Emission allowances

Emission allowances are intangible assets measured at cost. Allowances received free of charge are recognized at nominal value, i.e. at zero carrying amount. A provision to cover the obligation to return emission allowances is recognized at fair value at the end of the reporting period if the emission allowances held by the Group do not cover the actual emissions. The purchased emission allowance quotas recognized in intangible rights are derecognized against the actual emissions or, when the emission allowances are sold. The obligation to deliver allowances equal to emissions is recognized under other operating expenses. Gains from the sale of allowances are recognized as other operating income in the statement of income.

Property, plant and equipment

Property, plant and equipment acquired by the Group companies are measured at cost. The cost includes all expenditure directly attributable to the acquisition of the asset. Government grants received are deducted from the cost. Property, plant and equipment acquired in business combinations are measured at fair value at the acquisition date. Borrowing costs (mainly interest costs) directly attributable to the acquisition or construction of a qualifying asset are capitalized in the statement of financial position as part of the carrying amount of the asset. Qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale. Other borrowing costs are recognized as expenses in the period in which they are incurred. Property, plant and equipment are carried in the statement of financial position at cost less accumulated depreciation and impairment losses.

Property, plant and equipment are depreciated on a straight-line basis over their expected useful lives. Depreciation is based on the following estimated useful lives:

- Buildings 25–40 years
- Heavy machinery 15–30 years
- Light machinery and equipment 3–15 years

Land is not depreciated, except for leased land, as the useful life of land is assumed to be indefinite. Mine properties are depreciated using the units-of-production method based on the depletion of ore reserves over their estimated useful lives. Recognition of depreciation on an item of property, plant and equipment is discontinued when the item is classified as held for sale. Expected useful lives and residual values are reviewed at least at the end of each financial year and, if they differ significantly from previous estimates, the useful lives are revised accordingly. Following the review of useful lives of certain property, plant and equipment in 2015 their estimated useful lives were lengthened from October 1, 2015 onwards.

Ordinary repairs and maintenance costs are expensed during the reporting period in which they are incurred. The cost of major renovations is included in the asset's carrying amount when it is probable that the Group will derive future economic benefits in excess of the originally assessed standard of performance of the existing asset and the cost can be reliably measured. Costs arising on such major renovations are accounted for as capital expenditure and depreciated on a straight-line basis over their estimated useful lives.

Gains and losses on sale and disposals of property, plant and equipment are determined by the difference between the received net proceeds and the carrying amount of the asset. Gains and losses on sale and disposals are presented in other operating income or expenses, thus included in EBIT.

Government grants

Government or other grants are recognized as income on a systematic basis over the periods necessary to match them with the related costs which they are intended to compensate. Investment grants related to acquisitions of property, plant and equipment and intangible assets are deducted from the cost of the asset in question in the statement of financial position and recognized as income on a systematic basis over the useful life of the asset in the form of reduced depreciation expense.

Impairment of property, plant and equipment and intangible assets

Carrying amounts of non-current assets are regularly reviewed to determine whether there is any evidence of impairment. If any such evidence of impairment emerges, the asset's recoverable amount is estimated. Goodwill is tested at least annually, irrespective of whether there is any evidence of impairment.

The recoverable amount of an asset is the higher of fair value less costs to sell and value in use. For goodwill testing purposes the recoverable amount is based on value in use which is determined by reference to discounted future net cash flows expected to be generated by the asset. In Outokumpu, goodwill is tested on operating segment level. The discount rate used is a pre-tax rate that reflects the current market view on the time value of money and the asset-specific risks. An impairment loss is the amount by which the carrying amount of an asset exceeds its recoverable amount. An impairment loss is recognized immediately in profit or loss. The estimated useful life of the asset that is subject to depreciation or amortization is also reassessed when an impairment loss is recognized.

A previously recognized impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. However, the reversal must not cause that the adjusted carrying amount is higher than the carrying amount that would have been determined if no impairment loss had been recognized in prior years. Impairment losses recognized for goodwill are not reversed.

Leases

Group as a lessee

Lease agreements of property plant and equipment, in which the Group has substantially all the rewards and risks of ownership, are classified as finance leases. An asset acquired through finance lease is recognized as property, plant and equipment in the statement of financial position, within a group determined by the asset's characteristics, at the commencement of the lease term at the lower of fair value and the present value of minimum lease payments.

Respective lease liabilities less finance charges are included in debt. Each lease payment is allocated between the finance charge and the reduction of the outstanding liability. The finance charge is allocated to each period during the lease term so as to produce a constant periodic rate of interest on the remaining balance of the liability. Property, plant and equipment acquired under finance lease contracts are depreciated over the shorter of the useful life of the asset and the lease term. If a sale and leaseback transaction results in

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a finance lease, any excess of sales proceeds over the sold asset's carrying amount will not be immediately recognized but deferred and amortized over the lease term.

At inception of significant other arrangements, the Group determines whether these arrangements are, or contain a lease component. At inception of an arrangement that contains a lease the Group separates payments and other consideration required by the arrangement into those for the lease and those for other elements. Lease accounting principles are applied to lease payments.

Leases of assets where the lessor retains substantially all the risks and benefits of ownership are classified as operating leases. Payments made under operating lease contracts are expensed on a straight-line basis over the lease terms.

Group as a lessor

Leases of property, plant and equipment where the Group has substantially transferred all the rewards and risks of ownership to the lessee are classified as finance leases. Assets leased out through such contracts are recognized as other receivables and measured at the lower of the fair value of the leased asset and the present value of minimum lease payments. Interest income from finance lease is recognized in the statement of income so as to achieve a constant periodic rate of return on the net investment in the finance lease.

Rental income received from property, plant and equipment leased out by the Group under operating leases is recognized on a straight-line basis over the lease term.

Financial instruments

Financial assets

The Group's financial assets are classified as financial assets at fair value through profit or loss, loans and receivables and available-for-sale financial assets. Outokumpu did not hold financial instruments classified as held-to-maturity investments in the current or previous reporting period. Classification is made upon initial recognition based on the purpose of use of the financial asset.

If an item is not measured at fair value through profit or loss, significant transaction costs are included in the initial carrying amount of the financial asset. Financial assets are derecognized when the Group loses the rights to receive the contractual cash flows on the financial asset or it transfers substantially all the risks and rewards of ownership outside the Group.

At the end of the reporting period, the Group estimates whether there is objective evidence on impairment of items other than financial assets measured at fair value through profit or loss. A financial asset is assumed to be impaired if there is objective evidence on impairment and the effect on the estimated future cash flows generated by the financial assets can be reliably measured. Objective evidence on impairment may be e.g. a significant deterioration in the counterparty's results, a contract breach by the debtor and, in case of equity instruments (available-for-sale financial assets), a significant or long-term decrease in the value of an instrument below its carrying amount. In such situations, the fair value development of equity instruments is reviewed for the past three quarters of the reporting period. The Group has determined percentual limits for the review, the breach of which will result in the recognition of an impairment loss. An impairment loss is recognized immediately in profit or loss.

Financial assets at fair value through profit or loss

The category of financial assets at fair value through profit or loss includes derivatives, to which hedge accounting is not applied, as well as other financial items at fair value through profit or loss held for trading purposes. A financial asset is classified in this category if it has been acquired with the main purpose of selling the asset within a short period of time. In some cases also share investments can be classified in this category.

These financial assets are recognized at the trade date at fair value and subsequently remeasured at fair value at the end of each reporting period. The fair value measurement is based on quoted rates and market prices as well as on appropriate valuation methodologies and models. Realized and unrealized gains and losses arising from changes in fair values are recognized in profit or loss in the reporting period in which they are incurred.

Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments and are not quoted in active markets. Loans and receivables arise when the Group gives out a loan or delivers goods or services directly to a debtor.

Loans and receivables are recognized at the settlement date and measured initially at fair value. After initial recognition, loans and receivables are measured at amortized cost by using the effective interest rate method.

Outokumpu uses factoring for working capital management. Sold trade receivables have been derecognized when the related risks and rewards of ownership have been transferred in material respect.

Available-for-sale financial assets

Available-for-sale financial assets are non-derivative financial assets which are either designated in this category or not classified in any other category of financial assets. The purchases and sales of these items are recognized at the trade date. Available-for-sale financial assets are included in non-current assets, unless the Group has the intention to dispose of the investment within 12 months from the reporting date.

This category includes share investments, both in listed and unlisted companies. Investments in shares are measured at fair value, or if fair value cannot be reliably measured, at cost less any impairment losses. The fair value measurement is based on quoted rates and market prices at the end of the reporting period, as well as on appropriate valuation techniques, such as recent transaction prices and cash flow discounting. These valuation techniques maximize the use of observable market data where it is available and rely as little as possible on entity-specific estimates made by Outokumpu. Fair value changes of share instruments measured at fair value are recognized in other comprehensive income and presented in equity within fair value reserve, net of tax, until the shares in question are disposed of or impaired, in which case, the accumulated changes in fair value are transferred from equity to be recognized in profit or loss as reclassification adjustments.

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand, deposits held at call with banks and other highly liquid investments with original maturities of three months or less. These are readily convertible to a known amount of cash and the risk of changes in value is low. Bank overdrafts are included in current liabilities in the statement of financial position.

Financial liabilities

The Group's financial liabilities are classified as either financial liabilities at fair value through profit or loss or other financial liabilities (financial liabilities recognized at amortized cost). A financial liability (or part of the liability) is not derecognized until the liability has ceased to exist, that is, when the obligation identified in a contract has been fulfilled or cancelled or is no longer effective.

Financial liabilities at fair value through profit or loss

In Outokumpu Group, the category of financial liabilities at fair value through profit or loss includes derivatives that do not meet the criteria of hedge accounting. Realized and unrealized gains and losses arising from changes in fair value of derivatives are recognized in profit or loss in the reporting period in which they are incurred.

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Other financial liabilities

Financial liabilities recognized at amortized cost include the loans, bonds, finance lease liabilities and trade and other payables. Loans and trade and other payables are recognized at the settlement date and measured initially at fair value. After initial recognition they are carried at amortized cost using the effective interest rate method. Significant transaction costs are included in the original carrying amount.

Significant costs related to revolving credit facilities are amortized over the expected loan term.

Convertible bonds

The Group classifies convertible bonds as compound instruments. The component parts of the bonds are classified separately as financial liabilities and equity in accordance with the substance of the arrangement.

The liability component is recognized initially at fair value of a similar liability. The equity component is recognized initially at the difference between the fair value of the bond as a whole and the fair value of the liability component. Transaction costs are allocated to the liability and equity components in proportion to their initial carrying amounts.

Subsequent to initial recognition, the liability component is measured at amortized cost using the effective interest method. The equity component of the bond is not remeasured to initial recognition except on conversion expiry.

Derivative instruments and hedge accounting

Derivatives

All the Group's derivatives are initially recognized at fair value on the trade date, on which the Group becomes a contractual counterparty, and are subsequently measured at fair value. Gains and losses arising on fair value measurement are accounted for depending on the purpose of use of the derivative contract. The gains and losses arising from fair value changes of derivative contracts, to which hedge accounting is applied and which are effective hedging instruments, are presented congruent with the hedged item. Changes in fair value of derivative contracts not qualifying for hedge accounting are recognized in EBIT in other operating income and expenses. If a derivative is designated for financing activities, the gain or loss effects arising from the instrument are recognized within financial income and financial expenses.

The fair value measurement of derivatives is based on quoted market prices and rates as well as on discounted cash flows at the end of the reporting period. The fair value of currency, interest rate and metal options is determined by utilising commonly applied option valuation models, such as Black-Scholes-Merton model. Fair values of certain derivatives are based on valuations of external counterparties.

Hedge accounting

Hedge accounting refers to the method of accounting, which aims to assign one or several hedging instruments so that their fair value or cash flows offset completely or partly the changes in fair value or cash flows of the hedged item. Outokumpu applies hedge accounting to certain foreign exchange and commodity derivatives. Derivatives, to which hedge accounting is not applied, have been acquired to reduce the profit or loss and/or cash flow effects of operations or financing activities.

In the beginning of each hedging arrangement, the Group documents the relationship between the hedging instrument and the hedged item, as well as the objectives of risk management and strategy of the hedging arrangement. Hedging instruments are subject to prospective and retrospective effectiveness testing. Hedge effectiveness is the degree to which changes in the fair value or cash flows of the hedged item that are attributable to a hedged risk are offset by changes in the fair value or cash flows of the hedging instrument. The hedging relationship is considered to be highly effective if the changes in fair values or cash flows of the hedging instrument offset the cash flow changes of the hedged item by 80–125%. Hedge accounting is discontinued when the requirements of hedge accounting are no longer met.

Cash flow hedges

In cash flow hedging, the Group is hedging against changes in cash flows, which result from the realization of a risk associated with a recognized asset or liability or a highly probable forecast transaction. Fair value changes of derivatives designated to hedge forecast cash flows are recognized in other comprehensive income and presented within the fair value reserve in equity to the extent that the hedge is effective. Such fair value changes accumulated in equity are reclassified in profit or loss in the period in which the hedged cash flows affect profit or loss. The fair value changes related to the ineffective portion of the hedging instrument are recognized immediately in profit or loss.

Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recorded in the statement of income, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk.

Net investment hedges

The Group has in earlier years hedged equities of the subsidiaries located outside the euro area against changes in exchange rates with the aim to reduce the effects of changes in exchange rates on the Group's equity. Accumulated fair value changes of qualifying financial instruments designated as hedges are reported in equity. They will be reclassified to profit or loss as part of the gain or loss on disposal if the corresponding foreign operation is sold or otherwise disposed of, partly or in full.

Measurement of fair values

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. Fair value hierarchy is based on the source of inputs used in determining fair values. In level one, fair values are based on public quotations for identical instruments. In level two, fair values are based on market rates and prices, discounted future cash flows and, in respect of options, on valuation models. For assets and liabilities in level three, there is no reliable market source available and thus fair value measurement cannot be based on observable market data. Therefore, the measurement methods are chosen so that the information available for the measurement and the characteristics of the measured objects can be adequately taken into account.

Inventories

Inventories are stated at the lower of cost and net realizable value. The cost of raw material is determined by the weighted average method. The cost of self-produced finished goods and work in progress comprises raw materials, direct labour, other direct costs and related production and procurement overheads, but excludes borrowing costs. Cost of purchased products includes all purchasing costs including direct transportation, handling and other costs. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. Spare parts are carried as inventory and their cost is recognized in profit or loss as consumed. Major spare parts are recognized in property, plant and equipment when they are expected to be used over more than one financial year.

Treasury shares

When the parent company or its subsidiaries purchase the company's own shares, the consideration paid, including any attributable transaction costs, net of taxes, is deducted from the parent company's equity as treasury shares until the shares are cancelled. When such shares are subsequently sold or reissued, any consideration received is recognized directly in equity.

Provisions and contingent liabilities

A provision is recognized when Outokumpu has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of

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economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The Group's provisions mainly relate to restructuring plans, onerous contracts, environmental liabilities, litigation and tax risks. The amount recognized as a provision corresponds to the management's best estimate of the costs required to fulfil an existing obligation at the end of the reporting period. If part of the obligation may potentially be compensated by a third party, the compensation is recognized as a separate asset when it is virtually certain that the compensation will be received. Non-current provisions are discounted to net present value at the end of the reporting period using risk-free discount rates.

The cost of an item of property, plant and equipment also comprises the initial estimate of costs of dismantling and removing the item and restoring the site on which it is located at the end of the useful life of the item on a present value basis. Such a liability may exist for decommissioning a plant, rehabilitating environmental damage, landscaping or removing equipment. A provision presenting the asset retirement obligation is recognized in the same amount at the same date. Adjustments to the provision due to subsequent changes in the estimated timing or amount of the outflow of resources, or in the change in the discount rate are deducted from or added to the cost of the corresponding asset in a symmetrical manner. The costs will be depreciated over the asset's remaining useful life.

Environmental provisions are based on the interpretation of the effective environmental laws and regulations related to the Group at the end of the reporting period. Such environmental expenditure, that arises from restoring the conditions caused by prior operations are recognized as expenses in the period in which they are incurred. A restructuring provision is recognized when a detailed restructuring plan has been prepared and its implementation has been started or the main parts of the plan have been communicated to those, who are impacted by the plan. Restructuring provision mainly comprise employee termination benefits.

A contingent liability is a possible obligation that arises from past events and whose existence will be confirmed only by the occurrence of uncertain future events not wholly within the control of the entity. Such present obligation that probably does not require settlement of a payment obligation and the amount of which cannot be reliably measured is also considered to be a contingent liability. Contingent liabilities are disclosed in the notes to the financial statements.

Employee benefits

Post-employment and other long-term employee benefits

Group companies in different countries have various post-employment benefit plans in accordance with local conditions and practices. The plans are classified as either defined contribution plans or defined benefit plans.

The fixed contributions to defined contribution plans are recognized as expenses in the period to which they relate. The Group has no legal or constructive obligation to pay further contributions if the receiving party is not able to pay the benefits in question. All such arrangements that do not meet these requirements are defined benefit plans.

Defined benefit plans are funded with payments to the pension funds or insurance companies. The present value of the defined benefit obligations is determined separately for each plan by using the projected unit credit method. The plan assets are measured at fair value at the end of the reporting period. The liability recognized in the statement of financial position is the defined benefit obligation at the closing date less the fair value of plan assets. Current service costs, past service costs and gains or losses on settlements are recognized in functional costs above EBIT. Net interest expense or income is recognized in financial items under interest expense or interest income. All remeasurements of the net defined benefit liability (asset) are recognized directly in other comprehensive income.

For other long-term employee benefits, all service costs and remeasurements are recognized immediately in the statement of income. Interest expenses are recognized in financial items under interest expenses.

Share-based payment transactions

The share-based incentive programs are accounted for partly as equity-settled and partly as cash-settled. The equity-settled and cash-settled parts both include market and non-market based vesting conditions. The fair values of programs over vesting periods are determined at the grant date and the portion paid in cash is remeasured based on market conditions at the end of each reporting period. Market prices and applicable statistical models are used in determining the fair values. The impact of non-market based vesting conditions is assessed at the end of each reporting period. The programs include maximum limits for the pay-outs and the limits have been taken into account in the fair value measurement of the benefits.

EBIT

In Outokumpu Group, EBIT is the net sum which is formed by adding other operating income to sales and then deducting the cost of purchase adjusted by change in the inventory and the cost of manufacture for own use, the cost of employee benefits, depreciation, amortization, any impairments, and other operating expenses. All other items of the statement of income are presented below EBIT. Exchange gains and losses and fair value changes of derivatives are included in EBIT, if they arise from business-related items. Otherwise they are recognized in financial items.

Adjustments to EBIT

Adjustments to EBIT presented in the notes to the consolidated financial statements include items which affect the comparability between periods because of their unusual nature, size or incidence. Only material income and expenses resulting for example from group-wide restructuring programs, impairments. and gains or losses on sale of assets or businesses, as well as raw material related inventory and metal derivative gains and losses are included in adjustments.

Dividends

The dividend proposed by the Board of Directors is not deducted from distributable equity until approved by the Annual General Meeting of Shareholders.

Earnings per share

Basic earnings per share is calculated by dividing the net result attributable to the equity holders of the company by the weighted average number of shares in issue during the period, excluding shares purchased by Outokumpu and held as treasury shares.

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding with the assumption that convertible instrument is converted. Furthermore, the profit or loss used in the calculation is adjusted for the interest expense related to the instrument and recognized in the period, net of tax. However, potential ordinary shares are only dilutive if the adjustments decrease the earnings per share ratio.

3. Segment information

Outokumpu's business is divided into three business areas which are Europe, Americas and Long Products. In addition to the business area structure, Business Support Functions cover Finance, Technology, Communications and IR, Business Transformation and IT, Legal, Corporate Affairs and Compliance, Safety, Health and Environment, Internal audit, and HR and Organization Development.

Business areas have responsibility for sales, profitability, production and supply chain management and they are Outokumpu's reportable segments under IFRS. The performance of the segments is reviewed based on segment's EBIT which is defined in the accounting principles for the consolidated financial statements. The review is done regularly by the CEO based on internal management reporting which is based on IFRS. Below is a description of the activities of the three reportable segments:

Europe consists of both coil and plate operations as well as ferrochrome production in Europe. The high-volume and tailored standard stainless steel grades are primarily used for example in architecture, building and construction, transportation, catering and appliances, chemical, petrochemical and energy sectors, as well as other process industries. The production facilities are located in Finland, Germany and Sweden. The business area has extensive coil service center and sales network across Europe, Middle East, Africa and APAC region.

Americas produces standard austenitic and ferritic grades as well as tailored products. Its largest customer segments are automotive and transport, consumer appliances, oil and gas, chemical and petrochemical industries, food and beverage processing, as well as building and construction industry. The business area has production units in the US and Mexico, as well as a service center in Argentina.

Long Products are used in a wide range of applications such as springs, wires, surgical equipment, automotive parts and construction. The manufacturing is concentrated in the integrated sites in the UK, Sweden and the US.

Other operations consist of activities outside the three reportable segments described above, as well as industrial holdings. Such business development and Corporate Management expenses that are not allocated to the business areas are also reported under Other operations. Sales of Other operations consist of electricity, nickel warrants, internal commissions and services. Other operations' figures for 2015 include the divested SKS operations.

Outokumpu does not have individual significant customers as defined in IFRS 8.

Operating segments

2016				Reconciliation			
€ million	Europe	Americas	Long Products	Reportable segments total	Other operations	Eliminations	Group
External sales	3,775	1,304	333	5,412	278	-	5,690
Inter-segment sales	149	21	153	324	294	-618	-
Sales	3,924	1,325	487	5,736	571	-618	5,690
EBITDA	349	-6	18	361	-6	0	355
Depreciation and amortization	-158	-54	-7	-219	-7	-	-226
Impairments	-26	-	-	-26	-	-	-26
EBIT	164	-60	11	115	-13	0	103
Share of results in associated companies and joint ventures	-	-	-	-	-	-	5
Financial income	-	-	-	-	-	-	10
Financial expenses	-	-	-	-	-	-	-130
Result before taxes	-	-	-	-	-	-	-13
Income taxes	-	-	-	-	-	-	156
Net result for the financial year	-	-	-	-	-	-	144
Adjustments to EBIT							
Redundancy costs	-22	-3	-2	-26	-3	-	-30
Gain on the SKS divestment	-	-	-	-	28	-	28
Changes to the UK pension scheme	4	-	21	25	1	-	26
Net insurance compensation and costs related to technical issues in Calvert	-	24	-	24	-	-	24
Restructuring provisions, other than redundancy	-8	-	-	-8	-	-	-8
Gain on the Guangzhou divestment	-	-	-	-	6	-	6
Net of raw material-related inventory and metal derivative gains/losses	-1	10	-1	7	-	4	11
Assets in operating capital	3,563	1,458	239	5,260	286	-219	5,326
Other assets	-	-	-	-	-	-	393
Deferred tax assets	-	-	-	-	-	-	204
Assets held for sale	-	-	-	-	-	-	67
Total assets	-	-	-	-	-	-	5,990
Liabilities in operating capital	1,155	331	99	1,585	318	-211	1,692
Other liabilities	-	-	-	-	-	-	1,818
Deferred tax liabilities	-	-	-	-	-	-	22
Liabilities directly attributable to assets held for sale	-	-	-	-	-	-	43
Total liabilities	-	-	-	-	-	-	3,574
Operating capital	2,408	1,127	139	3,675	-32	-8	3,635
Net deferred tax asset	-	-	-	-	-	-	181
Capital employed	-	-	-	-	-	-	3,816

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2015

€ million	Europe	Americas	Long Products	Reconciliation Reportable segments total	Other operations [1]	Eliminations	Group
External sales	4,151	1,177	389	5,716	667	-	6,384
Inter-segment sales	165	37	162	365	311	-676	-
Sales	4,316	1,214	551	6,081	979	-676	6,384
EBITDA	286	-136	10	160	370	2	531
Depreciation and amortization	-196	-80	-8	-284	-18	-	-302
Impairments	-6	-	-	-6	5	-	-1
EBIT	84	-216	2	-131	358	2	228
Share of results in associated companies and joint ventures	-	-	-	-	-	-	49
Financial income	-	-	-	-	-	-	9
Financial expenses	-	-	-	-	-	-	-159
Result before taxes	-	-	-	-	-	-	127
Income taxes	-	-	-	-	-	-	-41
Net result for the financial year	-	-	-	-	-	-	86
Adjustments to EBIT							
Gain on the SKS divestment	-	-	-	-	409	-	409
Redundancy costs	-25	-	-	-25	-	-	-25
Net insurance compensation and costs related to technical issues in Calvert	-	-17	-	-17	-	-	-17
Impairments related to EMEA restructuring	-6	-	-	-6	-	-	-6
Net of raw material-related inventory and metal derivative gains/losses	31	-37	-5	-11	-	-20	-31
Assets in operating capital	3,683	1,496	210	5,389	316	-234	5,471
Other assets	-	-	-	-	-	-	388
Deferred tax assets	-	-	-	-	-	-	16
Total assets	-	-	-	-	-	-	5,874
Liabilities in operating capital	1,002	217	59	1,278	289	-229	1,338
Other liabilities	-	-	-	-	-	-	2,192
Deferred tax liabilities	-	-	-	-	-	-	16
Total liabilities	-	-	-	-	-	-	3,546
Operating capital	2,680	1,279	151	4,111	27	-6	4,133
Net deferred tax asset	-	-	-	-	-	-	0
Capital employed	-	-	-	-	-	-	4,133

[1] Other operations' figures for 2015 include the divested SKS operations.

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Geographical information

€ million	Finland	Germany	Sweden	The UK	Other Europe	North America	Asia and Oceania	Other countries	Inter-area	Group
2016										
Sales by destination	204	1,371	162	482	1,610	1,388	382	89	-	5,690
Sales by origin	2,743	1,268	1,166	493	404	1,410	56	51	-1,901	5,690
Non-current assets	1,555	345	276	59	115	1,009	17	3	-	3,379
2015										
Sales by destination	217	1,437	148	572	1,753	1,337	795	125	-	6,384
Sales by origin	3,088	1,367	1,326	515	460	1,343	407	60	-2,182	6,384
Non-current assets	1,604	324	311	71	120	1,047	22	3	-	3,503

Sales by destination is presented for external sales.
Sales by origin and non-current assets are presented by the locations of the Group companies.
Non-current assets exclude investments in associated companies and joint ventures, financial instruments, deferred tax assets and defined benefit plan assets.

4. Acquisitions and divestments

Acquisitions

Year 2016

In September, Outokumpu acquired Hernandez Edelstahl GmbH, a stainless steel distributor in Germany, to further optimize Outokumpu's customer service in Europe. Prior to the acquisition, Outokumpu held 33.3% of the company's shares and it was accounted for as an associated company in the Group's consolidated financial statements. Assets acquired and liabilities assumed in the acquisition included non-current assets of EUR 15 million, current assets of EUR 21 million and current liabilities of EUR 45 million. The consideration paid net of cash and cash equivalents acquired was EUR 9 million. The goodwill of EUR 19 million arising from the acquisition was immediately impaired.
The impact of the goodwill impairment loss and other acquisition related expenditure on the Group's profit and loss was offset by the reversal of EUR 22 million of Outokumpu's credit loss allowances for Hernandez at the time of the acquisition.

Year 2015

Outokumpu made no acquisitions during 2015.

Divestments

Year 2016

In 2016, Outokumpu agreed on the final terms and conditions of the Shanghai Krupp Stainless Co., Ltd. (SKS) transaction recognized in 2015. The final transaction price for Outokumpu's 5% share rose to EUR 92 million, taking into account all adjustments. As a result, Outokumpu recognized additional gain of EUR 24 million net of withholding taxes on the divestment in 2016, EUR 28 million of which is recognized in other operating income and EUR -5 million in income taxes in the consolidated statement of income. Consideration receivable amounted to EUR 35 million on December 31, 2016.

In April 2016, Outokumpu divested its subsidiary Outokumpu Stainless International (Guangzhou) Ltd., a service center in China. The gain on the transaction recognized in other operating income was EUR 6 million. The effect of the divestment on the Group's financial position was immaterial.

Year 2015

In December 2015 Outokumpu divested its shares in Shanghai Krupp Stainless Co., Ltd. (SKS) in China. The gain on the transaction net of withholding taxes was EUR 389 million, including EUR 8 million transaction costs and EUR 5 million cumulative foreign exchange gains reclassified from equity to profit or loss. The gain is presented in other operating income (EUR 409 million) and income taxes (EUR -20 million) in the consolidated statement of income.

Effect of the SKS disposal on the financial position of the Group

€ million	2015
Non-current assets	156
Current assets	52
Non-controlling interest	-32
Non-current liabilities	-18
Current liabilities	-137
	21
Consideration received in cash	358
Withholding taxes	-20
Cash and cash equivalents of the company disposed of	-15
Net cash inflow	323
Receivable	75

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In December 2015 Outokumpu divested its share in joint venture Fischer Mexicana. The divestment was carried out by selling the shares in the subsidiary Outokumpu Participations Mexico S.A. de C.V. through which the share in Fischer Mexicana was owned. The consideration received in cash was EUR 57 million. The gain on the sale net of taxes was EUR 43 million, including EUR 1 million transaction costs and EUR 12 million of cumulative foreign exchange gains reclassified from equity to profit or loss. The gain is presented in share of results in associated companies and joint ventures (EUR 49 million) and income taxes (EUR -6 million) in the consolidated statement of income. In the consolidated statement of financial position the divestment mainly affected the item investments in associated companies and joint ventures, which decreased by EUR 18 million. Cash and cash equivalents of the divested subsidiary were EUR 0 million.

5. Assets held for sale

Year 2016

In 2016, Outokumpu committed to divesting the subsidiary Outokumpu Stainless Plate, LLC within the Americas segment. Accordingly, the subsidiary is presented as a disposal group held for sale in Outokumpu's 2016 consolidated financial statements. The main items presented under assets held for sale comprise PPE of EUR 35 million, inventories of EUR 14 million and deferred tax assets of EUR 8 million. The main item presented under liabilities associated with assets held for sale comprise defined benefit obligation of EUR 38 million. The divestment of the subsidiary took place in January 2017.

6. Income and expenses

Cost of sales

The EUR 400 million baseline for the EUR 100 million reduction target in sales, general and administrative costs includes EUR 58 million of costs that were reported as cost of sales in 2015. The corresponding costs for 2016 were reported as selling and marketing as well as administrative costs.

Depreciation and amortization by function

€ million	**2016**	2015
Cost of sales	**-214**	-288
Selling and marketing expenses	**-1**	-1
Administrative expenses	**-11**	-12
Research and development expenses	**-0**	-1
	-226	-302

Other operating income

€ million	**2016**	2015
Exchange gains and losses from foreign exchange derivatives	**-**	9
Market price gains and losses from commodity derivatives	**-**	22
Market price gains and losses from derivative financial instruments	**-**	31
Gains from disposal of subsidiaries	**34**	409
Gains on sale of intangible assets and property, plant and equipment	**4**	20
Insurance compensation	**37**	1
Other income items	**13**	11
	88	472

Other operating expenses

€ million	**2016**	2015
Exchange gains and losses from foreign exchange derivatives	**-13**	-
Market price gains and losses from commodity derivatives	**-10**	-
Market price gains and losses from derivative financial instruments	**-22**	-
Impairments	**-26**	-1
Losses on sale of intangible assets and property, plant and equipment	**-2**	-1
Other expense items	**4**	-11
	-46	-13

Adjustments to EBIT

€ million	**2016**	2015
Redundancy costs	**-30**	-25
Gain on the SKS divestment	**28**	409
Changes to the UK pension scheme	**26**	-
Net insurance compensation and costs related to technical issues in Calvert	**24**	-17
Restructuring costs, other than redundancy	**-8**	-
Gain on the Guangzhou divestment	**6**	-
Impairments related to EMEA restructuring	**-**	-6
Net of raw material-related inventory and metal derivative gain/losses	**11**	-31
	58	330

In 2016, Outokumpu announced global streamlining measures related to sales, general and administrative functions and proceeded with other restructuring measures in accordance with the EMEA restructuring plan. Related to these measures redundancy costs of EUR 30 million were recognized. In 2015, EUR 25 million of redundancy costs and EUR 6 million of impairments were recognized relating to the EMEA restructuring plan mainly in Germany and Sweden. In addition EUR 8 million restructuring costs were recognized in 2016 relating to earlier site closures.

In 2016, EUR 28 million additional gain was recognized relating to the divestment of Shanghai Krupp Stainless Co., Ltd. in China (SKS) in December 2015. Outokumpu also divested its Guangzhou service center in 2016 from which EUR 6 million gain was recognized. See note 4.

In October 2016, Outokumpu closed its defined benefit pension scheme in the UK. As a result, the net pension obligation decreased due to a curtailment of EUR 26 million. See note 25.

In 2016, EUR 24 million adjustment was recognized relating to earlier insurance compensation in Calvert mill in the US due to machinery breakdown incident in 2014. In 2015 costs of EUR 17 million were recognized due to interruption and transfer of production to Group's other mills as well as repair and maintenance costs.

Net effect of raw material-related inventory and metal derivative gains/losses was EUR 11 million in 2016 (2015: EUR -31 million).

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Auditor fees

KPMG

€ million	2016	2015
Audit	**-1.9**	-2.0
Tax advisory and other services	**-0.1**	-0.2
	-1.9	-2.1

7. Employee benefit expenses

€ million	2016	2015
Wages and salaries	**-562**	-585
Termination benefits	**-28**	-21
Social security costs	**-68**	-72
Post-employment and other long-term employee benefits		
Defined benefit plans [1]	**17**	-12
Defined contribution plans	**-49**	-55
Other long-term employee benefits	**-2**	-2
Expenses from share-based payments	**-9**	-1
Other personnel expenses	**-14**	-15
	-713	-762

[1] Includes curtailment of EUR 26 million due to the closure of the defined benefit pension scheme in the UK. See note 25.

Profit-sharing bonuses based on the Finnish Personnel Funds Act were not recognized in 2016 nor 2015.

More information on employee benefits for key management can be found in note 31 and in Corporate Governance in chapter Remuneration.

8. Financial income and expenses

€ million	2016	2015
Interest income	**4**	4
Gains on the sale of available-for-sale financial assets	**5**	0
Other financial income items	**0**	2
Other financial income	**6**	2
Interest expenses		
Debt at amortized cost	**-71**	-92
Factoring expenses	**-8**	-6
Finance lease arrangements	**-15**	-14
Derivatives	**-4**	-9
Interest expense on defined benefit obligations and other long-term employee benefits	**-8**	-9
Interest expenses	**-105**	-130
Capitalized interests	**3**	2
Fees related to committed credit facilities	**-18**	-21
Other fees	**-4**	-9
Other financial expenses	**-18**	-29
Exchange gains and losses		
Derivatives	**-13**	-92
Cash, loans and receivables	**6**	86
Other market price gains and losses		
Derivatives	**1**	6
Other	**-1**	3
Market price gains and losses	**-6**	3
Total financial income and expenses	**-121**	-149

Exchange gains and losses in the consolidated statement of income

€ million	2016	2015
In sales	**10**	13
In purchases [1]	**-15**	-35
In other income and expenses [1]	**-12**	8
In financial income and expenses [1]	**-7**	-6
	-23	-21

[1] Includes exchange gains and losses on elimination of intra-group transactions.

Exchange gains and losses include EUR 24 million net exchange loss on derivative financial instruments (2015: EUR 84 million net exchange loss) of which EUR 12 million loss on derivatives has been recognized in other operating expenses and EUR 13 million loss in financial items.

9. Income taxes

Income taxes in the consolidated statement of income

€ million	2016	2015
Current taxes	**-12**	-35
Deferred taxes	**168**	-6
	156	-41

The applicable Finnish corporate tax rate for the financial years 2016 and 2015 was 20.0%. The applicable tax rates for companies outside Finland range from 0.0% to 38.4% (2015: 0.0% to 38.8%).

Aggregate deferred taxes recognized in equity through other comprehensive income

€ million	2016	2015
Fair value reserves	**-1**	-2
Net investment hedging	**-4**	-4
Remeasurements of the net defined benefit liability	**23**	2
	18	-4

As of December 31, 2016 tax loss carry forwards amount to EUR 3,790 million (2015: EUR 3,573 million), in particular EUR 896 million (2015: EUR 906 million) in Finland, EUR 391 million (2015: EUR 421 million) in Sweden, EUR 1,646 million (2015: EUR 1,404 million) in the US and EUR 521 million (2015: EUR 485 million) in Germany. Deferred tax assets are recognized only to the extent that the realization of such tax benefits is probable. In determining the related valuation allowance, all positive and negative factors, including prospective results, are taken into consideration in estimating whether sufficient taxable income will be generated to realize deferred tax assets. These estimates can change depending on the future course of events. As of December 31, 2016 tax loss carry forwards of the Outokumpu Group for which no deferred tax asset is recognized amount to EUR 2,546 million (2015: EUR 3,190 million). In 2016, due to the probable future tax benefits in Finland and Sweden deferred tax assets of EUR 189 million on existing tax loss carry forwards were recognized, which were not recognized in

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previous years. Earnings before taxes turning positive in these countries impacted the recognition decision. No deferred tax liabilities were recorded on undistributed profits on foreign subsidiaries, as such profits are not to be distributed in the foreseeable future.

Tax losses carried forward

€ million	**2016**	2015
Expire in less than 5 years	**176**	188
Expire between 5 and 9 years	**692**	616
Expire later than 9 years	**1,641**	1,489
Never expire	**1,281**	1,280
	3,790	3,573

Deferred income taxes in the statement of financial position

€ million	**2016**	2015
Deferred tax assets	**204**	16
Deferred tax liabilities	**-22**	-16
Net deferred tax asset	**181**	0

Significant components of the deferred tax assets and liabilities are as follows:

	2016			2015		
€ million	Deferred tax assets	Deferred tax liabilities	Net	Deferred tax assets	Deferred tax liabilities	Net
Intangible assets	8	-3	6	11	-2	8
Property, plant and equipment	24	-209	-186	32	-173	-142
Other financial assets	33	-2	32	31	-1	30
Inventories	14	-8	5	17	-8	9
Derivative financial assets	5	-9	-5	5	-9	-4
Trade and other receivables	2	-3	-1	4	-2	2
Non-current and current debt	70	-0	70	58	-0	57
Defined benefit and other long-term employee benefit obligations	50	-23	28	69	-22	47
Provisions	14	-19	-5	15	-18	-4
Derivative financial liabilities	7	-1	6	9	-0	8
Trade and other payables	19	-2	17	20	-3	17
Tax loss carry forwards	1,132	-	1,132	1,050	-	1,050
	1,379	**-280**	**1,099**	1,320	-240	1,080
Valuation allowance	-918	-	-918	-1,080	-	-1,080
Offset	-257	257	-	-224	224	-
	204	**-22**	**181**	16	-16	0

Deferred taxes have been reported as a net balance of those Group companies that file a consolidated tax return, or that may otherwise be consolidated for current tax purposes.

Movement in deferred tax assets and liabilities during the financial year

€ million	Net deferred taxes Jan 1, 2016	Translation differences	Recognized in profit or loss	Recognized in other comprehensive income	Reclassification to assets held for sale	**Net deferred taxes Dec 31, 2016**
Intangible assets	8	0	-3	-	-	**6**
Property, plant and equipment	-142	-6	-46	-	8	**-186**
Other financial assets	30	-0	1	0	-	**32**
Inventories	9	0	-4	-	-0	**5**
Derivative financial assets	-4	0	-2	1	-	**-5**
Trade and other receivables	2	0	-3	-	-0	**-1**
Non-current and current debt	57	1	11	-	0	**70**
Defined benefit and other long-term employee benefit obligations	47	1	-24	20	-16	**28**
Provisions	-4	-0	-1	-	-	**-5**
Derivative financial liabilities	8	-0	-2	-	-	**6**
Trade and other payables	17	0	0	-	-0	**17**
Tax losses carried forward	1,050	12	70	-	0	**1,132**
	1,080	**8**	**-2**	**21**	**-8**	**1,099**
Valuation allowance	-1,080	-9	171	-	-	**-918**
	0	**-1**	**168**	**21**	**-8**	**181**

€ million	Net deferred taxes Jan 1, 2015	Translation differences	Recognized in profit or loss	Recognized in other comprehensive income	Net deferred taxes Dec 31, 2015
Intangible assets	2	0	6	-	8
Property, plant and equipment	-73	3	-72	-	-142
Other financial assets	-3	-0	33	0	30
Inventories	6	1	3	-	9
Derivative financial assets	-6	-0	3	-1	-4
Trade and other receivables	11	0	-9	-	2
Non-current and current debt	53	0	4	-	57
Defined benefit and other long-term employee benefit obligations	48	2	4	-7	47
Provisions	17	0	-21	-	-4
Derivative financial liabilities	11	0	-3	-	8
Trade and other payables	44	3	-31	-	17
Tax losses carried forward	853	48	151	-	1,050
	964	58	68	-7	1,080
Valuation allowance	-951	-57	-74	-	-1,080
	13	0	-6	-7	0

In 2016 the income tax benefit of EUR 156 million presented in the financial statements is EUR 154 million higher than the expected income tax benefit of EUR 3 million, which would result if the Finnish corporate tax rate of 20.0% was applied to the Group's result before taxes. For financial year 2015 the reported income tax expense of EUR 41 million was EUR 16 million higher than the expected income tax expense of EUR 25 million calculated with the Finnish corporate tax rate of 20.0%. The following table reconciles the expected income tax benefit to the income tax benefit or expense presented in the consolidated statement of income:

€ million	**2016**	2015
Hypothetical income taxes at Finnish tax rate on consolidated result before tax	**3**	-25
Difference between Finnish and foreign tax rates	**10**	18
Tax effect of non-deductible expenses and tax exempt income [1]	**-3**	88
Tax effect of losses for which no deferred tax asset is recognized [2]	**152**	-116
Taxes for prior years	**2**	25
Other items [1]	**-8**	-29
Income taxes in the consolidated statement of income	**156**	-41

[1] In 2016 and 2015 the gain on the sale of shares in subsidiaries is fully or partly not taxable in the jurisdictions of the sellers, which resulted in a reconciliation effect of EUR 119 million in 2015. However, the gains are subject to withholding tax expense in the countries, in which the sales took place. Withholding taxes of EUR -5 million (2015: EUR -26 million) are included in Other items. See note 4.

[2] Includes EUR 189 million change due to deferred tax assets which were not recognized in previous years.

Tax audit in Outokumpu Oyj was concluded in November 2014 and did not result in proposed changes to the company's taxation. The Tax Recipients' Legal Service Unit appealed against the outcome of the tax audit. In January 2017 the case has been dropped as the Tax Recipients' Legal Service Unit has cancelled its claim for taxation adjustment.

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10. Earnings per share

	2016	2015
Result attributable to the equity holders of the Company, € million	**144**	96
Weighted average number of shares, in thousands	**414,411**	415,474
Diluted average number of shares, in thousands [1]	**414,411**	415,474
Earnings per share for result attributable to the equity holders of the Company (basic and diluted), € [1]	**0.35**	0.23

[1] 33,662 thousand potentially convertible shares were excluded from the diluted average number of shares because their effect would have been anti-dilutive. In 2015, the impact of these shares on the average number would have been 29,235 thousand shares.

11. Intangible assets

€ million	Goodwill	Other intangible assets [1]	Total
Historical cost on Jan 1, 2016	475	229	704
Translation differences	-1	-2	-3
Additions	-	13	13
Acquired subsidiaries	19	0	19
Reclassifications [2]	-	1	1
Historical cost on Dec 31, 2016	**493**	**241**	**734**
Accumulated amortization and impairment on Jan 1, 2016	-8	-198	-206
Translation differences	1	2	3
Amortization	-	-8	-8
Impairments	-19	-	-19
Accumulated amortization and impairment on Dec 31, 2016	**-26**	**-204**	**-229**
Carrying value on Dec 31, 2016	**467**	**37**	**504**
Carrying value on Jan 1, 2016	467	30	498
Historical cost on Jan 1, 2015	474	299	774
Translation differences	1	9	10
Additions	-	4	4
Disposals	-	-6	-6
Disposed subsidiaries	-	-80	-80
Reclassifications [2]	-	1	1
Historical cost on Dec 31, 2015	475	229	704
Accumulated amortization and impairment on Jan 1, 2015	-7	-199	-206
Translation differences	-1	-3	-3
Disposals	-	6	6
Disposed subsidiaries	-	7	7
Amortization	-	-10	-10
Accumulated amortization and impairment on Dec 31, 2015	-8	-198	-206
Carrying value on Dec 31, 2015	467	30	498
Carrying value on Jan 1, 2015	467	100	567

[1] Other intangible assets include land-use rights, emission allowances, capitalized development costs, patents, licenses and software.

[2] Construction work in progress related to intangible assets is presented in the corresponding item of property, plant and equipment. When the asset is taken into use, it is reclassified to the appropriate asset account.

Intangible assets mainly comprise acquired assets.

Impairment testing of goodwill

Goodwill acquired through business combinations has been allocated for impairment testing as follows:

€ million	2016	2015
Europe [1]	**458**	458
Long Products	**9**	9
	467	467

[1] Goodwill allocated in 2015 to APAC and Quarto Plate was reallocated to Europe in 2016 following the new organization structure.

Goodwill is tested on operating segment level. Operating segments are the Group's cash-generating units. Goodwill has been allocated to the operating segments mentioned above. During the year 2016, goodwill was reviewed for impairment on a quarterly basis.

The recoverable amounts of the cash-generating units are based on value-in-use calculations which are prepared using discounted cash flow projections. Key assumptions used in the value-in-use calculations are discount rate, terminal value growth rate, average global growth in end-use consumption of stainless steel and base price development. The values assigned to the key assumptions are based on the plans approved by the management for 2017–2019 after which cash flows are projected for a period of 3 years, including terminal value based on conservative assumptions.

Discount rate is the weighted average pre-tax cost of capital (WACC), as defined for Outokumpu. The components of WACC are risk-free yield rate, Outokumpu credit margin, market risk premium, equity beta, and industry capital structure. Goodwill of Europe presents 98% of the total goodwill of the Group and the pre-tax WACC used for Europe is 9.4% (2015: 9.6%).

In the terminal value, growth rate assumption of 0.5% (2015: 0.5%) is used which management believes to be prudent based on current economic circumstances, although historical growth rates and forecasts of independent market analysts indicate higher long-term growth rates.

Growth rate assumption used for stainless steel deliveries is conservative, and generally lower than independent analysts' view on long-term market development. Base price forecast is based on conservative assumptions, which are in line with expectations of general inflation. In addition, committed investments and expected cost savings have been included in the cash flow projections.

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The estimated recoverable amount of Europe exceeds its carrying amount by approximately EUR 2,404 million. Increase of 7.0 percentage point in after-tax WACC would cause the recoverable amount to equal the carrying amount. Also, 18% decrease in annual delivery volumes or 12% decrease in base prices would cause the recoverable amount to equal the carrying amount. Terminal growth rate of 0% would not lead to impairment.

As a result of the performed impairment test to Group's cash-generating units, no impairment losses were recognized in 2016 or 2015. However, an impairment loss of EUR 19 million was recognized immediately for goodwill that arose from the acquisition of Hernandez Edelstahl GmbH in 2016. See note 4.

Emission allowances

Outokumpu had seven active sites operating under EU's Emissions Trading Scheme (ETS) in 2016. These include the production plants in Tornio, Finland; Avesta, Degerfors and Nyby in Sweden; Sheffield in the UK; as well as Krefeld and Dillenburg in Germany.

The pre-verified carbon dioxide emissions under ETS were approximately 0.95 million tonnes in 2016 (2015: 1.02 million tonnes). For the trading period 2013–2020, all relevant Outokumpu sites have applied free emission allowances according to efficiency-based benchmarks and historical activity. Preliminary allocation for years 2017 and 2018 is estimated to be some 1 million tonnes annually. Considering the Group's operations and the Group's current emission allowance position, the amount of allowances is foreseen to be sufficient for compliance. Position is frequently monitored and optimized according to the definitions set in corporate risk policies. See note 19 for information on the management of the emission allowance price risk.

12. Property, plant and equipment

€ million	Land	Mine properties	Buildings	Machinery and equipment	Other tangible assets	Advances paid and construction work in progress [1]	Total
Historical cost on Jan 1, 2016	136	66	1,269	4,635	131	170	6,407
Translation differences	-0	-	-6	-40	-1	0	-46
Additions	4	0	18	64	1	64	151
Acquired subsidiaries	-	-	-	3	-	-	3
Disposals	-0	-	-24	-31	-0	-15	-71
Disposed subsidiaries	-	-	-1	-2	-	-	-3
Reclassifications	-	0	14	74	-1	-93	-6
Reclassification to assets held for sale	-0	-	-18	-62	-3	-0	-84
Historical cost on Dec 31, 2016	**139**	**66**	**1,251**	**4,641**	**129**	**125**	**6,351**
Accumulated depreciation and impairment on Jan 1, 2016	-14	-15	-575	-2,705	-71	-21	-3,402
Translation differences	0	-	8	45	0	0	54
Disposals	-	-	2	24	-0	16	42
Disposed subsidiaries	-	-	-0	1	-	-	1
Reclassifications	-	-	-0	-2	6	1	5
Depreciation	-0	-6	-45	-157	-9	-0	-217
Impairments	-	-	-1	-7	-	-	-8
Reclassification to assets held for sale	0	0	8	40	1	-	49
Accumulated depreciation and impairment on Dec 31, 2016	**-14**	**-21**	**-603**	**-2,763**	**-73**	**-4**	**-3,477**
Carrying value on Dec 31, 2016	**126**	**45**	**648**	**1,878**	**56**	**122**	**2,874**
Carrying value on Jan 1, 2016	122	51	693	1,930	60	149	3,005
Historical cost on Jan 1, 2015	145	46	1,275	4,631	132	128	6,357
Translation differences	3	-	28	145	1	2	179
Additions	0	12	1	29	1	86	129
Disposals	-12	-	-17	-109	-5	-1	-145
Disposed subsidiaries	-	-	-19	-92	-	-0	-112
Reclassifications	-	8	0	32	3	-45	-3
Historical cost on Dec 31, 2015	136	66	1,269	4,635	131	170	6,407
Accumulated depreciation and impairment on Jan 1, 2015	-9	-12	-543	-2,565	-70	-20	-3,219
Translation differences	-0	-	-5	-41	-0	-0	-47
Disposals	3	-	17	108	5	-	132
Disposed subsidiaries	-	-	3	23	-	-	25
Reclassifications	-	-	-	2	-1	-0	0
Depreciation	-0	-3	-47	-237	-5	-0	-292
Impairments	-6	-	-	5	-	-	-1
Accumulated depreciation and impairment on Dec 31, 2015	-14	-15	-575	-2,705	-71	-21	-3,402
Carrying value on Dec 31, 2015	122	51	693	1,930	60	149	3,005
Carrying value on Jan 1, 2015	136	34	732	2,065	63	108	3,138

[1] Advances paid and construction work in progress includes also intangible assets. When the asset is ready to be taken into use, it is reclassified to appropriate asset account either in property, plant and equipment or in intangible assets.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Borrowing costs amounting to EUR 3 million were capitalized on investment projects during the financial year (2015: EUR 2 million). Total interest capitalized on December 31, 2016 was EUR 29 million (Dec 31, 2015: EUR 33 million). Outokumpu determines separate capitalization rates for each quarter. The average rate used during 2016 was 4.3%.

Impairments

Property, plant and equipment of business areas Europe and Americas represent 62% and 34%, respectively, of the total property, plant and equipment. Impairment testing in general as well as Europe's results are described in note 11.

Regarding Americas, a pre-tax WACC of 9.2% (2015: 9.2%) and a terminal growth rate assumption of 1.0% (2015: 1.0%) are used. The estimated recoverable amount of Americas exceeds its carrying amount by approximately EUR 268 million. Increase of 1.5 percentage point in after-tax WACC would cause the recoverable amount to equal the carrying amount. Also, 8% decrease in annual delivery volumes or 2% decrease in base prices would cause the recoverable amount to equal the carrying amount. Terminal growth rate of 0% would not lead to impairment.

In 2016 or 2015 no impairment losses were recognized as a result of the impairment test performed to Group's cash-generating units. However, in 2016, impairment losses totaling EUR 8 million were recognized in Europe business area due to restructuring and asset obsolence (2015: losses of EUR 6 million due to restructuring in Germany).

Assets leased by finance lease agreements

€ million	Land	Buildings	Machinery and equipment	Total
Historical cost	28	1	234	263
Accumulated depreciation	-1	-0	-98	-99
Carrying value on Dec 31, 2016	**28**	**1**	**136**	**164**
Historical cost	29	33	236	298
Accumulated depreciation	-1	-5	-87	-93
Carrying value on Dec 31, 2015	28	28	149	205

13. Investments in associated companies and joint ventures

Outokumpu has the following associated companies and joint ventures which are all equity accounted. Based on the amounts reported in the Group's consolidated financial statements, it is concluded that the investments are immaterial.

Associated companies

	Domicile	Ownership, %
OSTP Holding Oy	Finland	49
Rapid Power Oy	Finland	33
Manga LNG Oy	Finland	45

Summarized financial information on associated companies

€ million	**2016**	2015
Carrying value of investments in associated companies	**51**	48
Group's share of total comprehensive income	**3**	-4

Joint ventures

	Domicile	Ownership, %
Fagersta Stainless AB	Sweden	50

Summarized financial information on joint ventures

€ million	**2016**	2015
Carrying value of investments in joint ventures	**16**	14
Group's share of total comprehensive income,[1)]	**2**	3
Gain from disposal of Fisher Mexicana S.A. DE C.V.	**-**	49

[1)] In 2015, Group's share of total comprehensive income in 2015 includes the divested joint venture Fisher Mexicana S.A. DE C.V. until December 2015. See note 4.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

14. Carrying values and fair values of financial assets and liabilities by measurement category

2016		Measured at					
€ million	Category in accordance with IAS 39	Amortized cost	Cost	Fair value recognized in other comprehensive income	Fair value recognized through profit or loss	Carrying amount on Dec 31, 2016	Fair value on Dec 31, 2016
Non-current financial assets							
Available-for-sale financial assets	a)	-	49	4	-	53	53
Investments at fair value through profit or loss	c)	-	-	-	1	1	1
Trade and other receivables	b)	2	-	-	-	2	2
Current financial assets							
Investments at fair value through profit or loss	c)	-	-	-	16	16	16
Trade and other receivables	b)	611	-	-	-	611	611
Cash and cash equivalents	b), c)	204	-	-	-	204	204
Derivatives held for trading	d)	-	-	-	34	34	34
		817	49	4	51	920	920
Non-current financial liabilities							
Non-current debt	f)	987	-	-	-	987	1,127
Derivatives held for trading	d)	-	-	-	4	4	4
Current financial liabilities							
Current debt	f)	458	-	-	-	458	458
Trade and other payables	f)	1,324	-	-	-	1,324	1,324
Derivatives held for trading	d)	-	-	-	63	63	63
		2,769	-	-	67	2,836	2,976

Categories in accordance with IAS 39:

a) Available-for-sale financial assets

b) Loans and receivables

c) Financial assets at fair value through profit or loss

d) Derivatives held for trading

e) Hedge accounted derivatives

f) Other financial liabilities

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

2015

€ million	Category in accordance with IAS 39	Measured at: Amortized cost	Measured at: Cost	Measured at: Fair value recognized in other comprehensive income	Measured at: Fair value recognized through profit or loss	Carrying amount on Dec 31, 2015	Fair value on Dec 31, 2015
Non-current financial assets							
Available-for-sale financial assets	a)	-	36	4	-	40	40
Investments at fair value throughprofit or loss	c)	-	-	-	1	1	1
Trade and other receivables	b)	40	-	-	-	40	40
Current financial assets							
Investments at fair value through profit or loss	c)	-	-	-	16	16	16
Trade and other receivables	b)	624	-	-	-	624	624
Cash and cash equivalents	b), c)	186	-	-	-	186	186
Hedge accounted derivatives	e)	-	-	5	-	5	5
Derivatives held for trading	d)	-	-	-	32	32	32
		849	36	9	49	944	944
Non-current financial liabilities							
Non-current debt	f)	1,249	-	-	-	1,249	1,245
Derivatives held for trading	d)	-	-	-	9	9	9
Current financial liabilities							
Current debt	f)	547	-	-	-	547	547
Trade and other payables	f)	957	-	-	-	957	957
Hedge accounted derivatives	e)	-	-	1	-	1	1
Derivatives held for trading	d)	-	-	-	49	49	49
		2,752	-	1	58	2,811	2,807

Categories in accordance with IAS 39:

a) Available-for-sale financial assets

b) Loans and receivables

c) Financial assets at fair value through profit or loss

d) Derivatives held for trading

e) Hedge accounted derivatives

f) Other financial liabilities

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

15. Fair value hierarchy of financial assets and liabilities

2016		Fair value			
€ million	Carrying amount	Level 1	Level 2	Level 3	**Total**
Financial assets measured at fair value					
Available-for-sale financial assets	4	0	-	4	**4**
Investments at fair value through profit or loss	17	16	-	1	**17**
Derivatives	34	-	34	-	**34**
	55	16	34	5	**55**
Financial assets not measured at fair value					
Non-current trade and other receivables	2	-	2	-	**2**
Financial liabilities measured at fair value					
Derivatives	67	-	67	-	**67**
Financial liabilities not measured at fair value					
Non-current debt	987	859	267	-	**1,127**

2015		Fair value			
€ million	Carrying amount	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value					
Available-for-sale financial assets	5	0	3	1	5
Investments at fair value through profit or loss	16	16	-	1	16
Hedge accounted derivatives	5	-	5	-	5
Derivatives held for trading	33	-	33	-	33
	59	16	41	2	59
Financial assets not measured at fair value					
Non-current trade and other receivables	40	-	40	-	40
Financial liabilities measured at fair value					
Hedge accounted derivatives	1	-	1	-	1
Derivatives held for trading	58	-	58	-	58
	59	-	59	-	59
Financial liabilities not measured at fair value					
Non-current debt	1,249	465	780	-	1,245

The fair value of non-current debt is determined by using discounted cash flow method and taking into consideration the market credit spread applied for Outokumpu. The fair value of non-current trade and other receivables is determined by discounted cash flow method taking into account the credit risk of the counterparty. The carrying amounts of current financial assets and current financial liabilities not measured at fair value are reasonable estimates of their fair value.

16. Available-for-sale financial assets

€ million	**2016**	2015
Carrying value on Jan 1	**40**	27
Additions	**14**	15
Fair value changes	**5**	-1
Gains and losses from disposals reclassified to profit or loss	**-5**	-
Carrying value on Dec 31	**53**	40

Fair value reserve in equity

€ million	**2016**	2015
Fair value	**53**	40
Cost	**49**	36
Fair value reserve before tax	**4**	4
Deferred tax liability	**-1**	-1
Fair value reserve	**3**	3

Materially all equity securities are unlisted. Investments include EUR 48 million holdings in Voimaosakeyhtiö SF providing ownership to Fennovoima Oy and holdings in other energy companies in which Outokumpu does not have control, joint control or significant influence. During 2016 Outokumpu invested further EUR 14 million in Voimaosakeyhtiö SF. As the Fennovoima project is at an early stage, the fair value cannot be reliably measured and therefore investment has been valued at cost. Unlisted equity securities at fair value include holdings in energy producing companies and other investments not listed in any stock exchange.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

17. Investments at fair value through profit or loss

€ million	2016	2015
Carrying value on Jan 1	**16**	6
Additions	**1**	11
Other changes	**-1**	-1
Carrying value on Dec 31	**17**	16

The carrying value comprises mainly of investment by Group's captive insurance company Visenta Försäkrings AB in state bonds, covered bonds, and funds.

18. Share-based payment plans

During the year 2016 Outokumpu's share based payment programs included Performance Share Plan 2012 (2014–2016, 2015–2017, and 2016–2018), Restricted Share Pool Program (2014–2016, 2015–2017 and 2016–2018) and Matching Share Plans. Share-based programs are part of the Group's incentive and commitment-building system for key employees. The objective of the programs is to retain, motivate and reward selected employees for good performance which supports Outokumpu's strategy.

The Performance Share Plan 2013–2015 ended and based on the achievement of the targets the participants received 65.1% of the target number of shares of the plan as reward. After deductions for applicable taxes, altogether 178,789 shares were delivered to 84 persons. Regarding the Restricted Share Pool Program, plan 2013–2015, after deductions for applicable taxes in total 7,426 shares were delivered to two participants based on the conditions of the plan. Outokumpu used its treasury shares for the reward payments.

In December 2015, the Board of Directors approved the commencement of the new plan (plan 2016–2018) of the Performance Share Plan 2012 as of the beginning of 2016. The number of gross shares (taxes included) allocated from the plan was 2,651,650 (payout at maximum performance level). At the end of the reporting period 120 persons participated in the plan. The plan's earnings criteria are Outokumpu's profitability and the efficiency with which its capital is employed compared to a peer group as well as Outokumpu's gearing 2018.

In December 2015, the Board also approved the commencement of the new plan (plan 2016–2018) of Restricted Share Pool Program 2012 as of the beginning of 2016. Restricted share grants are approved annually by the CEO on the basis of the authorization granted by the Board of Directors, with the exception of any allocations to Leadership Team members, which will be approved by the Board of Directors. The maximum number of gross shares (taxes included) that could be allocated from the plan is 330,000. At the end of the reporting period 19 persons participated in the plan.

In December 2015, the Board of Directors approved the commencement of Matching Share Plan for the CEO at the beginning of 2016, according to which the CEO was entitled to receive in total 1,157,156 gross shares including taxes on the condition that he personally invested EUR 1 million into Outokumpu shares by February 20, 2016. The matching shares will be delivered in four equal instalments at the end of 2016, 2017, 2018 and 2019, respectively. The CEO is required to keep at least all the shares he acquired and the first vesting portion, i.e. 25% of the net amount of the received matching shares throughout his service with Outokumpu. In December 2016, the Board of Directors approved the delivery of the first reward share tranche to the CEO from the Matching share Plan. After deduction for applicable taxes, the net number of shares delivered to the CEO was 185,077.

In April 2016, the Board of Directors approved the commencement of Matching Share Plan for management for the years 2016–2020. According to the plan, the participants invested 30–120% of their annual gross base salary into Outokumpu shares by December 31, 2016. Outokumpu will match each share acquired by the participant with two gross shares from which applicable taxes will be deducted and the remaining net number of shares will be delivered in four equal instalments at the end of 2017, 2018, 2019 and 2020, respectively. In order to receive the matching shares, the participants are required to keep all the shares they have acquired until the vesting of the each matching share tranche. The maximum number of gross matching shares is 2,184,702 including taxes and 32 persons participate in the plan.

In December 2016, the Board of Directors approved the commencement of plan 2017–2019 of the Performance Share Plan 2012 and the Restricted Share Pool 2012 as of the beginning of 2017.

The total estimated fair value of the share-based payment plans is EUR 31 million on December 31, 2016. This value is recognized as an expense in the statement of income during the vesting periods.

Detailed information of the share-based incentive programs can be found in Outokumpu's home page www.outokumpu.com.

Share-based payments included in employee benefit expenses

€ million	2016	2015
Equity-settled share-based payment transactions	**-3**	-1
Cash-settled share-based payment transactions	**-6**	-0
	-9	-1
Total carrying amount of liabilities for cash-settled arrangements on Dec 31	**6**	1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

The general terms and conditions of the share-based incentive programs

	Performance Share Plan 2012		
Grant date	May 31, 2014	Feb 11, 2015	Feb 10, 2016
Vesting period	Jan 1, 2014–Dec 31, 2016	Jan 1, 2015–Dec 31, 2017	Jan 1, 2016–Dec 31, 2018
Vesting conditions			
Non-market	EBIT improvement for the year 2014; EBIT excluding non-recurring items for the year 2015; underlying EBITDA for the year 2016; a cash flow measure for the years 2014, 2015 and 2016; and return on capital employed (ROCE) in 2016	EBIT excluding non-recurring items and a cash flow measure for the year 2015; and return on capital employed (ROCE) ranking among peers and debt-to-equity ratio (gearing) in 2017	Outokumpu's profitability and the efficiency with which its capital is employed compared to a peer group, and Outokumpu's gearing in 2018
Other relevant conditions	A salary-based limit for the maximum benefits	A salary-based limit for the maximum benefits	A salary-based limit for the maximum benefits
Exercised	In shares and cash	In shares and cash	In shares and cash

	Restricted Share Pool Program 2012		
Grant date	May 31, 2014	April 30, 2015	Dec 9, 2016
Vesting period	Jan 1, 2014–Dec 31, 2016	Jan 1, 2015–Dec 31, 2017	Jan 1, 2016–Dec 31, 2018
Vesting conditions	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits
Exercised	In shares and cash	In shares and cash	In shares and cash

	Matching Share Plan for the CEO	Matching Share Plan for the management
Grant date	Dec 17, 2015	April 27, 2016
Vesting period	Jan 1, 2016–Dec 31, 2019	Jan 1, 2017–Dec 31, 2020
Vesting conditions	Personal investment of EUR 1 million into Outokumpu shares; requirement to keep at least the personal investment and the first vesting portion, i.e. 25% of the net amount of the received matching shares throughout service with Outokumpu. If the CEO's service contract is terminated without any fault or negligence attributable to him, all the shares not yet delivered will vest at the expiry of the CEO agreement provided that the ownership requirement for the CEO is fulfilled	Personal investment of 30–120% of annual gross base salary into Outokumpu shares; requirement to keep the personal investment until the vesting of each matching share tranch; continuation of employment until the matching shares are delivered
Exercised	In shares and cash	In shares and cash

The fair value of share-based incentive programs are determined using relevant mathematical modeling.

Share values used in valuations

€	Share price at the end of the reporting period	Incentive share fair value at the grant date
Performance Share Plan		
Vesting period 2014–2016	8.51	6.46
Vesting period 2015–2017	8.51	4.82
Vesting period 2016–2018	8.51	2.11
Restricted Share Pool Program		
Vesting period 2014–2016	8.51	6.46
Vesting period 2015–2017	8.51	5.41
Vesting period 2016–2018	8.51	7.81
Matching Share Plan for the CEO	8.51	2.50
Matching Share Plan for management [1)]	8.51	5.35

[1)] Average fair value based on purchase dates

19. Financial risk management, capital management and insurances

The objectives of financial risk management are to reduce the impact of price fluctuations and other factors of uncertainty in financial markets on earnings, cash flows and capital structure, as well as to ensure adequate liquidity. The objective of capital management is to secure the ability to continue as a going concern and to optimize the cost of capital in order to enhance value to shareholders. The main objectives of insurance management are to provide mitigation against catastrophe risks and to reduce earnings variation caused by hazards.

The Board has approved the risk management policy, which defines responsibilities, process and other main principles of risk management. The Board oversees risk management on a regular basis and the Chief Financial Officer is responsible for implementation and development of financial risk management. In 2016 the Financial Risk Policy was reviewed and changes to it were approved by the CFO. Main changes to the policy were related to the new organization and to metal risk management.

Financial risks consist of market, country, credit, liquidity and refinancing risks. Subsidiary companies hedge their currency and metal price risk with Outokumpu Oyj, which does most of the Group's foreign exchange and metal derivative contracts with banks and other financial institutions. Treasury and Risk Management function ("Treasury") is responsible for managing foreign exchange, metal, interest rate, liquidity and refinancing risk as well as emission allowance price risk. Credit risk management is becoming more centralized and Treasury coordinates the management of credit risk. Energy & Gas function is responsible for managing electricity and fuel price risks.

Treasury sources substantial part of the Group's insurances. The most important insurance lines are property damage and business interruption, liability, marine cargo and credit. The Group's captive insurance company Visenta Försäkrings AB retains selected part of risk.

Exposure to financial risk is identified as part of the risk management process. This approach aims to secure that any emerging risk is identified early and that each significant risk is described, quantified, managed and communicated properly. In risk quantification, both likelihood of an adverse event and the impact of that event are assessed. For market risk, the adverse scenario is based on a predefined price change in a risk factor, e.g. in exchange rate or metal price. Furthermore, the impact analysis is based on measured underlying exposure, e.g. the amount of forecasted currency cash flow. The likelihood of the adverse scenario is based on market volatility of the underlying risk factor. Eventually, the impacts of key risks are quantified in terms of changes in net income, free cash flow, net debt and equity.

Market risk

Market risk is caused by changes in foreign exchange and interest rates, interest margins as well as metal, energy and security prices. These price changes may have a significant impact on Group's earnings, cash flow and capital structure. Outokumpu uses matching strategies and derivative contracts to partially mitigate the above mentioned impacts of market price changes. Hedge accounting is applied selectively and based on separate decisions. The derivatives, for which hedge accounting is not applied, have been made to reduce impacts of market price changes on earnings and/or cash flows related to business or financing activities. The use of non-hedge-accounted derivatives may cause timing differences between derivative gains/losses and the earnings impact of the underlying exposure.

Stainless steel business is highly cyclical, which often results in significant changes in the underlying exposures to different market risk factors. Consequently applying hedging policies in a consistent way may lead to big changes in the amounts of reported derivate contracts. Nominal amounts and fair values of derivatives are presented in note 20. Sensitivity of financial instruments to market prices is described in the following table.

Sensitivity of financial instruments to market risks

€ million	**2016** In profit or loss	**2016** In other comprehensive income	2015 In profit or loss	2015 In other comprehensive income
+/-10% change in EUR/USD exchange rate	+5/-4	-	-2/+3	-
+/-10% change in EUR/SEK exchange rate	-6/+8	-9/+11	-9/+11	-13/+15
+/-10% change in nickel price in USD	-2/+1	-	-1/+1	+0/-0
+/-10% change in propane price in USD	-	-	+1/-1	-
+/-1% parallel shift in interest rates	-4/+4	-	-5/+1	-

The sensitivity analyses apply to financial instruments only. Other assets, liabilities and off-balance sheet items such as net pension liabilities, sales and purchase orders, are not in the scope of these analyses. The calculations are net of tax. During the year the volatility for nickel price has been in the range of 29–37%. With +/- 30% change in dollar denominated price, the effect in profit or loss is about EUR -6/+4 million for nickel derivatives.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Foreign exchange rate risk

A major part of the Group's sales is in euros and US dollars. A significant part of expenses arise in euros, US dollars, Swedish kronas and British pounds. In Europe, Outokumpu's products are priced mainly in euros and therefore costs in Swedish krona and British pounds give rise to a significant foreign exchange risk impacting profitability and cash flows. Due to captive ferrochrome production and related revenues being linked to US dollar, the EUR/USD exchange rate risk for the Group is significant. Furthermore, stainless steel contribution margin is impacted by the value of US dollar.

Outokumpu hedges most of its fair value risk which relates to currency denominated accounts receivables, accounts payables, debt, cash, and loan receivables. Cash flow risk related to firm commitments is hedged to a large extent, whereas forecasted and probable cash flows can be hedged selectively and with separate decisions only. In 2016 Outokumpu hedged part of the H2-2016 forecasted cash flows related to its operations in The UK. The Group's fair value currency position is presented in a more detailed level in the table below.

Foreign exchange positions of EUR-based companies

	2016				2015			
€ million	SEK	USD	GBP	Other	SEK	USD	GBP	Other
Trade receivables and payables	1	-178	12	6	4	-99	18	5
Loans and bank accounts [1]	596	556	0	7	302	930	-8	9
Derivatives	-475	-409	-28	-10	-135	-798	-22	-12
Net position	**122**	**-30**	**-15**	**3**	170	34	-12	2

Foreign exchange positions of SEK-based companies

	2016				2015			
€ million	EUR	USD	GBP	Other	EUR	USD	GBP	Other
Trade receivables and payables	52	-13	-26	2	-2	5	-4	4
Loans and bank accounts [1]	20	13	2	1	17	6	1	0
Derivatives	-159	-30	14	-10	-144	-25	-8	-15
Net position	**-87**	**-31**	**-10**	**-7**	-129	-14	-11	10

[1] Includes cash and cash equivalents, loan receivables and debt

Outokumpu has net income and net investment translation risk mainly in US dollars, Swedish kronas and British pounds. Based on the policy this risk can be hedged selectively and with separate decision only. In 2016 there were no hedges related to net income or net investment exposures. The effective portion of gains (EUR 17 million, net of tax) on earlier financial years' net investment hedges is recognized in other comprehensive income.

Changes in currency rates cause translation differences in debt and have therefore impact on Group's capital structure. The largest debt translation risk relates to USD denominated internal loans. In 2016 USD 400 million equity was injected into Outokumpu Americas Inc. in order to reduce the amount of internal dollar denominated loans.

Interest rate risk

The Group's interest rate risk is monitored as cash flow risk i.e. impact of interest rate changes on net interest expenses, and fair value risk i.e. impact of interest rate changes on fair value of monetary assets and liabilities. In order to manage the balance between risk and cost in an optimal way, significant part of debt has effectively short-term interest rate as a reference rate. This approach typically helps to reduce average interest rate of debt while it may also provide some mitigation against a risk of adverse changes in business environment, which tends to result to decrease in short-term interest rates. Interest rate swaps are used to manage Group's interest rate risk.

US dollar, euro and Swedish krona have substantial contribution to the overall interest rate risk. Approximately 34% (2015: 59%) of the Group's debt has an interest period of less than one year and the average interest rate of non-current debt on December 31, 2016 was 7.2% (Dec 31, 2015: 5.4%). Interest rate position is presented on a more detailed level in the table below. Outokumpu is also exposed to variation of credit margins, mainly in regards of any new financing.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Currency distribution and re-pricing of outstanding net debt

€ million	Dec 31, 2016				
Currency	Net debt [1]	Derivatives [2]	Average rate, %	Duration, year	Rate sensitivity [3]
EUR	1,362	-1,057	5.6	9.0	-4.5
SEK	-17	582	-0.3	0.1	5.7
USD	-31	524	0.7	0.2	4.9
Others	-71	-17	0.8	0.0	-0.9
	1,242	**32**			**5.2**

€ million	Dec 31, 2015				
Currency	Net debt [1]	Derivatives [2]	Average rate, %	Duration, year	Rate sensitivity [3]
EUR	1,385	-1,107	5.5	11.5	-4.8
SEK	283	294	4.1	0.3	4.3
USD	21	894	21.2	0.3	6.0
Others	-44	-78	2.7	0.2	-0.9
	1,646	3			4.5

1) Includes cash and cash equivalents, loan receivables and debt

2) Net derivative liabilities include nominal value of interest rate and cross currency swaps and currency forwards earmarked to net debt. Currency forwards are not included in average rate calculation

3) The effect of one percentage point increase in interest rates to financial expenses over the following year

Changes in interest rates impact pension plan asset and liability values. The net liability of Group's pension plans is some EUR 300 million and therefore decrease in long-term interest rates would typically increase the net liability of the plans.

Metal and energy price risk

Outokumpu uses a substantial amount of raw materials and energy for which prices are determined in regulated markets, such as London Metal Exchange and Nasdaq Commodities. Timing differences between alloy metal purchases and pricing of stainless steel; changes in inventory levels; and the capability to pass on price changes in raw materials to end-product prices affect metal risk. In addition, the volume and amount of discounts related to stainless scrap purchases have major impact on metal price risk. Since there is no established financial market for chrome, this metal risk is not treated as financial risk.

Apart from chrome, changes in nickel price is the most important metal price risk for Outokumpu. A majority of stainless steel sales contracts include an alloy surcharge clause, with the aim of reducing the risk arising from the timing difference between alloy metal purchase and stainless steel delivery to customer. Outokumpu's nickel position consists of price fixed purchase orders, inventories of nickel-containing materials and price fixed sales orders. Based on financial risk policy applied in 2016 the identified nickel price risk, excluding risk related to base stock, must be hedged. Nickel in base stock is hedged partially and in 2016 the hedging ratio has been at around 20 percent. Nickel price hedging has been done with dollar denominated derivatives, which are included in currency position. This means that e.g. in Finland nickel hedging is effectively done against euro. Risk related to stainless steel scrap purchase discounts is not hedged. Outokumpu has not done any hedges on molybdenum and iron prices mainly due to lack of liquid financial markets.

Nickel derivatives and LME warrants have been used to manage impacts of price changes on earnings. Metal prices have a major impact on working capital and therefore cash flow from operations. This risk has not been hedged with derivatives, however strict working capital management helps to reduce cash flow risk.

Outokumpu's main sites in Europe are participating in the EU Emissions Trading Scheme (ETS). The amounts of realized and forecasted carbon dioxide emissions and granted emission allowances are monitored centrally. Emission allowance price risk is managed with the aim of securing the cost of compliance for the current trading period and reducing the cost of compliance. In certain situations the market price of power is partly based on price of carbon dioxide emissions. This indirect exposure to emission prices can be significant for Outokumpu due to energy intensive processes using power, propane, natural gas and other oil products, e.g. marine diesel. Outokumpu manages energy price risk centrally.The Group hedges both propane and natural gas price risk by locking future purchase prices mainly with supply contracts. Power price risk is reduced with fixed price supply contracts and ownerships in power utilities.

Security price risk

Outokumpu has investments in equity and fixed income securities. On December 31, 2016 the biggest investments were in Voimaosakeyhtiö SF (equity investment EUR 48 million) and OSTP Holding Oy (equity investment of EUR 23 million). The captive insurance company Visenta Försäkrings AB has investments in highly rated and liquid fixed income securities as well as fixed income and equity funds.

Outokumpu has a well-funded pension plan in the UK. This plan has assets approximately EUR 500 million, most of which have been invested in fixed income securities and a relatively large portion in equities. Changes in security prices would therefore impact the net liability reported on this plan. For more information please see note 25.

Country and credit risk

All sales must be covered by approved credit limits or secured payment terms. Most of the outstanding trade receivables have been secured by credit insurances, which typically cover some 90 percent of the insured amount. Part of the credit risk related to trade receivables is managed with bank guarantees, letters of credit and advance payments.

On December 31, 2016 the maximum exposure to credit risk of trade receivables was EUR 471 million (2015: EUR 442 million). A large part of trade receivables is covered by insurance or by secured payment terms, however there are also unsecured trade receivables based on separate decisions. The portion of unsecured receivables has varied between 13 to 17 percent of all trade receivables. For significant part of trade receivables Outokumpu uses factoring, which transfers most risks and rewards to the buyer of the receivables. At the end of the year most of the receivables were generated by a large number of customers and there were only a few risk concentrations. Age analysis of accounts receivables is in note 22.

Treasury monitors credit risk related to receivables from financial institutions. Outokumpu seeks to reduce these risks by limiting the counterparties to banks and other financial institutions with good credit standing. For the derivative transactions, Outokumpu prefers to have ISDA framework agreements in place. Investments related to liquidity management are made in short-term deposits and liquid financial instruments with low credit risk. Exposure to country risk is monitored and at year-end such risk included e.g. Argentina due to Outokumpu's local and cross-border business activities there.

Liquidity and refinancing risk

Outokumpu raises most of its debt centrally. The Group seeks to reduce liquidity and refinancing risk by having sufficient amount of cash and long-term committed credit lines available, by having balanced maturity profile of debt and by diversifying sources of funding. Efficient cash and liquidity management is also reducing liquidity risk. Finance plans are prepared and reviewed regularly with a particular focus on the Group's forecasted cash flows, projected funding requirements, planned funding transactions during the forecast period and financial covenant headroom. The amount and adequacy of liquidity reserves, the amounts of scheduled annual repayments of non-current debt as well as forecasted gearing and leverage levels are key targets and outcomes of the planning. In 2016 improved profitability and lower gearing allowed increased focus on cost of debt optimization. Decent profitability, reduction in net working capital, strict capex controls and certain asset disposals lead to a clear reduction in net debt.

In March Outokumpu Oyj received corporate family rating of B3 and B3-PD probability default rating from Moody's. The 2019 and 2021 secured notes were rated by Moody's at B2. All ratings have a positive outlook. In June Outokumpu issued the EUR 250 million 7.25% senior secured rated notes maturing on June 16, 2021.

The main funding programs and credit facilities are: a committed revolving facility of EUR 800 million, of which EUR 145 million matures in February 2017 and EUR 655 million in February 2019; two committed revolving bilateral credit facilities of EUR 120 million maturing in February 2019, and a Finnish commercial paper program totaling EUR 800 million. As at December 31, 2016 Outokumpu had a total amount of some EUR 920 million committed credit facilities, of which EUR 775 million is long-term. All committed credit facilities were unutilized at year-end. Outokumpu Oyj, certain subsidiaries and lenders of Outokumpu benefiting from the security package have signed an intercreditor agreement, which was created in February 2014. More information on liquidity and refinancing risk is presented in the following table.

Contractual cash flows

2016

€ million	Balance Dec 31	2017	2018	2019	2020	2021	2022–
Bonds	496	-	-	250	-	250	-
Convertible bond	219	-	-	-	250	-	-
Loans from financial institutions	89	64	7	6	6	4	1
Pension loans	165	8	33	46	43	23	13
Finance lease liabilities	155	65	5	2	3	51	28
Commercial papers	321	321	-	-	-	-	-
Trade payables	1,111	1,111	-	-	-	-	-
Interest payments and facility charges	11	75	69	59	34	18	122
Interest rate derivatives	5	2	1	1	0	-	-
Other derivatives	28	28	-	-	-	-	-
		1,672	**115**	**364**	**336**	**346**	**164**

On December 31, 2016, the Group had cash and cash equivalent amounting to EUR 204 million and committed available long-term credit facilities totaling EUR 757 million. In addition, there is a fully unutilized EUR 145 million committed credit facility maturing in the end of February 2017.

2015

€ million	Balance Dec 31	2016	2017	2018	2019	2020	2021–
Bonds	398	150	-	-	250	-	-
Convertible bond	210	-	-	-	-	250	-
Loans from financial institutions	467	20	369	6	66	6	5
Pension loans	174	9	34	38	34	31	29
Finance lease liabilities	208	28	66	5	3	3	102
Commercial papers	339	339	-	-	-	-	-
Trade payables	830	830	-	-	-	-	-
Interest payments and facility charges	20	83	60	54	41	21	151
Interest rate derivatives	7	4	3	1	1	-	-
Other derivatives	15	12	3	-	-	-	-
		1,475	534	103	395	310	287

On December 31, 2015, the Group had cash and cash equivalent marketable securities amounting to EUR 186 million and committed and available credit facilities, available and undrawn TyEL pension loans in Finland, and other agreed and undrawn loans totaling EUR 928 million.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Capital management

The objective of capital management is to secure ability to continue as a going concern and to optimize cost of capital in order to enhance value to shareholders. As part of this objective, the Outokumpu seeks to maintain access to loan and capital markets at all times despite of the cyclical nature of the stainless steel industry. The Board of Directors reviews the capital structure of the Group on a regular basis. Capital structure and debt capacity are taken into account when deciding on new investments. Tools to manage equity capital include dividend policy, share buybacks and issues of equity or equity-linked securities. Debt capital is managed taking into account the requirement to secure liquidity and the capability to refinance maturing debt. These topics are considered in connection with cost of capital optimization.

Tools to manage debt capital structure include loan prepayments and liability management measures, such as the tender offers of issued notes and use of call options. Revolving facilities include two financial covenants, which are based on gearing and liquidity. The notes maturing in 2019 and 2021 include incurrence based financial covenants on gearing. The 2019 notes covenant level for gearing is 140% on December 31, 2016 and 130% thereafter. The 2021 notes covenant level for gearing is 120% until June 16, 2018 and 110% thereafter.

The Group's internal capital structure is reviewed on a regular basis with an aim to optimize it e.g. by applying internal dividends and equity adjustments. Net investment and debt in foreign subsidiaries is monitored and Outokumpu has capability to hedge net investment translation risk. In 2016 Outokumpu repatriated equity (EUR 170 million) by capital reduction in Belgium. Significant amount (USD 400 million) of equity was injected to Outokumpu Americas Inc.

Outokumpu's captive insurance company, Visenta Försäkrings AB, has to comply with capital adequacy requirements set by the financial supervisory authority in Sweden. During the reporting period Visenta has been profitable and well capitalized to meet externally imposed requirements based e.g. on Solvency II framework.

The management monitors Group's capital structure on the basis of gearing ratio, which is calculated as net debt divided by total equity. Net debt is calculated as total current and non-current debt less cash and cash equivalents. In 2016 leverage ratio, which is calculated by dividing net debt by underlying EBITDA, has become an important measurement for capital structure.

On December 31, 2016, net debt was EUR 1,242 million (2015: EUR 1,610 million), total equity EUR 2,416 million (2015: EUR 2,329 million) and gearing 51.4% (2015: 69.1%). The decrease in gearing resulted primarily from reduction in net working capital and recognizion of deferred tax assets.

Insurances

The Group's business is capital intensive and key production processes are rather tightly integrated and have therefore interdependencies. Property damage and business interruption (PDBI) insurance, covering e.g. fires, machinery breakdowns and natural catastrophes, is the most important insurance line and significant portion of insurance premiums paid relate PDBI cover. Business operations may cause significant liability risks related e.g. to people, environment or Outokumpu's products. Outokumpu aims to mitigate liability risk by relevant risk management measures and by having reasonable insurances in place. Other significant insurance lines include marine cargo and credit.

During the reporting year there were no serious fires or machinery breakdown incidents. There was one PDBI insurance claim caused by severe weather conditions (lightning) in the Tornio region. In December a ship carrying Outokumpu's ferronickel sank in the Aegean sea. The value of Outokumpu's cargo (approximately EUR 6 million) is covered by insurance. There were no significant liability or credit insurance claims in 2016. Fire safety and machinery breakdown audits were carried out mainly as planned. The loss settlement for the machinery breakdown, which took place in June 2014 in Calvert, was settled with insurers in March at about USD 60 million less risk retention of about USD 13 million.

Visenta Försäkrings AB, a captive insurance company owned by Outokumpu, can act as direct insurer and as reinsurer. Visenta is registered in Sweden and it has assets totaling EUR 26 million (2015: EUR 28 million). Visenta underwrites PDBI insurance and it has issued a surety bond to support the AvestaPolarit pension scheme in the UK.

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20. Fair values and nominal amounts of derivative instruments

€ million	**2016** Positive fair value	**2016** Negative fair value	**2016** Net fair value	2015 Net fair value	**2016** Nominal amounts	2015 Nominal amounts
Currency and interest rate derivatives						
Currency forwards	**27**	**52**	**-25**	5	**2,647**	2,284
Interest rate swaps	**0**	**5**	**-5**	-7	**777**	578
					Tonnes	Tonnes
Metal derivatives						
Forward and futures nickel contracts	**7**	**9**	**-2**	-4	**27,233**	32,623
Forward and futures molybdenum contracts	**-**	**-**	**-**	-3	**-**	212
Nickel options, sold	**-**	**1**	**-1**	-	**1,800**	-
Emission allowance derivatives	**-**	**-**	**-**	-0	**-**	2,400,000
Propane derivatives	**-**	**-**	**-**	-12	**-**	61,500
					MMBtu	MMBtu
Natural gas derivatives	**-**	**-**	**-**	-1	-	705,000
Total derivatives	**34**	**67**	**-33**	-22		
Less long-term derivatives						
Interest rate swaps	**-**	**4**	**-4**	-6		
Forward and futures nickel contracts	**-**	**-**	**-**	-2		
Propane derivatives	**-**	**-**	**-**	-1		
Short-term derivatives	**34**	**63**	**-29**	-12		

Fair values are estimated based on market rates and prices on the reporting date, discounted future cash flows and, in respect of options, on valuation models.

Hedge accounted cash flow hedges

Outokumpu has hedged currency spot price risk related to SEK denominated long-term electricity supply agreement for the Finnish production sites. The currency derivatives, which hedge the currency risk, mature in other periods in year 2017 than the underlying cash flows of electricity purchases. The derivatives will be prolonged later to mature at the same period as the underlying cash flows.

€ million	**2016** Nominal amount, SEK million	**2016** Fair value of outstanding cash flow hedges, € million	**2016** Equity, € million	2015 Nominal amount, SEK million	2015 Fair value of outstanding cash flow hedges, € million	2015 Equity, € million
Maturity < 1 year	390	0	0	391	1	1
Maturity 1–5 years	770	0	-1	1,171	4	2
	1,161	**0**	**-1**	1,562	5	3

Master netting agreements and similar arrangements

Outokumpu enters into derivative transactions with most counterparties under ISDA agreements. In general the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. In certain circumstances, e.g. when a credit event such as a default occurs, all outstanding transactions under the agreement are terminated, the termination value is assessed and only a single amount is payable in settlement of all transactions. ISDA agreements do not meet the criteria for offsetting in the statement of financial position. The right to offset is enforceable only on the occurrence future credit events. The following table sets out the carrying amounts of recognized financial instruments that are subject to the agreements described above.

€ million	**2016**	2015
Derivative assets		
Gross amounts of recognized financial assets in the statement of financial position	**34**	38
Related financial instruments that are not offset	**33**	30
	1	8
Derivative liabilities		
Gross amounts of recognized financial liabilities in the statement of financial position	**67**	59
Related financial instruments that are not offset	**33**	30
	34	29

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

21. Inventories

€ million	2016	2015
Raw materials and consumables	**376**	340
Work in progress	**508**	476
Finished goods and merchandise	**347**	434
Advance payments	**2**	1
	1,232	1,251

The most important commodity price risk for Outokumpu is caused by fluctuation in nickel and other alloy prices. Majority of stainless steel sales contracts include an alloy surcharge clause, with the aim of reducing the risk arising from the time difference between raw material purchase and product delivery. However, the risk is remarkable, because the delivery cycle in production is longer than the alloy surcharge mechanism expects. Thus, only the price for the products to be sold in near future is known. That is why a significant part of the future prices for the products to be sold is estimated according to management's best knowledge in net realizable value (NRV) calculations. Due to fluctuation in nickel and other alloy prices, the realized prices can deviate significantly from what has been used in NRV calculations on the closing date. Reversal of NRV write-downs amounting to EUR 26 million were recognized in income statement during the financial year (2015: write-downs amounting to EUR 21 million).

22. Trade and other receivables

€ million	2016	2015
Non-current		
Loans receivable	**1**	3
Other accruals and receivables	**1**	37
	2	40
Current		
Trade receivables	**471**	443
VAT receivable	**36**	52
Income tax receivable	**25**	29
Loans receivable	**5**	7
Prepaid insurance expenses	**7**	3
Other accruals	**45**	30
Other receivables	**98**	122
	687	686
Allowance for impairment of trade receivables		
Allowance on Jan 1	**19**	19
Additions	**12**	6
Deductions	**-22**	-4
Recovery of doubtful receivables	**-3**	-2
Allowance on Dec 31	**6**	19
Age analysis of trade receivables		
Neither impaired, nor past due	**421**	390
Past due 1–30 days	**38**	39
Past due 31–60 days	**5**	5
More than 60 days	**6**	9
	471	443

The maximum exposure to credit risk at the reporting date is the carrying amount of the loan and trade receivables. Most of the outstanding trade receivables have been secured by credit insurance policies, which typically covers some 90% of an insured credit loss. Credit risks related to trade receivables are presented in more detail in note 19. Financial risk management, capital management and insurances.

As of December 31, 2016 Outokumpu has derecognized trade receivables totaling EUR 387 million (2015: EUR 287 million), which represents fair value of the assets. Net proceeds received totaled EUR 364 million (2015: EUR 271 million). Underlying assets have maturity less than one year. The maximum amount of loss related to derecognized assets are estimated to be EUR 17 million (2015: EUR 17 million). This estimation is based on insurance policies and contractual arrangements of factoring companies and Outokumpu. The analysis does not include impact of any operational risk related to Outokumpu's contractual responsibilities.

EUR 12 million of receivables from associated companies were impaired during 2016 in addition to EUR 10 million that were included in the allowance for impairment of trade receivables on December 31, 2015. The total impairment was reversed in September 2016.

23. Cash and cash equivalents

€ million	2016	2015
Cash at bank and in hand	**203**	145
Short-term bank deposits [1)]	**0**	41
	204	186

[1)] In 2015 including a short-term deposit EUR 30 million which has been pledged.

Fair value of cash and cash equivalents does not significantly differ from the carrying value. The average effective interest rate of cash and cash equivalents at the end of 2016 was 0.2% (Dec 31, 2015: 1.3%).

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24. Equity

Share capital, premium fund and invested unrestricted equity reserve

€ million	Number of shares, 1,000	Share capital	Premium fund	Invested unrestricted equity reserve	Total
On Jan 1, 2015	415,427	311	714	2,103	3,127
Shares granted from the share-based payment programs [1)]	63	-	-	-	-
On Dec 31, 2015	415,489	311	714	2,103	3,127
Shares granted from the share-based payment programs [1)]	371	-	-	-	-
Treasury share purchase	-2,000	-	-	-	-
On Dec 31, 2016	**413,861**	**311**	**714**	**2,103**	**3,127**
Treasury shares [1)]	2,514				
Total number of shares on Dec 31, 2016	**416,374**				

[1)] Shares granted from treasury shares without effect to share capital.

According to the Articles of Association, the Outokumpu share does not have nominal value.

Premium fund includes proceeds from share subscription and other contribution based on the old Finnish Limited Liability Companies Act for the part the contributions exceed the account equivalent value allocated to share capital.

Invested unrestricted equity reserve includes net proceeds from the rights issues in 2014 and 2012.

Fair value reserves

Fair value reserves include movements in the fair values of available-for-sale financial assets and derivative instruments used for cash flow hedging.

Other reserves

Other reserves includes amounts transferred from the distributable equity under the Articles of Association or by a decision of the General Meeting of Shareholders, and other items based on the local regulations of the Group companies.

Retained earnings

Retained earnings include remeasurements of defined benefit plans, treasury shares, cumulative translation differences and other retained earnings and losses.

Distributable funds

On December 31, 2016 the distributable funds of the parent company totaled EUR 2,247 million of which retained earnings were EUR 123 million. The Board of Directors proposes to the Annual General Meeting in 2017 that a dividend of EUR 0.10 per share is paid for 2016 (no dividends paid for 2015).

Non-controlling interest

In December 2015 Outokumpu divested the subsidiary Shanghai Krupp Stainless Co., Ltd. (SKS) incorporated in China, which had a 40% non-controlling interest (see note 4).

In 2015 Outokumpu's profit attributable to SKS's non-controlling interest amounted to EUR -9 million. EUR 41 million of SKS's share capital was paid up by the non-controlling interest holder in 2015. SKS's sales was EUR 322 million and net result for the financial year was EUR -23 million in 2015 until the loss of control, before intercompany eliminations but including fair value adjustments.

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25. Employee benefit obligations

Outokumpu has established several defined benefit and defined contribution plans in various countries. The most significant defined benefit plans are in Germany and in the UK.

Germany

In Germany Outokumpu has several defined benefit plans, of which major plans include a management plan, open pension plans for normal staff, and other pension promises, which are nearly all closed for new entrants. Basis to all pension promises in Germany are bargaining agreements and/or individual contracts (management promises). Management plan and other pension promises are based on annuity payments, whereas plans for normal employees are based on one lump sum payment after retirement

In addition, all the promises are embedded in Germany in the BetrAVG law. The law contains rules for vested rights, pension protection scheme and regulations for the pension adjustments. In Germany no funding requirements exist, thus the plans are materially all unfunded.

UK

The UK scheme provides pensions in retirement and death benefits to members. In October 2016, Outokumpu closed its defined benefit pension scheme in the UK to future pension accruals and made changes to the terms of retirement. All members have joined a defined contribution scheme. As a result, the net pension obligation decreased due to a curtailment of EUR 26 million.

The scheme is registered under UK legislation and is contracted out of the State Second Pension. The scheme is subject to the scheme funding requirements outlined in UK legislation. The scheme trustees are responsible for the operation and governance of the scheme, including making decisions regarding the scheme's funding and investment strategy.

Risks associated with defined benefit plans

Through its defined benefit pension plans, Outokumpu is exposed to a number of risks, the most significant of which are detailed below.

Asset volatility: The level of equity returns is a key factor in the overall investment return. If a plan holds significant proportion of equities, which are expected to outperform corporate bonds in the long-term, it might face higher volatility and risk in the short-term. The investment portfolio might also be subject to a range of other risks typical of the assets held, in particular credit risk on bonds and exposure to the property market.

Change in bond yields: A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plans' bond holdings (if any). In a situation where the return on plan assets is lower than the corporate bond yields, a plan may face a shortfall which might lead to increased contributions.

Inflation risk: Inflation rate is linked to both future pension and salary increase, and higher inflation will lead to higher liabilities.

Longevity: The majority of Outokumpu's defined benefit obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plans' liabilities.

Funding

Funding requirements are generally based on pension fund's actuarial measurement framework set out in the funding policies. In UK preliminary pension fund's valuation was completed in 2015 with a deficit of GBP 27 million. In 2016, Outokumpu made contributions totaling GBP 20 million to the plan to cover the deficit, and the remaining GBP 7 million will be paid in 2017. The valuation is not based on the the same assumptions as the IFRS valuation, which shows a surplus.

Defined benefit cost recognized in the consolidated statements of income and comprehensive income

€ million	**2016**	2015
In EBIT	**17**	-12
In financial income and expenses	**-6**	-7
Defined benefit cost recognized in the consolidated statement of income	**11**	-18
In other comprehensive income	**-63**	3
Total defined benefit cost recognized	**-53**	-15

Amounts recognized in the consolidated statement of financial position

€ million	**2016**	2015
Present value of funded defined benefit obligations	**497**	489
Present value of unfunded defined benefit obligations	**307**	323
Fair value of plan assets	**-527**	-516
Net defined benefit liability	**276**	295

€ million	**2016**	2015
Defined benefit liability	**322**	331
Other long-term employee benefit liabilities	**34**	38
Defined benefit assets	**-45**	-35
Net liability	**311**	334

Movement in net defined benefit liability

€ million	2016 Present value of obligation	2016 Fair value of plan assets	2016 Net defined benefit liability	2015 Present value of obligation	2015 Fair value of plan assets	2015 Net defined benefit liability
On Jan 1	812	-516	295	792	-498	295
Current service cost	10	-	10	11	-	11
Interest expense/(income)	25	-19	6	26	-19	7
Remeasurements arising from						
Return on plan assets	-	-74	-74	-	18	18
Demographic assumptions	1	-	1	-3	-	-3
Financial assumptions	140	-	140	-18	-	-18
Experience adjustment	-4	-	-4	-0	-	-0
Exchange differences	-64	70	7	31	-30	2
Employer contributions	-	-38	-38	-	-13	-13
Contributions by plan participants	1	-1	-0	1	-1	-0
Benefits paid	-36	36	-	-27	27	-
Curtailments	-27	-	-27	-	-	-
Reclassification to liabilities directly attributable to assets held for sale	-53	15	-38	-	-	-
Other change	-2	-	-2	-3	-	-3
On Dec 31	**804**	**-527**	**276**	812	-516	295

The present value of obligations and the fair value of plan assets comprise mainly of German and UK plans. The present value of obligation for German plans on December 31, 2016 was EUR 305 million (Dec 31, 2015: EUR 275 million). For the UK, the present value of obligation was EUR 451 million (Dec 31, 2015: EUR 433 million), and the fair value of plan assets was EUR 496 million on December 31, 2016 (Dec 31, 2015: EUR 468 million).

The expected contributions to be paid to the defined benefit plans in 2017 are EUR 21 million, covering also the deficit reduction in the UK according to the agreed payment schedule.

Allocation of plan assets

€ million	2016	2015
Equity instruments	**81**	82
Debt instruments	**277**	346
Real estate	**4**	7
Investment funds	**3**	3
Other assets	**160**	75
Total plan assets	**525**	514

Allocation of plan assets covers 99% of total defined benefit plan assets. The plan assets are mainly invested in quoted instruments. Debt instruments include mostly investment-grade government and corporate bonds.

Asset-liability matching strategies

The majority of defined benefit assets are in the UK. The UK scheme's benchmark asset allocation is 30%/70% return-seeking/liability matching. This strategy reflects the scheme's liability profile and the trustees' and company's attitude to risk. The trustees monitor the investment objectives and asset allocation policy on a regular basis.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Significant actuarial assumptions

		Germany	The UK	Other countries
Discount rate, %	**2016**	**1.75**	**2.75**	**3.82**
	2015	2.25	4.00	3.86
Future salary increase, %	**2016**	**-**	**-**	**2.24**
	2015	-	3.80	2.23
Inflation rate, %	**2016**	**-**	**3.50**	**-**
	2015	-	3.30	-
Future benefit increase, %	**2016**	**1.50**	**3.15**	**-**
	2015	1.52	3.00	-
Medical cost trend rate, %	**2016**	**-**	**-**	**6.60–7.00**
	2015	-	-	7.30–7.80
Life expectancy	**2016**	Modified from RT 2005 G	110% SAPS All Pensioner Amounts tables	Standard mortality tables
	2015	Modified from RT 2005 G	110% SAPS All Pensioner Amounts tables	Standard mortality tables

The significant actuarial assumptions are presented separately for the significant countries, and for other countries a weighted average of the assumptions is presented.

The weighted average duration of the overall defined benefit obligation is 17.4 years. In Germany and in the UK the weighted average durations are 14.7 and 20.2 years, respectively.

Sensitivity analysis of significant actuarial assumptions

Reasonably possible changes at the reporting date to one of the weighted principal assumptions, while holding all other assumptions constant, would have affected the defined benefit obligation as shown below:

Germany

2016	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.5%	Decrease by 7%	Increase by 8%
Future benefit increase	0.5%	Increase by 4%	Decrease by 4%
Life expectancy	1 year	Increase by 3%	

2015			
Discount rate	0.5%	Decrease by 7%	Increase by 7%
Future benefit increase	0.5%	Increase by 4%	Decrease by 4%
Life expectancy	1 year	Increase by 3%	

The UK

2016	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.5%	Decrease by 10%	Increase by 12%
Future benefit increase	0.5%	Increase by 7%	Decrease by 7%
Life expectancy	1 year	Increase by 3%	

2015			
Discount rate	0.5%	Decrease by 9%	Increase by 10%
Future benefit increase	0.5%	Increase by 6%	Decrease by 5%
Future salary increase	0.5%	Increase by 1%	Decrease by 1%
Life expectancy	1 year	Increase by 3%	

Other countries

2016	Change in assumption	Increase in assumption	Decrease in assumption
Discount rate	0.5%	Decrease by 6%	Increase by 7%
Medical cost trend rate	0.5%	Increase by 8%	Decrease by 6%
Future salary increase	0.5%	Increase by 1%	Decrease by 1%
Life expectancy	1 year	Increase by 4%	

2015			
Discount rate	0.5%	Decrease by 6%	Increase by 7%
Medical cost trend rate	0.5%	Increase by 8%	Decrease by 6%
Future salary increase	0.5%	Increase by 1%	Decrease by 1%
Life expectancy	1 year	Increase by 5%	

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

Other long-term employee benefits

Other long-term employee benefits mainly relate to long-service remunerations and early retirement provisions in Germany as well as long-service remunerations in Finland. In Germany, the employees are entitled to receive a one-time indemnity every ten years after 25 years of service. Under the early retirement agreements, employees work additional time prior to retirement, which is subsequently paid for in instalments after retirement. In Finland, the employees are entitled to receive a one-time indemnity every five years after 20 years of service.

The other long-term employee benefit liabilities recognized in the consolidated statement of financial position on December 31, 2016 were EUR 34 million (Dec 31, 2015: EUR 38 million).

Multi-employer defined benefit plans

ITP pension plans operated by Alecta in Sweden and plans operated by Stichting Bedrijfspensioenfonds voor de metaalindustrie in the Netherlands are multi-employer defined benefit pension plans. However, it has not been possible to get sufficient information for the calculation of obligations and assets by employer from the plan operators, and therefore these plans have been accounted for as defined contribution plans in the consolidated financial statements.

26. Provisions

€ million	Restructuring provisions	Environmental provisions	Other provisions	Total
Provisions on Jan 1, 2016	60	63	13	136
Translation differences	-0	-2	-1	-2
Increases in provisions	35	2	13	50
Utilized during the financial year	-29	-8	-8	-46
Unused amounts reversed	-11	-1	-4	-15
Acquired subsidiaries	-	-	1	1
Reclassifications	-	9	-	9
Provisions on Dec 31, 2016	**54**	**64**	**15**	**133**

€ million	**2016**	2015
Non-current provisions	**118**	113
Current provisions	**15**	23
	133	136

Restructuring provisions

In 2016, increases in provisions were mainly due to global streamlining measures related to sales, general and administrative functions and restructuring measures in accordance with the EMEA restructuring plan. The restructuring provisions are expected to be paid between the years 2017–2024.

Environmental provisions

Majority of the environmental provisions are for closing costs of production facilities and landfill areas, removal of problem waste and landscaping in facilities in Finland, in the UK, in the US and in Germany. The outflow of economic benefits related to environmental provisions is expected to take place mainly over a period of more than 10 years. Due to the nature of these provisions, there are uncertainties regarding both the amount and the timing of the outflow of economic benefits. Reclassifications occurred between provisions and other current liabilities.

Other provisions

Other provisions comprise for example provisions for product and other claims and are mainly current in nature. The increase is mainly due to product claims and a provision related to earlier site closures.

Provisions are based on management’s best estimates at the end of the reporting period.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

27. Debt

€ million	2016	2015
Non-current		
Bonds	**496**	248
Convertible bonds	**219**	210
Loans from financial institutions	**24**	447
Pension loans	**158**	165
Finance lease liabilities	**90**	179
	987	1,249
Current		
Bonds	**-**	150
Loans from financial institutions	**64**	20
Pension loans	**8**	9
Finance lease liabilities	**65**	28
Commercial paper	**321**	339
	458	547

The bonds maturing in 2019 and 2021 as well as most of the bank loans include financial covenants, which are described in note 19.

Bonds

€ million	Interest rate, %	Outstanding amount 2016	2015
2012 fixed rate bond maturing on June 7, 2016	5.875	**-**	150
2014 fixed rate bond maturing on Sept 30, 2019	6.625	**250**	250
2016 fixed rate bond maturing on June 16, 2021	7.250	**250**	-
		500	400

Convertible bonds

€ million	Interest rate, %	Outstanding amount 2016	2015
2015 fixed rate bond maturing on Feb 26, 2020	3.250	**250**	250

Finance lease liabilities

Minimum lease payments

€ million	2016	2015
Not later than 1 year	**77**	43
Between 1 and 5 years	**96**	122
Later than 5 years	**151**	253
Future finance charges	**-169**	-211
Present value of minimum lease payments	**155**	207

Present value of minimum lease payments

€ million	2016	2015
Not later than 1 year	**65**	28
Between 1 and 5 years	**61**	77
Later than 5 years	**29**	102
Present value of minimum lease payments	**155**	207

28. Trade and other payables

€ million	2016	2015
Non-current		
Accruals	**37**	48
Current		
Trade payables	**1,111**	830
Accrued employee-related expenses	**77**	81
Accrued interest expenses	**11**	20
VAT payable	**33**	45
Advances received	**7**	2
Withholding tax and social security liabilities	**20**	9
Payables related to factoring programs	**48**	11
Other accruals	**51**	50
Other payables	**102**	42
	1,459	1,089

29. Commitments and contingent liabilities

€ million	2016	2015
Mortgages and pledges on Dec 31		
Mortgages	**3,447**	3,559
Other pledges	**13**	30
Guarantees on Dec 31		
On behalf of subsidiaries for commercial and other commitments	**27**	30
On behalf of associated companies for financing	**-**	7
On behalf of other companies for financing	**-**	1
On behalf of other companies for commercial and other commitments	**2**	2
Other commitments	**16**	11

Mortgages relate mainly to securing Group's financing. A major part of Outokumpu's borrowings are secured partly by mortgage over the real property of the Group's main production plants and partly by share pledges over the shares in selected Group companies.

Outokumpu has provided a security, including a pledge of shares of a subsidiary company, related to AvestaPolarit pension scheme.

Other pledges reported in 2016 include Outokumpu's shares in Manga LNG Oy to secure certain liabilities of Manga LNG Oy. Outokumpu's total liability at the end of 2016 amounted to EUR 22 million, which is presented under other pledges and other commitments.

Outokumpu Oyj is, in relation to its shareholding in Kymppivoima Tuotanto Oy and Etelä-Pohjanmaan Voima Oy, liable for the costs, commitments and liabilities relating to electricity provided by Rapid Power Oy. Outokumpu's liability for the net debt of Rapid Power Oy at the year-end 2016 amounted to EUR 4 million (2015: EUR 7 million). Outokumpu Oyj is, in relation to its shareholding in Etelä-Pohjanmaan Voima Oy, liable for the costs, commitments and liabilities relating to electricity provided by Tornion Voima Oy. Outokumpu's liability for the net debt of Tornion Voima Oy at the year-end 2016 amounted to EUR 3 million (2015: EUR 4 million). These liabilities are reported under other commitments.

One remaining guarantee issued by ThyssenKrupp on behalf of Inoxum companies has not yet been transferred to Outokumpu Oyj as of December 31, 2016. However, Outokumpu Oyj has given ThyssenKrupp a counter-guarantee for this commitment amounting to EUR 4 million.

Present value of minimum lease payments on operating leases

€ million	2016	2015
Not later than 1 year	**10**	10
Between 1 and 5 years	**27**	24
Later than 5 years	**50**	38
	87	72

Operating leases include lease agreements on Group companies' premises.

Outokumpu's share of the Fennovoima investment is about EUR 250 million of which EUR 48 million has been paid by the end of the reporting period. Annual capital expenditure related to the project is expected to be around EUR 10–20 million in the coming years, and approximately half of the investment is expected to be paid only at the end of the construction phase in 2022–2023.

Group's other off-balance sheet investment commitments totaled EUR 19 million on December 31, 2016 (Dec 31, 2015: EUR 60 million).

30. Disputes and litigations

Dispute over invention rights, Outotec vs. Outokumpu

Outokumpu and Outotec have since 2013 had a dispute relating to innovations on ferroalloy technology. On January 9, 2017, the companies reached an agreement whereby both parties withdrew their claims. Outotec was granted an exclusive right to sell and license the relevant innovations and technology against an agreed license fee payable to Outokumpu. Outokumpu retains the right to use the innovations in its own business.

Cartel fine imposed by the European Commission

In March 2011, the European Court of Justice upheld a EUR 3.2 million cartel fine imposed on ThyssenKrupp Stainless AG, a legal predecessor of Outokumpu Nirosta GmbH ("Nirosta"), in a decision of the European Commission from December 2006 (the "2006 Decision"). The 2006 Decision is based on a 1998 European Commission finding (the "1998 Finding") that between 1993–1998, certain stainless steel producers, including Inoxum and certain of its legal predecessors, had violated Article 65 (1) of the European Coal and Steel Community Treaty by participating in a price-fixing arrangement with other stainless steel producers. The alleged price-fixing arrangement consisted of modifying and applying in a concerted fashion the reference values used to calculate the alloy surcharge to the base price of stainless steel. The 1998 Finding was appealed and subsequently annulled on procedural grounds with respect to Nirosta's liability for one of its legal predecessors. Subsequent to this annulment, the European Commission opened new proceedings, which resulted in the 2006 Decision. Nirosta's appeals of the 2006 Decision were unsuccessful. In April 2011, Nirosta filed a complaint (Verfassungsbeschwerde) with the German Constitutional Court (Bundesverfassungsgericht) requesting that the Court declare the 2006 Decision incompatible with certain fundamental rights under the German Constitution (Grundgesetz). The German Constitutional Court decided on July 19, 2016 not to accept the complaint. Outokumpu has decided not to pursue the matter further.

Claim in Spain related to the divested copper companies

Outokumpu divested all of its copper business in 2003–2008. One of the divested companies domiciled in Spain later faced bankruptcy. The administrator of the bankruptcy filed a claim against Outokumpu Oyj and two other non-Outokumpu companies, for recovery of payments made by the bankrupt Spanish company in connection with the divestment. The Bilbao court of first instance in Spain has accepted the claim of EUR 20 million brought against Outokumpu and the two other companies. Outokumpu and the two other companies have appealed the court's decision.

Claim in Italy related to former tax consolidation group

In December 2015 Outokumpu Holding Italia and Acciai Speciali Terni (AST) entered into a dispute relating to the tax consolidation of the former ThyssenKrupp Tax Group in Italy. AST claims payment of approximately EUR 23 million resulting from the former tax consolidation of the Italian tax group managed by ThyssenKrupp. Outokumpu Holding Italia is the former ThyssenKrupp holding company and was transferred to Inoxum as part of the carve-out in 2011. The EUR 23 million claim resulted from former tax installments paid by ThyssenKrupp Italia in 2006 which have not been properly settled towards AST in the following years. The matter is currently pending in court.

Antitrust investigation in Germany

On September 22, 2016, Outokumpu's subsidiary in Germany (Outokumpu Nirosta GmbH) received a letter from the German Federal Cartel Office stating that the company has been included in an ongoing investigation of possible infringements of antitrust laws in the past. Following an internal investigation, Outokumpu's view is that the official investigation on it is without merit.

31. Related party transactions

Outokumpu's related parties include the key management of the company and their close family members, associated companies and joint ventures, and Solidium Oy. The transactions with related parties are presented in the tables below. Key management includes Leadership Team members and members of the Board of Directors. The principal associated companies and joint ventures are listed in note 13 and subsidiaries are presented in note 32.

Solidium Oy, a limited company fully owned by the State of Finland, owns 26.2% of Outokumpu on December 31, 2016. Solidium's mission is to strengthen and stabilize Finnish ownership in nationally important companies and increase the value of its holdings in the long run.

Transactions and balances with related companies

€ million	**2016**	2015
Sales	**142**	137
Purchases	**-6**	-6
Interest income	**0**	1
Trade and other receivables	**29**	64
Trade and other payables	**1**	1

EUR 12 million of receivables from associated companies were impaired during 2016 in addition to EUR 10 million that were impaired on December 31, 2015. The total impairment was reversed in September 2016. Property, plant and equipment with sales price of EUR 8 million was sold to an associated company in 2015.

Employee benefits for the key management

€ thousand	**2016**	2015
Short-term employee benefits	**7,956**	4,187
Termination benefits	**-**	2,681
Post-employment benefits [1]	**1,243**	1,307
Share-based payments	**4,485**	273
Remuneration to the Board of Directors	**763**	721
	14,447	9,169

[1] Includes only supplementary pensions.

In 2016, key management has received EUR 978,000 related to financing arrangements of the matching share plans.

Employee benefits for CEO and Deputy CEO

€ thousand	Salaries and other short-term benefits	Termination benefits	Bonuses	Post-employment benefits	Share-based payments	Total
2016						
CEO	**1,137**	**-**	**948**	**675**	**3,001**	**5,762**
Deputy to the CEO [1]	**530**	**-**	**168**	**336**	**64**	**1,099**
2015						
CEO, January 1–October 26	635	1,821	-	302	-	2,758
Deputy to the CEO	512	-	-	503	-	1,015

[1] Christoph de la Camp as of July 1, 2016; Reinhard Florey until June 30, 2016

Regarding the CEO, the figures include both the statutory pension expenses based on the Finnish Employees Pensions Act and the expenses for a defined contribution pension plan with an annual insurance premium of 25% of his annual earnings, excluding share rewards. The CEO has the right to retire at the age of 63. The deputy to the CEO resides in Germany and is entitled to the pension benefits in accordance with the German Essener Verband. The pension of the deputy to the CEO until June 30, 2016 was also under German Essener Verband.

Remuneration to Board of Directors

€ thousand	**2016**	2015
Chairman Jorma Ollila	**151**	154
Vice Chairman Olli Vaartimo	**91**	92
Member Markus Akermann	**82**	84
Member Roberto Gualdoni	**82**	88
Member Stig Gustavson	**70**	72
Member Kati ter Horst, as of April 6, 2016	**65**	-
Member Heikki Malinen	**70**	73
Member Saila Miettinen-Lähde, as of March 26, 2015	**71**	69
Member Elisabeth Nilsson	**82**	86
Member Siv Schalin, until March 26, 2015	**-**	4
	763	721

More information on key management's employee benefits can be found on the page Remuneration, on p.14 in the Corporate Governance section.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33

32. Subsidiaries on December 31, 2016

		Country	Group holding, %
Europe			
AO Outokumpu		Russia	100
Avesta Klippcenter AB		Sweden	100
Hernandez Edelstahl GmbH	1)	Germany	100
Outokumpu AS		Norway	100
Outokumpu A/S		Denmark	100
Outokumpu Asia Pacific Ltd		China	100
Outokumpu Benelux B.V.		The Netherlands	100
Outokumpu B.V.		The Netherlands	100
Outokumpu Chrome Oy		Finland	100
Outokumpu Distribution France S.A.S.		France	100
Outokumpu Distribution Hungary Kft.		Hungary	100
Outokumpu Distribution Polska Sp. z o.o.		Poland	100
Outokumpu Distribution UK Ltd.		The UK	100
Outokumpu EMEA GmbH		Germany	100
Outokumpu EMEA Oy	*)	Finland	100
Outokumpu Ges.m.b.H		Austria	100
Outokumpu India Private Limited		India	100
Outokumpu Industriunderhåll AB		Sweden	100
Outokumpu Istanbul Dis Ticaret Limited Sirketi	*)	Turkey	100
Outokumpu K.K.		Japan	100
Outokumpu Management (Shanghai) Co., Ltd.	*)	China	100
Outokumpu Middle East FZCO		United Arab Emirates	100
Outokumpu Nirosta GmbH		Germany	100
Outokumpu Nordic AB		Sweden	100
Outokumpu N.V.		Belgium	100
Outokumpu Prefab AB		Sweden	100
Outokumpu Press Plate AB		Sweden	100
Outokumpu PSC Benelux B.V.		The Netherlands	100
Outokumpu PSC Finland Oy		Finland	100
Outokumpu PSC Germany GmbH		Germany	100
Outokumpu Pty Ltd		Australia	100
Outokumpu (Pty) Ltd		South Africa	100
Outokumpu S.A.		Spain	100
Outokumpu (S.E.A.) Pte. Ltd.		Singapore	100
Outokumpu Shipping Oy		Finland	100
Outokumpu S.p.A.		Italy	100
Outokumpu S.r.l.		Romania	100

		Country	Group holding, %
Outokumpu Stainless AB		Sweden	100
Outokumpu Stainless B.V.		The Netherlands	100
Outokumpu Stainless (GZ) Trading Co. Ltd.		China	100
Outokumpu Stainless Steel (China) Co. Ltd.		China	100
Outokumpu Stainless Oy		Finland	100
Outokumpu Tornio Infrastructure Oy		Finland	100
Sogepar UK Limited		The UK	100
Americas			
Outokumpu Brasil Comercio de Metais Ltda.		Brazil	100
Outokumpu Fortinox S.A.		Argentina	100
Outokumpu Mexinox Distribution S.A. de C.V.		Mexico	100
Outokumpu Mexinox S.A. de C.V.		Mexico	100
Outokumpu Stainless Coil, Inc.		The US	100
Outokumpu Stainless Plate, LLC		The US	100
Outokumpu Stainless USA, LLC		The US	100
ThyssenKrupp Mexinox CreateIT, S.A. de C.V.		Mexico	100
Long Products			
Outokumpu Stainless Bar, LLC		The US	100
Outokumpu Stainless Ltd		The UK	100
Outokumpu Stainless Pipe, Inc.		The US	100
Polarit Welding, Inc.		The US	100
Other operations			
2843617 Canada Inc.		Canada	100
OHHEB GmbH	1)	Germany	100
Orijärvi Oy	*)	Finland	100
Outokumpu Americas, Inc.		The US	100
Outokumpu Chrome Holding Oy	*)	Finland	100
Outokumpu Distribution Benelux B.V.		The Netherlands	100
Outokumpu Holding Germany GmbH	*)	Germany	100
Outokumpu Holding Italia S.p.A.		Italy	100
Outokumpu Holding Nederland B.V.	*)	The Netherlands	100
Outokumpu Holding UK Limited		The UK	100
Outokumpu Mining Australia Pty. Ltd.		Australia	100
Outokumpu Mining Oy		Finland	100
Outokumpu Stainless Holding GmbH		Germany	100
Outokumpu Stainless Holdings Ltd		The UK	100

		Country	Group holding, %
Outokumpu Stainless UAB	2)	Lithuania	100
Outokumpu Treasury Belgium N.V./SA	*)	Belgium	100
Outokumpu Zinc B.V.	*)	The Netherlands	100
Viscaria AB	*)	Sweden	100
Visent Invest AB		Sweden	100
Visenta Försäkrings AB		Sweden	100

In addition Outokumpu has agents and branch offices in Argentina, Bulgaria, Chile, Colombia, Egypt, Estonia, Greece, Israel, South Korea, Lebanon, Peru, Slovenia, Switzerland, Taiwan, Thailand, Venezuela and Vietnam.

This list does not include all dormant companies or all holding companies.

The Group holding corresponds to the Group's share of voting rights.

1) Acquired in 2016

2) Established in 2016

*) Shares and stock held by the parent company

33. Events after the end of the reporting period

Divestment of quarto plate mill in the US

On January 25, 2017, Outokumpu divested its quarto plate mill in New Castle, Indiana, US to D'Orazio Capital Partners, a US-based private equity company and to the mill's current management. The cash consideration of the transaction is expected to be approximately EUR 28 million, depending on the amount of the net working capital at the closing. In 2016 financial statements, the New Castle mill is presented as assets held for sale.

Key financial figures

Group key figures

Scope of activity		2016	2015	2014	2013	2012
Sales	€ million	**5,690**	6,384	6,844	6,745	4,538
- change in sales	%	**-10.9**	-6.7	1.5	48.6	-9.4
- exports from and sales outside Finland, of total sales	%	**96.4**	96.6	96.7	96.9	95.7
Capital employed on Dec 31 [1]	€ million	**3,816**	4,133	4,072	4,265	5,623
Operating capital on Dec 31 [1]	€ million	**3,635**	4,133	4,059	4,266	5,626
Capital expenditure [2]	€ million	**164**	154	127	183	3,149
- in relation to sales	%	**2.9**	2.4	1.8	2.7	69.4
Depreciation and amortization	€ million	**226**	302	320	332	230
Impairments	€ million	**26**	1	27	13	105
Research and development costs	€ million	**20**	23	23	26	19
- in relation to sales	%	**0.4**	0.4	0.3	0.4	0.4
Personnel on 31 Dec [3]		**10,600**	11,002	12,125	12,561	16,649
- average for the year [4]		**10,977**	11,833	12,540	13,150	7,853

[1] Key figure definition changed in 2016. Figures for 2015 have been restated. Figures for 2014–2012 have not been restated.
[2] Capital expenditure for 2014 and 2013 presented for continuing operations.
[3] Personnel reported as headcount. Year 2013 reported for continuing operations.
[4] Year 2012 average personnel does not include Inoxum personnel. Years 2014 and 2013 reported for continuing operations.

Profitability		2016	2015	2014	2013	2012
EBIT	€ million	**103**	228	-243	-510	-385
- in relation to sales	%	**1.8**	3.6	-3.6	-7.6	-8.5
EBITDA	€ million	**355**	531	104	-165	-50
Share of results of associated companies and joint ventures	€ million	**5**	49	7	-2	-0
Result before taxes	€ million	**-13**	127	-459	-822	-524
- in relation to sales	%	**-0.2**	2.0	-6.7	-12.2	-11.5
Net result for the financial year	€ million	**144**	86	-439	-1,003	-536
- in relation to sales	%	**2.5**	1.4	-6.4	-14.9	-11.8
Return on equity [1]	%	**6.4**	3.9	-21.8	-41.4	-21.4
Return on capital employed [1]	%	**2.6**	5.3	-5.8	-10.3	-8.2
Return on operating capital [1]	%	**2.7**	5.3	-5.8	-10.3	-8.2

Financing and financial position

		2016	2015	2014	2013	2012
Liabilities	€ million	**3,574**	3,546	4,279	5,884	5,949
Net debt	€ million	**1,242**	1,610	1,974	3,556	3,431
- in relation to sales	%	**21.8**	25.2	28.8	52.7	75.6
Net financial expenses	€ million	**121**	149	223	310	138
- in relation to sales	%	**2.1**	2.3	3.3	4.6	3.1
Net interest expenses	€ million	**102**	125	139	197	66
- in relation to sales	%	**1.8**	2.0	2.0	2.9	1.5
Interest cover		**0.9**	2.0	-2.3	-3.2	-6.9
Share capital	€ million	**311**	311	311	311	311
Other equity	€ million	**2,105**	2,018	1,821	1,580	2,641
Equity-to-assets ratio	%	**40.4**	39.6	33.3	21.5	30.5
Debt-to-equity ratio	%	**51.4**	69.1	92.6	188.0	116.2
Net cash generated from operating activities [5]	€ million	**389**	-34	-126	34	266
Dividends	€ million	**0.10** [6]	-	-	-	-

[5] Cash flows for 2014 and 2013 presented for continuing operations.

[6] The Board of Directors' proposal to the Annual General Meeting.

Share-related key figures

		2016	2015	2014	2013	2012
Earnings per share [1), 2)]	€	**0.35**	0.23	-1.24	-7.52	-0.46
Earnings per share, continuing operations [2), 3)]	€	**-**	-	-1.27	-6.23	-
Cash flow per share [1), 2)]	€	**0.94**	-0.08	-0.36	0.26	0.23
Equity per share [2), 4)]	€	**5.84**	5.60	5.13	14.23	22.07
Dividend per share	€	**0.10** [5)]	-	-	-	-
Dividend payout ratio	%	**28.8**	0.0	neg.	neg.	neg.
Dividend yield	%	**1.2**	0.0	0.0	0.0	0.0
Price/earnings ratio		**24.31**	11.85	neg.	neg.	neg.
Development of share price [6)]						
Average trading price	€	**4.51**	4.49	5.16	4.64	0.97
Lowest trading price	€	**2.08**	2.06	3.37	3.03	0.64
Highest trading price	€	**8.51**	7.76	7.50	7.39	2.10
Trading price at the end of the period	€	**8.51**	2.73	4.77	3.55	0.79
Change during the period [7)]	%	**211.3**	-42.7	34.2	-48.8	-40.3
Change in the OMX Helsinki index during the period	%	**3.6**	10.8	5.7	26.5	8.3
Market capitalization at the end of the period	€ million	**3,541**	1,138	1,987	845	1,650
Development in trading volume						
Trading volume [8)]	1,000 shares	**955,682**	1,345,515	695,235	178,989	1,297,738
In relation to weighted average number of shares [1)]	%	**230.6**	323.9	198.9	135.0	112.5
Adjusted average number of shares [9)]		**414,411,287**	415,473,976	349,558,854	132,579,577	1,156,005,029
Number of shares at the end of the period [8), 9), 10)]		**413,860,600**	415,489,308	415,426,724	2,077,105,460	2,077,065,460

1) 2014 and 2013 calculated based on the rights-issue-adjusted weighted average number of shares. 2012 has not been restated.

2) 2013 adjusted to reflect the reverse split in June 2014.

3) 2013 calculated based on rights-issue-adjusted weighted average number of shares.

4) 2013 and 2012 calculated based on the rights-issue-adjusted number of shares

5) The Board of Directors' proposal to the Annual General Meeting.

6) 2013 share prices adjusted according to the effect of the rights issue and the reverse split. 2012 has not been adjusted.

7) 2014 calculated based on the adjusted comparable share prices. 2013 calculated based on the unadjusted comparable share prices.

8) Includes only Nasdaq Helsinki trading.

9) Excluding treasury shares.

10) 2013 and 2012 not adjusted according to the effect of the rights-issue-adjusted and the reverse split.

Definitions of key financial figures

Capital employed = Total equity + net debt + net defined benefit and other long-term employee benefit obligations + net interest rate derivative liabilities + net accrued interest expenses – net assets held for sale – loans receivable – available-for-sale financial assets – investments at fair value through profit or loss – investments in associated companies and joint ventures

Operating capital = Capital employed + net deferred tax liability

Research and development costs = Research and development expenses in the statement of income (including expenses covered by grants received)

Underlying EBIT = EBIT – Items classified adjustments

EBITDA = EBIT before depreciation, amortization and impairments

$$\text{Return on equity} = \frac{\text{Net result for the financial period (4-quarter rolling)}}{\text{Total equity (4-quarter rolling average)}} \times 100$$

$$\text{Return on capital employed (ROCE)} = \frac{\text{EBIT (4-quarter rolling)}}{\text{Capital employed (4-quarter rolling average)}} \times 100$$

$$\text{Return on operating capital (ROOC)} = \frac{\text{EBIT (4-quarter rolling)}}{\text{Operating capital (4-quarter rolling average)}} \times 100$$

Net debt = Non-current debt + current debt – cash and cash equivalents

$$\text{Interest cover} = \frac{\text{Result before taxes + net interest expenses}}{\text{Net interest expenses}}$$

$$\text{Equity-to-assets ratio} = \frac{\text{Total equity}}{\text{Total assets – advances received}} \times 100$$

$$\text{Debt-to-equity ratio} = \frac{\text{Net debt}}{\text{Total equity}} \times 100$$

$$\text{Earnings per share} = \frac{\text{Net result for the financial year attributable to the equity holders}}{\text{Adjusted average number of shares during the period}}$$

$$\text{Cash flow per share} = \frac{\text{Net cash generated from operating activities}}{\text{Adjusted average number of shares during the period}}$$

$$\text{Equity per share} = \frac{\text{Equity attributable to the equity holders}}{\text{Adjusted number of shares at the end of the period}}$$

$$\text{Dividend per share} = \frac{\text{Dividend for the financial year}}{\text{Adjusted number of shares at the end of the period}}$$

$$\text{Dividend payout ratio} = \frac{\text{Dividend for the financial year}}{\text{Net result for the financial year attributable to the equity holders}} \times 100$$

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Adjusted trading price at the end of the period}} \times 100$$

$$\text{Price/earnings ratio (P/E)} = \frac{\text{Adjusted trading price at the end of the period}}{\text{Earnings per share}}$$

$$\text{Average trading price} = \frac{\text{EUR amount traded during the period}}{\text{Adjusted number of shares traded during the period}}$$

Market capitalization at end of the period = Number of shares at the end of the period × Trading price at the end of the period

Trading volume = Number of shares traded during the period, and in relation to the weighted average number of shares during the period

Parent company financial statements

Income statement of the parent company

€ million	**2016**	2015
Sales	**561**	649
Cost of sales	**-451**	-580
Gross margin	**109**	69
Other operating income	**9**	10
Selling and marketing expenses	**-27**	-32
Administrative expenses	**-123**	-84
Other operating expenses	**-20**	-118
EBIT	**-52**	-156
Financial income and expenses	**157**	311
Result before appropriations and taxes	**105**	156
Appropriations		
Group contribution	**0**	-
Change in depreciation difference	**0**	0
Income taxes	**-1**	-0
Result for the financial year	**105**	155

According to the Finnish accounting standards the parent company financial statements are to be presented in addition to Group financial statements. The parent company's financial statements have been prepared in accordance with Finnish accounting standards (FAS). The parent company Outokumpu Oyj's income statement and balance sheet items are mainly internal and are eliminated on the group level. The parent company's complete financial statements (available only in Finnish) can be read on the company's internet pages www.outokumpu.com ↗.

Balance sheet of the parent company

€ million	2016	2015
ASSETS		
Non-current assets		
Intangible assets	**28**	19
Property, plant and equipment	**21**	11
Financial assets		
Shares in Group companies	**4,037**	3,798
Loan receivables from Group companies	**428**	740
Shares in associated companies	**31**	31
Other shares and holdings	**49**	36
Other financial assets	**0**	2
	4,545	4,607
Total non-current assets	**4,594**	4,637
Current assets		
Current receivables		
Interest-bearing	**1,774**	2,260
Non interest-bearing	**163**	225
	1,937	2,485
Cash and cash equivalents	**124**	139
Total current assets	**2,062**	2,624
TOTAL ASSETS	**6,655**	7,260

€ million	2016	2015
EQUITY AND LIABILITIES		
Shareholders' equity		
Share capital	**311**	311
Premium fund	**720**	720
Invested unrestricted equity reserve	**2,123**	2,123
Retained earnings	**19**	-130
Result for the financial year	**105**	155
	3,278	3,181
Untaxed reserves		
Accumulated depreciation difference	**0**	0
Liabilities		
Non-current liabilities		
Interest-bearing	**915**	1,096
	915	1,096
Current liabilities		
Interest-bearing	**2,190**	2,725
Non interest-bearing	**272**	259
	2,462	2,984
Total liabilities	**3,377**	4,080
TOTAL EQUITY AND LIABILITIES	**6,655**	7,260

Cash flow statement of the parent company

€ million	2016	2015
Cash flow from operating activities		
Result for the financial year	**105**	155
Adjustments for		
Taxes	**1**	0
Depreciation and amortization	**6**	6
Impairments	**8**	117
Gain/loss on sale of intangible assets, and property, plant and equipment	**-2**	-5
Interest income	**-124**	-137
Dividend income	**-119**	-272
Interest expense	**64**	88
Change in provisions	**-1**	1
Exchange gains and losses	**-2**	-13
Gain on disposal of other financial assets	**-5**	-
Other adjustments	**2**	-
	-173	-215
Change in working capital		
Change in trade and other receivables	**47**	-64
Change in trade and other payables	**23**	-51
	71	-116
Dividends received	**119**	272
Interest received	**124**	133
Interest paid	**-69**	-86
Income taxes paid	**-1**	0
	174	319
Net cash from operating activities	**176**	143

€ million	2016	2015
Cash flow from investing activities		
Investments in subsidiaries and other shares and holdings	**-267**	-222
Purchases of property, plant and equipment	**-1**	-0
Purchases of intangible assets	**-28**	-31
Proceeds from disposal of subsidiaries and other disposals	**4**	1,020
Proceeds from sale of property, plant and equipment	**0**	16
Proceeds from sale of intangible assets	**8**	22
Proceeds from sale of other financial assets	**0**	-
Change in other long-term receivables	**11**	261
Net cash from investing activities	**-272**	1,067
Cash flow before financing activities	**-95**	1,210
Cash flow from financing activities		
Repurchase of treasury shares	**-7**	-
Gain on disposal of other financial assets	**6**	-
Borrowings of non-current debt	**369**	326
Repayments of non-current debt	**-637**	-589
Change in current debt	**-400**	-409
Other financing cash flow	**751**	-520
Net cash from financing activities	**81**	-1,192
Net change in cash and cash equivalents	**-14**	18
Net change in cash and cash equivalents in the balance sheet	**-14**	18

Statement of changes in equity of the parent company

€ million	Share capital	Premium fund	Invested unrestricted equity reserve	Retained earnings	Total equity
Equity on Jan 1, 2015	311	720	2,123	-130	3,025
Result for the financial year	-	-	-	155	155
Equity on Dec 31, 2015	311	720	2,123	26	3,181
Result for the financial year	-	-	-	105	105
Treasury shares repurchase	-	-	-	-7	-7
Equity on Dec 31, 2016	**311**	**720**	**2,123**	**123**	**3,278**

Distributable funds on Dec 31

€ million	2016	2015
Retained earnings	**19**	-130
Result for the financial year	**105**	155
Invested unrestricted equity reserve	**2,123**	2,123
Distributable funds on Dec 31	**2,247**	2,149

Commitments and contingent liabilities of the parent company

€ million	2016	2015
Pledges on Dec 31	**13**	30
Guarantees on Dec 31		
On behalf of subsidiaries		
For financing	**304**	261
For commercial guarantees	**1**	4
For other commitments	**26**	29
On behalf of associated companies		
For financing	**-**	7
On behalf of sold companies		
For financing	**-**	1
For commercial and other guarantees	**-**	1
Other commitments	**16**	11

A major part of Outokumpu's borrowings are secured partly by share pledges over the shares in selected Group companies and partly by security to the real property of selected subsidiaries.

Pledges reported in 2016 include Outokumpu's shares in Manga LNG Oy to secure certain liabilities of Manga LNG Oy. Outokumpu's total liability at the end of 2016 amounts to EUR 22 million, which is presented under pledges and other commitments.

Outokumpu Oyj is, in relation to its shareholding in Kymppivoima Tuotanto Oy and Etelä-Pohjanmaan Voima Oy, liable for the costs, commitments and liabilities relating to electricity provided by Rapid Power Oy. Outokumpu's liability for the net debt of Rapid Power Oy at the year-end 2016 amounted to EUR 4 million (2015: EUR 7 million). Outokumpu Oyj is, in relation to its shareholding in Etelä-Pohjanmaan Voima Oy, liable for the costs, commitments and liabilities relating to electricity provided by Tornion Voima Oy. Outokumpu's liability for the net debt of Tornion Voima Oy at the year-end 2016 amounted to EUR 3 million (2015: EUR 4 million). These liabilities are reported under other commitments.

One remaining guarantee issued by ThyssenKrupp on behalf of Inoxum companies has not yet been transferred to Outokumpu Oyj as of December 31, 2016. However, Outokumpu Oyj has given ThyssenKrupp a counter-guarantee for this commitment amounting to EUR 4 million.

Outokumpu Oyj will guarantee until January 2017 certain subsidiaries' ability to satisfy their financial liabilities when due.

Corporate Governance 2016

working towards a world that lasts forever

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Corporate Governance in 2016

Regulatory and structural framework

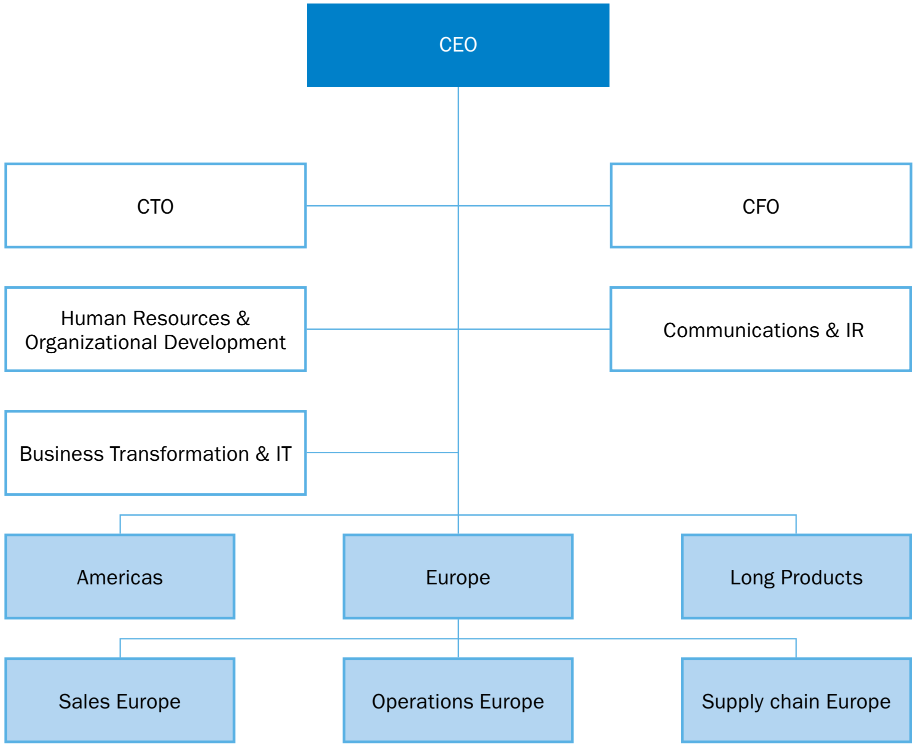
Outokumpu Oyj, the Group's parent company, is a public limited liability company, listed on the Helsinki Stock Exchange (Nasdaq) and incorporated and domiciled in Finland. In its corporate governance and management, Outokumpu Oyj complies with the laws and regulations applicable to Finnish public companies, the company's Articles of Association and the Corporate Governance Policy approved by the company's Board of Directors.

Outokumpu Oyj follows the Finnish Corporate Governance Code effective as of January 1, 2016. The Finnish Corporate Governance Code is issued by the Securities Market Association and adopted by Nasdaq Helsinki Ltd.

The governing bodies of the parent company Outokumpu Oyj, i.e. the General Meeting of Shareholders, the Board of Directors and the President and Chief Executive Officer (CEO), have the ultimate responsibility for the organization of the Group's management and operations. The Outokumpu Leadership Team members report to the CEO and support and assist the CEO in the efficient management of the Group's operations. Outokumpu's primary corporate governance information source is the Group's Corporate Governance website Please visit the website for the latest Corporate Governance Statement and the latest corporate governance information.

The General Meeting of Shareholders convenes at least once a year. Under the Finnish Companies Act, certain important decisions, such as the approval of financial statements, decisions on dividends and increases or reductions in share capital, amendments to the Articles of Association, and election of the Board of Directors and auditors, fall within the exclusive domain of the General Meeting of Shareholders.

Organization on December 31, 2016



Composition and Operations of the Board of Directors on December 31, 2016

Chairman of the Board of Directors

Jorma Ollila

b. 1950, Finnish citizen
M.Sc. (Pol.) (University of Helsinki 1976)
M.Sc. (Econ.) (London School of Economics 1978)
M.Sc. (Eng.) (Helsinki University of Technology 1981)
Outokumpu Board member 2013–
Chairman of the Board 2013–
Chairman of the Remuneration Committee

Work experience

Chairman of the Board: Nokia Corporation 2006–2012
Chairman and Chief Executive Officer: Nokia Corporation 1999–2006
President and Chief Executive Officer: Nokia Corporation 1992–1999
President: Nokia Mobile Phones 1990–1992
Senior Vice President, Finance: Nokia 1986–1989
Various managerial positions within corporate banking: Citibank 1978–1985

Positions of trust

Chairman of the Board; Xinova Management Company LLC 2016–
Chairman of the Board: Miltton Oy 2015–
Chairman of the Boards of Directors and the Supervisory Boards: The Research Institute of the Finnish Economy ETLA and Finnish Business and Policy Forum EVA 2005–
Vice Chairman of the Board: Otava Ltd 1996–
Board member: TBG AG 2016–
Board member: Tetra Laval Group 2013–
Board member: University of Helsinki 2009–
Advisory Partner: Perella Weinberg Partners 2014–
Chairman of the Board: Royal Dutch Shell Plc 2006–2015

Independent of the company and its significant shareholders.

Vice Chairman of the Board of Directors

Olli Vaartimo

b. 1950, Finnish citizen
M.Sc. (Econ.)
Outokumpu Board member 2010–
Vice Chairman of the Board 2011–
Chairman of the Audit Committee

Work experience

CFO: Metso Oyj 2003–2010
Executive Vice President, Deputy to the President and CEO: Metso Oyj 2003–2010
Member of the Executive Team 1999–2010 and Vice Chairman of the Executive Team 2004–2010: Metso Oyj
President and CEO (acting): Metso Oyj 2003–2004
President and CEO: Metso Minerals Oy 1999–2003
President and CEO: Nordberg Group, Rauma Oyj 1993–1999
Executive Vice President: Rauma Oyj 1991–1998

Positions of trust

Chairman of the Board: Kuusakoski Group Oy 2016–
Vice Chairman of the Board: Kuusakoski Oy 2016–
Vice Chairman of the Board: BMH Technology Oy 2016–
Board member: Sampo-Rosenlew Oy 2016–
Board member: Black Bruin Oy 2016– (earlier Sampo-Hydraulics Oy)
Board member: Valmet Automotive Oy 2014–
Chairman of the Board: Valmet Automotive Oy 2003–2014
Board member: Kuusakoski Oy 2008–2016
Board member: Kuusakoski Group Oy 2008–2016
Board member: Alteams Oy 2008–2014
Board member: Northland Resources SA 2013–2014

Independent of the company and its significant shareholders.

Members of the Board of Directors

Markus Akermann

b. 1947, Swiss citizen
M.Econ. (University of St.Gallen, Switzerland)
Outokumpu Board member 2013–
Member of the Audit Committee

Work experience

Chief Executive Officer: Holcim Group 2002–2012
Chairman of the Board: Holcim Group Support Ltd 2002–2012
Member of the Board: Holcim Ltd 2002–2013
Member of the Group Executive Committee with responsibility for Latin America, international trading activities and Corporate Human Resources and Training: Holcim Group 1993–2001
Member of the Board and Managing Director: Holcim Apasco SA de CV, Mexico 1993–2012
Area Manager Central America, Andean Countries and international trading activities: Holcim Group 1986–1993

Positions of trust

Member of the Board: Votorantim Cimentos S.A. 2013–
Member of the Board: ACC Mumbai, India 2005–2012
Member of the Board: Ambuja Cements Ltd Mumbai, India 2006–2012
Member of the Executive Board: World Business Council for Sustainable Development (WBCSD) 2008–2011

Independent of the company and its significant shareholders.

Roberto Gualdoni
b. 1956, German citizen
MBA, M.Sc. (Eng.)
Outokumpu Board member 2014–
Member of the Audit Committee

Work experience
Chief Executive Officer: Styrolution Group 2011–2014
President, Styrenics: BASF SE 2010–2011
Senior Vice President, Global Procurement Raw Materials: BASF SE 2007–2010
Senior Vice President, Global Procurement Basic Products: BASF SE 2006–2007
Group Vice President, Business Unit Engineering Plastics Europe: BASF SE 2001–2005
Group Vice President, Business Unit Foam Products Europe: BASF SE 1998–2001
Chief Controller, Regional Division Central Europe: BASF SE 1996–1998
Controlling, Sales Division Germany: BASF SE 1994–1996
European Market Coordinator – Specialty Chemicals: BASF SE 1991–1994
Market Coordinator North Europe/Germany – Specialty Chemicals: BASF SE 1991
Product manager, Superabsorbers and Dispersing Agents: BASF SE 1990–1991
Marketing Manager, Textile, Leather, Paper and Specialty Chemicals: BASF Argentina S.A. 1988–1989
Assistant to the General Manager: BASF Argentina S.A. 1987–1989
Commercial Coordinator: Tenaris 1983–1986

Positions of trust
Board member: American Aerogel Corp. 2016–
Chairman of the Supervisory Board: Styrolution Europe and Styrolution Americas 2012–2014
Chairman of the Board: BGS 2001–2005
Member of the Steering Board: PlasticsEurope 2012–2014
Board member: FIW 1998–2001
Board member: BASF Intertrade AG 2006–2007
Vice President: EXIBA 1998–2001

Independent of the company and its significant shareholders.

Stig Gustavson
b. 1945, Finnish citizen
M.Sc. (Eng.)
Dr.Tech. (hon.) Tampere University of Technology
Dr.Tech. (hon.) Aalto University Helsinki
Finnish Honorary title Vuorineuvos
Outokumpu Board member 2014–
Member of the Remuneration Committee

Work experience
President and CEO: Konecranes Plc 1994–2005
President: KONE Oy/KONE Cranes 1988–1994
President: KONE Oy/KONE Wood 1985–1988
Director: KONE Oy/KONE Roxon 1982–1985
Various executive positions within leading Finnish and Swedish companies, 1970–1982

Positions of trust
Board memberships and Chairmanships in over 20 major Finnish and Scandinavian companies and over 10 Finnish, Scandinavian and European organizations, trusts and charities, including present positions.
Chairman of the Board: Suomi Gas Distribution Oy 2015–
Chairman of the Finance Committee: Technology Academy (Finland) 2015–
Vice Chairman of the Board: Konecranes Plc 2016–
Vice Chairman of the Supervisory Board: Tampere Technical University 2013–
Supervisory Board Member: Varma Mutual Pension Insurance Company 2000–
Senior Advisor: IK Investment Partners 1997–
Board Member: IK Investment Partners Funds 2014–
Chairman of the Board: Konecranes Plc 2005–2016
Chairman of the Board and Executive Committee: Technology Academy (Finland) 2007–2015

Independent of the company and its significant shareholders.

Kati ter Horst
b. 1968, Finnish citizen
M.Sc. (Marketing), MBA (International Business)
Outokumpu Board member 2016–
Member of the Audit Committee

Work experience
Executive Vice President, Head of Stora Enso Paper 2014–
Senior Vice President, Paper Sales, Printing and Living: Stora Enso 2013–2014
Senior Vice President, Office Paper Sales, Printing and Reading: Stora Enso 2012–2013
Director, Customer Service Centre West, Publication Paper: Stora Enso 2010–2012
Several managerial positions in the paper business, 1996–2010
Business analyst, Jaakko Pöyry Consulting, Singapore 1994–1996

Positions of trust
Board member: Finnish Forest Industries Federation 2015–

Independent of the company and its significant shareholders.

Heikki Malinen
b. 1962, Finnish citizen
M.Sc. (Econ.), MBA (Harvard)
Outokumpu Board member 2012–
Member of the Remuneration Committee

Work experience
President and CEO: Posti Group Corporation (formerly Itella Corporation) 2012–
President and CEO: Pöyry PLC 2008–2012
Executive Vice President, Strategy, member of the UPM Executive Team: UPMKymmene Corporation, Helsinki, Finland 2006–2008
President: UPM North America, Chicago, USA 2004–2005
President of Sales: UPM North America, Chicago, USA 2002–2003
Managing Partner: Jaakko Pöyry Consulting, New York, USA 2000–2001
Engagement Manager: McKinsey & Co, Atlanta, USA 1997–1999
Director, Business Development UPM Paper Divisions, Helsinki, Finland 1994–1996

Positions of trust
Vice Chairman: Service Sector Employers PALTA 2016–
Board member: East Office of Finnish Industries 2012–
Supervisory Board member: Finnish Fair Corporation 2014–
Chairman: American Chamber of Commerce (AmCham Finland) 2009–2014
Board member: Ilmarinen Mutual Pension Insurance Company 2014–2016
Board member: Federation of Finnish Technology Industries 2011–2012
Board member: Botnia Oy 2006–2008
Supervisory Board member: Ilmarinen Mutual Pension Insurance Company 2013

Independent of the company and its significant shareholders.

Saila Miettinen-Lähde
b. 1962, Finnish citizen
M.Sc. (Eng.)
Outokumpu Board member 2015–
Member of the Audit Committee

Work experience
Chief Financial Officer: F-Secure Corporation 2015–
Deputy CEO 2012–2014 and CFO 2005–2015: Talvivaara Mining Company Plc
Founding Partner: SIDOS Partners Oy 2004–2005
Director: Carnegie Investment Bank 2000–2004
Vice President Business Development: Orion Oyj 2000
Director: The Finnish Innovation Fund Sitra: 1998–1999
Various managerial positions: Leiras Oy 1993–1998

Positions of trust
Member of the Board: LeaseGreen Group Oy 2015–
Chairman of the Board: Valuecode Oy 2014–2015 and member of the Board 2008–2014
Member of the Board: Rautaruukki Oyj 2012–2014
Member of the Board: Biohit Oyj 2011–2013
Member of the Board: Talvivaara Mining Company Plc 2007–2012

Independent of the company and its significant shareholders.

Elisabeth Nilsson
b. 1953, Swedish citizen
M.Sc. (Tech.)
Hon. Doctor, Luleå Technical University
Outokumpu Board member 2011–
Member of the Remuneration Committee

Work experience
Governor: Östergötlands län 2010–
President: Jernkontoret (Swedish Steel Producers' Association) 2005–2010
General Manager, Metallurgy Division: SSAB Oxelösund 2003–2005
Managing Director: SSAB Merox 2001–2003
Manager, Department for Environment, Health and Safety: SSAB 1996–2001
Manager, Continuous Casting Department: SSAB Oxelösund 1991–1996

Positions of trust
Chairman of the Board: Göta Kanalbolaget 2011–
Chairman of the Board: Risbergska donationsfonden 2010–
Chairman of the Board: Tåkernfonden 2010–
Chairman of the Board: Övralidsstiftelsen 2010–
Member: Royal Swedish Academy of Engineering Science IVA 2007–
Member: Skandia Council 2014–
Board member: EKN Exportkreditnämnden 2016–
Board Member: Boliden 2015–
Chairman: Foundation Mefos 2005–2010
Chairman: Svenska Bergsmannaföreningen 2007–2009
Board member: Northland Resources SA 2013–2014
Board member: Sveaskog AB 2010–2012
Board member: 4:e AP-fonden 2010–2011
Board member: Swerea AB 2008–2011
Board member: Euromaint AB 2004–2007
Board member: Swedish Maritime Administration 1996–2006

Independent of the company and its significant shareholders.

The Board assesses the independence of the Board members and records the outcome in the Board minutes. All of the members of the Board of Directors on December 31, 2016 were independent of the company and its significant shareholders.

The updated biographical details are found on the company's website.

Outokumpu shares and share-based rights (parents or subsidiaries) owned by each director and his/her controlled corporations on December 31, 2016

Jorma Ollila	54,248
Olli Vaartimo	29,202
Markus Akermann	23,248
Roberto Gualdoni	32,936
Sitg Gustavson	14,936
Kati ter Horst	6,488
Heikki Malinen	25,936
Saila Miettinen-Lähde	10,918
Elisabeth Nilsson	17,545
Total	**215,475**

Operations and appointment of the Board of Directors

The general objective of the Board of Directors is to direct Outokumpu's business and strategies in a manner that secures a significant and sustained increase in the value of the company for its shareholders. To this end the members of the Board are expected to act as a resource and to offer their expertise and experience for the benefit of the company. The tasks and responsibilities of the company's Board of Directors are determined on the basis of the Finnish Companies Act as well as other applicable legislation.

The Board of Directors has general authority to decide and act in all matters not reserved for other corporate governance bodies by law or under the provisions of the company's Articles of Association. The general task of the Board of Directors is to organize and oversee the company's management and operations and it has the duty at all times to act in the best interest of the company.

The Board of Directors has established rules of procedure which define its tasks and operating principles in the Charter of the Board of Directors. The main duties of the Board of Directors are as follows:

With respect to directing the company's business and strategies:

- To decide on Outokumpu's basic strategy and long-term targets and monitor their implementation.
- To decide on annual business plans.
- To decide on annual limits for the Group's capital expenditure, monitor related implementation, review performance and decide on changes.
- To decide on major and strategically significant investments.
- To decide on major and strategically important business acquisitions and divestments.
- To decide on any significant financing arrangements.
- To decide on any other commitments by any of the Group companies that are out of the ordinary either in terms of value or nature, taking into account the size, structure and field of the Group's operations.

With respect to organizing the company's management and operations:

- To nominate and dismiss the CEO and his/her deputy, if any, monitor his/her performance and to decide on the CEO's terms of service, including incentive schemes, on the basis of a proposal made by the Board's Remuneration Committee.
- To nominate and dismiss the members of the Outokumpu Leadership Team and to define their areas of responsibility based on a proposal by the Board's Remuneration Committee.
- To monitor the adequacy and allocation of the Group's top management resources.
- To decide on any significant changes to the Group's business organization.
- To decide on the Group's ethical values and modes of activity.
- To ensure that policies outlining the principles of corporate governance are in place.
- To ensure that policies outlining the principles of managing the company's insider issues are being observed.
- To ensure that the company has guidelines for any other matters that the Board deems necessary and that fall within the scope of the Board's duties and authority.

With respect to the preparation of matters to be resolved by the General Meetings of Shareholders:

- To establish a dividend policy and issue a proposal on dividend distribution.
- To make a proposal to the Annual General Meeting concerning the election of an external auditor and auditing fees
- To make other proposals to General Meetings of Shareholders.

With respect to financial control and risk management:

- To discuss and approve interim reports, statements and annual accounts.
- To monitor significant risks related to the Group's operations and the management of such risks.
- To ensure that adequate procedures concerning risk management are in place.
- To monitor financial position, liquidity and debt maturity structure
- To monitor the Group's control environment.

The Board of Directors also assesses its own activities on a regular basis.

The Board of Directors shall have a quorum when more than half of its members are present. A decision by the Board of Directors shall be the opinion supported by more than half of the members present at a meeting. In the event of a tie, the Chairman shall have the casting vote.

The Annual General Meeting elects the Chairman, the Vice Chairman and the other members of the Board of Directors for a term expiring at the close of the following Annual General Meeting. The entire Board of Directors is therefore elected at each Annual General Meeting. A Board member may be removed from office at any time by a resolution passed by a General Meeting of Shareholders. Proposals to the Annual General Meeting concerning the election of Board members that have been made known to the Board of Directors prior to the Annual General Meeting will be made public if such a proposal is supported by shareholders holding a minimum of 10% of all the company's shares and voting rights and the person being proposed has consented to such nomination.

Under the company's Articles of Association, the Board shall have a minimum of five and a maximum of twelve members. A Board consisting of nine members was elected at the 2016 Annual General Meeting. The Board of Directors meets at least five times each year. In 2016, the Board of Directors had 13 meetings, and the average attendance rate was 97%.

Breakdown of individual attendance at Board meetings

13 meetings in 2016

	Attendance
Jorma Ollila	13/13
Olli Vaartimo	13/13
Markus Akermann	13/13
Roberto Gualdoni	13/13
Stig Gustavson	11/13
Kati ter Horst (from April 6, 2016)	8/9
Heikki Malinen	13/13
Saila Miettinen-Lähde	13/13
Elisabeth Nilsson	13/13

Diversity Principles of the Board of Directors

Diversity of the Board of Directors supports the vision and the long-term objectives of the Group. Outokumpu recognizes the importance of a diverse Board, including but not limited to age, educational and international background, professional expertise and experience from relevant industrial sectors as well as a representation of both genders. The Company strives for a Board structure where both genders are represented in a well-balanced manner. The Shareholders' Nomination Board shall take the Diversity Principles into account when preparing its proposals to the Annual General Meeting and an account of the progress in achieving set objectives shall be disclosed annually. The objective of a well-balanced Board structure in terms of gender representation was achieved in 2016.

The review by the Board of Directors is found on p. 2 in the Financial statements.

Composition and operations of the Board committees

The Board of Directors has set up two permanent committees consisting of Board members and has confirmed rules of procedure for these committees. Both committees report to the Board of Directors.

Audit Committee

The Audit Committee consists of a minimum of three Board members. The rules of procedure for and responsibilities of the Audit Committee have been established in the Charter of the Audit Committee ↗ approved by the Board of Directors. The task of the Audit Committee is, in greater detail than is possible for the Board as a whole, to deal with matters relating to financial reports and statements, the company's financial position, auditing work, fees paid to auditors, internal controls and compliance matters, the scope of internal and external audits, the Group's tax position, the Group's financial policies and other procedures for managing Group risks. In addition, the Audit Committee prepares a recommendation to the Board of Directors concerning the election of an external auditor and auditing fees at a General Meeting. The Audit Committee met five times during 2016, and the average attendance rate was 96%.

Breakdown of individual attendance at Audit Committee meetings

5 meetings in 2016

	Attendance
Olli Vaartimo	5/5
Markus Akermann	5/5
Roberto Gualdoni (from April 6, 2016)	4/4
Kati ter Horst (from April 6, 2016)	3/4
Heikki Malinen (until April 6, 2016)	1/1
Saila Miettinen-Lähde	5/5

Remuneration Committee

The Remuneration Committee consists of the Chairman of the Board and a minimum of two additional Board members. The rules of procedure for and responsibilities of the Remuneration Committee have been established in the Remuneration Committee Charter ↗ approved by the Board of Directors. The task of the Remuneration Committee is to prepare proposals to the Board of Directors concerning the appointment of the company's top management and principles relating to the compensation they receive. The Board of Directors has authorized the Remuneration Committee to determine the terms of service and benefits enjoyed by the Outokumpu Leadership Team members other than the company's CEO. The Remuneration Committee met five times during 2016, and the average attendance rate was 95%.

Breakdown of individual attendance at Remuneration Committee meetings

5 meetings in 2016

	Attendance
Jorma Ollila	5/5
Roberto Gualdoni (until April 6, 2016)	2/2
Stig Gustavson	4/5
Heikki Malinen (from April 6, 2016)	3/3
Elisabeth Nilsson	5/5

Temporary Working groups

To handle specific tasks, the Board of Directors can also set up temporary working groups consisting of Board members. These working groups report to the Board of Directors. No temporary working groups were set up in 2016.

Shareholders' Nomination Board

Outokumpu's Annual General Meeting in 2012 resolved to establish a Shareholders' Nomination Board to annually prepare proposals to the Annual General Meeting for the election, composition and remuneration of the members of the Board of Directors.

In addition, the Annual General Meeting adopted a Charter of the Shareholders' Nomination Board ↗, which regulates the nomination and composition, and defines the tasks and duties of the Nomination Board.

According to the Charter, the Nomination Board consists of the representatives of Outokumpu's four largest shareholders, registered in the Finnish book-entry securities system on October 1, who accept the assignment and the Chairman of the Board should act as an expert member of the Nomination Board. Accordingly, to be eligible for membership in the Nomination Board, any nominee-registered shareholder needs to register the holding directly in the Finnish book-entry system for at least the said date.

Holdings by a shareholder who, under the Finnish Securities Markets Act has an obligation to disclose changes in shareholdings (flagging obligation) that are divided into several funds or registers will be added together when calculating the share of all the voting rights, provided that the shareholder presents a written request to that effect to the Chairman of the Company's Board of Directors no later than September 30 preceding the Annual General Meeting. Should a shareholder not wish to use its nomination right, the right transfers to the next largest shareholder who would otherwise not have a nomination right.

Shareholders with the right to appoint representatives to the Nomination Board in 2016 were Solidium Oy, Varma Mutual Pension Insurance Company, Ilmarinen Mutual Pension Insurance Company and the Social Insurance Institution of Finland. These shareholders chose the following individuals as their representatives on the Nomination Board: Kari Järvinen, Managing Director of Solidium Oy; Pekka Pajamo, CFO of Varma Mutual Pension Insurance Company; Timo Ritakallio, President and CEO of Ilmarinen Mutual Pension Insurance Company and Tuula Korhonen, Investment Director of the Finnish Social Insurance Institution. Kari Järvinen was elected Chairman of the Nomination Board, and Jorma Ollila, Chairman of the Outokumpu Board of Directors, served as an expert member. The Nomination Board convened 3 times in total, and the attendance rate was 100%. The Nomination Board has submitted its proposals regarding the Board composition and director remuneration to Outokumpu's Board of Directors, and the Board has incorporated these proposals into the notice convening the Outokumpu 2017 Annual General Meeting of Shareholders.

Executive Management

Biographical details of the CEO and the Leadership Team on December 31, 2016

Roeland Baan

b. 1957, Dutch citizen
M.Sc. (Econ.)
President and Chief Executive Officer 2016–
Chairman of the Outokumpu Leadership Team 2016–
Responsibility areas: Group management, Europe business area, legal, corporate affairs and compliance, safety, health and environment, and internal audit
Employed by the Outokumpu Group since 2016

Work experience

Executive Vice President and CEO: Aleris Europe and Asia 2013–2015
Executive Vice President and CEO, Global Rolled and Extruded Products: Aleris 2011–2013
Executive Vice President and CEO, Europe and Asia: Aleris 2008–2011
Executive Vice President, Global Pipes and Tubes Division and the South African carbon steel operations: Arcelor Mittal Group 2006–2007
Chief Executive Officer: Mittal Steel Europe 2004–2006
Senior Vice President, Operations, SHV Energy BV: SHV NV 2001–2004
Chief Executive Officer, Thyssen Sonnenberg Recycling GmbH & Co. KG: SHV NV 1998–2001
Senior Vice President, Business Development and Asia Operations: SHV NV 1996–1998
Various positions: Shell International Petroleum Co. 1980–1996

Positions of trust

Chairman of the Board: International Stainless Steel Forum 2016–
Board member: World Steel Association 2016–
Board member: Eurofer 2015–
Board member: Borusan Mannesmann Boru Sanayi ve Ticaret A.Ş. 2012–, member of the Audit Committee 2012–, Chairman of the Corporate Governance Committee 2013– and member of the Risk Committee 2013–
Vice Chairman: European Aluminium Association 2014–2015

Christoph de la Camp

b. 1963, German citizen
MBA, B.Sc. (Eng.)
Chief Financial Officer 2016–
Member of the Outokumpu Leadership Team 2016–
Responsibility areas: Financial and business controlling, taxation, treasury, metal and risk management, business analysis
Employed by the Outokumpu Group since 2016

Work experience

Chief Financial Officer: INEOS Styrolution Holding GmbH 2011–2016
Chief Financial Officer: INEOS Nova LLC (INEOS Stynerics LLC) 2007–2011
Finance Director: NOVA Innovene International SA 2005–2007
Various commercial, project management and financial positions: BP Plc 1994–2005

Kari Tuutti

b. 1970, Finnish citizen
M.Sc. (Econ.)
President – Long Products 2014–
Member of the Outokumpu Leadership Team 2012–
Responsibility area: Long Products business area
Employed by the Outokumpu Group since 2011

Work experience

Executive Vice President – Marketing, Communications and Sustainability: Outokumpu Oyj 2012–2014
Senior Vice President – Marketing, Communications and IR: Outokumpu Oyj 2011–2012
Communications, marketing, investor relations and treasury positions: Nokia 1995–2011
Treasury Manager, Nokia Finance (Geneva, Switzerland) 1997–1998
Analyst, Treasury: Merita Bank 1994–1995

Positions of trust

Chairman of the Board: Fagersta Stainless AB 2014–2015, 2016–
Chairman of the Board: Euro Inox 2013–2015
Board member: Fagersta Stainless AB 2015–2016

Michael S. Williams
b. 1960, US citizen
B.Sc. (Information science)
President – Americas 2015–
Member of the Outokumpu Leadership Team 2015–
Responsibility area: Americas business area
Employed by the Outokumpu Group since 2015

Work experience
Senior Vice President, Strategic Planning & Business Development: United States Steel Corporation 2013–2015 and other positions 2006–2013 and 1992–1999
Vice President, Commercial Products: Special Metals Corporation 2006
Various executive, operations and sales positions: Ormet Corporation 1999–2006

Positions of Trust:
Board Member: Specialty Steel Industry of North America 2015–
Board memebr: Mobile Area Chamber of Commerce 2017

Liam Bates
b. 1971, UK citizen
B.Sc. hons (Econ.), MBA
Executive Vice President – Supply Chain, Europe 2016–
Member of the Outokumpu Leadership Team 2015–
Responsibility area: Supply chain in the Europe business area
Employed by the Outokumpu Group since 1993

Work experience
President – Quarto Plate: Outokumpu Oyj 2015–2016
Senior Vice President – Quarto Plate Europe: Outokumpu Stainless AB 2014–2015
Vice President – Mergers & Acquisitions: Outokumpu Oyj 2012–2014
Various positions in Outokumpu since 1993

Maciej Gwozdz
b. 1975, Polish citizen
Executive MBA, M. Sc. (Econ.)
Executive Vice President – Operations, Europe 2016–
Member of the Outokumpu Leadership Team 2016–
Responsibility area: Operations in the Europe business area
Employed by the Outokumpu Group since 2016

Work experience
Senior Vice President, Steering Europe: ZF Friedrichshafen AG 2016
Vice President, Steering Europe: TRW Automotive/ZF Group 2013–2016
Various positions in operations and HR: TRW Automotive 2001–2013
Various HR positions: South African Breweries International 1998–2001

Olli-Matti Saksi
b. 1967, Finnish citizen
M.Sc. (Eng.)
Executive Vice President – Sales, Europe 2016–
Member of the Outokumpu Leadership Team 2014–
Responsibility area: Sales in the Europe business area
Employed by Outokumpu Group since 2013

Work experience
President – EMEA: Outokumpu 2014–2016
Senior Vice President – Head of Sales EMEA: Outokumpu 2013–2014
SVP and General Manager, Division Rolled Products: Aleris 2011–2013
VP, Sales and Marketing: Aleris 2008–2011
VP, Sales and Marketing: ArcelorMittal 2004–2008
VP, Sales: Rautaruukki 2000–2004

Positions of trust
Chairman: International Stainless Steel Forum's Market Development Committee 2014–

Pekka Erkkilä
b. 1958, Finnish citizen
M.Sc. (Eng.)
Executive Vice President, Chief Technology Officer 2013–
Member of the Outokumpu Leadership Team 2013–
Responsibility areas: Technology, R&D and strategic investments
Employed by the Outokumpu Group since 2013 (and in 1983–2000 and 2004–2010)

Work experience
President, Ferrous Solutions business area: Outotec Oyj 2010–2013
Executive Vice President, General Stainless and Production Operations: Outokumpu Oyj 2004–2010
Executive Vice President, later President: AvestaPolarit Oyj 2001–2004
President: Outokumpu Chrome Oy 1996–2000
Various management positions: Outokumpu Tornio Works 1983–1995

Positions of trust
Vice Chairman of the Board: Fennovoima Oy 2016–
Board member: East Office of Finnish Industries Oy 2016–
Board member: Metallurgiska Forskningsbolaget i Luleå AB 2015–
Chairman of the Board: Manga LNG Oy 2013–2015
Board member: Association of Finnish Steel and Metal Producers 2016

Board member: Voimaosakeyhtiö SF 2014–2016
Board member: University of Oulu 2009–2015

Jan Hofmann
b. 1979, German citizen
M.Sc. (Econ.)
Executive Vice President – Business Transformation & IT 2016–
Member of the Outokumpu Leadership Team 2015–
Responsibility areas: Business Transformation and IT
Employed by the Outokumpu Group since 2012

Work experience
President – APAC: Outokumpu 2015–2016
Chief Financial Officer – APAC: Outokumpu Oyj 2015
Senior Vice President – Group Strategy and Business Excellence: Outokumpu Oyj 2012–2014
Vice President – Business Development: Inoxum GmbH 2011–2012
Head of Business Development: ThyssenKrupp Stainless AG 2009–2011
Various positions: ThyssenKrupp 2005–2009

Positions of trust
Vice Chairman of the Board: Shanghai Krupp Stainless Co. Ltd, 2015–
Board member: ThyssenKrupp VDM GmbH 2011–2012

Johann Steiner
b. 1966, German citizen
M.Sc. (Econ.)
Executive Vice President – Human Resources and Organization Development 2016–
Member of the Outokumpu Leadership Team 2013–
Responsibility areas: Human resources and organization development
Employed by the Outokumpu Group since 2013

Work experience
Executive Vice President – Human Resources, IT, Health and Safety: Outokumpu 2013–2016
Group HR Director: SAG Group GmbH 2012
Operating Partner: Humatica AG 2010–2012
Group HR Director: Clariant International AG 2002–2008
VP Executive Policies: EADS (former DaimlerChrysler Aerospace AG) 1999–2002
Senior Consultant: Towers Perrin 1993–1998

Saara Tahvanainen
b. 1974, Finnish citizen
M.Sc. (Soc.)
Executive Vice President – Communications and Investor Relations 2016–
Member of the Outokumpu Leadership Team 2014–
Responsibility areas: Communications, investor relations and marketing
Employed by the Outokumpu Group since 2012

Work experience
Executive Vice President – Communications & Marketing: Outokumpu Oyj 2014–2016
Vice President – Communications: Outokumpu Oyj 2013–2014
Director – External Communications: Outokumpu Oyj 2012
Senior Communications Manager and Communications Manager: Nokia 2006–2012
Communications Manager: Fazer 2004–2006
Project Manager, change and leadership communications: Ericsson 2001–2004

The updated biographical details are found on the company's website.

Outokumpu shares and share-based rights (parents or subsidiaries) owned by Leadership Team members and his/her controlled corporations on December 31, 2016

Roeland Baan	583,692
Christoph de la Camp	132,950
Liam Bates	60,059
Pekka Erkkilä	93,207
Maciej Gwozdz	74,137
Jan Hofmann	56,471
Olli-Matti Saksi	103,161
Johann Steiner	57,609
Saara Tahvanainen	1,959
Kari Tuutti	64,070
Michael S. Williams	121,253
Total	**1,348,568**

More information on remuneration can be found on p. 23–24 in this Corporate governance section and in the separate Remuneration statement.

CEO and deputy to the CEO

The President and Chief Executive Officer (CEO) is responsible for the company's operational management, in which the objective is to secure significant and sustainable growth in the value of the company for its shareholders.

The CEO prepares decisions and other matters for the meetings of the Board of Directors, develops the Group's operations in line with the targets agreed with the Board of Directors, and ensures the proper implementation of Board decisions. The CEO is also responsible for ensuring that existing legislation and applicable regulations are observed throughout the Group.

The CEO chairs the meetings of the Outokumpu Leadership Team. The deputy to the CEO is responsible for attending to the CEO's duties in the event that the CEO is prevented from doing so. Since 2011, the Group's Chief Financial Officer has acted as deputy to the CEO.

Leadership Team

The Outokumpu Leadership Team assists the CEO in the overall management of Outokumpu's business. The members of the team have extensive authorities in their individual areas of responsibility, and their duty is to develop the Group's operations in line with the targets set by the Board of Directors and the CEO. At the end of 2016, the members of the Outokumpu Leadership Team held the following positions:

- President and Chief Executive Officer (Group management, Europe business area, legal, corporate affairs and compliance, safety, health and environment, and internal audit)
- Executive Vice President – Chief Financial Officer (Financial and business controlling, taxation, treasury, metal and risk management, business analysis)
- Executive Vice President – Operations Europe (Operations in the Europe business area)
- Executive Vice President – Sales, Europe (Sales in the Europe business area)
- Executive Vice President – Supply Chain, Europe (Supply chain in the Europe business area)
- President – Americas (Americas business area)
- President – Long Products (Long Products business area)
- Executive Vice President – Chief Technology Officer (Technology, R&D and strategic investments)
- Executive Vice President – Business Transformation and IT (Business Transformation and IT)
- Executive Vice President – Communications and Investor Relations (Communications, investor relations and marketing)
- Executive Vice President – Human Resources and Organizational Development (Human resources and organization development)

The Leadership Team typically meets at least once a month.

Internal control procedures and the main features of risk management systems

Internal control

According to the Finnish Limited Liability Companies Act and the Finnish Corporate Governance Code, the Board of Directors is responsible for ensuring that the company's internal controls are properly organized. The purpose of this section is to provide shareholders and other parties with a description of how internal control and risk management of financial reporting is organized in Outokumpu. As a listed company, the Group has to comply with a variety of regulations. To ensure that all the stated requirements are met, Outokumpu has introduced principles for financial reporting and internal control and distributed them throughout the company's organization.

Control environment

The foundation of Outokumpu's control environment is the business culture established within the Group and its associated methods of operation. The basis for the company's compliance and control routines is provided by Group policies and principles, which define the way in which Outokumpu's organization operates. These policies and principles include, for example, the Group's Corporate Responsibility Policy and Ethical Principles. The Outokumpu Code of Conduct describes the Group's basic values and offers standardized, practical guidelines for managers and employees to follow. Outokumpu's compliance program is described at our website ↗.

The Outokumpu performance management process is a key management activity and an important factor in enabling an efficient control environment. In all sections of the Group's operations, planning activities and the setting of both operational and financial targets are executed in accordance with Outokumpu's overall business targets. Management follow-up of related achievements is carried out through monthly management reporting routines and in performance review meetings.

Outokumpu operates in accordance with the risk management policy approved by the Group's Board of Directors, and the Audit Committee regularly monitors the Group's risk map. The policy defines the objectives of risk management activities, the approaches to be taken and areas of responsibility. As well as supporting the Outokumpu strategy, risk management activities help in defining a balanced risk profile from the perspective of shareholders and other stakeholders, such as customers, suppliers, personnel and lenders. More information on risk management within Outokumpu can be found in the Risk management section on p. 16 in the Corporate Governance section.

Outokumpu's control process for financial reporting is based on Group policies, principles and instructions relating to financial reporting, as well as on the responsibility and authorization structure within the Group. Policies relating to financial reporting are usually owned and approved by the CEO and the CFO. Financial reporting in Outokumpu is carried out in a harmonized way using a common chart of accounts.

Financial reporting is prepared in accordance with International Financial Reporting Standards (IFRS). The Outokumpu Accounting Principles (OAP) are Outokumpu's application guidance as regards IFRS. The aim of the OAP and other financial reporting policies and instructions included in the Outokumpu Controller's Manual is to ensure that uniform financial processes and reporting practices are used throughout the Group. Policies and instructions for financial reporting are reviewed on a regular basis and revised when necessary. During the 2016 financial year, Outokumpu has evaluated the implications of the new and revised IFRS standards to enter into force in the near future and implemented the changes required in the ESMA guidelines on Alternative Performance Measures. In 2015, the key changes included the review of the useful lives of its property, plant and equipment. In 2017, Outokumpu will prepare for the implementation of the new IFRS 15 and IFRS 9 standards as of the beginning of 2018 and IFRS 16 standard as of the beginning of 2019 and continue to follow other changes in IFRS standards closely. No major impact on the financial reporting due to the implementation of new standards is expected in 2017.

Financial statements by the parent company and stand-alone Finnish subsidiaries are prepared in accordance with generally accepted accounting principles in Finland, while foreign subsidiaries follow local accounting principles. Outokumpu also complies with regulations regarding financial reporting published by the Financial Supervisory Authority (FIN-FSA) Nasdaq Helsinki and the European Securities and Markets Authority (ESMA).

Identification and assessment of risks related to financial reporting

Risk management processes connected with the Group's financial reporting are coordinated by Outokumpu's Treasury and Risk Management function. Related risks are classified as operational risks and can arise as a consequence of inadequate or failed internal processes, employee actions, systems or other events such as misconduct or crime. The aim of the Outokumpu risk management process is to identify, evaluate, control and mitigate such risks.

Major risks are reported to and evaluated by the Audit Committee on a regular basis. Outokumpu's risk management process includes arranging workshops on the identification of key risks, including operational risks, for business areas and Group functions. Deliverables include risk maps, risk identification plans and a financial assessment of the Group's ability to bear risk.

Control activities

In addition to the Board of Directors and Audit Committee, operational management teams in Outokumpu are responsible for ensuring that internal controls relating to financial reporting are in place at all Outokumpu units. The aim of control activities is to discover, prevent and correct potential errors and deviations in financial reporting. Control activities also aim to ensure that authorization structures are designed and implemented in such a way that conflicting divisions of work do not exist (i.e. one person performing an activity and also being responsible for controlling that activity). Control activities consist of different kinds of measures and include reviews of financial reports by Group management and in business area management teams, the reconciliation of accounts, analyses of the logic behind reported figures, forecasts compared to actual reported figures, and analyses of the Group's financial reporting processes, among others. A key component is the monitoring of monthly performance against financial and operational targets. These control activities take place at different levels of the organization. The most important accounting items in Outokumpu are the valuation and reporting of inventories and other items of working capital. Also, in difficult market situations, asset impairment calculations and related sensitivity analyses are increasingly important. These items are carefully monitored and controlled, both within business areas and at Group level, on a regular basis.

Information technology and solutions play an important role in guaranteeing that the Group's internal controls have a solid foundation. The Group's consolidation system has been renewed in 2015 to ensure timely and uniform financial and management reporting from the Group entities and an effective closing process within the whole Group. Outokumpu is also running a business transformation program to develop and improve business capabilities. This will be achieved mainly by harmonizing and improving the Group's core business processes and implementing supporting IT systems (e.g. ERP) that will be common to the whole Group. As part of this program, internal controls based on systems and processes will also be enhanced and evaluated.

Information and communication

Group-wide policies and principles are available to all Outokumpu employees. Instructions relating to financial reporting are communicated to all the parties involved. The main communication channels employed are Outokumpu's intranet and other easily accessible databases. Face-to-face controller meetings are also organized. Senior controller meetings are organized on a quarterly basis or more frequently when this is considered necessary to share information and discuss issues of topical interest to the Group.

Outokumpu has established different networks and communities in which financial reporting and internal control issues and related instructions are discussed and reviewed. These networks usually consist of personnel from the business areas and Group functions. The aim of these networks, communities and common instructions is to ensure that unified financial processes and reporting practices are used throughout the Group. The networks and communities play an important role in establishing the effectiveness of internal controls relating to financial reporting and in developing Outokumpu policies, instructions and processes.

Follow-up

Both management in all Outokumpu companies and personnel in the accounting and controlling functions are responsible for the follow-up and monitoring of internal controls connected with financial reporting. Through its activities, the Internal Audit function monitors as well as ensures a proper control environment across the group. The Risk Management function and external auditors are also engaged in follow-up and control activities. The findings of the follow-up procedures are reported to the Audit Committee and the Outokumpu Leadership Team on a regular basis.

Compliance

Outokumpu is strongly committed to the highest ethical standards and observes the laws and other regulations of the countries in which it operates, and it complies with agreements and commitments it has made. Outokumpu's Code of Conduct sets out these ethical standards and provides guidelines for a common way of working with the aim of ensuring that all Outokumpu employees live up to Outokumpu's ethical standards. Outokumpu's Legal, Corporate Affairs and Compliance function is responsible for managing and continuously developing Outokumpu's compliance program. Outokumpu's compliance program is described in more detail as part of Outokumpu & society ↗. The Legal, Corporate Affairs and Compliance function reports to the CEO and also reports to the Outokumpu Leadership Team and directly to the Board Audit Committee on compliance-related matters.

Internal audit

Internal Audit is an independent and objective assurance, control, and consulting function designated to add value, to improve operations, and to monitor and support the organization in the achievement of its objectives. Through a systematic, disciplined approach, Internal Audit determines whether governance processes, the internal control system, and the risk management system, as designed and represented by the Board of Directors and the Leadership Team, are effective and efficient.

With a strong commitment to integrity and accountability, Internal Audit provides value to governing bodies and senior management as an objective and direct source of correct, reliable information and independent advice. Internal Audit also monitors adherence to Group principles, policies and procedures, and investigates fraudulent and non-compliant behaviors and activities. Internal Audit performs its function on behalf of and directly reports to the Audit Committee and to the Leadership Team, but is functionally assigned to the CEO. The annual internal audit plan is approved by the Audit Committee.

In 2016, Internal Audit performed 20 scheduled operational audits, including an extended compliance audit in the Nordic region, an evaluation and consulting on delivery performance in the Americas, and audits of various sales offices around the world. The results of all the audits carried out, including their risk appraisals are reported and distributed in writing. In view of the Outokumpu Code of Conduct and the Corporate Responsibility Policy, a previously identified potential risk in the context of sales intermediary agreements has been resolved successfully. The key risk areas to be focused on 2017 are master data management, process controls, and data protection.

The confidential whistleblowing hotline ("Helpline") available on the company intranet and via the internet is set up to anonymously inform Internal Audit and the Audit Committee of suspicions of financial misconduct or unethical behavior. No cases were reported via the Helpline in 2016.

Of 6 unscheduled investigations of potential misconduct recognized through other channels, no incidents of discrimination or human rights violations were noted. Internal Audit observed cases of unfair behavior and incurred or alleged theft, among them stealing material out of a closed-down melt shop; however, none of these cases was financially material. Various noted attempts of misconduct via faked emails resulted in no harm to the company.

Insider management

The company's Insider Rules and the insider laws and regulations, including the Finnish Securities Act, the Guidelines for Insiders issued by Nasdaq Helsinki Ltd and the Market Abuse Regulation (EU), constitute the primary legal framework for the insider issues relevant to the Group and its employees.

Additionally, the Regulation on Energy Market Integrity and Transparency (EU) sets forth similar requirements as the Market Abuse Regulation on dealing with inside information relating to wholesale energy products. As the company is a participant in the wholesale energy market, the company's Insider Rules apply to such energy-related inside information, as applicable.

The persons discharging managerial responsibilities in Outokumpu, in the meaning of the Market Abuse Regulation, include members of the company's Board of Directors, the CEO and other members of the Outokumpu Leadership Team ("the Management"). The Management together with the persons or companies closely associated with a member of the Management constitutes the so called "Notifying Persons". Outokumpu maintains a non-public list of the Notifying Persons.

Outokumpu applies a restricted period of thirty (30) calendar days before the announcement, as well the day of the announcement, of an interim financial report, interim financial statement and a year-end report (the "Closed Window"). During this period, the Management, the persons subject to trading restrictions and any legally incompetent persons under their custody shall not conduct any transactions, on its own account or for the account of a third party, directly or indirectly, relating to the company's shares or debt instruments, or derivatives or other financial instruments linked thereto. Separate, non-public, project-specific insider registers are maintained for insider projects. Persons defined as project-specific insiders are those who, in the course of their duties in connection with a project, receive information concerning the Group which, if or when realized, is likely to have a significant effect on the value of the company's publicly traded securities.

The company has the obligation to inform the public as soon as possible of inside information which directly concerns the Company, unless the company has decided that the publication of the inside information shall be delayed, in accordance with the applicable insider regulations. The publication of inside information shall be made in accordance with the company's Disclosure Policy.

Outokumpu's Head of Legal, Corporate Affairs and Compliance is responsible for the coordination and supervision of insider topics.

Auditors

Under its Articles of Association, the company shall have a minimum of one and a maximum of two auditors who are qualified auditors or firms of public accountants authorized by the Central Chamber of Commerce of Finland and independent of the company.

The Annual General Meeting elects the auditors for a term of office ending at the close of the next Annual General Meeting. A proposal to the Annual General Meeting on the election of auditors that has been made known to the Board of Directors prior to the Annual General Meeting will be made public if it is supported by shareholders holding a minimum of 10% of all the company's shares and voting rights and the person or company proposed has consented to such nomination. Additionally, the Board of Directors has the duty to make a proposal to the Annual General Meeting as to the election and fees of the auditor.

The company's auditors submit the statutory auditor's report to the company's shareholders in connection with the company's financial statements. The auditors also report their findings to the Board Audit Committee on a regular basis and at least once a year to the full Board of Directors. The parent company, Outokumpu Oyj, is audited by KPMG Oy Ab, and the responsible auditor is Virpi Halonen, Authorized Public Accountant. KPMG Oy Ab is also responsible for overseeing and coordinating the auditing of all Group companies. KPMG has been the Group Auditor since fiscal year 2006 and Virpi Halonen has been the Auditor in Charge since 2012. Both Outokumpu and KPMG Oy Ab emphasize the requirement that the auditor be independent of the company being audited. In its global independence policy, KPMG has stated its commitment to observing and complying with the Code of Ethics of the International Federation of Accountants (IFAC). An audit tendering process was held in 2016 and the Board of Directors' proposal of company auditor will be given to the Annual General Meeting convening on March 21, 2017.

Outokumpu's Board Audit Committee continuously monitored non-audit services purchased by the Group from KPMG Oy Ab at a global level. In 2016, auditors were paid fees totaling EUR 1.9 million, of which non-auditing services accounted for EUR 0.1 million.

Remuneration

Board of Directors

As confirmed by the 2016 Outokumpu Annual General Meeting, the annual remuneration for the members of Outokumpu's Board of Directors is as follows: Chairman EUR 140,000, Vice Chairman EUR 80,000 and other members EUR 60,000, with 40% of this paid as Outokumpu shares purchased from the market and 60% paid in cash. The annual fee is paid once a year, and members of the Board are not entitled to any other share-based rewards. In addition to their annual remuneration, all members of the Board of Directors are paid a meeting fee of EUR 600 (EUR 1,200 for members of the Board of Directors residing outside Finland). The meeting fee is also payable for attending meetings of Board committees.

Compensation and benefits of the CEO

In 2016 the President and CEO's compensation consisted of a basic salary, taxable benefits (housing benefit, car benefit, phone benefit, medical and life insurance and compensation for schooling costs of his children in Finland), matching share plan and a yearly short-term incentive determined by the Board on the basis of the Company's key targets. The performance-based short-term incentive payable based on the targets set for 2016 could not exceed 95% of the CEO's annual basic salary, and it was based on an EBITDA target (earnings before interest, taxes, depreciation and amortization), operational targets with an emphasis on occupational safety and net working capital improvement as well as individual targets. The compensation paid in 2016 to the President and CEO Baan is shown in the table on p. 15 in the Corporate Governance section and details of the share-based incentive programs he participates in on p. 23–24 in the Corporate Governance section.

The CEO has the right to retire at the age of 63. He participates in the Finnish TyEL pension system in addition to which he is included in a defined contribution pension plan with an annual insurance premium of 25% of his annual earnings, excluding share rewards.

The service contract of the CEO is valid until further notice. The CEO is not entitled to a specific severance payment, and the notice period is three months for both parties.

Compensation and benefits of the other Leadership Team members

The performance-based short-term incentive payable to the members of the Leadership Team based on the targets set for 2016 was based on an EBITDA target (earnings before interest, taxes, depreciation and amortization), operational targets with an emphasis on occupational safety and net working capital improvement as well as individual targets. The maximum short-term incentive payment for 2016 varied based on local market practices between 50% and 100% of the members' annual basic salaries. The Leadership Team members are also included in the share based incentive plans for Outokumpu management, the details of which are presented in the tables on p. 23–24 in the Corporate Governance section. No separate remuneration is paid to the Group CEO or members of the Leadership Team for membership of this Team or the Group's other internal governing bodies.

The service contract of CFO de la Camp, who is also deputy to the CEO, can be terminated by both parties with six months' notice. To the extent that the service contract would be terminated by the company, other than for a cause without notice or with ordinary notice due to misconduct, the CFO would receive additional compensation equivalent to 12 months' salary. For the other members of the Leadership Team, the notice period is six months for the employee and either twelve months for the Company without additional severance compensation and with the possibility to stop salary payment during notice period if the executive finds another employment before the end of notice period, or 18 months' base salary at the maximum, including salary for notice period and severance compensation.

The retirement age for the members of the Leadership Team is 63 years, and they participate in the local retirement programs applicable to employees in the country where their employing company is located. The members employed in Germany are entitled to pension benefits in accordance with the rules of the German Essener Verband. The members employed in Finland participate in the Finnish TyEL pension system, in addition to which they are entitled to a defined contribution pension plan for which maximum premium is 25% of an individual's annual earnings, excluding share rewards. The pension benefits of the other Leadership Team members vary in line with the local market practices. Outokumpu did not provide any guarantees or other similar commitments on behalf of members of its Board of Directors in 2016.

No members of the Board of Directors or the Leadership Team or closely related persons or institutions have any significant business relationships with the Group.

Fees, salaries and employee benefits paid

2016 €	Salaries and fees with employee benefits [1]	Performance/project-related incentives	Annual remuneration	Share-based incentives [4]	Total
Board of Directors					
Chairman of the Board, Ollila	11,400	-	140,000	-	151,400
Vice Chairman of the Board, Vaartimo	10,800	-	80,000	-	90,800
Board member, Akermann	21,600	-	60,000	-	81,600
Board member, Gualdoni	21,600	-	60,000	-	81,600
Board member, Gustafsson	9,600	-	60,000	-	69,600
Board member, ter Horst	5,400	-	60,000	-	65,400
Board member, Malinen	10,200	-	60,000	-	70,200
Board member, Miettinen-Lähde	10,800	-	60,000	-	70,800
Board member, Nilsson	21,600	-	60,000	-	81,600
CEO, Baan	1,137,213	-	-	2,441,252	3,578,465
Deputy to the CEO [2]	530,000	-	-	-	530,000
Other Leadership Team Members [3]	3,310,719	215,000	-	264,764	3,790,483

[1] For Board members, meeting fees. For Leadership Team, salaries and employee benefits.

[2] Florey January 1–June 30, 2016, de la Camp July 1–December 31, 2016

[3] Gwozdz October 1–December 31, 2016, other members January 1– December 31, 2016

[4] Gross, including the value of the shares on the day of delivery and taxes. For CEO includes the taxable value of the shares delivered in the end of December and the whole cash portion of which a small portion was paid in January 2017.

2015 €	Salaries and fees with employee benefits	Performance/project-related incentives	Annual remuneration	Share-based incentives [4]	Total
Board of Directors					
Chairman of the Board, Ollila	13,800	-	140,000	-	153,800
Vice Chairman of the Board, Vaartimo	12,000	-	80,000	-	92,000
Board member, Akermann	24,000	-	60,000	-	84,000
Board member, Gualdoni	27,600	-	60,000	-	87,600
Board member, Gustafsson	12,000	-	60,000	-	72,000
Board member, Malinen	12,600	-	60,000	-	72,600
Board member, Miettinen-Lähde	9,000	-	60,000	-	69,000
Board member, Nilsson	26,400	-	60,000	-	86,400
Board member, Schalin [1]	3,600	-	-	-	3,600
CEO, Seitovirta [2]	634,888	303,912	-	110,408	938,800
Deputy to the CEO	512,072	250,000	-	100,675	762,072
Other Leadership Team Members [3]	3,039,955	1,015,241	-	48,035	4,055,196

[1] January 1–March 31, 2015

[2] January 1–October 26, 2015

[3] Lu January 1–March 31, 2015, Hofmann April 1–December 31, 2015, Wallis January 1–April 30, 2015, Salas May 1–June 30, 2015, Williams July 1–December 31, 2015, Parvento January 1–November 5, 2015, Bates November 5– December 31, 2015.

[4] Gross, including the value of the shares on the day of delivery and taxes

Risk management

Outokumpu operates in accordance with the risk management policy approved by the company's Board of Directors. This defines the objectives, approaches and areas of responsibility in the Group's risk management activities. As well as supporting Outokumpu's strategy, the aim of risk management is identifying, evaluating and mitigating risks from the perspective of shareholders, customers, suppliers, personnel, creditors and other stakeholders.

Risk management organization

The Board of Directors carries ultimate responsibility for risk management within Outokumpu. The CEO and members of the Leadership Team are responsible for defining and implementing risk management procedures, and for ensuring that risks are both properly addressed and taken into account in strategic and business planning.

Outokumpu's Risk Management Steering Group, led by the CFO, is a governing body for risk management in Outokumpu. Business Areas and Group functions are responsible for managing risks connected with their own operations. Auditors and Internal Audit monitor risk management processes, and the Risk Management Steering Group, the Board's Audit Committee and the Board of Directors review both key risks and actions taken to manage these risks on a regular basis. Treasury and Risk Management function supports implementation of Outokumpu's risk management policy, facilitates and coordinates risk management activities, and prepares quarterly risk reports for management, Board's Audit Committee and Auditors.

Risk management process

Outokumpu has defined risk as anything that could have an adverse impact on achieving the Group's objectives. Risks can therefore be threats, uncertainties or lost opportunities connected with current or future operations. Outokumpu's appetite for risk and risk tolerance are defined in relation to earnings, cash flows and capital structure. The risk management process is an integral part of the overall management processes and it is divided into four stages: risk identification, evaluation/prioritization, mitigation and reporting. Risk management process in Outokumpu is two-fold, including a top-down approach to manage the Group's key risks and a bottom-up approach focusing on the operational level.

Within Outokumpu, the risk management process is monitored and controlled at different organizational levels in a systematic manner. Regular risk updates are carried out to capture relevant information and to ensure that the process is operating in an uninterrupted manner. The monitoring and analysis of results and risk updates also ensure that accurate information is provided both internally – to Business Area management teams and members of the Leadership Team – and externally to parties such as shareholders and other stakeholders.

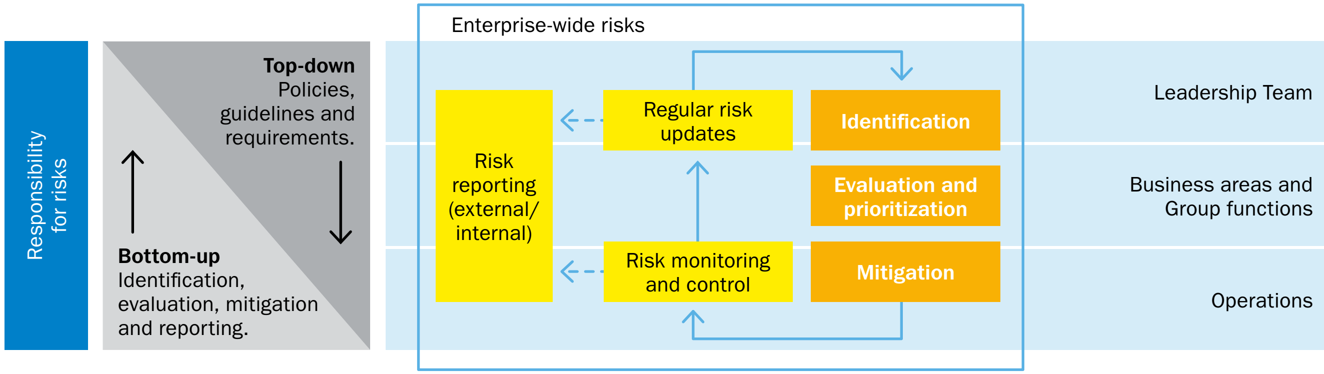
Focus areas 2016

The focus in risk management was to secure the business plan by robust risk management activities, including actions in safety, securing liquidity, reducing costs and improving the efficiency and controls of Outokumpu's operations. Outokumpu continued its systematic fire safety and loss prevention audit programs, which also focused on machinery breakdown loss prevention during 2016. In total, more than twenty fire safety and machinery breakdown loss prevention audits were carried out in 2016 using in-house expertise in co-operation with external advisors. In the first quarter of 2016, Outokumpu completed negotiations with its insurance companies regarding the settlement of the machinery breakdown incident at its Calvert mill in the US back in 2014. No material operational risks realized during 2016.

Outokumpu obtained a rating from Moody's in the first quarter of 2016. Rating was supported by improvement in profitability and free cash flow.

In the second quarter, Outokumpu issued a EUR 250 million senior secured bond, to extend the maturity profile while also addressing the refinancing of 2017 debt maturities.

Risk management process in Outokumpu



Strategic and business risks

Risks related to Outokumpu's business priorities and targets

In the beginning of April 2016, Outokumpu announced its new vision and measures to drive competitiveness and further improve the financial performance of the Company. The new vision has been defined as: to be the best value creator in stainless steel by 2020 through customer orientation and efficiency. Simultaneously, Outokumpu outlined its long-term financial targets connected to this vision. In the short term, Outokumpu's future development is expected to depend on the successful implementation of the measures to drive competiveness and the following short term actions:

- New organizational set-up meaning a simplified organization with three business areas, less management layers and a lighter cost structure;
- A reduction of EUR 100 million in sales, general and administrative costs (SG&A) by the end of 2017 against the baseline of EUR 400 million at the end of 2015; and
- A cash release of at least EUR 200 million from net working capital by the end of 2016, particularly through the reduction of inventory carry.

Outokumpu's current expectations regarding the impact and timing of the abovementioned measures are based on a number of assumptions and expectations that are subject to various risks and uncertainties.

Stainless steel industry and markets

Huge stainless steel capacity build-up in Asia, namely China, in the past years has resulted into a reversal of the trade flows between East and West. Whereas China earlier was a net importer of stainless steel, it has now been a net exporter since 2010. This has resulted in rapidly increasing market shares of Chinese material and deflated price levels in the Outokumpu main markets, Europe and USA. Europe has responded by imposing anti-dumping measures on cold rolled stainless products from China and Taiwan in 2015, while USA has imposed preliminary anti-dumping and counter-valing duties on stainless steel flat products from China in 2016. In Europe, this has resulted in lower volumes of imports during 2015–2016, compared to record-highs of 2014, but the volumes still remain at higher levels than before 2014. However, these measures are inadequate to fully mitigate the risk, as there seem to be possibilities (circumvention, absorption, semi-finished products etc.) for exporters to undermine/avoid the effects of the defense measures. In 2016, the imports of hot rolled material (no duties being applied) from Asia to Europe have continued to increase, adding concerns to European mills of lost volumes and deflated price levels.

Lower pricing levels of imports may impair or eliminate Outokumpu's ability to compete with such producers. This and other practices may have an adverse effect on Outokumpu's profitability to the extent that subsidized stainless steel products are exported into Outokumpu's key markets, the EU and the United States. In addition, Outokumpu has significant exposure to the effects of trade actions and barriers due to the global nature of its operations. Such trade actions and barriers could limit Outokumpu's further growth and market access.

Outokumpu believes that the overall long-term prospects for stainless steel demand remain positive. Key global megatrends, such as urbanization, modernization, and increased mobility, are expected to support future growth of stainless steel demand. There are, however, risks that such megatrends will be realized slower than expected, and that the occurrence of natural catastrophes or other adverse changes in the global political and economic environment, can impact the stainless steel industry and reduce growth prospects also in Outokumpu's core markets.

Since global demand for stainless steel is forecasted to increase in the coming years, Outokumpu expects that global demand for ferrochrome, a key ingredient in stainless steel production, will increase correspondingly. As part of its Europe Business Area, Outokumpu produces ferrochrome at its Tornio ferrochrome production facility using chromite extracted from its Kemi chromite mine. Outokumpu aims to maintain both a high utilization rate at its ferrochrome production facility and the Group's competitive position in the ferrochrome market by consuming a significant amount of ferrochrome internally and also by selling certain volumes on the global market. Outokumpu's competitive position in the ferrochrome business is affected by foreign exchange rates, particularly the US dollar and e.g. the prices of power and coke.

Raw materials, supplies and energy

Outokumpu is exposed to price changes of alloy metals in multiple ways. The underlying exposure consists of price fixed purchase contracts; price fixed sales contracts and physical stocks of priced inventories of nickel, molybdenum, carbon and stainless steel scrap and various grades and forms of stainless steel. Price changes of alloy metals lead to impacts on earnings, cash flows and balance sheet structure. Pricing systems are applied in many markets and may cause volatility in demand of stainless steel. This typically leads to reduced demand when metal prices decline, which may also lead to increase in inventories causing adverse impact on earnings being even higher. Another possible adverse consequence of volatility in demand is the negative impact on capacity utilization rations. In addition, the monetary value of discounts in purchasing (e.g. in connection with purchases of stainless steel scrap) depends on the level of alloy metal prices. Therefore, the price levels of alloy metals are likely to have long-term impacts on profitability.

Stainless steel production requires substantial amounts of certain raw materials, primarily nickel, recycled stainless steel, ferrochrome, molybdenum, recycled carbon steel, as well as energy and supplies. Most of these are subject to significant price volatility due to fluctuating customer demand, speculation and scarcity, which may, from time to time, be compounded by decreases in extraction and production due to natural disasters, political or financial instability, or unrest. Additionally, the production of stainless steel products and ferrochrome requires significant amounts of energy, particularly electricity and, to a lesser extent, propane, natural gas and light fuel oil. Energy costs represent a substantial portion of Outokumpu's total cost of sales and energy prices have historically varied, and may continue to vary significantly, as a result of political and economic factors beyond Outokumpu's control. For example, the European Climate and Energy Package (the "CEP") has a significant impact on the electricity markets in Europe, and, therefore, also affects Outokumpu's business. Outokumpu is also exposed to price volatility of raw materials and supplies, which it purchases primarily under short- or long-term contracts, but also on the spot market. Increases in the prices of certain raw materials, such as nickel, ferrochrome, molybdenum and iron, are generally passed on to customers through alloy surcharges. Outokumpu has hedged part of its exposure to changing nickel prices and, on a case-by-case basis, molybdenum prices. Although the alloy surcharge mechanism is intended to allow stainless steel producers to pass on the costs of raw materials to customers, it does not eliminate Outokumpu's exposure to raw material price volatility. Therefore, Outokumpu may not be able to pass on all of its raw materials costs to customers, which can have negative impacts on Outokumpu's profitability. Financial risks related to raw materials and energy prices are described in note 19 to the financial statements.

Legal risks

Outokumpu and its subsidiaries are subject to several litigation cases. For a company such as Outokumpu, there is a general risk, which mainly relates to Outokumpu being litigated against by business partners and/or in connection with its business activities in the future. Outokumpu is also exposed to typical litigation risks in connection with mergers and acquisitions. For the specific risks relating to existing litigation, please see Note 30 to the financial statements, "Disputes and litigations". Outokumpu's products are used in a wide range of applications. For instance, certain products are used in safety-critical applications, such as pipes used in the oil, gas, chemical and petrochemical industries. In addition, a certain part of Outokumpu's products are used in the automotive industry, where key customers require extensive third-party certification regarding the products purchased. Therefore, Outokumpu is exposed to product liability claims arising e.g. from automotive industry customers. Such claims may result in severe damages, impacting Outokumpu's profitability. Outokumpu manages and mitigates its legal risks by running internal governance and compliance programs and policies, some of them extending beyond local minimum legal requirements.

Environmental business risks

The main environmental business risks for Outokumpu are related to emission trading schemes and new environmental and consumer protection demands. The European Union's unilateral Emission Trading System (ETS) forms a risk for Outokumpu, indirectly in electricity prices and directly in emission allowance costs. Outokumpu´s European units cannot transfer these costs to product prices due to global competition.

Outokumpu has secured part of its future electricity supply – and the associated prices – through long-term contracts. Additionally, Outokumpu is participating in nuclear power projects in Finland. Outokumpu operates in accordance with prevailing laws and regulations, including environmental, chemical and product safety legislation. EU regulatory activity in this area has developed rapidly. Non-fact based changes in this legislation, as proposed in the EU, could have long-term impacts on Outokumpu's operations. Strict compliance with all relevant environmental regulations causes increased costs and impacts Outokumpu's competitive position. Outokumpu mitigates these impacts through the systematic identification and management of environmental, chemical and product safety risks, through emission trading, and by maintaining a proactive dialogue with stakeholders involved in the framing of environmental legislation.

Operational risks

Major disasters and business interruptions

Outokumpu's production processes are dependent on the continuous operation of critical production equipment, including furnaces, continuous casters, rolling mills and electrical equipment, e.g. electric motors and transformers, and production downtime may occur as a result of unexpected mechanical failures. Operations may also be disrupted for a variety of other reasons, including fire, explosion, flooding, release of substances harmful to the environment or health, failures in information technology, strikes or transportation disruptions.

Furthermore, accidents may lead to production downtimes that affect specific items of machinery or production plants, or possibly result in plant closures, including closure for the duration of any ongoing investigation. This type of disruption may cause significant business interruptions and have a negative impact on Outokumpu's profitability. Primarily because of the high temperatures required for production, fire is a significant risk for Outokumpu. Most of the production facilities are located in extensive industrial zones and a fire in could lead to major damage to property and interruptions in production. Extreme weather conditions and natural disasters may also affect Outokumpu's operations, especially as a result of damage to property or the loss of production through extremely low temperatures, flooding, hurricane, tornado or drought. Outokumpu monitors such risks by continuously evaluating its production facilities and production processes from a risk management perspective and also by arranging regular fire-safety audits. Insurance covers a large proportion of the associated risks. In 2016, Outokumpu also focused on machinery breakdowns loss prevention by conducting separate surveys at the main sites.

Environmental accidents

The main environmental accident risks at production sites relate to use of acids, production of hazardous waste and toxic gases, landfill activities, long-term contamination of soil or groundwater, or long-term effects of hazardous pollutants. Outokumpu also has environmental liabilities and risks at closed mines and sites. Certified environmental management systems are in place at all production sites to manage the environmental accident risks in a systematic way, including external environmental audits. In addition, Outokumpu has an internal environmental auditing program to monitor and ensure local legal compliance and the level of environmental risk management.

Project risks

Outokumpu has through a holding company Voimaosakeyhtiö SF committed to a 14% stake in Fennovoima Oy, which has a parliamentary decision-in-principle to construct a new nuclear power plant in Pyhäjoki, Finland. The company has selected Rosatom Overseas CJSC as the plant supplier. Fennovoima Oy submitted a construction license application to the government in June 2015, and the construction license is expected in the end of 2018. Infrastructure work at the site began in 2015 and according to the plans, is expected to last approximately two to three years. The construction of the plant will begin after the construction license has been obtained and the infrastructure work has sufficiently progressed. The power plant is scheduled to start commercial operations in 2024. The project involves a number of potential risks for Outokumpu, including project completion risks such as delays, cancellation, non-completion, technical risks, possible tightening nuclear safety regulations in the future, and financial risks such as budget overruns, non-competitive cost of power, financing risks, cost and availability of the financing, political and public acceptance risks as well as environmental risks. When operational, shareholders will be liable for their pro rata share of the company's fixed energy procurement costs and the right to procure their pro rata share of the energy produced by the company at cost (the "Mankala principle"). Considering the risks involved in the project, there can be no assurance that one or more of the project risks will not occur or that Fennovoima Oy will have adequate financing for the project in the event of any future defaults by the direct or indirect shareholders in Fennovoima Oy.

Outokumpu is investing approximately EUR 30 million in using liquefied natural gas (LNG) instead of propane at the Tornio mill. The main part of the investment, phased over 2015–2018, is being used to make the required equipment modifications at the Tornio mill. This investment includes a number of risks inherent to investment projects, including project completion risks, financial risks such as market price risks, and risks relating to contractual arrangements between the different business partners. Replacing the use of propane with LNG sourced directly from the global market is expected to reduce production costs through lower and more stable energy prices, and thereby increase the competitiveness of and provide a more sustainable source of energy for our Tornio mill.

IT dependency and cyber security risks

Outokumpu relies on various applications and other information technologies that are used globally in all business areas and group functions. Many of these applications and underlying infrastructure are outdated, making them more vulnerable to failure, and could result in business interruptions, for example, in the production and supply chain processes. In addition, the enterprise architecture is complicated, and the large number of different and unharmonized information systems increases the risk of loss of critical applications. Furthermore, cyber threats and other security threats could exploit possible weaknesses in Outokumpu's security controls, which in turn, could cause leakage of sensitive information, theft of intellectual property, production outages or damage to Outokumpu's reputation. Outokumpu is taking necessary steps to ensure that the IT systems and solutions are reliable, and also aims to ensure secure information management at all company locations to avoid data loss or situations in which business-critical information becomes unavailable. Additionally, Outokumpu is improving its cyber readiness in order to prevent possible cyber-attacks, by running and initiating various security development activities based on the detailed cyber threat and risk exposure analyses. Outokumpu has also taken actions to mitigate its earlier dependence on certain people in application support and has improved IT incident management with a special focus on major incidents. Outokumpu has also launched a business transformation program to develop and improve its business capabilities and renew its IT systems in the coming years.

Safety and personnel

Outokumpu has set its safety vision and principles on high level. Safety takes priority over all other activities. All Outokumpu employees are responsible for their own safety, but also for the safety of their colleagues. Outokumpu strongly believes that all injuries can be prevented. Additionally, as a part of its vision for 2020 Outokumpu has introduced 6 must win battles to reach its short term targets, safety being one of these six, aiming to standardized and disciplined approach to safety that correlates with improved quality and operational efficiency, leading to a top decile position in the industry.

Despite the ongoing efforts and actions, serious incident or fatal accident may occur during worktime. Outokumpu considers the risk of fatalities and serious injuries having a significant impact on its safety culture and its reputation as an employer. Moreover Outokumpu believes that great focus and systematic development of safety performance and safety culture will have a positive impact on operational performance and discipline. Outokumpu has systematic and continuos monitoring and reporting practices in place, including reactive and proactive measures of safety performance on montly level.

Outokumpu's ability to continue and grow its business as well as provide high-quality products depends, to a large extent, on the contributions made by its key personnel. The loss of key individuals or other employees who have specific knowledge of, or relationships with, trade customers in markets in which Outokumpu operates could have significant impacts on Outokumpu's business. If Outokumpu is unable to attract, retain, motivate, train and develop qualified employees at all levels, it could have a material adverse effect on Outokumpu's business, financial condition and results of operations. There can be no assurance that Outokumpu will be able to retain such senior managers and other key employees. However, Outokumpu has implemented HR processes to attract and retain key employees in the Group. Implementation of leadership development programs and succession planning for key positions in the Group are also undertaken as part of the talent review process to maintain development opportunities and to ensure an adequate pipeline of talent to mitigate the potential loss of senior managers. Additionally, Performance Management processes were upgraded through the organization to ensure alignment to the company mission and targets.

Compliance, crime and reputational harm

Outokumpu operates globally and its activities span multiple jurisdictions and complex regulatory frameworks at a time of increased enforcement activity and enforcement initiatives globally in areas such as competition law, anti-corruption and trade restrictions, including sanctions. Outokumpu's governance and compliance processes may not prevent breaches of law or governance standards. Outokumpu also faces the risk of fraud by its employees, losses of critical research and development data, misconduct, as well as violations by its sales intermediaries or at its joint ventures and other companies in which it has an interest, particularly if it only has a minority stake and does not control accounting or other rules and protocols for the conduct of business.

Outokumpu's failure to comply with applicable laws and other standards could subject it to fines, loss of operating licenses, loss of business, loss of management time, company focus, breach of its financing agreements and reputational harm. Effective internal controls are necessary for Outokumpu to provide reliable financial reports and effectively prevent and detect fraud. If Outokumpu cannot provide reliable financial reports or prevent fraud, this could have a material adverse effect on its financial results. Additionally, at the operational level, individual employees may not comply with Outokumpu's policies and guidelines and, as a result, may incur compliance costs (including fines) and cause reputational damage. Inadequate internal controls could also cause investors and other third parties to lose confidence in Outokumpu's reported financial information and risk management processes, which could have a material adverse effect on Outokumpu's business, financial condition and results of operations. Outokumpu's compliance program aims to prevent and mitigate compliance risks from occuring and is further developed continuously. The annual compliance risk assesment forms the basis for the compliance action plan for the forthcoming year.

Financial risks

Key current financial risks for Outokumpu are:

- Changes in the prices of nickel, iron, molybdenum, electrical power and fuels;
- Currency developments affecting the euro, the US dollar, the Swedish krona and the British pound;

- Interest rate changes connected with the US dollar, the euro and the Swedish krona;
- Changes in levels of credit margins;
- Counterparty risk related to customers and other business partners, including financial institutions;
- Risks related to liquidity and refinancing;
- Breach of financial covenants or other terms and conditions leading to default;
- Risk related to prices of equities and fixed-income securities invested under defined benefit pension plans.

The financial risks listed above and related processes for risk management are described in further detail in note 19 to the Group's consolidated financial statements.

Corporate responsibility risks and stakeholders' materiality analysis

Outokumpu has also identified its exposures in sustainability and corporate responsibility. These are mainly identified through dialogue with stakeholders (customers, suppliers, investors, employees, NGOs, authorities, communities, associations) in connection with the materiality analysis related to Outokumpu's sustainability program, but also through Outokumpu's risk management process as well. In the materiality analysis, the most important sustainability topics for business were a safe and healthy workplace, energy and material (resource) efficiency, and accountable and transparent governance and reporting. For our stakeholders, in addition to these, management of toxics and chemicals and mitigation of environmental impacts were also important. Additional information on the materiality analysis is available in Outokumpu's sustainability report in the section "Reporting on sustainable development". These main topics from the materiality analysis are also partially considered as Outokumpu's key risks, which are explained above within several risk scenarios, including: environmental business risks; environmental accident risks; raw materials, supplies and electricity; compliance; and reputational harm.

For instance, the management of workplace safety, toxics and chemicals are core parts of Outokumpu's health and safety management activities, as described in the chapter Safe and healthy working environment.

Additionally, Outokumpu takes seriously all labor practice violations and related threats as well as its full transparency and compliance in human rights topics. Additional information on human

rights and about Outokumpu's stakeholder relations is available in the Sustainability report under sections Our people and Outokumpu and society. In order to also improve the identification of sustainability risks, the new Global Reporting Initiative G4 standard has been taken in to use for the responsibility reporting.

Shares and shareholders

Shares and share capital

Outokumpu's shares are listed on the Nasdaq Helsinki Large Cap list under the trading code OUT1V, and are incorporated into the Finnish book-entry securities system. The total share capital was EUR 311 million at the end of the year. All shares in Outokumpu carry equal voting and dividend rights.

As of December 31, 2016, the total number of Outokumpu shares was 416,374,448. Between May 17, 2016, and May 26, 2016, Outokumpu repurchased 2,000,000 of its own shares through public trading at Nasdaq Helsinki. As of December 31, 2016, Outokumpu held 2,513,848 of its own shares, i.e. treasury shares (Dec 31, 2015: 885,140).

Outokumpu in the capital markets

Outokumpu continued its regular and active dialogue with investors and analysts in 2016.

Key topics discussed with investors were Outokumpu's new vision and financial targets for 2020, the improving performance of the Americas business area, the balance sheet, as well as market-related topics. Outokumpu held its Annual General Meeting in Helsinki, Finland, in April. The Capital Markets Day was held in the new headquarters in Helsinki, Finland, in November. Outokumpu arranged 17 roadshows in Europe and in the US during the year. The company also met investors at three industry seminars in New York, Miami and London. In total, over 250 one-on-one meetings and 30 conference calls were held with investors during the year.

Shareholders by group on December 31, 2016

	Shares	%
Private corporations	122,994,508	29.54
Financial and insurance institutions	14,986,923	3.60
Public sector and public organizations	37,562,259	9.02
Non-profit organizations	2,280,222	0.55
Households	73,556,287	17.66
Outside Finland	1,747,088	0.42
Nominee accounts held by custodian banks	163,247,161	39.21
Total	**416,374,448**	**100**

Shares not transferred to the book-entry securities system total 30.

Shareholders by group on December 31, 2016

* Solidium Oy is wholly-owned by The Finnish State.

** incl. JPMorgan Asset Management U.K. Limited holding >5% of outstanding shares

Principal shareholders on December 31, 2016

	Shares	%
Solidium Oy	109,069,264	26.19
The Social Insurance Institution of Finland	9,298,652	2.23
Varma Mutual Pension Insurance Company	8,628,949	2.07
Ilmarinen Mutual Pension Insurance Company	8,060,673	1.94
State Pension Fund	5,000,000	1.20
Elo Mutual Pension Insurance Company	3,500,000	0.84
OP-Finland Small Firms Fund	1,735,000	0.42
OP-Finland Value Fund	1,234,282	0.30
Etera Mutual Pension Insurance Company	1,111,295	0.27
Evli Bank Plc	1,067,048	0.26
Keva	1,000,000	0.24
Nordea Nordic Small Cap Mutual Fund	994,300	0.24
OP-Delta Fund	950,000	0.23
Nordea Pro Suomi Fund	922,629	0.22
Relander Harald Bertel	850,000	0.20
	153,422,092	36.85
Nominee accounts held by custodian banks	163,247,161	39.21
Treasury Shares	2,513,848	0.60
Other Shareholders	97,191,347	23.34
Total	**416,374,448**	**100**

Shares not transferred to the book-entry securities system total 30.

Share price development and market capitalization

During 2016, the price of the Outokumpu share peaked at EUR 8.51 and was EUR 2.08 at its lowest (2015 high/low: EUR 7.76/ EUR 2.06). The Outokumpu share price closed at the end of the year at EUR 8.51, marking an increase of 211% from the closing price of 2015 (Dec 31, 2015: EUR 2.73). At the end of 2016, the company's market capitalization was EUR 3,541 million, compared to EUR 1,138 million at the previous year's end.

In 2016, the average daily trading volume in Outokumpu shares on the Nasdaq Helsinki was 3.8 million shares. In total, 956 million Outokumpu shares were traded on the Nasdaq Helsinki during 2016, representing a value of EUR 4,302 million (2015: 1,346 million shares, which corresponded to EUR 6,013 million).

In addition to the Nasdaq Helsinki, Outokumpu's shares are traded also on various alternative trading platforms. The volume of Outokumpu's shares traded on the Nasdaq Helsinki represented approximately 50% of the total volume of Outokumpu's shares traded in 2016 (source: Fidessa Fragmentation Index ↗).

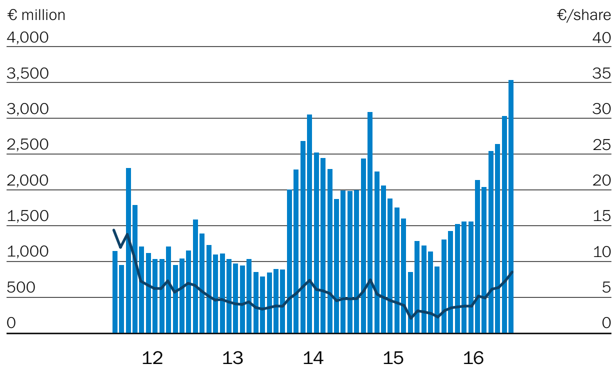
More information about the shares is available at our website ↗.

Distribution of shareholders on December 31, 2016

Number of shares	Number of shareholders	% of shareholders	Total shares	% of share capital	Average shareholding
1–100	15,155	25.70	686,437	0.17	45
101–1 000	29,734	50.41	12,728,244	3.06	428
1 001–10 000	12,830	21.75	37,089,212	8.91	2,891
10 001–100 000	1,182	2.00	28,111,583	6.75	23,783
100 001–1 000 000	72	0.12	23,292,800	5.59	623,511
1 000 001–10 000 000	10	0.02	42,149,747	10.12	4,214,975
10 000 001–100 000 000	0	0.00	0	0.00	0
100 000 001–	1	0.00	109,069,264	26.19	109,069,264
Shares in nominee accounts held by custodian banks	-	-	163,247,161	39.21	-
	58,984	**100**	**416,374,448**	**100**	

Shares not transferred to the book-entry securities system total 30.

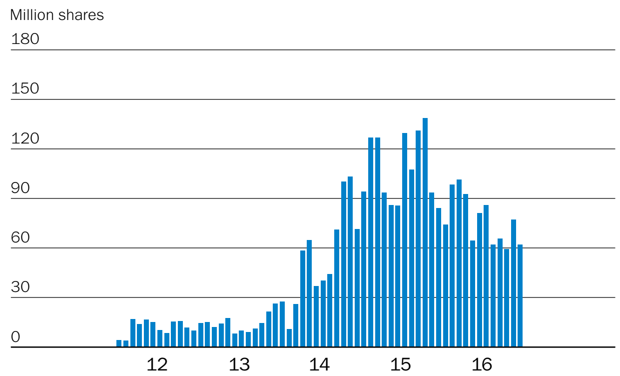
Market capitalization and share price development



■ Month-end market capitalization
— Share price

Source: Nasdaq

Monthly trading volume



Includes trading on Nasdaq Helsinki. The graph does not include trading on 28 February, 2014 because of an extraordinary peak as a result of ThyssenKrupp selling its shares in Outokumpu.

Source: Nasdaq

Share-based incentive programs

Outokumpu's Board of Directors has confirmed that share-based incentive programs are part of the incentive and commitment scheme for the company's key personnel. The objectives are to reward key personnel for good performance and thereby support Outokumpu's strategy, and to direct management attention towards increasing Outokumpu's profitability and shareholder value. The programs offer the possibility of receiving Outokumpu shares as an incentive, provided that the criteria set by the Board for each earnings period are fulfilled.

Performance Share Plan 2012

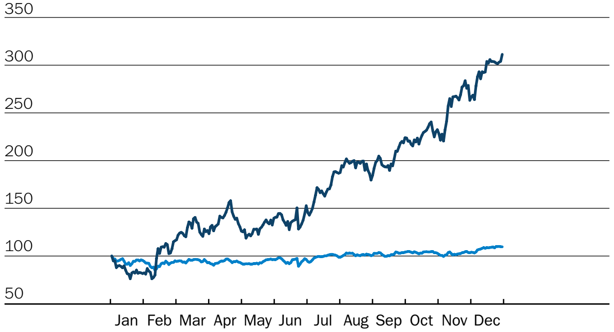
The Board of Directors of Outokumpu approved on January 31, 2012 the establishment of a share-based incentive plan, the Performance Share Plan 2012, which is part of the remuneration and commitment program for the key management of Outokumpu Group. The Performance Share Plan consists of annually commencing performance share plans. Each plan includes a three-year earnings period, after which any share rewards earned will be delivered to the participants.

The second plan of the Performance Share Plan, covering years 2013–2015, ended on December 31, 2015. The criteria set for the plan were Outokumpu share price at the end of 2015, EBITDA (earnings before interest, taxes, depreciation and amortization) for the year 2013, EBIT (earnings before interests and taxes) improvement for the year 2014, EBIT excluding non-recurring items for the year 2015 and achievement of Inoxum transaction related synergies. Based on the achievement of the targets, the participants received 65.1% of the target number of shares as a reward. After deductions for applicable taxes, altogether 178,789 shares were delivered to 84 persons in spring 2016. Of these 178,789 shares, 36,606 shares were delivered to Leadership Team members. Outokumpu used its treasury shares for the reward payment, which meant that the total number of shares of the company did not change due to the reward.

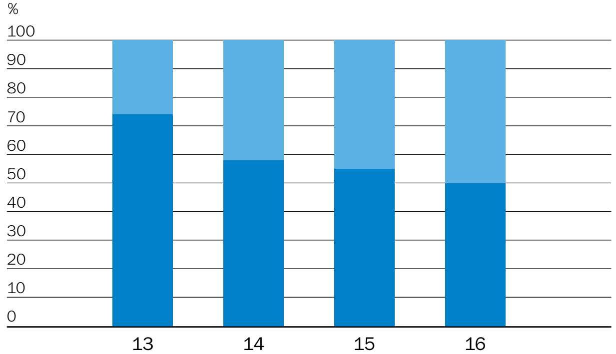
Restricted Share Pool 2012

The Board of Directors of Outokumpu approved on January 31, 2012 the establishment of a Restricted Share Pool program, which is part of the remuneration and commitment program for selected key resources of Outokumpu Group. It consists of annually commencing plans with a

Outokumpu share price development in 2016



Trading venue development 2013–2016



Source: Fidessa.

Performance Share Plans

	PSP 2014–2016	PSP 2015–2017	PSP 2016–2018
Number of participants on December 31, 2016	99	111	120
Maximum number of gross shares to be paid [1]			
CEO Baan	-	-	220,000
Other Leadership Team members	253,704	393,000	739,500
Other participants	902,058	958,500	1,692,150
Total maximum number of gross shares to be paid [1]	1,155,762	1,351,500	2,651,650
Earning criteria	EBIT improvement for the year 2014; EBIT excluding non-recurring items for the year 2015; underlying EBITDA for the year 2016; a cash flow measure for the years 2014, 2015 and 2016; and return on capital employed (ROCE) in 2016.	EBIT excluding non-recurring items and a cashflow measure for the year 2015; and return on capital employed (ROCE) ranking among peers and debt-to-equity ratio (gearing) in 2017.	Outokumpu's profitability and the efficiency with which its capital is employed compared to a peer group, and Outokumpu's gearing in 2018
Share delivery year	2017	2018	2019

[1] The maximum number of gross shares (taxes included) payable if the set performance targets are achieved in full.

three-year vesting period, after which the allocated share rewards will be delivered to the participants provided that their employment with Outokumpu continues uninterrupted throughout the duration of the plan and until the shares are delivered. Restricted share grants are approved annually by the CEO, with the exception of any allocations to Leadership Team members, which will be approved by the Board of Directors.

The second plan of the Restricted Share Pool 2012, covering years 2013–2015, ended on December 31, 2015. After deductions for applicable taxes, in total 7,426 shares were delivered to two participants of the 2013–2015 plan in spring 2016. Of these 7,426 shares, 5,070 shares were delivered to Leadership Team members. Outokumpu used its treasury shares for the reward payment, which meant that the total number of shares of the company did not change due to the reward.

Matching Share Plans

Matching Share Plan for the CEO

The CEO is part of a Matching Share Plan according to which he is entitled to receive in total 1,157,156 gross shares including taxes on the condition that he personally invested EUR 1 million into Outokumpu shares by February 20, 2016. The matching shares will be delivered in four equal instalments in the end of 2016, 2017, 2018 and 2019, respectively. The first vesting portion, in total 185,077 shares after deduction of applicable taxes, was delivered to the CEO in the end of 2016. The CEO is required to keep at least all the shares he has acquired and the first vesting portion throughout his service with Outokumpu. If the CEO's service contract is terminated without any fault or negligence attributable to him, all unvested matching shares (ie. shares not yet delivered) will vest at the expiry of the CEO agreement, provided that the ownership requirement for the CEO is fulfilled.

Matching Share Plan for management

The Board of Directors of Outokumpu approved on April 27, 2016 the establishment of a Matching Share Plan program for key management for years 2016–2020, in order to emphasize shareholder value creation, enforce an ownership culture and to incentivize the achievement of the 2020 vision.

According to the plan, the participants have invested an amount corresponding to 30–120% of their annual gross base salary into Outokumpu shares. Outokumpu will match each share acquired by the participant with two gross shares from which applicable taxes will be

Restricted Share Pool

	RSP 2014–2016	RSP 2015–2017	RSP 2016–2018
Number of participants on December 31, 2016	5	4	19
Maximum number of gross shares to be paid [1)]			
CEO Baan	-	-	-
Other Leadership Team members	-	5400	-
Other participants	17,700	17,900	39,500
Total maximum number of gross shares to be paid [1)]	17,700	23,300	39,500
Share delivery year	2017	2018	2019

[1)] The gross number of shares (taxes included) payable if the employment has continued until the delivery date of the shares and no notice of termination has been given prior to the delivery date.

Matching Share Plans

	CEO Plan	Management Plan
Number of participants on December 31, 2016	1	32
Maximum number of gross shares to be paid [1)]		
CEO Baan	1,157,156	-
Other Leadership Team members	-	1,393,342
Other participants	-	791,360
Total number of gross shares to be paid [1)]	1,157,156	2,184,702
Shares delivered (net of taxes)	185,077	0
Gross shares to be paid [1)]	867,867	2,184,702
Share delivery years	2016, 2017, 2018, 2019	2017, 2018, 2019, 2020

[1)] The gross number of shares (taxes included) payable.

deducted and the remaining net number of shares will be delivered to the participant. The matching shares will be delivered in four equal instalments in the end of 2017, 2018, 2019 and 2020, respectively. In order to receive the matching shares, the participants are required to keep all the shares they have acquired until the vesting of each matching share tranche.

Other terms

According to the share ownership plan of the Outokumpu Group, the members of the Leadership Team are obliged to own Outokumpu shares received under share-based incentive programs to the value of their annual gross base salary. 50% of the net shares received from the Performance Share Plan, Restricted Share Pool and Matching Share Plan programs described above must be used to fulfill the above ownership requirement.

Management shareholding

On December 31, 2016, members of the Outokumpu Board of Directors and the Leadership Team held a total of 1,156,043 Outokumpu shares, corresponding to 0.4% of the company's shares and voting rights. If the members of the Leadership Team were to receive the maximum number of gross shares for the Matching Share Plan and the 2014–2016, 2015–2017 and 2016–2018 periods of the performance and restricted share plans (a total of 4,092,813 gross shares including taxes), their shareholding obtained via the programs would amount to 1.3% of the company's shares and voting rights. Details of Outokumpu's management shareholdings can be found in the section Corporate Governance.

Information for investors

Annual General Meeting 2017

Outokumpu Oyj's Annual General Meeting 2017 will be held on Tuesday, March 21, 2017 at 2.00 pm EET at Clarion Hotel Helsinki at Tyynenmerenkatu 2, 00220 Helsinki, Finland.

To attend the Annual General Meeting, shareholders must be registered on March 9, 2017 in Outokumpu's shareholder register held by Euroclear Finland Ltd.

A holder of nominee registered shares has the right to participate in the Annual General Meeting by virtue of such shares, based on which he/she on March 9, 2017 would be entitled to be registered in the shareholders' register of the company held by Euroclear Finland Ltd. The participation in the meeting also requires that the shareholder has been registered into the temporary shareholders' register held by Euroclear Finland Ltd. at the latest by March 16, 2017 by 10.00 am EET. A holder of nominee-registered shares who wants to participate in the Annual General Meeting has to be registered into the temporary shareholders' register by the account management organization of the custodian bank latest by the time stated above.

A shareholder shall register for the meeting no later than March 13, 2017 by 4.00 pm EET by giving a prior notice of participation. Notifications can be made at www.outokumpu.com/generalmeeting; by e-mail to agm.outokumpu@innovatics.fi; by telefax: +358 9 421 2428, or by telephone: +358 50 532 5582 (from Monday to Friday at 12.00–4.00 pm EET) or by mail to

Outokumpu Oyj
Share Register
P.O. Box 245
FI-00181 Helsinki, Finland.

A shareholder may participate in the Annual General Meeting and exercise his/her rights at the meeting by way of proxy representation. Proxy documents should be delivered to Outokumpu Oyj, Share Register, P.O. Box 245, FI-00181 Helsinki, Finland before the end of the registration period.

A complete notice to the AGM and additional information concerning the AGM is available at www.outokumpu.com/generalmeeting.

Payment of dividend

The Board proposes to the Annual General Meeting a dividend of 0.10 euros per share based on the balance sheet adopted for the account period ending December 31, 2016. The dividend will be paid to shareholders registered in the shareholders' register held by Euroclear Finland Oy on the dividend record date of March 23, 2017. The Board proposes that the dividend be paid on March 30, 2017.

Working towards a world that lasts forever.

Outokumpu is a global leader in stainless steel. We create advanced materials that are efficient, long lasting and recyclable – thus building a world that lasts forever.

Stainless steel, invented a century ago, is an ideal material to create lasting solutions in demanding applications from cutlery to bridges, energy and medical equipment: it is 100% recyclable, corrosion-resistant, maintenance-free, durable and hygienic.

Outokumpu employs some 10,000 professionals in more than 30 countries, with headquarters in Helsinki, Finland and shares listed in Nasdaq Helsinki.

outokumpu
working towards a world that lasts forever

Outokumpu Oyj
Salmisaarenranta 11
FI-00180 Helsinki, Finland

Tel. +358 9 4211

corporate.comms@outokumpu.com

www.outokumpu.com