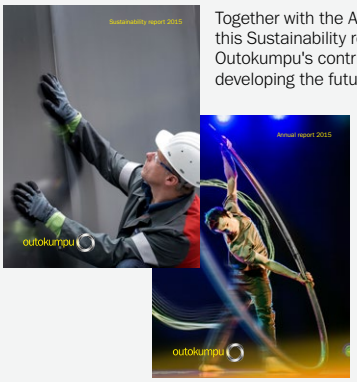
Sustainability report 2015

outokumpu

CONTENTS

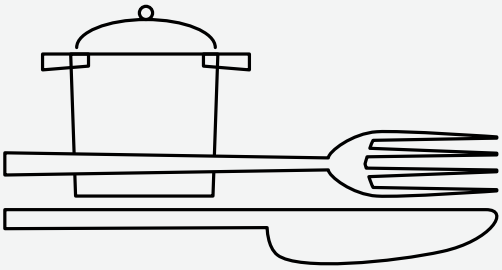


Together with the Annual report, this Sustainability report shows Outokumpu's contribution to developing the future.

G4

CORPORATE RESPONSIBILITY PRINCIPLES

Outokumpu recognizes all material topics of its operations and strategy. **p. 64**

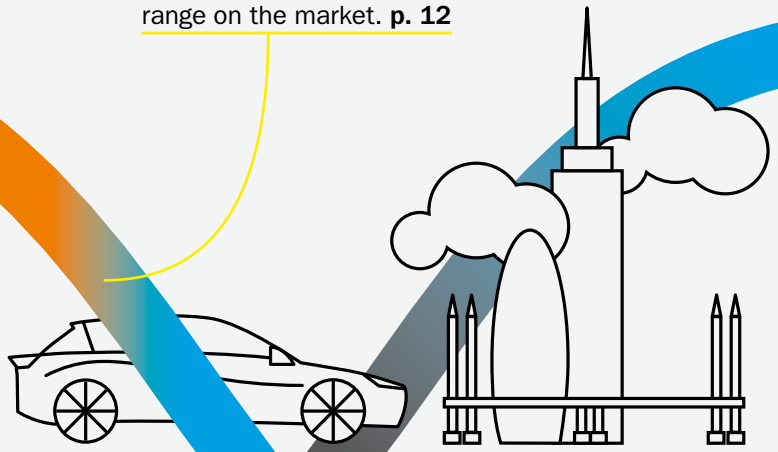


BEST SOLUTION FOR CUSTOMERS' NEEDS

Outokumpu has the widest product range on the market. **p. 12**

ECONOMIC IMPACTS ON LOCAL, NATIONAL AND GLOBAL LEVELS

Outokumpu takes community engagement seriously. **p. 52**



OUTOKUMPU – ONE COMPANY

The key theme for 2015 was creating a culture of working together. **p. 38**

IMPROVED RESOURCE EFFICIENCY

Outokumpu further improves resource efficiency. **p. 20**

FORTA ADDS 20+ YEARS TO SERVICE LIFE

Stainless steel's superior life cycle properties provide a competitive advantage in sustainability for customers. **p. 26**

LEARNING ACROSS BORDERS

Expatriate assignments serve in developing talented individuals through providing experience and exposure to a new and challenging environment. **p. 45**


"Outokumpu has been systematically integrating responsible business practices into its business operations for decades."

CEO's foreword

In today's world, sustainable business practices are non-negotiable; they are part of the license to operate. Corporate responsibility should not be about getting good ratings or producing glowing reports. It should be about how you conduct your daily business. It should be about maintaining your integrity even in the most challenging circumstances and showing respect towards your employees, customers, shareholders, and the communities and environment you operate in.

Our stainless steel is helping customers around the world to create lasting, beautiful and sustainable structures and objects. What we develop, manufacture and deliver represents our biggest contribution to a more sustainable world. Thus, our sustainability efforts focus on demonstrating responsibility in our value chain: the way we source and produce our materials, ensure the safety and well-being of our employees, and work with our partners and customers.

Over the past few years, Outokumpu has gone through a large merger and enormous industrial changes. These changes, including the closure of the Bochum melt shop in Germany in 2015, have not been easy, and they have understandably tested the commitment and endurance of our people.

During the first weeks of January 2016, my very first weeks as CEO of Outokumpu, I visited all our main locations. What I witnessed only strengthened my belief in this company. At every site, the competence and passion of our people and their will to succeed never ceased to impress me. For me, this shows that even when faced with incredible market pressure and financial challenges, Outokumpu has carried out the changes with the utmost integrity towards its employees and stakeholders.

In 2015, we took a number of actions to ensure we continued to honor Outokumpu's long tradition as a responsible company in this ever-changing world. To further strengthen our compliance practices and enforce our zero-tolerance policy on corruption, we launched a comprehensive e-learning program to educate our employees. Furthermore, as part of a materiality analysis, we engaged a wide group of stakeholders in assessing the most material aspects of our business in order to help sharpen our corporate responsibility approach. This systematic and inclusive attitude towards engagement ensures that our stakeholders help us improve in those areas that add most value to them and society.

As part of our wider social engagement we participated in several corporate responsibility forums, such as Global Compact Nordic Network, the UN Global Compact goals and World Steel Association's Sustainable Development Charter. Our efforts and transparency gained us inclusion in the Climate Disclosure Leadership Index again, as well as a listing as one of the leaders in the RobecoSAM Sustainability Yearbook 2015.

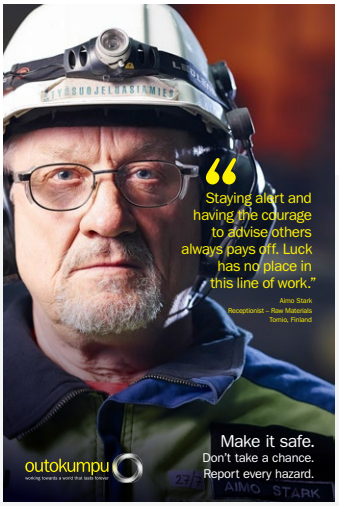
Outokumpu has been systematically integrating responsible business practices into its business operations for decades. Global issues, such as the depletion of natural resources, energy efficiency, carbon footprint and transparency have shaped, and continue to shape, the way we do business. In the past 20 years, we have almost halved our carbon footprint and grown the recycled content of our stainless to an average of over 87%. I would venture to say that making the right choices in sustainability is so ingrained in the way Outokumpu manufactures and delivers its materials that it is increasingly difficult to talk about it as separate from our overall operations.

It is truly an honor and privilege to lead a company with such a rich and meaningful history. What's more, the material we create and provide globally has huge potential. Long-lasting, durable and fully recyclable, stainless steel provides endless opportunities for everyone committed to creating a more sustainable world.

Roeland Baan
Outokumpu CEO

Highlights 2015

Last year was focused on stakeholder engagement.
We want to serve our customers' needs better, include our employees in our development and support a sustainable supply chain.



SAFETY WEEK TO STRENGTHEN OUR "SAFETY FIRST"

In 2015, Outokumpu organized a Safety Week to emphasize the importance of safety with different actions. Every employee needs to get home safely, every day. To reach this goal, we need a constant focus on safety. This requires not only following the regulations, but also having the right leadership and attitude: Take care of yourself and your colleagues! Never stand by idly if you see an unsafe situation.

NEW PRODUCT PORTFOLIO

Selecting the right stainless steel grade for a specific application is vitally important in achieving a sustainable solution, while cost must also be taken into consideration. There are several stages where material selection needs to be made. To make the right material selection, it is important to get a full picture of the service conditions the steel will face

- Corrosion resistance
- Mechanical strength
- Fabricability
- Physical properties
- Surface aspects

In 2015, a new product categorization of steel grades was introduced to support customers' decision-making.

CUSTOMER FOCUS

After two years, Outokumpu reintroduced Experience 2015, a customer event in Berlin. Attended by more than 500 guests representing 50 countries, the two-day event generated a spirited dialogue on innovation, sustainability and advanced materials. Outokumpu Experience 2015 drew the focus to sustainability, emerging energy technologies and crash-resistant automotive components, which all indicate the role of stainless steel in a world that lasts forever!

"The e-learning covered some 3,700 people and achieved a completion rate of 99%."

Outokumpu's Compliance Program – Anti-Corruption e-learning

Outokumpu's policy on corruption is very clear – we have zero tolerance for corrupt practices. As part of its compliance efforts in 2015, Outokumpu issued a new Anti-Corruption Instruction and launched a subsequent Anti-Corruption e-learning course, compulsory for all white-collar employees. The e-learning course covered some 3,700 people and achieved a completion rate of 99%.

Outokumpu is a pioneer in Leadership in Energy and Environmental Design (LEED) – Green building offers both environmental and economic opportunities

LEED was developed by the United States Green Building Council (USGBC). Outokumpu has LEED documentation available, and therefore designers selecting Outokumpu stainless steel can gain LEED points for their building. LEED recognizes buildings that achieve high energy efficiency and use sustainable materials that meet documentation requirements. The sustainable characteristics of Outokumpu stainless steel, such as high recycled content and long service life, are rewarded in this scheme. To further demonstrate our commitment to sustainable building, Outokumpu joined USGBC as a member in 2015.

The Hearst Headquarters became the first New York City commercial office building to achieve Gold LEED Certification from the US Green Building Council. Outokumpu supplied stainless steel for the building.

EXAMPLES OF OUTOKUMPU'S RATING AND AWARDS FOR EXCELLENCE

Outokumpu has been awarded for the sixth consecutive year with a position on the Nordic Climate Disclosure Leadership Index (CDLI). Recognized as a Nordic leader for the quality of climate change-related information that it has disclosed to investors and the global marketplace through the CDP, Outokumpu earned its position on the index by disclosing high-quality data on carbon targets, emissions and energy efficiency through the CDP's climate change program with the best possible disclosure score, 100.

RobecoSAM, a leading company for sustainable investments, and the Dow Jones Sustainability Index (DJSI) also recognized Outokumpu's sustainability engagements. Outokumpu's actions in Climate Strategy, Occupational Health and Safety, Water-related Risks and Code of Conduct were rated Industry Best. Outokumpu's overall rating by RobecoSAM was fourth among the global steel industry.

Outokumpu has been reconfirmed for inclusion in the Ethibel EXCELLENCE Investment Register since October 12, 2015. This selection by Forum ETHIBEL indicates that the company performs better than average in its sector in terms of corporate social responsibility (CSR).

RoSPA GOLD AWARD FOR A FIFTH CONSECUTIVE YEAR

Outokumpu's melt shop in UK has won the RoSPA
Gold award for a fifth consecutive year. The melt shop team has put in more than a decade of risk reduction, spotting hazards and raising SBOs (safety behavior observations). During the five years of successive gold awards, they have had only one lost time injury. The Royal Society for the Prevention of Accidents (RoSPA) encourages improvement in occupational health and safety management. Only organizations that maintain high standards in consecutive years can win gold medals.

CDP CLIMATE DISCLOSURE LEADER 2015

member of the INVESTMENT REGISTER ETHIBEL PIONEER & EXCELLENCE

ROBECOSAM We are Sustainability Investing.

"Nordic leader for the quality of climate change-related information."

OUTOKUMPU WON THE INTERNATIONAL CHROMIUM DEVELOPMENT ASSOCIATION'S AWARD FOR SAFETY

Kemi mine
The Outokumpu Kemi mine is the only chrome mine within the European Union.

icda International Chromium Development Association

KEMI MINE CONTRACTOR EMPLOYEES' PARTICIPATION IN SAFETY ACTIONS IS 100%

ICDA is an international non-profit association that promotes the value and sustainability of chromium and represents the chromium industry worldwide. This acknowledgement highlights Outokumpu's long-term safety effort and developments both in Kemi mine and Tornio stainless steel plant. Around half of the personnel working daily at the Kemi mine are contractor employees, and their participation in safety actions is 100%. Globally, our target is to get every employee, whether working for Outokumpu or a contractor, home safely, every day. The bottom line is always safety first.

ENVIRONMENTAL STEWARDSHIP

Outokumpu's Wildwood site was awarded for its environmental stewardship, nominated by Southpoint Solutions in recognition of the positive impact the company's lighting project had on the environment. Environmental stewardship refers to responsible use and protection of the natural environment through conservation and sustainable practices. This is an example of how sustainable practices bring about cost and environmental savings while making working conditions safer.

OUTOKUMPU CONTRIBUTES TO SEVERAL UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

Resource efficiency is Outokumpu's main driver
- 100% recyclability
- Goal of over 85% recycled content
- Long-lasting products

Outokumpu's stainless is used for drinking water treatment plants and distribution, i.e. turning saltwater into drinking water.

Our expertise is in developing new stainless grades that best fit their specific uses, such as lightweight, strong stainless for trains with low weight but high safety.

Using Outokumpu's stainless in buildings makes them long-lasting and low-maintenance.

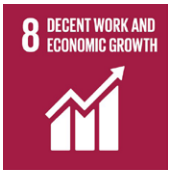
Outokumpu's stainless is used for medical devices and implants and is chosen for its hygienic qualities.
Its inert behavior supports food safety in food contact uses.

Outokumpu's materials are used for low-carbon power plants such as wind turbines and nuclear power plants.
Stainless/high-alloyed steel is used i.e. for:
- Desulfurization of waste gas from conventional power plants
- High-temperature power plants

Outokumpu contributes to climate protection with a specific carbon footprint target of 20% by 2020 from the baseline of a three-year average between 2007 and 2009 by:
- Energy and material efficiency projects
- Yield improvement with targets for right-first-time production
- Optimization of capacity

Outokumpu gave a core business example for the SDG Industry matrix.
Outokumpu looks for sustainable suppliers (Kyocera printer project).

Life-long learning for our employees
Collaboration with external R&D partners
Dialogue with schools and universities



Our number one priority is a safe working environment. We care for our employees and contractors and offer unique, long-term health studies.

Product properties

INNOVATIVE STEEL FUEL TANK AWARDED

The collaboration by Outokumpu and TFS received the New Application Award from ISSF. **p. 12**

NEW LIFE CYCLE EFFICIENT STEEL GRADES

New Forta H-Series suited for safe, low-carbon solutions in the automotive industry. **p. 12**

Stainless steel is 100% recyclable, hygienic and corrosion-resistant and the environmental impacts resulting from its use are almost non-existent. With the widest product range on the market and competent sales force, we take pride in being able to provide the best solution to meet our customers' needs.

11TH EDITION OF THE CORROSION HANDBOOK

The indispensable tool is based on the company's extensive research and product development. p. 12

WORLD'S MOST RECYCLED MATERIAL

Stainless steel fits perfectly into the circular economy. **p.11**

SECTOR LEADER IN LIFE CYCLE DATA

Outokumpu offers Environmental Product Declarations for all main stainless steel products. **p.11**

OUTOKUMPU AVERAGE IN 2015:

87% RECYCLED CONTENT

Sustainable stainless

As a material, stainless steel is strong, corrosion-resistant, durable and hygienic: in many ways, it is the perfect answer to global challenges such as resource scarcity, urbanization, and global climate and water challenges.

Working towards a world that lasts forever

Steel is the world's most recycled material. Estimates indicate that the end-of-life recycling rate for stainless steel is some 82%. In Outokumpu's manufacturing operations, the average recycled content for all stainless steel products produced by the Group in 2015 was 87%, significantly higher than the global industry average. The most important raw materials used by Outokumpu in producing stainless steel are recycled stainless and carbon steels. In addition to recycled steel, alloying elements, including iron-containing alloys and other metals such as chromium, nickel and molybdenum, are also necessary. Stainless steel is fully recyclable and suffers no degradation during reprocessing. Its constituents (including iron, nickel and chromium) can therefore be reused indefinitely in producing new stainless steel.

Steel is already the world's most recycled material. Stainless steel scrap on the market does not satisfy the demand. In addition to recycled steel, alloying elements, including iron-containing alloys and other metals such as chromium, nickel and molybdenum, are required.

These excellent recycling characteristics mean that stainless steel is well positioned to meet the demands of a future sustainable society. Outokumpu recognizes that recycling and the life cycle approach are important elements in achieving sustainable operations.

"The average recycled content for all stainless steel produced by Outokumpu in 2015 was as high as 87%."

Outokumpu stainless steel is safe

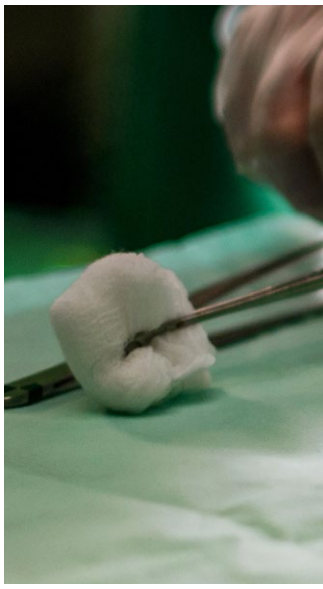
Outokumpu produces business-to-business products. Safety information about all our products is available to our customers. We have identified certain end uses – the use of stainless steel in kitchenware and the food processing industry, for instance, as well as in medical appliances – where health and safe use are of utmost importance, and we have taken measures to evaluate our products' impact on health and the environment. Most recently, we participated in a testing program on metal release from established stainless steel grades in contact with food, which confirmed that stainless steel is suitable as a food contact material. We have also tested some of our newly developed stainless steel grades for food contact. The results revealed that these new grades are as well suited for food contact as the more established stainless steel grades. Food contact uses in general cover almost one third of stainless steel consumption.

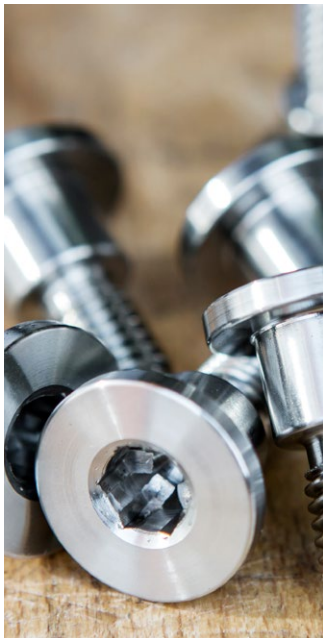
Stainless steel in its manufactured forms – as delivered to Outokumpu customers – is inert and non-toxic. On the other hand, industrial processes involving the material, such as welding or pickling, can release substances or fumes that could be hazardous if inhaled for substantial periods of time. The safety information sheets published by Outokumpu help customers handle our stainless steel products in a safe manner. Our safety information was updated in 2015. Also, our safety data sheets for the Americas were updated in 2015. Because stainless steel is inert and non-reactive, it is also widely used in medical appliances and drinking water facilities.

Outokumpu fulfills legal and customer requirements

Regarding the health and safety impact or labeling of stainless steel, Outokumpu is in compliance with requirements and did not receive any fines. Due to the non-hazardous character of stainless steel products, steel is exempt from labeling. Nevertheless, we have either safety information sheet or safety data sheets that cover all our steels. Quality-related claims are handled together with customers according to the procedures described in quality management systems.

Outokumpu stainless steel is used in a wide range of different products, from industrial machinery and tanks to kitchen utensils and cellphones. Both service life and





The stainless steel infinite circle

Stainless steel fits perfectly into a circular economy. It is fully recyclable and suffers no quality degradation during reprocessing.

Recycling and durability saves resources

It goes without saying that the possibility of recycling a product saves resources by reducing the need to extract new minerals and ores from the ground. However, durability is also important. Manufacturing something only once, instead of twice or even three times during a certain time period, due to breakdowns and repair, is of course less resource-consuming. Stainless steel helps to prolong the lifetimes of applications, for example in bridges susceptible to corrosion, or components like exhaust pipe systems in cars.

A study by the Boston Consulting Group on the CO_2 emissions related to six relevant uses of steel revealed that CO_2 savings in the use phase are six times the CO_2 needed to produce the steel.

Low life cycle costs for stainless steel

The durability of stainless steel also has a cost-effective impact from a life cycle perspective. Stainless steel requires only minimal maintenance, which is both economical and good for the environment and society. The combination of corrosion resistance and durability increases product lifetimes. In certain cases, these cost savings can be in the range of 30% to 40% compared to alternative materials, and they arise from reduced repair and maintenance costs.

other expectations of the products show large variations over this wide span of end-applications. The use of Outokumpu steel in modern society minimizes emissions by creating efficiency in, for example, transport, construction and energy production. Thus, our steel supports prosperity and health.

As a sector leader, Outokumpu offers life cycle inventory data in its Environmental Product Declarations (EPD) for Outokumpu's main stainless steel products. These are public documents that describe the main environmental effects and energy needs of the Group's stainless steel grades throughout their supply chain.

"Outokumpu has recently launched several new steel grades to serve as life cycle efficient alternatives."

Product and application development

The direction of Outokumpu's product and application development is driven by global trends like economic and population growth, mobility, urbanization, climate change and limited resources. We work closely together with customers in order 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.

Outokumpu's product development involves the development of new steel grades and new surface finishes, as well as continuous improvement of the quality and properties of existing steel grades. Outokumpu has recently launched several new steel grades to serve as life cycle -efficient alternatives for conventional stainless steel grades, including ferritic Core 4622, austenitic Supra 4420 and formable duplex stainless steels Forta FDX 25 and Forta FDX 27. During the year 2015, we continued market and application development activities related to these new grades. Another important highlight of our recent product development is the Forta H-Series steels. Forta H-Series steels are high-strength and highly formable materials well suited to the challenges faced by the automotive industry. For original equipment manufacturers (OEMs), the Forta H-Series is an innovative new way to reduce CO_2 emissions and to improve passenger safety at a stable, competitive price.

A highlight in Outokumpu's Pro family was the reintroduction of the grade Ultra 654 SMO, the most stainless steel ever. It offers unique opportunities for end-users of stainless steel, with long-lasting, corrosion-resistant steel, also in harsh environments.

Regarding the topic of surface finishes, the Outokumpu production site in Dillenburg (Germany), in cooperation with the Outokumpu research center in Krefeld (Germany) has made substantial developments in the field of less-reflective stainless steel finishes for architectural applications. The solution to lower the reflection was to superimpose a coarse Linen pattern on top of a fine-patterned sheet. The new products, first introduced at the Outokumpu Experience customer event in Berlin, are called Deco Linen Star, Deco Linen Matt and Deco Linen Supermatt. In comparison to the standard and highly popular Deco Linen finish, the new Deco Linen Star has approximately 20% less specular reflectance, Deco Linen Matt has 40% and Deco Linen Supermatt has 60%. The main sales markets for these new finishes are architectural applications, where Outokumpu enjoys a highly respected reputation.

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. This work is particularly important when it comes to our new stainless steel grades. Furthermore, we actively search for and develop new application areas and markets for Outokumpu's products together with our customers and potential new users of stainless steel.

An example of our successful application development projects is the stainless steel fuel tank, which in 2015 received the New Applications Award from ISSF (the International Stainless Steel Forum) in the Best New Development Award category. The innovative new fuel tank was developed jointly by Outokumpu and the Swedish fuel system company TechROi Fuel Systems (TFS). The use of the Outokumpu HyTens® steel grade allowed extremely thin walls and tailored strength, making the tank around three kilograms lighter than conventional fuel tanks made of plastic. Thus, thanks to innovative use of stainless steel, the overall vehicle weight can be reduced, which lowers fuel consumption, thus mitigating emissions.

The new eleventh edition of Outokumpu's Corrosion Handbook was published in 2015. In the new edition, the in-depth articles and technical descriptions, covering numerous applications and industry sectors, have been updated. New topics include chapters on stainless steels for automotive applications and biogas plants. The handbook has become an indispensable tool among corrosion engineers, metallurgists, designers and other specialists to meet the challenges of corrosion in selecting the correct stainless steel grade for each specific application. The handbook was first published in 1934. It is based on the company's extensive research and product development.

Process and technology development

Continuous development of our production processes and technologies is at the core of our R&D. Process and technology development focuses on reduction of the environmental impact and improvement of the cost efficiency of our production processes, and on optimization of product quality.

During the year 2015, the main tasks in our process development included supporting Outokumpu's strategic initiatives related to the EMEA restructuring and ramp-up of Calvert operations. The closing down of the Bochum melt shop in Germany necessitated extensive process development efforts to ramp up capacity and enable production of former Bochum products at our other production sites. Furthermore, a job rotation program for technical experts was implemented to facilitate the transfer of technological knowhow between our sites. The operations of the Core Technology Competence groups, Group-wide expert teams on process development, have also now been established. Sharing best practices between sites through these teams has already resulted in substantial cost savings.

One focus area of process and technology development is the digitalization of the steel production process. Outokumpu is running several initiatives on the development of new process measurements, process models and process control systems.

External R&D collaboration

Outokumpu has an extensive network of external R&D partners and participates in both national and international research programs. Outokumpu is a member of the European Steel Technology Platform (ESTEP). Examples of research programs in which Outokumpu is participating include the Finnish Mechanical and Engineering Competence Cluster (FIMECC), Research Fund for Coal and Steel (RFCS) and Jernkontoret (the Swedish Steel Producers' Association). In Germany, we are collaborating with various universities and research institutes, among others with the Fraunhofer Institute and the Max-Planck-Institut für Eisenforschung. Furthermore, Outokumpu has recently put more emphasis on the EU's research and innovation program Horizon 2020 and on other European-level programs.

Two extensive five-year research programs coordinated by FIMECC and funded by TEKES (the Finnish Funding Agency for Innovation) are currently Outokumpu's largest external R&D initiatives. In the FIMECC SIMP (System Integrated Metals Processing) program, a globally unique grouping of leading metal industry companies have come together to further increase their global competitiveness by integrating digitalization and sustainability in metallurgical processes in a system-integrated manner. The FIMECC BSA (Breakthrough Steels and Applications) program focuses on the development of new generations of sustainable steels and their future applications.

"Process and technology development focuses on reduction of the environmental impact and improvement of the cost efficiency."

Our impact on the environment

WATER RECYCLING ENHANCED

99% of wastewater is treated and recycled at a cold-rolling plant in Mexico. **p. 30**

Outokumpu's business is based on the circular economy: our main raw material is recycled steel and our products can be recycled forever without losing its excellent properties. Improving resource efficiency is the most effective measure we have to directly reduce the environmental impacts of steel production.

OVER 4.4% REDUCTION IN DIRECT CO_2 EMISSIONS COMPARED TO BASELINE

Contribution to a target of a 20% reduction by 2020. **p. 24**

26% REDUCTION IN DUST EMISSIONS

Metals are recovered in melt shops with dust-filtering and used in stainless steel. **p. 27**

LESS WASTE TO LANDFILL

In 2015, Outokumpu succeeded in increasing the use and recycling of slag. **p. 20**

EFFICIENT CARBON PROFILE

Unique advantage from our own ferrochromium production and the integrated use of process gas. **p. 20, 24-26**

RECYCLED STEEL USE ANNUALLY OVER

2,200,000 TONNES

"The life cycle of stainless steel products is very long and the recycling rate among the highest."

Our impact on the environment

The most substantial environmental impacts that result from the stainless steel production process include emissions of dust and particles into the air, discharges of water from production plants, and direct and indirect energy consumption during production. Landfill waste is also created during the production process.

Environmental impacts always have to be analyzed per life span, not only related to the production phase. The use of steel in modern society minimizes emissions by creating efficiency in for example transport, construction, industries and power plants. Due to these facts, steel products are solutions in combating climate change and protecting the environment.

Efficient management systems save the environment, costs and time

Outokumpu's firm objective is to minimize the environmental burden of the Group's operations as much as is economically and technically feasible. The basis of this work is the Environment, Health and Safety, Quality and Energy Efficiency (EHSQ&En) Policy and coordination. Outokumpu's aim is to also harmonize and integrate internal management systems. All Outokumpu's production sites have risk-based management systems, which help avoid spills and accidents that could be harmful to people or the environment. All these systems operate in accordance with the Group EHSQ&En Policy. All our production units and service centers have certified ISO 9001 quality management systems and all production sites will have certified their Environmental Management System according to ISO 14001 in early 2016, and additionally, several sites are certified according to ISO 50001, Energy Management Systems.

At the Group level, Outokumpu has a long tradition of internally steering environmental performance. Environmental site managers meet in quarterly Outokumpu Environmental network meetings to manage and steer environmental operations and share best practices. The network has clear responsibilities and mandates according to the internal EHSQ&En manual (covering the environment, health and safety, quality and energy efficiency management and requirements). In energy matters, a similar network is established to coordinate European CO_2 emissions trading and cover energy efficiency topics. The Group perspective is aligned with the Group's management process and annual planning. All Outokumpu production units report today their environmental and energy figures as air emissions, energy use, water emissions or waste facts in Outokumpu's internal Energy & Environmental Reporting system (EER).

Environmental goals and results

Goals and target-setting, monitoring and reviews of performance against targets are mandatory continual processes in Outokumpu production units. These actions are also part of the environmental and energy efficiency management systems.

Outokumpu sets Group-wide, long-term and annual environmental targets. Group-wide targets are common targets that affect most Outokumpu sites. Targets at production sites are more specific, and typically every production site has several environmental targets of its own.

Environmental targets and the associated long-term goals cover all of Outokumpu's operation units globally.

GROUP-WIDE GOALS AND RESULTS 2015

Based on the outcome of Group-wide targets for 2015, environmental work once again yielded good results. Below you can find the results of the targets and brief comments:

- **No significant environmental incidents:** The target was achieved. There were no significant environmental incidents involving Outokumpu operations during 2015. This demonstrates the excellent standards maintained in our operations.

- **Climate change:** Reduction of emissions was in line with Outokumpu's long-term target of achieving a 20% reduction in direct and indirect CO_2 emissions by 2020, against the program baseline of 2007–2009. The Group's total carbon profile per tonne of steel produced was reduced by some 7.4% compared to baseline figures. The annual progress of this target is followed as an internal quarterly KPI; the target for 2015 is split into separate energy efficiency and CO_2 emissions targets.

- **Energy efficiency:** A further reduction of 1% in energy consumption per tonne of stainless steel processed, accumulating to 10% with 2007–2009 as the base period. The outcome of 2015 was an 8% improvement versus baseline (9.5% including closed sites). This is a good result, also taking into account that 2015 production and capacity utilization were at a lower level, which usually weakens the results. The total accumulative improvement achieved during the Group's low-carbon program in energy efficiency equaled some 436 GWh (2014:751, including closed sites) annually.

- **Direct CO_2 emissions** from production operations reduced by 1% per tonne of stainless steel processed, accumulating to 4.4% with 2007–2009 as the baseline period. This almost met the target for 2015 (4.5%). Although the production due to the market situation was lower. Outokumpu units are already very carbon-efficient and existing sources of CO_2 are not feasibly replaced with other materials.

- **Materials efficiency:** Further reductions in the amount of waste landfilled per tonne of stainless steel produced. Material efficiency was improved against the baseline, and we succeeded especially in the utilization of slag.

- **Certified environment management system** ISO 14001 coverage of 100% of Outokumpu's production sites. The goal will be reached in early 2016, when the cold-rolling mill in San Luis Potosí, Mexico, will achieve certifications. They passed the final external audits in December 2015 to January 2016.

EXAMPLES FROM SITE-SPECIFIC GOALS AND ACHIEVEMENTS IN 2015

Outokumpu UK units:

- **Increase energy efficiency** from 2.05 to 2.028 MWh/t per liquid steel. The target was exceeded. Energy efficiency reached by 1.888 MWh/t.

- **Decrease waste to landfill** from 36.5 kg/t to 32 kg/t. Target was not reached.

Avesta, Sweden:

- **Reduction of direct process-related CO_2 emissions** by 4% per tonne. This very challenging goal was almost reached (3.5%).

Tornio, Finland:

- **Energy efficiency:** Reuse rate of carbon monoxide gas from ferrochrome production >95%. The rate was 92.3%.

- **Emission control and decreasing emissions:** Improvement of gas-cleaning treatment equipment at ferrochrome sintering plant according to the detailed program. Goal was reached.

- **Increase of environmental awareness:** New environmental safety training for own employees. Training done for pilot groups and environmental communication increased for all employees.

GOALS FOR 2016

Outokumpu's Group-wide goals are the same for 2016 as 2015. These targets represent the key environmental focus areas of the company and also the most relevant environmental aspects, also verified in the stakeholders' external materiality analysis. The recycling goal will be reset in early 2016 due to harmonizing of methodology. The carbon profile methodology will be also reviewed in order to improve internal benchmarking.

All Outokumpu production units will set several specific environmental targets for 2016. They will support the Group-wide goals, but include also site- and unit-specific goals. During the year 2016, specific targets will be monitored, reported and reviewed according to ISO 14001 management system at every site.

Resource efficiency – materials and energy

Outokumpu aims to have a steel production system where all the materials resulting from production are fully utilized, either in their primary form, like steel, or by recycling them back into the steel production process, as in the case of dust, scale and swarf.

Outokumpu's manufacturing processes are developed to facilitate the use and recovery of valuable elements from the material streams. In this context, we have to take into consideration that treating material requires additional energy and results in emissions. Outokumpu's strategy is to improve production processes through R&D projects, continuous improvement tools, like business excellence projects, or with research programs.

Twin approach

Outokumpu has two aims when improving the Group's resource efficiency. First, we minimize the initial use of virgin materials in our primary production of stainless steel. We aim to reduce our energy demand with several efficiency projects, to improve our capacity utilization by strategic planning of facilities and operation sites, and to increase our yield by setting site-specific targets for right-first-time production. Outokumpu's recycled material input is very high, which advances the transformation towards a more circular economy. The second aim is the reduction of the quantities of waste sent to landfill. By paying special attention to waste management and segregation techniques, many waste fractions resulting from production operations are recycled or recovered. About 65% of total waste and by-material remain in the circular economy. Especially, the specific amount of steel slag sent to landfill could be reduced to 8% (2014: 13.5%).

"Outokumpu's manufacturing processes are developed to facilitate the use and recovery of valuable elements from the material streams."

Recovery of alloying elements

Dust and scale collected from stainless steel manufacturing operations are considered by Outokumpu to be significant waste streams. Wherever practical, these waste materials are collected and recycled to recover the valuable metals they contain, such as iron, nickel, chromium and molybdenum. In order to fully recover the valuable elements in the dust, secondary metallurgical processes are used. Outokumpu operates one such unit in Sheffield, UK, while other Outokumpu sites use external partners to perform this recovery operation. Through these processes, nickel, chromium and molybdenum are returned to Outokumpu's melt shops, and other elements, such as zinc, can be sent for use as a secondary raw material.

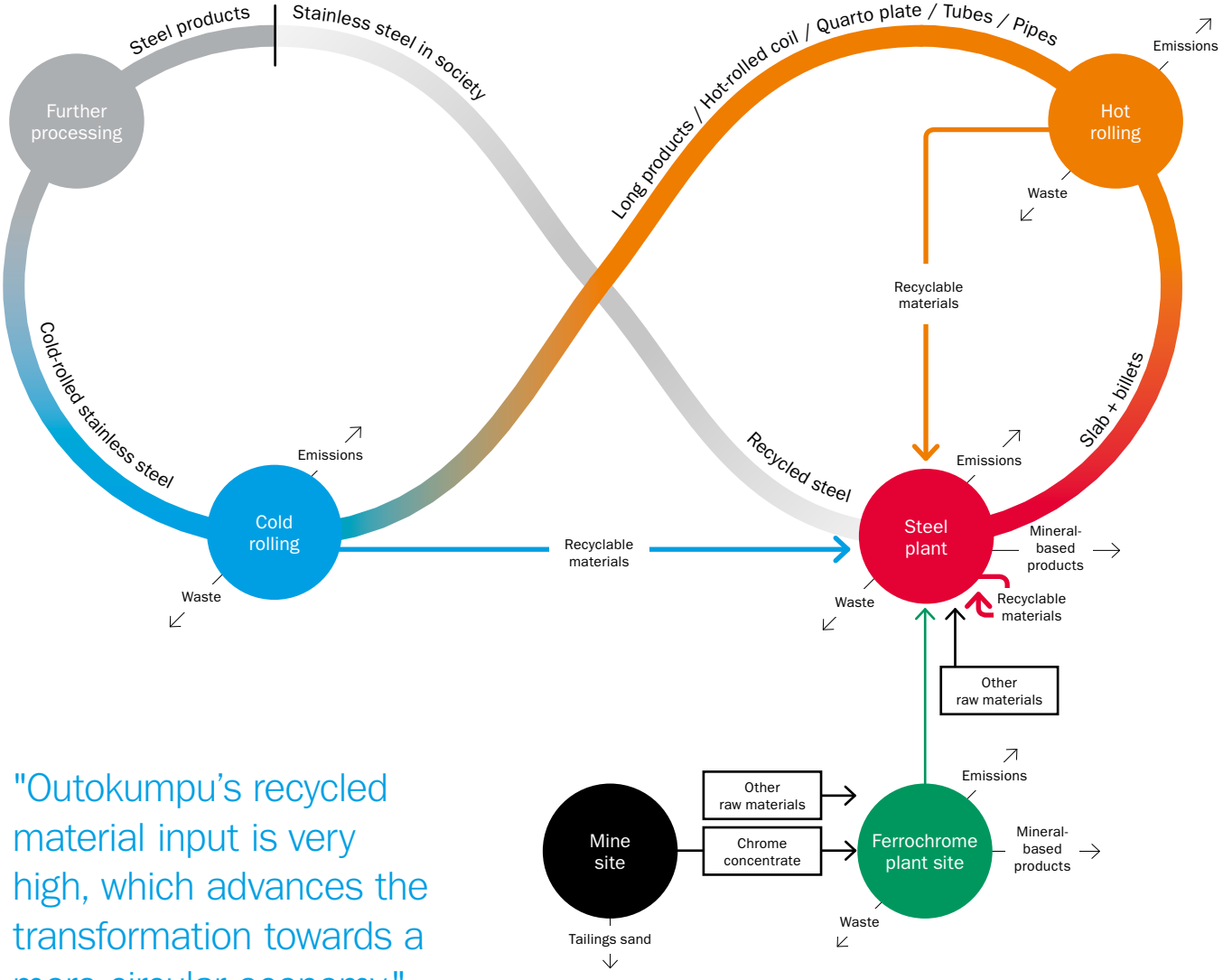
Steel slag transformed into products and the reuse of refractory materials

In hot liquid steelmaking processes, minerals are formed as slag. It is by far the biggest material side stream. Slag prevents the loss of crucial alloying elements during melting and aids the refining stages. Slag is an essential material in protecting molten metal against oxidization and heat losses. Outokumpu has developed slag-based products and has fostered long-term relationships with key third parties to facilitate the metal extraction and preparation of slag as a product.

The resulting slag products are employed in construction projects and used for neutralization purposes in industrial applications and as a soil conditioner in agriculture. In road construction, slag products can replace virgin materials such as crushed stone aggregate. Slag-containing asphalts also offer higher grip levels and can help to prevent road traffic accidents.

Used refractory materials from melt shops are a significant side stream material after slag. Outokumpu has pioneered the crushing and re-melting of dolomite bricks within our manufacturing units as a dolomite substitute, which decreases Outokumpu's dependence on virgin material. As this material is reused in the steelmaking process as a slag conditioner and ends up in the slag, it is effectively used three times: once as refractory brick, second as a substitute for dolomite and third as a substitute for road stone.

Material flow in Outokumpu's circular economy



"Outokumpu's recycled material input is very high, which advances the transformation towards a more circular economy."

Production site	Location	Production					Products
Avesta	Sweden			●	●	●	Coil and Sheet
Benrath	Germany					●	Coil and Sheet
Calvert	The United States			●		●	Coil and Sheet
Dahlerbruck	Germany					●	Precision Strip
Degerfors	Sweden				●		Quarto Plate
Dillenburg	Germany					●	Coil and Sheet
Kemi	Finland	●					Chrome Concentrate
Krefeld	Germany					●	Coil and Sheet
New Castle	The United States				●		Quarto Plate
Nyby	Sweden					●	Coil and Sheet
Richburg	The United States					●	Bar
San Louis Potosí	Mexico					●	Coil and Sheet
Sheffield	The United Kingdom			●	●	●	Wire Rod, Rebar
Tornio	Finland		●	●	●	●	Ferrochrome, Coil and Sheet
Wildwood	The United States					●	Welded Pipe

Continuous development to improve resource efficiency

Other types of material side flow are generated at our rolling mills. These are treated in various ways to minimize their environmental impact and increase utilization of the material. Outokumpu Group's guiding principle is to utilize waste according to the waste hierarchy by avoiding, recycling, recovering or using materials as an energy source. On the other hand, the use of wastes demands energy or affects the amount of other input material. These goal's conflicting facts have to be evaluated from an integrated point of view to balance circulation, environmental impact and cost effects.

Examples:
- **Kemi mine:** barren rock, ash and slag is used in backfilling underground workings.
- **Wildwood:** A new filter press was taken into use. Now filter cakes have a reduced water content of 54.4% by weight, which is a huge improvement and will decrease the amount of wastewater sludge sent to landfill and the associated costs.
- **Avesta:** Outokumpu has patented a process to convert sludge from the cold-rolling process into Hydrofluss. Hydrofluss replaces fluorspar, which is used in melting process for slag conditioning. All sludge from Degerfors and Nyby cold rolling can be recovered, which reduces landfill waste and increases metal recycling. The new process is in the optimization stage now.
- **Cold-rolling sites:** Surface treatment of stainless steel needs special acids as sulfuric, nitric and hydrofluoric acids. At all sites, acid is regenerated. This leads to a reduced need for acids made from virgin resources.

Waste management

Outokumpu uses 1.3 million tonnes of by-products, mainly slag, directly. The total amount of non-hazardous wastes are further 1.5 million tonnes, thereof 0.4 million tonnes recycled, 0.01 million tonnes recovered and 1.1 million tonnes landfilled.

Waste from Outokumpu production units is sent to appropriate treatment facilities or to landfill sites licensed to accept such materials. Hazardous waste generated by the Group's operations in 2015 totaled 127,009 tonnes (164,341 tonnes in 2014). Thereof are 14 thousand recycled and 45 thousand tonnes recovered and 64 thousand tonnes are landfilled. Of these amounts, some 63,000 tonnes of all hazardous wastes are treated and/or metal content is recovered.

Hazardous waste consisting of oily waste, acid regeneration and hydroxide sludge generated by the Group's operations in 2015 totaled 66,202 tonnes. Efforts to reduce landfilled waste can be seen. The amount of landfilled sludge could be reduced to 32,856 tonnes and sludge to treatment increased. 2015 does not include cold-rolling mill in Shanghai, which also influences figures on sludge.

Resource input for Outokumpu's steel[1]

Materials used, tonnes	**2015**	2014	2013
Recycled steel	**2 198 338**	2 430 388	2 111 093
Recovered metals	**132 448**	149 143	148 329
Ferrochrome	**395 070**	482 459	434 191
Nickel alloys	**152 233**	207 225	202 118
Other alloys	**112 270**	129 071	122 836
Additives, tonnes			
Slag formers	**423 287**	405 131	384 028
Melt shop process gases	**398 492**	414 071	313 804
Pickling acids bought	**32 626**	40 151	37 702
Pollution prevention materials	**46 962**	54 314	46 107
Packaging materials used for final products	**26 446**	20 682	20 498
Energy, TJ	**29 381**	30 056	29 273
Electricity	**17 859**	17 176	16 974
Propane	**4 467**	4 295	3 654
Carbon monoxide gas	**2 241**	2 272	1 949
Natural Gas	**4 200**	5 681	6 138
Diesel, Light and heavy fuel oil, other	**614**	634	558
Energy use in GJ per tonnes crude steel	**11.2**	10.3	11.3
Output, tonnes			
Steel	**2 628 088**	2 919 413	2 598 006
Emissions to air, Scope 1, tonnes			
Carbon dioxide	**1 237 422**	1 400 754	1 274 515
Nitrogen oxides	**1 982**	2 245	2 634
Sulphur oxides	**346**	383	348
Dust	**328**	441	447
Ozone-depleting substances	**0**	0	0
Other greenhouse gas, tonnes. CO_2 eqv. (CH_4 and N_2O)	**98**	81	89
Carbon dioxide per tonnes of steel	**0.47**	0.48	0.49
Emissions to water, tonnes			
Metals	**50**	53	44
Nitrates	**1 767**	2 408	1 809
Hazardous waste, tonnes			
Sludge to the treatment	**9 446**	23 002	16 582
Hydroxide sludge landfilled	**32 856**	47 964	73 639
Steelmaking dust to recovery	**48 348**	69 784	57 274
Waste slag, tonnes			
Steel slag, total	**1 006 011**	899 451	906 143
Slag utilized	**874 716**	720 091	735 087
Slags utilization rate (recovery, reuse, recycling)	**86.9%**	80.1%	81.1%

[1] Figures for 2013 and 2014 include discontinued sites.

The lower dust recovery from steelmaking is caused by a reduction of total dust. Only 6.5% of steelmaking dust could not be recovered in 2015. All such materials are treated, reused or disposed of in accordance with current legislation and best practices.

Management of landfill risks

Outokumpu owns and manages landfill sites at some production sites in Finland, Germany, Sweden and the UK. Operations in these locations meet stringent EU and national requirements. In addition to the actively used landfill sites, Outokumpu is taking care of some closed landfills. These sites are carefully monitored in order to ensure that the environmental impacts, for example on surrounding water, are minimal. The sites are typically also landscaped.

Energy efficiency

Steelmaking and rolling processes are energy intensive. Achieving the highest possible level of energy efficiency is very important for the Group. Outokumpu's aim is to minimize total energy usage from a life cycle point of view and reduce the directly related environmental impact.

Outokumpu production sites use a range of energy sources, such as natural gas, propane, heavy fuel oil and electricity. Energy use by the Group decreased 0.68 million GJ (2.2%) and totaled 29.4 million GJ in 2015 (30.1 million GJ in 2014), of which electricity consumption slightly increased to 17.9 million GJ (17.2 million GJ in 2014).

Outokumpu's approach to energy efficiency is long term, and the target is a continuous improvement of a 1% reduction yearly. Energy efficiency is a component in the management systems at all production sites. Major Outokumpu production sites realize this target with efficiency projects. In overall terms, the largest energy-saving potential lies in the use of process gas (CO-gas) from ferrochrome production, the recovery of waste heat, improved process integration and improved efficiency in using raw materials.

In all new investments or replacement investments, energy efficiency is improved and energy saving is a target. Additionally, systematic monitoring and analysis of energy consumption, including life cycle thinking, plays a very important role. Energy efficiency information is exchanged in Outokumpu's expert network as well as in site- and country-specific energy expert meetings. Improvements in energy efficiency achieved by Outokumpu during 2010–2015 totaled 8% (9.5% including closed sites).

Examples:

- At the melt shop located in Sheffield, United Kingdom, energy efficiency has been a top priority for many years. As a result of improvements to the efficiency of fume extraction, the installation of variable-speed drives and maximizing production planning to minimize energy consumption, the melt shop has reduced the energy demand between 2009 and 2015 by 13%.
- Outokumpu is responsible for the power connection at Krefeld, Germany. The electricity distribution grid of alternating current generates inactive current which cannot be used. We started to install a compensation to reduce the inactive current. This does not directly count towards Outokumpu's process efficiency, but it contributes to more efficient electricity distribution and a lower grid fee for Outokumpu.

Energy used

Unit	Electricity (MWh)	Fuel energy (MWh)	Total (MWh)
Finland	2 823 155	1 460 648	4 283 803
Sweden	987 747	564 447	1 552 194
Germany	253 963	558 440	812 403
The United Kingdom	150 518	89 745	240 262
The United States	625 492	365 592	991 084
Mexico	120 042	161 720	281 762
Total	4 960 917	3 200 591	8 161 508

Sustainable energy solutions

Outokumpu's Energy function is responsible for the Group's energy strategy and for procuring the electrical power and energy gases employed in Outokumpu's operations. The primary objective is to secure predictable, competitive and stable prices for the Group's future energy supply. Other important tasks carried out by the Energy function include the management and optimization of Outokumpu's physical energy portfolio and energy-production assets, participating in new low-carbon energy projects, promoting low-carbon fuel energy sources, and providing support for Outokumpu companies in their energy-related activities.

Price of electricical power

In 2015, the average system price of electrical power in Nord Pool, the Nordic electricity exchange, was EUR 20.98 per MWh. The average price in the Finnish area was EUR 29.66 per MWh, considerably higher than the system price. The strong hydrological situation, mild weather and low consumption kept power prices at relatively low levels.

Outokumpu's power procurement is executed using a long-term procurement. Outokumpu's electrical power portfolio is managed by engaging in trading activities in the Nordic power market, through bilateral long-term supply agreements with power utilities, and by making investments in low-carbon power-generation capacity.

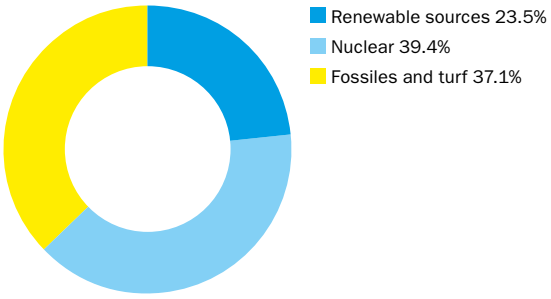
Outokumpu participates in low-carbon electricity production

Outokumpu's aim is to have access to additional low-carbon power production sources in the future. To achieve this, the Group participates in new power plant projects and enters into agreements with parties in the power market. By participating in new power plant projects, Outokumpu can also promote competition in the Nordic power markets and contribute to adequate power production capacity being constructed in the future.

Nuclear power

Outokumpu increased its holding in the Fennovoima nuclear project to 14.1% in 2015. In 2014, the Finnish Parliament approved Fennovoima's supplement to the decision-in-principle regarding the construction of a new 1,200 MW nuclear power plant in Finland. Fennovoima applied for the construction permit in June 2015. The infrastructure work at the site began in 2015 and is expected to last approximately two to three years.

Origin of electricity 2015



The construction of the plant would begin after the infrastructure work is completed, and the power plant would start commercial operations in 2024.

Outokumpu has a minor 0.3% holding in the Olkiluoto 3 nuclear power plant project of Teollisuuden Voima Oyj (TVO). The construction of the power plant in Finland is currently ongoing. TVO's Olkiluoto 4 nuclear power project, where Outokumpu had a 0.7% minority holding, was discontinued in 2015.

Hydropower

Since 2005, Outokumpu has had a 104 MW share of Norwegian hydropower capacity in Rana, Norway through a long-term leasing agreement that is valid until 2020. Outokumpu receives approximately 440 GWh of electricity from this renewable hydropower source in an average year.

Outukumpu uses local water as a renewable energy source in Dahlerbrück, Germany. The Outokumpu Dahlerbrück site owns a small hydroelectric power plant that was built in 1920 and is protected due to its cultural and historical value. It has two turbines with capacities of 200 kW and 110 kW. The power generation is dependent on the water level of the River Volme. The site gets 10% of its electricity from the plant.

Wind power

Outokumpu is a minority shareholder in Rajakiiri Oy, a wind power company. Rajakiiri installed eight shoreline wind turbines with a total capacity of 28.8 MW in Tornio in 2010, and commercial production of electricity started at the end of that year. The technical availability of the wind turbines has been excellent during their first years of operation.

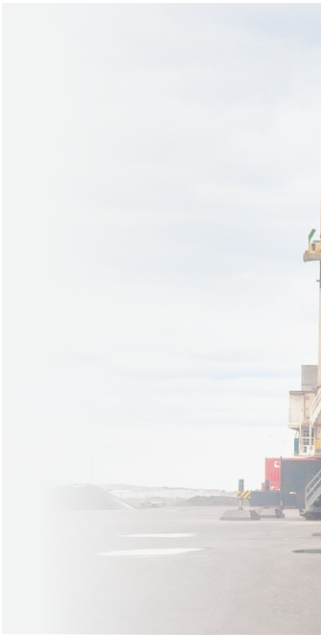
Combined Heat and Power

Outokumpu has a minority stake in a combined heat and power (CHP) plant in Tornio. This plant delivers heat to the production facilities in Tornio, and a proportion of the fuel used is carbon monoxide gas created as a by-product of the ferrochrome production process. The CHP plant has also acquired a local heating business in Tornio. This acquisition will lead to better optimization of the CHP plant, improvements in energy efficiency, and a reduction in the level of CO_2 emissions in the Tornio-Haparanda region.

Tornio Manga LNG project

In 2014, Outokumpu and SSAB Ruukki Metals Oy, the energy company EPV Energy Ltd and the gas company Skangas Oy decided on a project to utilize liquefied natural gas (LNG) in industrial processes, energy production and shipping. The project development company Manga LNG Oy is building an LNG terminal in Tornio harbor to enable use of LNG in Outokumpu Tornio and other Manga LNG partners' operations. Outokumpu's holding in Manga LNG Oy is 45%. LNG will replace other fossil fuels in industrial use and energy production.

The Manga LNG terminal includes reception, unloading and bunkering facilities, an LNG vaporizing facility, and one 50,000 m^3 storage tank. For gas deliveries, a pipeline will be built to the Röyttä industrial site. In addition, a truck loading facility for LNG trucks will be built as well as facilities to supply LNG to ships. From the Tornio terminal, the LNG will be delivered by trucks or railroad to customer terminals and consumption destinations in Northern Finland and Sweden. The building phase of the terminal is 2014–2017, and LNG deliveries will commence in 2018. The government of Finland has granted financial support to the project.



CO_2 emissions

Outokumpu's low-carbon program

Outokumpu has set a target to reduce the Group's specific carbon emissions in stainless steel production by 20% by 2020, with baseline figures from the 2007–2009 period. When assessing and measuring the Group's carbon profile, we utilize a method of calculation that focuses on emission factors of Outokumpu's production processes and the emission factor of electricity based on Outokumpu's electricity supply mix calculated on the energy mix of the electricity providers. Product transport emissions are calculated by emission factors and typical transport distances for each transport type.

Progress is monitored with a three-year moving average compared to baseline figures from the 2007–2009 period. The targets of the low-carbon program represent optimal Group-wide use of resources, which also directly results in continuous improvement of the environmental impact.

Our actions and the results achieved

Outokumpu's carbon profile consists of direct emissions from production operations, indirect emissions from electricity consumed, and the emissions resulting from the transportation of products and business travel, expressed as a quantity per tonne of stainless steel. After 2015, the Group's carbon profile was 7.4% lower than the program's baseline average for 2007–2009. This result is primarily due to lower specific emissions in production and improvements in energy efficiency. On the other hand, indirect Scope 2 emissions from electricity consumption amounted to a 1,126,128 tonnes of CO_2, which was lower because of lower emission factor compared to the previous year (2014: Scope 2 emissions of 1,140,285 tonnes of CO_2).

Primary actions focus on energy efficiency, increasing the proportion of low-carbon electricity and aiming for efficiency improvements through optimal capacity utilization and yield improvements in production. Sustainable aspects are gradually being integrated into our logistics and transportation solutions, including business travel. Efforts continued to minimize the environmental burden resulting from activities in Outokumpu's supply chain logistics and transportation. The emissions that result from product transportation, including our main internal product transfer, are shown in the Group's carbon profile and integrated into Outokumpu's long-term, climate change-related targets.

TARGET:
20%
REDUCTION IN CARBON FOOTPRINT BY 2020

Transportation of products by mode

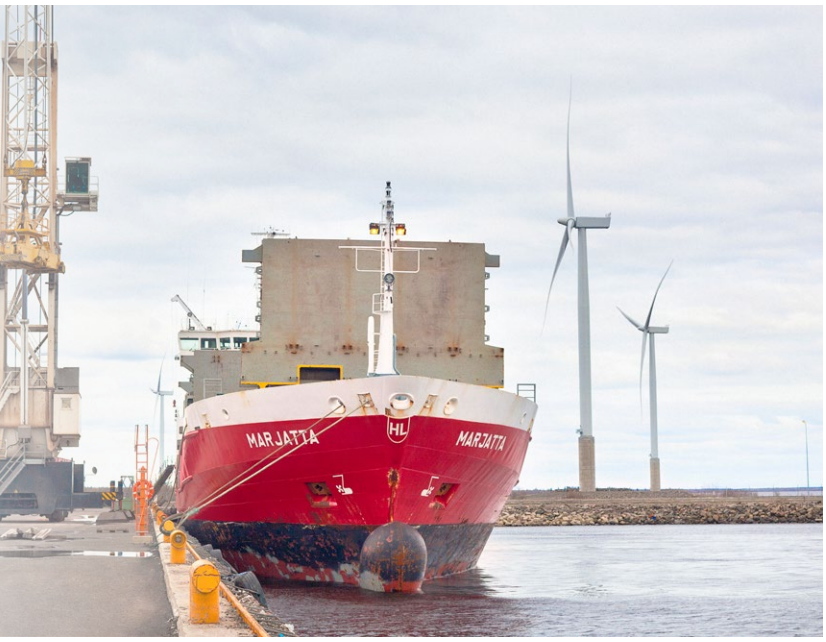
%	**2015**	2014	2013
By road	**44**	50	56
By sea	**42**	35	31
By rail	**14**	15	13

Total CO_2 emissions resulting from transportation of products reduced to 211,244 tonnes in 2015 (239,672 in 2014). The proportion of products and deliveries transported externally to customers by road, rail, and sea were 62%, 22% and 16% (67%, 17% and 15% in 2014), respectively.

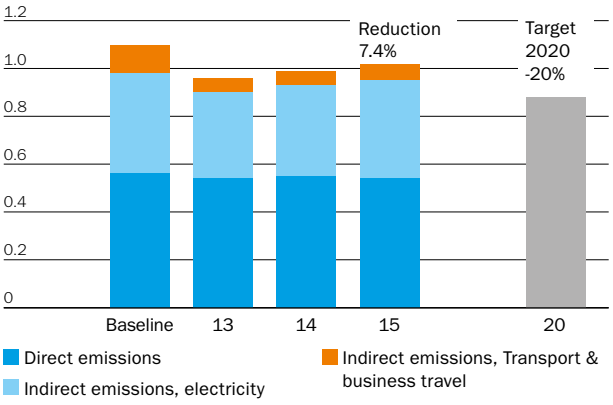
For internal product flows, the efforts to shift to train and ship are showing results. Almost 86% of the Group's internal transportation is by ship (80% in 2014), followed by 11% by train (16% in 2014). Although truck is still a main mode. Especially in Central Europe there has been some improvement in using intermodal transportation, which means combining truck and train.

CO_2 emissions resulting from business travel by Outokumpu personnel in 2015 totaled 5,831 tonnes (includes business air travel and company cars).

After 2015, Outokumpu's carbon profile was
7.4%
lower than baseline average for 2007–2009.



Carbon footprint of Outokumpu's steel



According to scope of the report data are adopted to the new existing and producing sites, different to last year.

Emissions trading

Outokumpu sites operating under the European Union Emissions Trading System (EU ETS) fully comply with the relevant EU laws and regulations, with agreed procedures and with the Group's trading and risk policies. The total pre-verified CO_2 emissions under EU ETS totaled approximately 1,000,000 tonnes. The allocation for the year 2015 was, and the allocation for 2016 is estimated to be, sufficient for the Group's operations.

Some 74% of the Group's direct emissions fall under the EU's CO_2 emissions trading system. The ETS incentivizes reductions of CO_2 emissions by putting costs on carbon. Outokumpu is especially burdened by the electricity price increase caused by emissions trading. Indirect extra electricity costs for Outokumpu were, during the previous EU emissions trading period of 2005–2015, some EUR 20–50 million per annum. These two elements raise Outokumpu's marginal production costs in relation to our global competitors.

Even though Outokumpu was granted process-related emissions allowances at no cost, the EU ETS will become a more restrictive system in the next phase, 2020–2030. Both the cap on total annual emissions in Europe and the quantity of emissions allowances allocated at no cost will gradually be reduced, and auctions will become the main method for obtaining such allowances. To dissuade companies that currently operate inside the EU from moving to countries where emissions reduction targets are not in place, industry sectors that feature high levels of carbon leakage risk will continue to receive some free emissions allowances.

"The sustainable nature of stainless steel assists both customers and society at large in constructing low-carbon solutions."

As the steel industry has been identified as one of the sectors in which the risk of carbon leakage is high, Outokumpu sites will continue to receive free emissions allowances on efficiency-based benchmarks. However, in the coming years we estimate that the biggest influence from climate policy on our operations is the indirect extra electricity cost caused by EU ETS system in Europe.

The European Commission's new ETS reform proposal recognizes that "businesses covered by the EU ETS are directly affected" but lacks consistency by failing to foresee compensation for carbon costs passed on in electricity prices and to effectively sustain sectors exposed to carbon leakage. Extra indirect ETS costs in electricity prices for industry can be compensated for within the limits by the EU Member States. This situation has implications for competition (distortion) within the EU. For instance, Outokumpu's UK and German units received some electricity price compensation in 2015, but the Finnish and Swedish units did not. The Finnish government is preparing to start electricity price compensation in 2017.

New opportunities

Even though the unpredictable consequences of climate change may be associated with significant future challenges, new business opportunities for Outokumpu may also result. The sustainable nature of stainless steel assists both the Group's customers and society at large in constructing low-carbon solutions. Stainless steel's remarkable physical properties make a significant contribution to achieving improved levels of efficiency in the transportation, energy, construction and manufacturing sectors, as well as in the household goods segment. Products manufactured by Outokumpu are also important in tackling global challenges such as the need for clean water supplies.

CASE

UP TO 20 YEARS LONGER SERVICE LIFE FOR OIL STORAGE TANKS

One of the largest orders for tank building to date, 245 tonnes of Outokumpu lean duplex stainless steel, was supplied for the construction of three big storage tanks for chemicals at Antwerp harbor in Belgium. The use of Forta LDX 2101 together with the quality of construction, a highly experienced contractor and preventive maintenance and corrosion control during service gives the tanks an expected life of 50 to 60 years. Compared to similar structures in the past, this lasts up to 20 years longer.

The tanks in Antwerp have been in service since September 2015. Ivens Construction took care of the construction of the tanks. The company specializes in building and renovation of tanks for the storage of chemicals and fuels, with 85 years of experience in construction with different types of materials.

THE MATERIAL OF CHOICE FOR LONG-LASTING TANKS

“More and more duplex stainless steels are chosen because of the very good price–performance ratio. Duplex has similar corrosion resistance to the austenitic stainless steels which are normally used, but offers the advantage of optimizing plate thickness due to higher strengths without diminishing the total tank integrity,” says Chief Technical Officer Jan Jochems of Ivens Construction.

FORTA ADDS 20+ YEARS TO SERVICE LIFE

Forta LDX 2101 makes the tanks virtually maintenance-free, and the strength of duplex stainless steel allows for material and fabrication cost savings.

The end use represents a vast part in the life cycle of stainless when calculated in time. In building and construction, it is generally more than 50 years. Stainless steel’s superior life cycle properties provide a competitive advantage in sustainability for customers.

SUSTAINABILITY IS AN ADVANTAGE

“Sustainability in terms of long-term resistance and a longer lifetime is certainly an important advantage, which is taken in to account by Ivens and our customers. The lower environmental footprint due to the recyclability and optimized production technology is not known well enough in the market today. It is, nevertheless, a very important issue for the future,” Jochems states.

“More and more customers are also taking these parameters into account for the evaluation of investments and quotations. They consider reliability in the longer term, not only focusing on the direct operational and investment costs, but also taking responsibility for the environment and the related social importance. These have become key parameters in our business to emphasize the special attention we pay to corporate social responsibility.”

"Levels of dust emissions from the Group's operations have declined significantly."

Emissions into air

One of Outokumpu's operating principles is to use best available techniques (BAT) to reduce emissions and minimize harmful environmental impacts that could result from the Group's operations. In this context, BAT means the best available pollution prevention technology from both technical and economic perspectives. Outokumpu is also an active participant in the process of updating the reference documents (BREFs), which specify related technologies, helping to set the high standards applicable within the European Union.

Dust emissions from Outokumpu's operations typically contain small quantities of metals (including iron, chromium and nickel), most of which are present in harmless forms. Chromium, for example, is usually found in its trivalent form and not in the hazardous hexavalent form. In recent years, the Group has supported many studies investigating the effects of metal emissions on both human health and the natural environment.

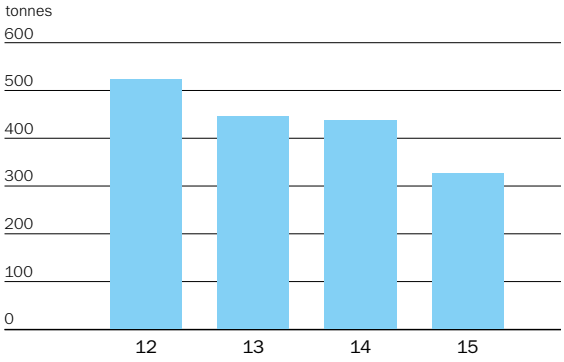
Investments in technology are reducing levels of dust emissions

Dust of different types has traditionally formed the most significant emissions resulting from operations by the steel industry. Levels of dust emissions from the Group's operations have declined significantly. The majority of Outokumpu's particle emissions originate from the melt shops in Finland, Sweden, the UK and the US. A de-dusting investment of EUR 1 million, together with a local contractor, for slag metal recovery units in Tornio, Finland, is now in full use. The Tornio investments as a whole are cutting diffuse emissions by about 100 tonnes per year.

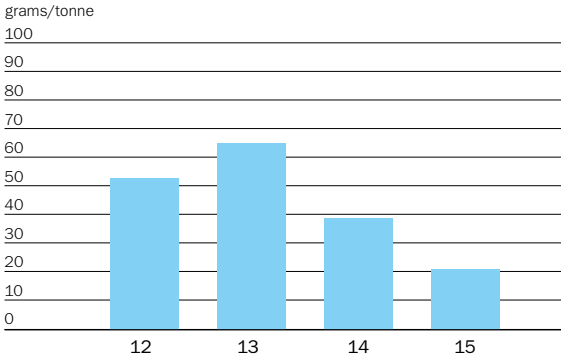
Dust emissions by Outokumpu in 2015 totaled 328 tonnes, 26% less than in 2014, mainly caused by closing melt shops and the improvement of abatement techniques at several melt shops. Nevertheless, this was an excellent result, since crude steel production decreased by only about 10%. Since the dust-filtering system is extremely efficient, normally catching 99% of dust emissions, even a brief malfunction leads to a high increase in total emissions. Therefore, the lower dust emission levels are also an indication of operational improvements in the Group's dust emission control efficiency.

Outokumpu's emissions of nitrogen oxides (NO_x) have been decreasing since 2013 to 1,982 tonnes in 2015. The NO_x reduction measure using low-NO_x burners and selective catalytic reduction technology was successful.

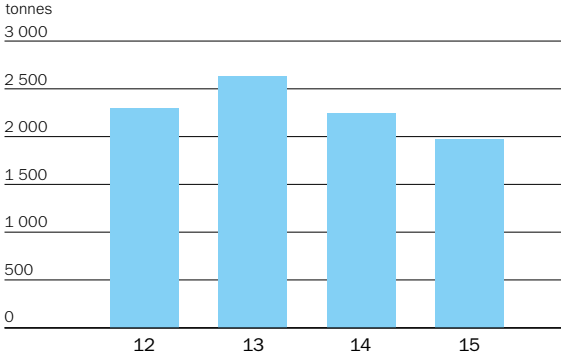
Particle emissions into air



Melt shop particle emissions



Nitrogen oxides into air



Fugitive dust is one environmental impact associated with steel slag treatment. In Tornio, Finland, we succeeded in cooperation with a contractor to reduce diffuse emissions by about 100 tonnes per year.

Strategic chromite ore – sustainable mining

Stainless steel is indispensable to modern society, as it plays an important role in infrastructure, energy and food supply as well as healthcare. The main alloying element in stainless steel, chromium, is defined by the European Commission as one of the economically critical metals for Europe.

The Outokumpu Kemi mine is the only chrome mine within the European Union. All mining activities are now carried out underground. The results of the monitoring of suspended particulate matter showed that the emissions situation has remained stable and that concentrations of dust in air, at and around the site, are low.

Investments in new sustainable technology

Concentration of cold-rolling activity in Germany is leading to the closing of the Benrath site, expected to take place at the end of 2016, and an overall ongoing investment of about EUR 108 million in Krefeld to replace old facilities and building new. With this project, about EUR 5.5 million were spent in environmental improvement in 2015. The new technologies will lead to a decrease in emissions and better environmental protection.

In Calvert, there has been good progress in a project to decrease acid use and costs as well as neutralize wastewater. The acid regeneration in Calvert has improved tremendously.

"Outokumpu uses a special radiation monitoring system to screen recycled steel."

Hazards are managed

Outokumpu's risks are assessed at Group-level, including our corporate sustainability and responsibility risks, and explained in our Annual report.

Some chemical and safety risks were highlighted in the outcomes of stakeholder materiality analyses. In our steel production we avoid radioactivity and control hazards of pickling acids. Other existing hazard compound we take care on is metallic mercury from natural source or contamination of scrap. As stainless contains the element chromium in metallic form some minimum amount of hexavalent chromium classified as dangerous can be formed in the process.

Radioactive material

As recycled steel is used in Outokumpu's manufacturing process, radioactive material can enter the stainless steel production chain. While such radiation usually derives from naturally occurring sources, the source of radiation in some cases consists of components from items of measuring equipment extensively used by heavy industry. The amounts of radioactive isotopes involved are small, with maximum quantities measured in grams, and sources of this type are normally detected before they enter the Outokumpu production process. In order to avoid radioactivity, all Outokumpu melt shops screen recycled steel and products after the liquid phase using special radiation monitoring equipment.

In 2015, one incident involving radioactive material entering an electric arc furnace despite the prescreening of scrap occurred at Outokumpu's melt shop in Finland. All radioactive materials were stored separately in accordance with guidelines provided by the appropriate national authorities. The dose rate associated with the radioactive material encountered in this case was not at a level harmful to humans.

Use of chemicals

Many Outokumpu sites handle huge quantities of potentially dangerous chemicals, for example propane, which is used as fuel in the furnaces, or strong acids used in the pickling process. To ensure the safety of both our employees and the people living close to the mills, thorough risk assessments are carried out and measures are taken to prevent and minimize any risk of accident. There are also detailed security plans and alarm systems. Information is also provided to people living close to the site. For instance, in Avesta, Tornio, Benrath and Dillenburg, the company has published and delivered brochures to people living close by the mill. They explain the correct actions in case of a chemical accident alarm at the mill. In addition to this, in Avesta and Tornio the same information is also easily accessible on the website of the local municipality.

Mercury

Outokumpu does not utilize mercury in our production operations. Nevertheless, our main raw material – recycled steel – may sometimes contain small amounts of mercury contamination. Our products are mercury-free: all potential mercury coming in through recycled steels is disposed of in our melting process because of its low evaporation point. The steel melt shops in Tornio and Avesta use continuous measurement of mercury emissions levels. During the last years, the measurements have revealed some potential sources of mercury in the scrap. The overall emissions in 2015 were lower than in previous years, showing that the European mercury ban in most articles is having an effect, but with a delay on recycled steel. However, in order to ensure decreasing mercury in emissions, Outokumpu's Tornio melt shop invested in 2015 in a new treatment facility for mercury emissions. The first-year results are promising.

Hexavalent chromium

Outokumpu does not utilize hexavalent chromium in any operations, and our stainless steel does not contain the substance. However, small amounts of these types of chromium compounds might be in the emissions from the steel melt shops and annealing and picking lines in cold-rolling plants. In all units, workplace air quality is monitored and hexavalent chromium levels are very low and under the limit values. In emissions into air, these compounds are typically very unstable and reduce quickly to non-toxic forms. Globally, ferrochrome production might be an emitter of hexavalent chromium, but in Outokumpu's case these emissions are totally eliminated by our closed-furnace technology; the reducing atmosphere in the furnace completely prevents hexavalent chromium emissions.

All long-term health and environment monitoring data and scientific research support the view that the minimal amount of hexavalent chromium in Outokumpu's emissions does not cause risks for the environment or the health of our employees or neighbors.

"Water discharge could significantly be decreased."

Water is worth saving

Water is an important resource for steelmaking. Almost all Outokumpu production units are located in areas in which there is a lot of water available. Most of the sites are located by rivers and in areas with a lot of rain. However, the Mexinox cold-rolling unit's surroundings in San Luis Potosí, Mexico, are arid and dry. There, the water source for production is groundwater and its use is restricted by local environmental permits.

The Mexinox cold-rolling unit recycles water back to the process in a larger scale. Today, the monthly use of water is 45,000 m^3. Some 99% of the process wastewater is treated and recycled.

Although there is plenty of water in Finland, Outokumpu chooses to recycle and reuse process wastewater at the Kemi mine. The concentration processes at the mine are based on gravimetric separation without chemicals. Thus, only some 138 liters of fresh water is used to produce one tonne of chrome concentrates. Only some 5% of the total amount of water used in the mine area's processes is water from outside the mine area, and the rest, 95%, is recycled water. The treatment of the process water is done in the most nature-conserving way, taking advantage of tailings and sedimentation ponds inside the mining area. As the ore-bearing minerals are very stable, chemicals are not used and the recycling of water is efficient. The mine has only a minor effect on local water quality.

Wastewater

All our wastewater is treated before discharge, either at our own facilities or by the local municipal facility.

In Dillenburg, Germany, the expansion of the municipal wastewater treatment plant has started to realize an economic de-nitrification of the wastewater coming from the mill. The cold-rolling plant is financing the expansion of the municipal wastewater treatment plant.

Test fishing in Tornio and at the Kemi mine showed that in both cases there are healthy and numerous fish populations (pike, perch and other typical local fish) even in recycling and wastewater ponds. The chemical analysis revealed that there is no metal accumulation in the fish; they are healthy and breed normally.

Prevent leakage and soil contamination

Some of Outokumpu's production sites have been in use by the metal industry for decades or even centuries. This increases the likelihood that some contamination exists at these sites. Typically, soil or groundwater at old production sites might be contaminated by oil or metals. Outokumpu's principle is that contamination is always treated and remediated according to current legislation as well as in coordination with and under guidance from the authorities. These cases do not have significant or material effects on the Group's finances, but remediation may last quite a long time. Often, the main action is the pumping of contaminated groundwater to a local wastewater treatment plant.

Soil and groundwater contamination was investigated during 2015, for example in Sweden at the Nyby site and at the closed Kloster site. An updated report on the former Avesta production site in Sweden was submitted to the authorities. In Krefeld, Germany, a risk assessment report on the soil and groundwater impact of the closed steel plant was prepared and sent to the authorities. Groundwater monitoring is ongoing. In Bochum, Germany, the authorities accepted our proposal for the shutdown process. Planned remediation work was ongoing at some Group sites in 2015, for example in Krefeld and Dillenburg, Germany. In Benrath, Germany, groundwater is treated by an air stripper, de-ionized and de-manganized and used as production water. Discussions with the authorities started regarding the closure of the site. The groundwater remediation in Wildwood, US, has decreased contaminants significantly. Remediation work at the former warehouse site in Montreal, Canada continued as planned during 2015.

Water withdrawal and discharges[1]

	2015	2014	2013
Water withdrawal by source in million m^3			
Surface water	**36.6**	35.4	32.1
Municipal water	**1.1**	1.8	1.9
Groundwater	**1.1**	1.4	1.5
Rainwater	**1.7**	1.0	1.0
Water discharges by type and destination in million m^3			
Wastewater out	**15**	21	20.2
Water discharge to surface water	**13.7**	19.2	18.4
Emissions to water in tonnes			
Metal discharges to water	**50**	53	44
Nitrogen in nitrates	**1 767**	2 408	1 810

[1] 2013 and 2014 data include continuing sites.

Biodiversity

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. Outokumpu production facilities are not located in sensitive areas such as Unesco World Heritage sites, Ramsar sites or Unesco biosphere reserves. During recent decades, Group sites have not been found to disturb local biodiversity in any manner that is generally considered unacceptable. None of the species included in the International Union for the Conservation of the Nature and Natural Resources (IUCN) Red List (a list which identifies and documents species most in need of conservation attention if global extinction rates are to be reduced) are known to be affected by Outokumpu's activities.

However, Outokumpu has identified protected areas or areas of high biodiversity value that are owned by company or adjacent to our operational sites or where our operations impact on this type of area or biodiversity has been assessed. These Outokumpu sites are

1. Dahlerbrück thin-strip cold-rolling site in Germany
2. Kemi mine in Finland
3. Tornio operations in Finland
4. Calvert, AL production site in the US

Dahlerbrück, Germany (total size of thin-strip cold-rolling site 0.063 km^2; total property 0.3 km², and a 0.22 km² overlapping area protected by the German Federal Nature Conservation Act and implementing the EU Natura legislation):

This is the only Outokumpu site in which a 0.042 km² protected area is partly located on the company's property. According to the EU Natura legislation, there are e.g. endangered deciduous forests and natural silicate rock biotype with some endangered animal habitats and plant species such as crinkled hairgrass and ferns.

Kemi, Finland (total land property 9.16 km^2):
This underground chrome mine is adjacent to two EU Natura protected peat and wetland areas. The mine area consists mainly of old barren rock and tailing sand storage areas, the operational area and water recycling ponds. Protected peatland areas to protect typical northern wet vegetation, habitats and biodiversity are located on the property border in the northwest (common border: 500 meters) and in the east (1 km). However, there is no indication, claim or report of any negative impact of mining activities on biodiversity. The only major impact on the east side peatland (Kirvesaapa) would be the lower ground and surface water level in the mine – but this effect is prevented by a permanent dam in the ditch running from the peatland to the mine site.

Internal biodiversity is also managed at the Kemi chrome mine. All old tailing sand areas are landscaped and are now, more or less, forests. A new landscaping plan for a 22.5-hectare tailing sand pond will be prepared in an ecologically efficient way. Barren rock extracted during the former open pit period is now being utilized and intermediate rock-storage locations are being used in underground construction and for gallery-filling operations. In the long term, this will ensure that the site will be returned to as natural a state as is technically feasible.

At the mine site another water pond is used for recycling of process water. Only 5% of the total amount of water used in the mine processes is from outside the mine area, and the rest, 95%, is recycled water from tailings and sedimentation ponds inside the mining area. In practice, these water ponds are nesting or feeding habitats for waterfowl, birds and wildlife. This increases the biodiversity significantly in the region. In addition to different bird species, for instance elks, reindeer, foxes, lynxes, eagles and ospreys can be regularly seen inside the mine area. The Kemi mine cooperates with the local ornithological society to monitor the local biodiversity.

Tornio, integrated ferrochrome and stainless steel plant, Finland (land property 6 km^2):
Outokumpu's Tornio site pumps all the fresh water it uses from the Tornionjoki river estuary on the northern coast of the Gulf of Bothnia, part of the Baltic Sea. The river is protected according to the EU Natura legislation: it is the biggest river in a natural condition in the EU and includes biodiversity values like salmon fish species. However, according to long-term and independent monitoring, Outokumpu's water use since the 1960s has not caused any harmful effects on the river or local biodiversity in the estuary.

Another identified and potential impact might be that of wastewater from the Tornio works on the biodiversity of the Bothnian Bay National Park ecosystems, located 5 km south in an archipelago protected by the EU Natura legislation. The main discharges into recipient water from the Tornio works are metals and nitrates. Many studies and annual monitoring of the biological, physical and chemical conditions which prevail near the Tornio site have been carried out since the 1970s. The results of the latest water quality and biological marine ecosystems monitoring confirmed that fish populations were healthy and the levels of metals (Cr, Ni and Zn) were very low and that they do not accumulate in marine food chains. Also, even very sensitive species of bottom fauna were found in the vicinity of the site. The quality of the seawater was good and metal concentrations were below the drinking water limits at all sampling points during the whole year 2015.

Annually, almost twenty professional fishermen are working close to the Tornio works and catch around 50 tonnes of fish. The effluent from the Tornio site has not deteriorated the reproductive capability of the fish either. Also, the latest research report concerning the impact of nitrates on recipient water at the Tornio site showed that the impacts are restricted to the immediate proximity of the discharge points at Tornio and cause only slight eutrophication. In practice, the wastewater is conducted first to the sedimentation pond, in which diverse fish fauna exist. This and non-toxic wastewater from the Tornio works was verified also in summer 2015 in test net fishing from this sedimentation pond. All these facts confirm that water use or run-off from the Tornio works do not cause any risk to local biodiversity. Outokumpu is also participating in the public Baltic Sea Challenge in order to improve the condition of the sea.

Adjacent to the Tornio works is also a third EU Natura area located 1 km to the northeast. Alkunkarinlahti is an important bird nesting habitat including birdwatching towers. However, reports and statements issued by the environmental authorities indicate that Outokumpu's activities do not have a negative impact or threaten biodiversity in this area.

Calvert, Alabama, US (land property 4.69 km^2):
There are no legally binding biodiversity requirement at the Calvert integrated stainless steel plant, but some 80 hectares of the property is defined as wetland including some restrictions on land use. The site management has identified as a biodiversity aspect that part of the wetland area is home to quite a wide array of wildlife, like wild turkeys, wild bears, fox squirrels, gopher tortoises and snakes, among other species. Since the gopher tortoise and Alabama black bear are threatened species, the Calvert environmental team has worked with regulators on a voluntary basis to help trap and move gopher tortoises to safe locations and we even installed a "bear-friendly" fence to allow the Alabama black bear to better travel through its natural migratory pathways.

"During recent decades, Group sites have not been found to disturb local biodiversity in any manner that is generally considered unacceptable."

Environmental legal compliance

The follow-up of site environmental performance, permit status and legal compliance is a routine in the quarterly internal Environmental Network meetings. In order to ensure legal compliance, the Environmental Network uses a prioritization for internal environmental audits based on identified risks. Site audits continued in 2015 according to revised internal risk list. During 2015, many of the production sites got new environmental permits or updates or had a permit process ongoing.

During 2015, the only monetary sanctions Outokumpu paid were administrative fines for delayed measurements and reports on facilities using substances hazardous to water for the Krefeld and Benrath sites in Germany. The fines amounted to EUR 14,000 in total.

Outokumpu units did not receive any non-monetary sanctions during 2015.

In 2015, 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 2015 shows that there were a total of 18 environmental non-compliances or breaches of permitted limits (2014: 21). 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. The location, type and corrective action taken regarding incidents and permit breaches were also reported to the Environmental Network and top management of Outokumpu.

These were, for example:

- Wildwood, FL, US: nickel in wastewater, aluminum and zinc in stormwater
- Calvert, AL, US: permit deviations for SO_2 from melt shop and NO_x deviations in cold-rolling; one water permit exceedance
- Sheffield melt shop, UK: dust emissions from metal recovery process and leachates in landfill but without the pollution risk outside
- Sheffield ASR, UK: chromium in wastewater
- Avesta, SWE: chromium, nickel and suspended solids in wastewater
- New Castle, IN, US: chromium and pH of wastewater
- Tornio, FIN: hot-rolling limit value of NO_x in coiling furnace flue gases

Permit processes were completed in several units. For example, the Calvert site received a new stormwater permit and the melt shop in Sheffield, UK a new emission permit. Our cold-rolling plant in Dillenburg, Germany, received a permit for direct discharge of rainwater.

Bochum, Germany, started the first steps in legal environmental procedures to close the melt shop.

Permit processes were ongoing at several sites. For instance, Avesta, Sweden, is waiting for final permit conditions for the acid regeneration plant, the Calvert plant in the US for a new air emission permit for NO_x and SO_2 at the melt shop, and the Kemi mine in Finland for a permit for landscaping the barren rock heaps. Also our cold-rolling mill in Krefeld, Germany, is waiting for the final permit for its revised cold rolling.

In 2015, the Mexinox cold-rolling site in San Luis Potosí, Mexico, did not have any environmental non-compliances. From the year 2015, we can summarize that emissions into the air and discharges into water remained within permitted limits, and the breaches that occurred were temporary, identified and had only a minimal impact on the environment.

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

Emerging legislation as part of compliance

Emerging environmental, energy and other legislation is reviewed in accordance with the Group risk management policy. Outokumpu has also identified changes in legislation as a significant issue in the materiality analysis. We regularly assess our risks related to different external developments outside our company and inform stakeholders in the Outokumpu Annual report.

Outokumpu welcomes the global achievement of UN climate summit COP21 in December 2015. Unfortunately, the development depends on voluntary measures in different countries. Outokumpu is in a global stainless steel business with global prices and has suffered from internal EU CO_2 emissions trading because these costs are unilateral and affect only European production. We hope that all stainless steel-producing countries will set prices for carbon emissions, and in the near future the global, fair pricing of carbon

"As a company in an energy-intensive industry, Outokumpu occasionally faces difficulties from rapid, national changes in energy policy."

emissions would be possible.

The greatest uncertainty for Outokumpu in connection with emissions-related regulatory measures stems from the EU Emissions Trading System (EU ETS) and related consequences affecting Outokumpu's business. The major impact from the ETS system has been indirect extra electricity costs which, during the years 2005–2015, were some EUR 20–50 million per annum. These costs are raising Outokumpu's marginal production costs in relation to our global competitors.

The EU framework and emissions trading rules for 2020–2030 are now under revision. We hope that the EU carefully reviews its energy and climate policy targets for 2030 and the Emissions Trading System in accordance with developments in other major industrial countries. These policies should not increase unilateral costs for European industry, the cleanest low-carbon industry in the world, or favor steel made outside of Europe, as that will only increase the carbon footprint of European companies and escalate global emissions.

To manage climate-and energy policy-related risks and prepare for expected developments connected with emissions trading, Outokumpu has an internal Emissions Trading Network, which includes representatives from all Outokumpu operations affected by the system. The responsibilities of this network include providing assistance in defining Outokumpu's emissions management strategy and securing its implementation.

The EU has many partially overlapping, existing and emerging energy policies, which have a huge impact on EU energy markets and the competiveness of the European steel industry. These policies have an effect on the business environment and, from Outokumpu's point of view, the most important identified policies were: the EU Emissions Trading Directive, State Aid Guidelines for ETS Compensation, Energy Taxation Directive, Energy Efficiency Directive, Renewable Energy Sources targets and long-term targets 2050.

As a company in an energy-intensive industry, Outokumpu occasionally faces difficulties from rapid, national changes in energy policy. The latest example is from Germany, where increasing fees in electricity prices were introduced for renewable energy sources. Similar unexpected changes took place in Finland during the last year related to energy taxation in the mining industry. These types of changes are difficult to forecast and can be costly for electricity-intensive industries. Emerging regulation can complicate Outokumpu's future planning and affect investments.

In 2015 our challenges in chemicals and environmental area were, for example:

- European legislation related to chemicals (REACH) and product safety (CLP) including the REACH authorization processes.
- Implementation of the Industrial Emissions Directive in the European Union together with binding Best Available Techniques (BAT) requirements.
- EU action plan for a circular economy initiatives that will have impacts on legislation and many other areas.

For the metal industry, chemicals legislation is causing unexpected impacts. For instance, the EU's listing of nickel as a suspected potential carcinogen under the CLP Regulation (Classification, Labelling, and Packaging) automatically leads to similar classification of austenitic stainless steel, as 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 non-scientific classification as a criterion to exclude substances from use is included in the EU Ecolabel Regulation and in some other initiatives. The EU Ecolabel includes the possibility of a derogation, and this is already approved for certain product groups (cellphones, laptops/computers) but needs intensive communication. However, this is causing unnecessary doubt among our customers. This political situation, based on non-factual information, has required intensive communication from Outokumpu and Eurofer during the last few years.

The implementation of the EU's chemicals REACH regulation might be a business risk for many industries, including Outokumpu. One tool in REACH is to ban and substitute dangerous substances through an authorization process. Among the 22 new chemicals proposed for authorization are two substances that are important to Outokumpu: coal tar pitch, high temperature (CTPht) and disodium tetraborate (product name "Borax"). Both chemicals are used in Outokumpu's production processes, although not present in the products.

Environmental investments and expenditures

Costs for environment-related activities within Outokumpu totaled EUR 89 million in 2015, of which costs associated with operational environmental management totaled EUR 81 million. Operational costs include process-related treatment, disposal and remediation costs for waste and emissions into air and water. 40.5% of the environmental expenditures are for air and climate change, 31.1% for water protection, 8.9% for waste management and 0.5% for soil and ground water. All others are of minor amount. Provisions and guarantees in connection with environmental considerations totaled EUR 63 million including provisions for the aftercare of former mining sites of EUR 1.4 million.

The liquefied natural gas (LNG) terminal investment is ongoing (EUR 30 million in 2015–2018) at Tornio harbor. Tornio is today the biggest consumer of propane in Finland. The terminal is expected to be in operation during the first half of 2018 and will decrease also Outokumpu's CO_2 and NO_x emissions by an estimated 10%.

"Costs for environment-related activities within Outokumpu totaled EUR 89 million in 2015, of which costs associated with operational environmental management totaled EUR 81 million."

Around EUR 108 million investment in Krefeld, Germany enhances the production capabilities of ferritic materials with new facilities for hood annealing, pickling, cold -rolling, bright annealing and temper rolling processes. With the state-of-the-art process and equipment technology, Outokumpu is able to significantly increase efficiency and synergy effects in the production of stainless steel products, while at the same time reducing energy consumption and emissions.

Our people

SITES AWARDED FOR ACCIDENT PREVENTION

RoSPA Gold medal for Sheffield melt shop and ICDA award for Kemi mine. **p. 48**

The year 2015 saw Outokumpu gain a firm foothold as a single company, evolving from one in the midst of a merger. Focus was shifted to driving performance and establishing a common culture beyond integration and restructuring.

O'PEOPLE SHOWED HIGH COMMITMENT

First employee engagement survey after the merger, O'People, showed good results. **p. 38**

JOB ROTATION PROMOTED ACROSS THE ORGANIZATION

Job rotation was promoted as part of Talent Management to develop competences and exchange knowledge. **p. 44–45**

200 MANAGERS COMPLETED SAFETY LEADERSHIP TRAINING

Due to savings programs, only operations- and business-critical training programs were executed in 2015. **p. 44**

NEW PERFORMANCE CULTURE ENHANCED

A new approach in Performance and Development Dialogues (PDDs) was implemented and Winning Behaviors was strengthened. **p. 42–43**

TOTAL NUMBER OF EMPLOYEES

11,002

More than
7,000 EMPLOYEES (63%)
made their voices heard in the employee engagement survey

Our people

In 2015, the transition to “one Outokumpu” took clear steps forward. The key theme for 2015 was creating a culture of working together. Several of the new processes introduced in 2014, such as the Talent Review and Talent Council, were established as routine, and the revised performance management process is serving as a beacon of the new culture of “together”.

Due to meagre financial performance, the savings programs continued with further cost-cutting. This accelerated the need to use our limited resources in the most effective manner to benefit the overall company targets, and to get best practices shared across organizational boundaries. The ultimate target was to create commercial superiority leading to a distinguishable customer experience from sales to delivery, differentiating Outokumpu from competitors.

Building trust

The first employee engagement survey (O’People) for the new organization was completed at the end of 2014, and the results were analyzed at the beginning of 2015. Altogether, more than 7,000 employees (63%) made their voices heard. The results showed the employees’ high commitment towards the company, but indicated room for improvement in communicating the company’s overall goals as well as working together and building trust beyond one’s own site towards the success of the whole Group. A number of topics from the survey results were picked up and set as priorities on our agenda. Actions to address the Group-wide development needs that surfaced from the O’People survey were planned and comparatively addressed both locally and Group-wide in 2015. These actions continue in 2016. A follow-up survey is set for 2016, yet again one example of forming an established “one Outokumpu” culture.

"The key theme for 2015 was creating a culture of working together."

Personnel in numbers

In 2015, Outokumpu continued the necessary restructuring work to turn the company around and back to sustainable profitability.

The ramp-down of the Bochum melt shop in June 2015 was one of the key elements in the significant industrial restructuring in Europe. Alternative employment elsewhere and other solutions were found for all employees, so that no one had to be made redundant. During 2015, the closures of Bochum in Germany and the Kloster strip mill in Sweden as well as the divestment of the joint venture in China led to a total reduction of 990 people in the workforce.

Overall, the number of personnel declined in total by 1,123 positions or 9.3% in 2015 and stood at 11,002 at the end of the year. Against the target of reducing 3,500 jobs by 2017, compared to 2012, we are more than halfway through.

In Europe, the number of personnel went down by 625 in total. With regards to the main location countries in Europe, the workforce in Germany declined by 400. In Sweden, the additional reductions in Degerfors lead to a total decline of 209, and in Finland, the number of employees slightly decreased by 12. In the Americas, the workforce declined by seven employees: In the US, the ramp-up at Calvert led to an increase of 33, concurring with minor reductions at the Long Products and Quarto Plate sites.

In all restructuring and lay-offs, Outokumpu complied with local legislation, collective bargaining agreements and other applicable regulations.

At the end of 2015, 29% of Outokumpu employees worked in Germany, 22% in Finland, 16% in Sweden, 11% in the US and 10% in Mexico. Since 2013, the proportion of blue-collar workers has remained stable at 65%. Of these, 14% were women and 86% men.

The number of people on temporary contracts was 354. Outokumpu's permanent employees mostly work on a full-time basis. Out of the 195 people working on a part-time basis, 128 were women.

The ongoing restructuring measures kept up the dynamics of total employee turnover during 2015 across Outokumpu. Thus, the number of permanent employees who left the organization was 1,126, leading to a leaving rate of 10.6% (2014: 8.2%). The voluntary leaving rate stood at 2.6% (2014: 3.3%).

Due to the restricted handling of new hires, especially at our European sites, and in the light of only selectively filling vacant positions, the number of new employees who joined the organization for the first time had declined from 547 in 2014 to 395 by the end of year 2015, thus reducing the hiring rate from 4.7% to 3.7%. In total, the average turnover amounted to 7.1% and was slightly above the 6.5% of 2014.

Following the ramp-up in Calvert, the hiring rate in the Americas amounted 9.8%. The still-dynamic labor market in Asia is reflected by a relatively high 15.8% average turnover in this area.

The proportion of employees older than 50 years in new hires is 12%, compared to 33% in Outokumpu overall. This underrepresentation is mainly due to the

Personnel by region and main location countries

			Change	
Total number of employees as per Dec 31	**2015**	2014	2015	%
Group total	**11 002**	**12 125**	**-1 123**	**-9.3%**
Europe	**8 479**	**9 104**	**-625**	**-7%**
Germany	3 186	3 586	-400	-11.2%
Finland	2 396	2 408	-12	-0.5%
Sweden	1 760	1 969	-209	-10.6%
Other	1 137	1 141	-4	-0.4%
Americas	**2 403**	**2 410**	**-7**	**-0.3%**
The United States	1 216	1 212	4	0.3%
Mexico	1 095	1 104	-9	-0.8%
Other	92	94	-2	-2.1%
Asia/Rest of the World	**91**	**581**	**-490**	**-84.3%**
China [1]	58	544	-486	-89.3%
Other	33	37	-4	-10.8%
Australia	25	26	-1	-3.8%
Africa	4	4	0	0.0%

[1] 2015 excluding SKS as already deconsolidated in December 2015.

fact the new hires mostly took place in shop-floor areas, where the average age of the workforce is comparably lower. Of the new hires, 38% were in the comparatively smallest group of employees younger than 30 years, which is above the relative size of that age group in the company. Approximately two thirds of the employees who left Outokumpu voluntarily were in the middle age group (30–50 years old), although they only represent a half of the personnel with permanent employment contracts.

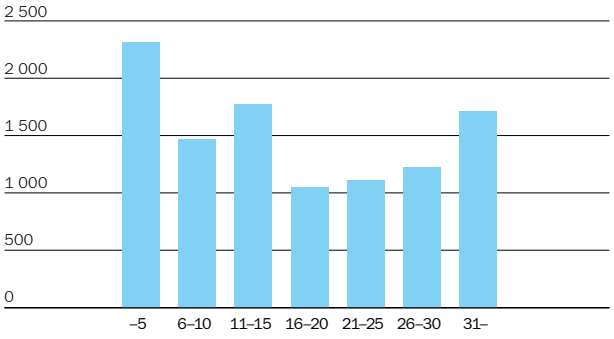
The proportion of female employees in new hires is 21%, which is higher than their share of personnel with permanent employment contracts (14%).

Personnel by countries

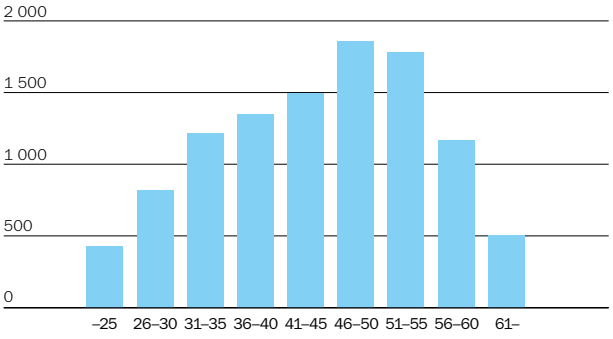
Total number of employees as per Dec 31	2015		2014		2013[1]	
	Headcount	FTE	Headcount	FTE	Headcount	FTE
Europe						
Germany	3 186	2 919	3 586	3 373	5 917	5 643
Finland	2 396	2 303	2 408	2 295	2 404	2 320
Sweden	1 760	1 683	1 969	1 880	1 954	1 873
The United Kingdom	560	552	541	538	583	578
Italy	222	214	218	211	3 078	3 071
The Netherlands	195	182	197	192	203	196
France	54	51	64	61	104	100
Poland	43	42	41	41	45	44
Hungary	28	28	28	28	29	29
Spain	11	10	11	10	49	47
Austria	7	7	7	7	14	14
Denmark	6	4	5	5	6	5
Norway	4	4	7	7	8	8
Belgium	4	4	5	4	5	5
Russia	1	0	9	9	11	11
Portugal	1	1	2	2	2	2
Romania	1	1	1	1	1	1
Turkey	0	0	3	3	83	83
Czech Republic	0	0	2	2	2	1
	8 479	8 005	9 104	8 669	14 498	14 031
Americas						
The United States	1 216	1 209	1 212	1 212	1 356	1 355
Mexico	1 095	1 089	1 104	1 104	1 091	1 091
Argentina	84	84	85	85	88	88
Brazil	8	8	9	9	5	4
Canada	0	0	0	0	4	4
	2 403	2 390	2 410	2 410	2 544	2 542
Asia						
China[2]	58	58	544	541	582	582
India	12	12	15	15	15	15
Singapore	13	13	11	11	12	12
Japan	4	4	6	6	13	13
United Arab Emirates	4	4	5	5	5	5
South Korea	0	0	0	0	4	4
	91	91	581	578	631	631
Australia	25	24	26	25	37	37
Africa						
South Africa	4	3	4	4	4	4
	4	3	4	4	4	4
Group total	11 002	10 514	12 125	11 686	17 714	17 244

[1] Including discontinued operations.
[2] 2015 excluding SKS as already deconsolidated in December 2015.

Personnel by years of service, permanent employees



Personnel age profile, permanent employees



Personnel by employment contract, contract type and gender

Total number of employees as per Dec 31, 2015	Total	Temporary	%	Permanent	%	Of which full-time	%	Of which part-time	%
Group total	11 002	354	3%	10 648	97%	10 453	98%	195	2%
Male	9 437	291	3%	9 146	97%	9 078	99%	67	1%
Female	1 565	63	4%	1 502	96%	1 375	92%	128	9%

Hires and Leavers by region, age group and gender

Number of permanent employees	Total	%	Hires	%	Leavers	%	Voluntary Leavers	%	Total Turnover	%	Hiring Rate%	Leaving Rate%	Voluntary Leaving rate%	Avg. Turnover Rate%
Group Total	10 648		395		1 126		282		1 521		3.7%	10.6%	2.6%	7.1%
Region														
Europe	8 130	76%	152	38%	852	76%	146	52%	1 004	66%	1.9%	10.5%	1.8%	6.2%
America	2 401	23%	235	59%	245	22%	123	44%	480	32%	9.8%	10.2%	5.1%	10.0%
Asia/ Rest of the World	117	1%	8	2%	29	3%	13	5%	37	2%	6.8%	24.8%	11.1%	15.8%
Age groups														
<30 years old	1 049	10%	152	38%	146	13%	59	21%	298	20%	14.5%	13.9%	5.6%	14.2%
30–50 years old	6 134	58%	197	50%	494	44%	180	64%	691	45%	3.2%	8.1%	2.9%	5.6%
>50 years old	3 465	33%	46	12%	486	43%	43	15%	532	35%	1.3%	14.0%	1.2%	7.7%
Gender														
Male	9 145	86%	313	79%	983	87%	232	82%	1 296	85%	3.4%	10.7%	2.5%	7.1%
Female	1 503	14%	82	21%	143	13%	50	18%	225	15%	5.5%	9.5%	3.3%	7.5%

Personnel by employee group, region and gender

Total number of employees as per Dec 31, 2015	Total	%	Thereof Blue collar	%	Thereof White collar	%	Thereof male	%	Thereof female	%
Group total	11 002	100%	7 153	65%	3 849	35%	9 437	86%	1 565	14%
Europe	8 479	77%	5 522	65%	2 957	35%	7 233	85%	1 246	15%
Germany	3 186	29%	2 183	69%	1 003	31%	2 845	89%	341	11%
Finland	2 396	22%	1 535	64%	861	36%	1 996	83%	400	17%
Sweden	1 760	16%	1 189	68%	571	32%	1 453	83%	307	17%
The United Kingdom	560	5%	351	63%	209	37%	511	91%	49	9%
Other Europe	577	5%	264	46%	313	54%	428	74%	149	26%
Americas	2 403	22%	1 614	67%	789	33%	2 133	89%	270	11%
The United States	1 216	11%	803	66%	413	34%	1 052	87%	164	13%
Mexico	1 095	10%	772	71%	323	29%	1 004	92%	91	8%
South America	92	1%	39	42%	53	58%	77	84%	15	16%
Asia/Rest of the World	120	1%	17	14%	103	86%	71	59%	49	41%
Asia/Oceania	116	1%	17	15%	99	85%	70	60%	46	40%
Other countries	4		0	0%	4	100%	1	25%	3	75%

Goals and results

RESULTS 2015

In 2015, the planning and development of new common processes and ways of working continued. For instance, we proceeded with the program to harmonize our business processes across Outokumpu to gain efficiencies. The results of the first global employee engagement survey (O'People) after the Inoxum integration identified a critical, Group-wide development area in communicating the company's overall goals and cooperating across borders. The overall results were reviewed locally and addressed in local workshops and communication. These results and actions were then shared across the company. One priority for the Group-wide approach was enhancing internal communication of the Winning Behaviors by integrating them in all communication.

The performance culture leading to accomplishment of the business targets was strengthened by timing the Performance and Development Dialogues (PDDs) quarterly, as well as arranging manager workshops in all business areas. The new, short-term incentive scheme launched for top management in 2014 was cascaded to other organizational levels with more evident linkage of the incentive plans to the company's financial performance.

The closure of the Bochum melt shop in Germany was a clear milestone in synergy savings, and the restructuring in Europe continued and made its mark in all activities. Headcount reductions continued.

Our work with employer branding in 2015 allowed the development of a good employer value proposition to encourage new talent to join the company. A new training and development framework intended for our future leaders, to support their career development, was constructed. Building of the Leadership Profile progressed in 2015, with leading people and business, and self-management as key parts. For all these components, refining continues in 2016 with some pilot projects to be initiated.

As part of Talent Management, job rotation was promoted across the organization. A new policy for international assignments was implemented, and altogether 34 employees moved to work in a different country either on short-term or long-term assignments during the year. Also, Group-wide programs such as cost savings initiatives and the program to review and harmonize business processes offered 230 internal recruits new challenges and opportunities to develop their competencies.

GOALS FOR 2016

The year 2016 will be highlighted with the new President and Chief Executive Officer Roeland Baan stepping into office on January 1. He will be acquainted with our people and vice versa with an extensive induction tour across the Outokumpu sites.

The focus on Winning Behaviors continues with the managerial approach already introduced in 2015, with training focusing on managing people and teams to work accordingly. The first O'Leader pilot training sessions representing managers leading international teams started in October 2015. The Outokumpu employer value proposition will be finalized and launched in 2016 with extensive communication. Actions to address the Group-wide development needs that surfaced from the O'People survey were planned and partly addressed in 2015, and actions continue in 2016. Our target is that a global employee engagement survey will take place every second year; hence the next follow-up will be conducted in 2016. The focus on sales competence development continues with the kick-off of Sales Academy in 2016.

Diversity is high on our agenda for the coming years. This is reflected in introducing a "50-50" recruitment ambition to build a sustainable talent base comprised equally of men and women.

Performance management

Managing performance was a key topic for 2015, as Outokumpu took the next steps towards being a high-performance organization. The leading theme for managing performance in 2015 was to guide leaders to a common Outokumpu approach and strengthen their individual capabilities in leadership. More than 700 managers participated in some 50 “Shifting Gears” workshops and follow-up “pit stops,” which addressed certain themes around high-performance to step up change in the company’s financial and operational performance.

One tangible action to support this was the introduction of a more systematic performance management cycle in Outokumpu. The target for 2015 was that every employee has a performance and development discussion with their manager every quarter. This is to help people understand their role within the “big picture” by creating transparency, setting targets that support the achievement of our common goals, managing team and individual priorities, and providing continuous feedback on performance. As the Performance and Development Dialogues (PDD) alone will not ensure high performance, managers were encouraged to maintain continuous team dialogue with regular team meetings and quarterly business updates focusing on the overall situation for the Group, business areas and units and key priorities to increase involvement.

Some locations that were outside the Group’s PDD processes in 2014 were included in 2015: the Calvert plant with 900 employees in the US implemented the PDD process. As a first step in Germany, some 200 employees will join from the beginning of 2016. A majority of the Outokumpu Group’s personnel received regular performance and career development reviews in 2015.

Compensation and benefits

In terms of compensation and benefits, Outokumpu has an overall framework and principles defined by Corporate Human Resources. In 2015, the overall principles remained unchanged and, due to Outokumpu’s financial challenges, salary increase budgets were very limited.

Following the structural change made in the short-term incentive plan for top management in 2014, it was cascaded to subsequent management levels at the beginning of 2015. It has a stronger link with overall business targets and the financial performance of the company. Thus, the focus of the incentives is tied to business targets and company performance, and personal targets were addressed in Performance and Development Dialogues. As such, the new, short-term incentive plan covered some 1,000 employees in 2015.

Within the overall framework, the business areas can develop solutions that best support the needs of their business and are competitive according to local market practices. Thus, some changes were made to incentives for field sales employees, for example in Europe, where the Coil EMEA, Long Products and Quarto Plate business areas hosted a common sales incentive plan.

In the Performance Share Plan 2012–2014, some of the earning criteria were reached, which resulted in a share reward for the first time in five years. Annually, some 150 key employees of the company are being invited to participate in share-based incentive plans.

16.9

The average number of hours of training per employee

Training and developing our people

In 2015, the building of the new company culture continued. The communication of the Winning Behaviors that were already introduced in 2013 extended throughout 2015 to build a shared understanding of the common behaviors that bring us success. Winning Behaviors are about putting the customer first, turning volumes into profit, acting with speed and working together. The meaning of these behavioral aspects in achieving the company's goals was strengthened in tying them more closely to quarterly Performance and Development Dialogues. The Winning Behaviors champions voted for from among the employees at the end of 2014 were in 2015 set as "living and breathing" examples of best contributions to customer, profit, speed and togetherness in daily work.

Due to the savings programs, only operations- and business-critical training programs were executed in 2015. Safety training programs did continue with over 200 managers completing safety leadership training. Also, some 160 managers from different levels of middle management in EMEA participated in the integration training to support the transformation in Europe. Finally, there was an O'Leader program targeted at people who have newly stepped into leadership positions.

Across the operational units, on-the-job training and specific skills training related to new equipment or processes continued. Also, in Finland, a small number of employees were granted study leave to enhance their education and capabilities.

There were three company-wide e-learning programs: one compliance-related for anti-corruption for all white-collar employees, another for IT security and a third for the new product categories, a product portfolio renewal which was launched in May 2015.

The average number of hours of training per employee was 16.9.

Talent Management

Outokumpu promoted job rotation across the organization to develop employees and their competences. A new international assignment policy of postings lasting more than 12 months was implemented, and a guideline for shorter postings was finalized at the end of the year. Altogether, 34 employees took part in international short-term and long-term assignments and took on new challenges within the organization during the year.

Outokumpu undertakes a talent review process that allows a systematic review of the talent pipeline across the company and within particular disciplines. This process helps to identify both potential resourcing gaps and competence needs for future training and development.

It is within the Talent Review Process, and specifically the succession planning process, that Outokumpu secures knowledge retention. This is particularly relevant during organizational changes or retirement. For large scale organizational changes resulting in significant job reductions, Outokumpu has experience of a very systematic approach in establishing a social plan, including outplacement, community support and severance, for those affected by the plant closures (e.g. the Bochum melt shop and Kloster strip mill closures). Due to the high quality of employees and the social plan, a large proportion of staff was either hired directly or received training to be employed elsewhere, whilst some retired.

Following the first Talent Review Process, which appraised all of the holders of key positions in the business areas and functions, a Talent Council was established in 2014. At year-end, it has been running for 18 months with an active workflow. The Talent Council is made up of senior leaders from the business areas and functions to follow up on key actions from the Talent Review Process and encourage greater mobility of key personnel and Group-wide visibility and development of potential successors. One of the long-term aims of the Talent Council will be to set clear expectations and performance requirements for the career development paths of our future leaders. The Council has been meeting quarterly, and follow-up actions have been undertaken by the Corporate Human Resources team. The Talent Review Process continued in 2015 with development plans in place for diversity, a talent pipeline for key positions, including talented young personnel, and rotation of some key individuals. To support talented female employees in their career paths, a network of senior female managers has been created to act as coaches and mentors.

During the year, Outokumpu offered 295 people (230 internal and 65 external candidates), new full-time or part-time career-broadening challenges and opportunities in Group-wide development programs and initiatives.

CASE

LEARNING ACROSS BORDERS

Because of our global operations, Outokumpu employees have the possibility to work abroad in Outokumpu sites and offices. Outokumpu believes it is important to promote job rotation and learning across national and organizational boundaries. In general, postings last from six months up to three years. Experts may apply or be invited from all levels within the organization.

Experienced specialists from e.g. Tornio, Finland and Avesta, Sweden have been sent to develop the effectiveness of the modern, fully integrated stainless steel mill in Calvert, Alabama, US. Their task is to support the mill to gain a more intense pace.

Since there is strong process development knowhow at Outokumpu's Tornio plant and the same type of production as in Calvert, Tarja Vanhamaa, an expert in process development, was asked to relocate to Calvert for a fixed period. Her husband Sakari, also assigned to a specialist task, and their three school-aged children, relocated to Calvert as well.

Expatriate assignments serve in developing talented individuals through providing experience and exposure to a new and challenging environment.

"Our work is demanding and challenging, but motivating. Although the job is familiar, the environment in a different country and continent, and working in a different language, make it extremely interesting. In addition to the cultural differences you need to navigate, you also have to realize that coming from the 'outside' means you're in someone else's workplace, maybe mixing up their routines. By respecting everybody's work, results can be achieved in a way that encourages everyone to try something new," says Tarja Vanhamaa.

An international transfer is a good investment for the company as a whole. Outokumpu can utilize specific knowhow and experience from inside the company to troubleshoot issues, and best practices are shared within the company.

"Even though I'm here to support Calvert, I also get help from colleagues in Finland, Sweden, Germany and other sites. 'I'm never too busy to help a colleague out,' one of them told me when I needed a hand in Calvert," Tarja says.

Tarja sums up that the experience from the job rotation has been truly rewarding for the whole family.

"Here, I have really been able to help out and do good things for the process development. The time has been limited, so everything has to be done fast. Professionally, I got great experience in working in a multicultural workplace, and I have new ideas to implement also into the Tornio processes. As a family, we gained memories and experiences to last for a lifetime, and the children gained full English-language skills. I recommend that everyone take on this kind of challenge."

"Professionally, I got great experience in working in a multicultural workplace, and I have new ideas to implement to help improve processes at Tornio."

Diversity and human rights

Outokumpu's ethical principles described in Outokumpu's Code of Conduct build on the equal treatment of all people, and 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. This is also promoted in remuneration, following the principle of equal pay in equivalent tasks. There are no globally applied indicators of equal remuneration between women and men, but individual countries (e.g. Sweden, Germany and Finland) analyze men's and women's salaries regularly. In 2013, a full comparison of all wages was completed in the Swedish business units, and the next review will be done during 2016. The aim of the comparison is to achieve statutory equality in wages and salaries, where the amount of pay is relative to the work responsibilities and competence and not the gender of the employee.

In most parts of the organization, the size of the positions is evaluated with a systematic job evaluation method that enables an analysis of remuneration practices and compensation levels. Outokumpu's intention is to provide a competitive base salary for all Group employees based on the scope of their role, individual performance and in line with local labor market and agreements. Typically, base salary levels also vary according to the stage each individual has reached in their career.

Within the Group, three alleged incidents of discrimination were recorded. Two of these incidents are still under review and being investigated, while one incident was dismissed by the Equal Employment Opportunity Commission (EEOC) in the US. If required, corrective actions will be taken accordingly.

The Group endorses the values of the United Nations Universal Declaration of Human Rights. All of the major Outokumpu locations are situated in Europe, the US and Mexico, where risks related to human rights are not considered to be high. Outokumpu follows the spirit of international labor treaties and condemns the use of forced and child labor.

Outokumpu maintains a consistent policy of freedom of association. All employees of the Group's operations are free to join trade unions in accordance with local rules and regulations. Altogether, 83% of the Group's permanent employees were covered by collective agreements in 2015. During the year, there were six days lost due to strikes (2014: 170; 2013: 24).

Some 14% of Outokumpu's employees are women (2014: 14%, 2013: 14%, 2012: 17%). Diversity is high on our agenda for the coming years. A transparent and unified resourcing process is the way to ensure equal opportunities. This is reflected in introducing a "50-50" recruitment ambition to build a sustainable talent base comprised equally of men and women. At the end of the year, two of the eight members of the Board of Directors and one of ten members of the Leadership Team were women, and altogether 31 women held key leadership positions. These correspond with the overall percentage of women working in Outokumpu. Altogehter 81% of the Group's permanent employees were covered by collective agreement in 2015.

"Outokumpu introduces a "50-50" recruitment ambition for building a sustainable talent base comprised equally of men and women."

Communication and cooperation

The focus in employee communication shifted to driving performance and a common culture beyond integration and restructuring. Increasing employee engagement and supporting the company's performance targets were high on the internal communication agenda.

Safety was a priority during the year in all CEO speeches and presentations. A Group-wide Safety Week campaign demonstrated the "safety first" attitude with video interviews, posters, local safety promotions and intranet articles to highlight hazards and risk areas and to increase individual commitment to safety. A series of internal videos on key performance indicators (KPIs) were created in order to make the key financial metrics and success factors of the company performance more understandable and simple to identify with. During spring, employees were introduced to Outokumpu's new product categorization through an extensive communication campaign prior to the launch to customers.

In total, there were 294 internal news items published on the company intranet in 2015, of which 43% were available in several languages. While the intranet and line managers are the most important day-to-day sources of information, these were supported by internal newsletters and info calls. The internal communication channels were complemented with a new company-wide social media network aimed at improving collaboration, knowledge sharing and teamwork. The capabilities of managers to lead their teams in contributing to common company goals were enhanced with Shifting Gears workshops and by introducing the first pilot training courses in manager communication skills in Calvert, US at the end of 2015.

The CEO spoke to the top 200 managers in relation to the most important news during the year in a total of six teleconferences, after which the managers took the message forward in their organizations. The cascading of company results, business situation and key priorities was supported with easy-to-understand presentation material.

Four "all staff info calls", launched in 2014, were carried out during 2015. In the info calls, the employees have a chance to hear directly from the CEO about Group strategy, priorities, achievements and challenges. The CEO speech and employee questions and answers sheets were available to all employees on the company intranet in four languages. Three top management meetings were arranged during the year.

At Outokumpu sites, communication with employees is diverse. On top of regular town hall meetings arranged by site management, managers and team leaders are encouraged to have regular information updates with their teams. Management team members are encouraged to regularly visit Group facilities, including production plants, and to talk with employees engaged in manufacturing operations. The intranet is used for informing people about current local issues and sharing management updates. Daily operational meetings promote productive dialogue and include reporting on safety.

An internal communication survey following the one executed in 2013 was conducted at year-end. Some 2,200 blue- and white-collar employees participated in the survey. Internal communication was generally rated as good, and the results have improved since the last survey. Some 76% of respondents felt that internal communication is clear and understandable and that they get relevant information about what is going on in the company. A total of 81% felt that they have a good understanding of company targets, while more info could still be shared about the bigger picture and reasons for decisions. The results will be reviewed and development plans made at the beginning of 2016.

Outokumpu Personnel Forum

Outokumpu has a Personnel Forum, which is a joint consultative body that offers a channel for transferring information between management and employees. The forum was established some ten years ago, when the European Works Council directive entered into force. The Personnel Forum discusses of transnational interest – the Group's economic and financial performance, future business prospects, product and market situations, strategy, investment decisions, annual report, manpower and employment issues, business reorganization, health and safety, environment, technology and research, and other matters that have transnational impact or are of common interest.

The forum has 33 representatives from European operations and it appoints a working committee (the Group Working Committee) which is responsible for ongoing cooperation between management and employees. Eight of the members represent the personnel and three members the management. In 2015, the Personnel Forum met once in Eskilstuna, Sweden and the working committee convened three times. In addition, there was one telephone conference.

Safe working environment

At Outokumpu, safety is the number one priority. Outokumpu is committed to providing a safe and healthy working environment at its production sites and facilities for its own personnel, contractors and visitors.

Safety First

The ultimate goal for Outokumpu remains zero accidents, with an underlying management philosophy to continuously improve our safety practices to ensure that Outokumpu is an industry leader in safety. Significant improvements have been made to allow a step change in safety performance over the last three years. However, opportunities for further development still exist across the Group. One action responding to this demand is the decision to follow the OHSAS 18001 (and soon ISO 45001) occupational health and safety standard at all main production sites.

Safety performance

Health and safety statistics were reported to a common reporting system. Leading and lagging indicators were required to be reported monthly and the definitions were based on an internal standard (based on external international standards). Injury rates and the rate of proactive actions (leading indicators) were followed-up per million working hours.

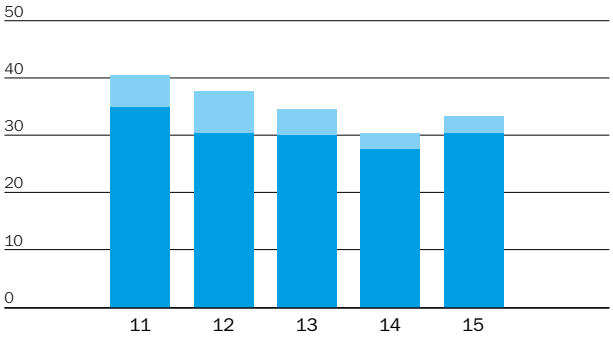
Regrettably, there was one fatality for one of Outokumpu's own male employees in San Luis Potosí, Mexico belonging to Coil Americas. This incident was fully investigated and corrective actions to avoid similar accident in the future were implemented. The Group LTI rate (lost time injuries per million working hours) was 3.0 (2014: 2.7) and did not reach the target of 2.5. The LTI rate for Outokumpu's own personnel was 2.8, and for contractors 3.5. Of those injured, 95% were male. The only injuries to female employees took place in Europe. The LTI rate in Europe was 4.2, in Americas 0.4 and in Asia-Pacific 0.7.

In 2015, the TRI (total rate of injuries) was 33.4 (2014: 30.3). The TRI for Outokumpu's own personnel was 33.7 and for contractors 32.3. The TRI in Europe was 34.3, in Americas 37.3 and in Asia-Pacific 2.9.

The follow-up of proactive safety actions continued to be a focus. The total number of preventive safety actions was 75,600 (2014: 52,563), including near-miss reports, hazard reports, safety behavioral observations and other preventive safety actions.

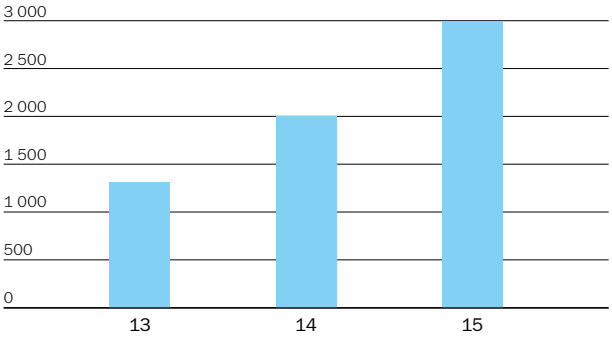
A number of plants maintained zero lost time injuries during 2015 and have maintained this for multiple years. These sites are across the production steps, providing evidence of best practice and sharing opportunities. A number of sites have been rewarded due to their efforts in their commitment to continuous improvement in accident and ill health prevention at work. Sheffield melt shop, UK, won the RoSPA (Royal Society for the Prevention of Accidents) Gold Medal this year. And the Kemi mine in Finland received an award from ICDA (the International Chromium Development Association).

Total rate of injuries for employees and contractors*



* Per 1 million working hours.

Proactive safety action frequency*



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

"No associations were found between working conditions in the Finnish stainless steel industry and increased mortality from any cause of death."

Health

As a responsible company, Outokumpu initiated systematic health studies with world-class independent expert institutes in the 1980s. The main targets of these studies have been individual levels of exposure to chromium and other compounds in the stainless steel production chain and their health effects. Occupational health activities focus on improving working environments, and employee health is monitored using a variety of occupational health checks and fitness tests. Occupational hygiene measurements are carried out on an ongoing basis at Group production sites to monitor work-related exposure to noise and impurities in the ambient air, as well as other factors. Subjects related to working environments within Outokumpu are also studied through joint research projects carried out in collaboration with universities and specialist institutions. This activity continues.

The number of occupational diseases diagnosed in the Group decreased significantly in 2015. There was one case of occupational disease (2014: 13), and it occurred in Europe to a male employee.

In 2015, an average of 5,291 (2014: 5,428) days per million hours worked by Outokumpu employees were lost as a result of sickness or injury. In Europe the lost days per million working hours were 7,265, in Americas 1,019 and in Asia-Pacific 2,041. The total absentee rate was 4.1% (2014: 4.2%); in Europe the rate was 5.5%, in Americas 0.8% and in Asia-Pacific 1.6%.

Epidemiological studies among Finnish ferrochromium and stainless steel production workers

The results of an epidemiological cancer study were published in the article “Cancer incidence among Finnish ferrochromium and stainless steel production workers in 1967–2011: a cohort study” in the British Medical Journal in 2013. The cohort consists of 8,100 employees who have been employed at the Outokumpu mine in Kemi and production site in Tornio since 1967. The health data related to this cohort have been analyzed further. The causes of death for the years 1971–2012 were obtained from Statistics Finland. The reference population was the population of Northern Finland. The results were published in the article “Cause-specific mortality in Finnish ferrochromium and stainless steel production workers” in Occupational Medicine in December 2015. The overall mortality, mortality from diseases of the circulatory system, accidents and suicides were significantly lower compared to the reference population. The conclusion was that the occupational exposures or working conditions in the Finnish ferrochromium and stainless steel industry appear not to be associated with increased mortality from any cause of death. Another scientific, health-related article on particle characterization in the typical air at Outokumpu’s workplaces has been submitted for publication, and a study on the acute respiratory health effects caused by occupational exposures is in the manuscript phase.

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. Company management in particular has to set a good example by cultivating fairness and conducting open and interactive communication.

For these kinds of purposes, our cold-rolling unit in San Luis Potosí, Mexico and Calvert, Alabama, sponsor voluntary wellness programs that create friendly competition among their employees to help promote healthy lifestyles, which has resulted in lower healthcare costs as well as positive attitudes at the workplace. Many employees from the company's German sites participated in health and well-being precaution actions. Several physical examinations were performed such as glaucoma tests, skin carcinoma screening, lung function tests and influenza immunization. A preventive medical check-up for bowel cancer and hormone levels was offered. Our young employees enjoyed a training program on sports, stretching, health, nutrition and precautionary screenings. A seminar on health-oriented leadership especially focused on stress, dependency and mental sickness was continued in 2015.

Outokumpu and society

ZERO TOLERANCE FOR CORRUPT PRACTICES

New Anti-Corruption Instruction issued in 2015. **p. 60**

Outokumpu's operations have economic impacts on local, national and global communities in its countries of operation through direct and indirect employment and other means of community involvement. Therefore, we take community engagement seriously.

STAKEHOLDERS ENGAGED IN MATERIAL ISSUES

438 stakeholders took part in a materiality survey. **p. 53**

LONG-TERM TARGET: EMPLOYER OF CHOICE

Outokumpu is a major employer in several communities, providing varied career paths. **p. 56**

OUTPERFORMING COMPETITORS IN CUSTOMER SATISFACTION

1,500 customer interviews showed good results for product quality. **p. 54**

SUPPLIER SUSTAINABILITY IN FOCUS

Strategic suppliers were evaluated, highlighting human rights. **p. 56**

THE GROUP TAXES TOTAL

EUR 35 MILLION

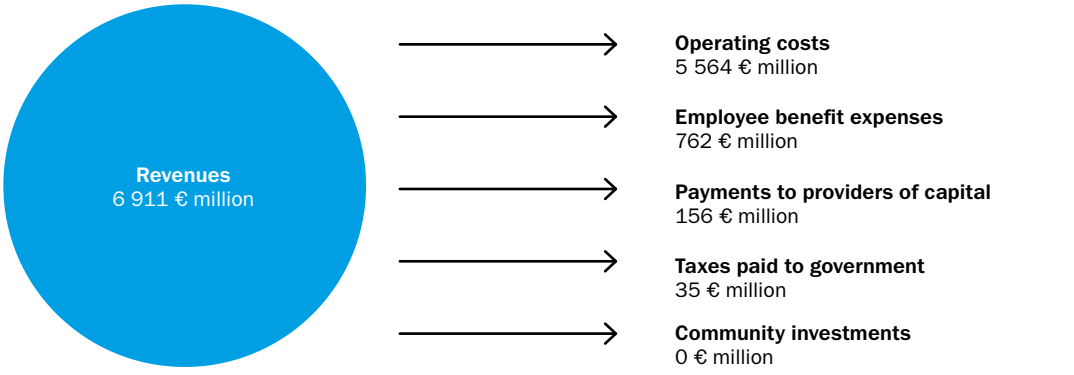
Outokumpu and society

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. Decisions might have a major impact on communities, Outokumpu personnel and their families, and local goods suppliers and service providers as well. Risks concerning stakeholders are included in the risk chapter of the Annual report.

Direct economic value generated and distributed

Direct economic value generated

Economic value distributed



Economic values retained in business
394 € million

"In 2015, Outokumpu has focused in stakeholder engagement and on materiality."

Stakeholder engagement to focus on material issues

In 2015, Outokumpu's stakeholders were surveyed on their opinions on material aspects. A total of 438 stakeholders participated. Important stakeholder groups, such as customers (85), suppliers (59), employees (231), investors, the authorities and NGOs, were included in the process through different actions; customers during Outokumpu's customer event Experience 2015, and all suppliers via a letter from our CEO; employees were requested to participate via Outokumpu's intranet. The authorities and NGOs were included by Outokumpu's network of personal contacts. Outokumpu's own assessment of material aspects was discussed and assessed by Group experts involved in corporate responsibility, as well as by the leadership. Some of the topics have been grouped:

Resource efficiency: Energy efficiency, supply of sustainable energy and recycling and circular economy

Environmental impact: Management of emissions into air, of water, of waste and impact on land use and biodiversity

Compliance: Ethical business conduct and compliance

Accountable and transparent governance and reporting: Accountable and transparent governance and reporting including tax transparency.

The assessment of the materiality issues resulted in most being of high significance and only a few being of medium significance for both Outokumpu and the Group's stakeholders. All the resulting material aspects have also been reported in the last report, but will be more focused in the one for 2015. In addition to the existing sustainability agenda, the aspect of toxics and chemicals was brought up, mainly by Outokumpu's employees. Toxics and chemicals in correlation to product use and the health of our workers and the environment have been on the agenda at Outokumpu for many years, and more focused reporting, especially on toxics and chemicals, is now implemented in this report.

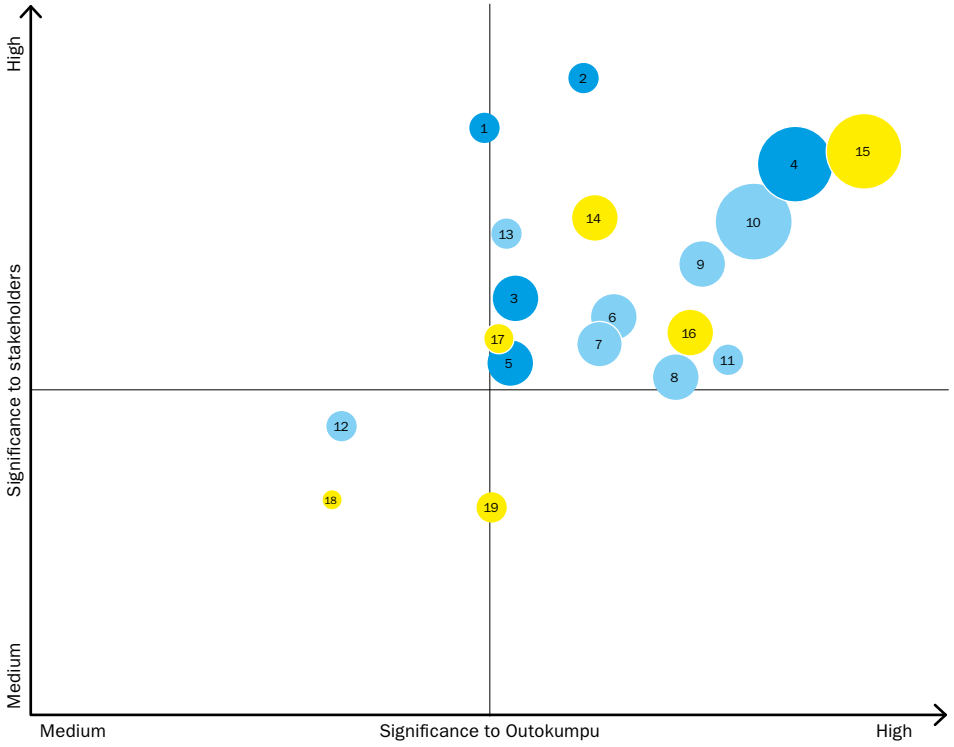
The Outokumpu Board of Directors accepted the revised sustainability analysis. According to the Group policy on sustainable development and corporate responsibility, the Board of Directors monitors Outokumpu's corporate responsibility performance at least once each year based on a report submitted by the CEO.

Focus on material issues

Environment
1. Environmental Impact
2. Management of Toxics and Chemicals
3. Climate Change
4. Resource Efficiency
5. Transport & Logistics

Economy
6. Commitment to Sustainability Leadership
7. Management Systems and Product Certifications
8. Sustainability Driven Commercial Opportunities
9. Product Responsibility and Safety
10. Accountable and Transparent Governance and Reporting
11. Compliance
12. Stakeholder Engagement
13. Sustainable Supply Chain

Social
14. Labor practices and Human Rights
15. Safe and Healthy Workplace
16. Human Resource Development
17. Restructuring Investments and Closures
18. Community Relations and Development
19. Changes in Legislation and Taxation



Size of the bubble refers to the importance of material issue in the value chain.

Customers

Outokumpu has a strong global base of customers spread across every continent and balanced over a range of industries. Continuous feedback and interaction with customers help us to improve our understanding of customer needs, the challenges they face and the business environment our customers operate in.

During the year, Outokumpu continued to collect continuous, firsthand feedback from our customers. Outokumpu uses a qualified feedback system, the Net Promoter Score (NPS), to collect and utilize customer insight in all our countries of operations. The Net Promoter Score tool processes around 1,500 customer interviews a year. The data obtained through the system is analyzed and benchmarked to support us in various goals. Customers' feedback helps us to achieve our growth targets and is used to enable continuous improvement of our performance, at both strategic and operational levels. We even have a network of customer satisfaction experts to help sales teams to find ways to impact customer satisfaction. The overall aim is to have a mutually beneficial process that helps us improve the three basic building blocks of customer satisfaction: product quality, delivery performance, and value for money.

Overall, Outokumpu's customer satisfaction continued at the same level as in 2014, and continues to outperform that of our competitors. Customer feedback shows that while we have been scoring well on product quality, we have been inconsistent in our delivery performance. As the Net Promoter Score method is primarily designed to measure customer satisfaction rather than production and as many of our customers buy from multiple sources within Outokumpu, Outokumpu's internal reporting follows the sales organization structure rather than that of our production. Customer feedback plays a central role in internal communications and is always a topic in quarterly CEO calls for the top 200 executives. Customer orientation is also a part of target-setting for each employee.

Outokumpu aims to build long-term relationships with its customers. Being a responsible business partner is a precondition for long-term partnership. Our principle Putting the customer first from the Outokumpu Winning Behaviors evolved into a Customer in Action campaign initiated at year-end. Customer in Action shares customer success stories in the form of text and videos across the organization, and also includes a global competition to reward best examples of a customer-oriented mindset.

CASE

PRINTER PROJECT WITH KYOCERA

Printing is an area with high potential in both ecological and cost savings. To bring about a positive change, Outokumpu started a global printer consolidation project in 2015, in cooperation with the document solution provider Kyocera.

"Outokumpu used more than 3,000 printers, with nearly 260 different models from 20 vendors. We were able to reduce the number to 10–15 models for standard printing purposes," says Jens Haußmann, Global Account Manager at Kyocera Document Solutions.

Outokumpu assessed the direct annual savings of the project at 20%. The new printers use a long-life drum technology called ECOSYS, which provides low total cost of ownership (TCO) and minimizes environmental impact. Using ECOSYS printers helps Outokumpu reduce the environmental waste of printing by up to 75%, because only the consumables used in printing must be replaced.

In addition, all the toner delivered worldwide to Outokumpu is carbon-neutral because of a compensation project.

"All carbon emissions caused throughout the toner's lifetime are offset through a climate protection project in Kenya. The project involves efficient cooking stoves, providing both environmental as well as health and social benefits. With the carbon-neutral toner, Outokumpu's total CO_2 impact will reduce in total by 80 tonnes," Haußmann says.

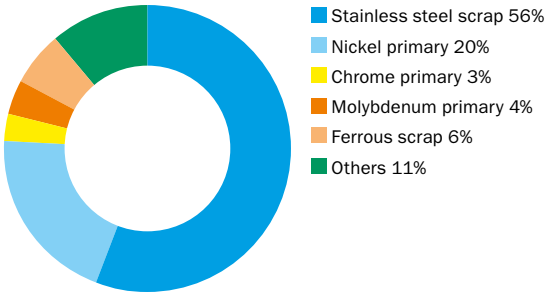
Suppliers

Outokumpu's purchasing decisions are made solely based on Outokumpu Group's best interests, taking into account the environmental, economic and social aspects of its Corporate Responsibility Policy. Suppliers will win Outokumpu's business based on best value in use of product or service offered. Value in use means the total amount spent on a particular commitment, including, among other things, the initial contract price, life cycle cost of investment, effect on Outokumpu's production efficiency and quality, commission fees, handling as well as other transaction costs and taxes.

Raw material purchases are the largest item in Outokumpu's costs. In 2015, Outokumpu's raw material delivery volumes were 3,075,945 tonnes, a comparable decrease of almost 12% from the previous year. The cost of raw material fell by 20.3% from the previous year. This is mainly explained by higher amount of scrap and the increased use of ferrochrome produced in own ferrochrome production site in Tornio as well as lower metal prices. Primary raw materials – nickel, ferrochrome, recycled stainless and carbon steel – are purchased on the open market. Part of the ferrochrome is sourced internally from the Group's own chromium mine and ferrochrome operations, which employ 229 people from external contractors and suppliers.

Outokumpu evaluates its suppliers from the sustainability point of view, highlighting responsibility within society and local communities. In 2015, evaluating our current and new suppliers against the common supplier requirements was integrated into the general procurement strategy, and tracking the coverage of supplier assessments was included in internal reporting. The scope of the study was all strategic suppliers for raw material procurement and for general procurement. In the last round of evaluation of suppliers we focused on human rights which mainly concerns our raw material suppliers. We had no new raw material supplier in 2015. The coverage of all completed answers and evaluated companies in raw material purchasing was more than 63% of Outokumpu's spending on these materials.

Raw material spend by category in 2015



The Outokumpu Code of Conduct is a tool for Outokumpu employees offering assistance in evaluating suppliers in different situations by setting examples and giving practical guidance. The Code of Conduct states that Outokumpu condemns all forms of corruption and complies with the anti-corruption treaties and laws of the countries in which it does business. Outokumpu expects its suppliers and contractors to act in accordance with the law and recommends that they perform according to Outokumpu's policies. It is the goal of Outokumpu that its business partners, subcontractors and suppliers become familiar with the Code of Conduct and Outokumpu's Corporate Responsibility Policy, and that they follow similar standards. Outokumpu is committed to marketing communication laws, standards and voluntary codes in communication with suppliers.

"Outokumpu evaluates its suppliers from the sustainability point of view, highlighting responsibility within society and local communities."

Current and future employees

Current and future employees are both very important stakeholders for Outokumpu, their energy and commitment being a fundamental part of the Group's business.

Outokumpu's employees are the vital element in achieving outstanding performance. Therefore, a key theme for 2015 was promoting a culture of working together and fostering an Outokumpu Spirit. The communication of the Winning Behaviors, which were already introduced in 2013, was extended throughout 2015 to build up a shared understanding of the common behaviors that bring us success.

Alongside a range of safety developments to ensure that all employees go home again safely, there has been an increase in the number of company sites promoting health and wellbeing supported by our occupational health facilities. There are currently no local or global level wellbeing programs in place but they are currently in planning for future rollout.

Outokumpu's long-term target is to be an employer of choice. Outokumpu aims to provide challenging career opportunities and to offer varied career paths. During 2015, the Group's employer branding was further developed, and it will be communicated in 2016 to strengthen reputation and awareness levels in the external candidate market. Direct cooperation with key universities and technical colleges in all of the countries that Outokumpu operates in plays a big role in future resourcing. Social media is also considered an important means of talent recruitment.

Outokumpu has a long tradition of offering summer jobs and traineeships in its major production locations in Finland, Germany and Sweden. This provides an opportunity for students to become acquainted with Outokumpu as an employer and experience some of the career opportunities that exist. Outokumpu remains committed to this process to ensure the continued strength and diversity of our talent base. During the summer of 2015, the Group employed some 600 summer workers in Finland, mainly in Tornio, and approximately 170 in Sweden. Traineeships were offered particularly within Group services such as marketing and accounting. In Germany, Outokumpu offered internships to 57 students close to graduation as engineers, as well as technical and commercial apprenticeships in all its locations. In the US, a select group of ninth-graders and their teachers spent a week as interns to experience the importance of communication skills, mathematics, computer literacy, creativity, problem-solving and teamwork. Also, a partnership with a local high school provided a way of filing a variety of entry-level positions at the local mill.

Economic impact

Employee benefit expenses in 2015 decreased compared to the previous year by some 11 % to EUR 762 million (2014: EUR 855 million).

Employee benefit expenses by country

€ Million	**2015**	2014	2013
Finland	**184**	168	161
Sweden	**128**	141	141
The United Kingdom	**35**	31	31
Germany	**235**	343	301
Other Europe	**25**	37	38
The United States	**107**	87	84
Mexico	**25**	26	24
Asia and Oceania	**18**	17	19
Other countries	**6**	5	6
Total	**762**	855	805

"Employer branding was further developed, and it will be communicated in 2016 to strengthen reputation and awareness levels in the external candidate market."

Investors and analysts

Outokumpu's regular and active dialogue with capital markets continued in 2015. Key topics discussed with investors and analysts were the actions to turn Coil Americas profitable, development in Coil EMEA restructuring, actions to strengthen the balance sheet, as well as market-related topics.

Outokumpu met investors and analysts at various events throughout the year. The company organized its Annual General Meeting in March. In addition, Outokumpu hosted quarterly results webcasts for analysts, investors and media. Outokumpu's representatives also attended seminars and conferences and organized 19 roadshows in Europe and in the US.

In addition, the company hosted a Capital Markets Day in Berlin in May. Three site visits for analysts and institutional investors were arranged in 2015, one to the chrome mine in Kemi and one to the stainless steel plant in Tornio, Finland, as well as one to the stainless steel plant in Calvert, US. A total of over 300 one-on-one meetings, conference calls and videoconferences with investors were held during the year.

Read more about Outokumpu shares and shareholders, Outokumpu's activities in the capital markets and stock exchange releases in 2015 in the Annual report in "Shares and shareholders" and "Information for investors" (p. 112, 116.

Local communities

Many Outokumpu production sites have long and interesting histories. For example, our Sheffield, Degerfors, Avesta, Nyby (Eskilstuna) and Dahlerbrück sites have been in use by the metal industry and integral parts of their local communities for centuries already. It is natural for Outokumpu, as a major employer in several locations, to have a strong presence in local society and activities in many ways.

Significant impacts on communities

As a major employer, Outokumpu's decisions may have significant impacts on the lives of local communities. Important Outokumpu locations include Avesta and Degerfors in Sweden, New Castle (Indiana) in the US, the Kemi-Tornio region in Finland, and Dahlerbrück and Dillenburg in Germany. In all these locations, the main impact comes from direct and indirect employment: we are economically important for local society through the incomes and taxes Outokumpu creates in the region. In 2015, we could not define any significant negative impact on local society in major Outokumpu locations. We maintain continuous cooperation with community officials and representatives, other commercial companies, schools and universities. We aim to actively listen to local communities.

Beyond a major impact on Outokumpu personnel and their families, the Group's operations also affect local communities through creating demand for local goods suppliers and service providers. Recent investments include the EUR 410 million investment in the expansion of the Group's ferrochrome production in Tornio, Finland, EUR 108 million to increase stainless quarto plate production capacity in Degerfors, Sweden, and a further EUR 108 million to modernize the cold-rolling mill in Krefeld, Germany. The ferrochrome expansion resulted in around 120 permanent jobs in the Kemi-Tornio region.

In addition to the above, we have also identified significant negative impacts of Outokumpu's strategic decisions on three local communities in 2015: Krefeld in Germany, Kloster in Hedemora, Sweden and Bochum, Germany.

In the Krefeld site in Germany, Outokumpu closed the melt shop at the end of 2013. Otherwise, the aim is to increase cold-rolling plant and capacity in the Krefeld site. However, this site restructuring means a total reduction of about 500 employees. All of them are included in a social plan or will be retiring from the company. As there was also another industrial production facility situated in the industrial park, the closure of the melt shop did not cause any relevant impact on local infrastructure.

The Kloster precision strip mill was closed in 2014 and the closure project continued in 2015. Efforts to find new jobs for the 177 former Kloster mill employees were successful: 154 have been given new positions or have retired. In 2015, the closure project continued at the site, with environmental development initiatives such as treating water from a small landfill and planning

the future of the property together with officials from Hedemora Municipality. Outokumpu also arranged a party for all former Kloster employees.

The melt shop at the Bochum site, Germany, was closed in June 2015. The melt shop was the only Outokumpu unit in the city of Bochum. Therefore, the 450 employees from the Bochum site were either transferred to other Outokumpu sites in Germany or to other facilities under the conditions of a social plan, while some retired. As the melt shop was situated in an industrial area with many other production companies, the influence on the local, highly populated region and infrastructure was limited.

Community engagement

As a heavy industry company, Outokumpu has at least some local community engagement, impact assessment or development programs in every production location, but typically not in smaller units such as service centers and sales offices. The units with local community engagement cover some 45% of Outokumpu's global units (including small sales offices), and 93% of Outokumpu personnel work at these sites.

At the largest production units, such as Tornio, Outokumpu has, in the past, organized social (SIA) and environment impact assessments (EIA) related to the expansion of production. In 2015, at our sites only one EIA process was completed, for the new material recycling facility of a contractor (for 87,000 tonnes a year) at the Tornio site. The outcome was positive and the permit process is ongoing.

Examples of local engagement projects or actions at our production units in 2015 are numerous. Typically, units have yearly discussions or information exchanges with neighbors or local community representatives on relevant topics such as employment, the environment, energy or sponsoring of local events.

Outokumpu's employees have given presentations at local schools and universities, and we have worked with local employment agencies to find positions for people within the Group. Schoolchildren and local students have been introduced to Outokumpu's working environment through tours and discussions with employees, for instance in Avesta. The Calvert plant in Alabama had successful cooperation in 2015 with schools, such as Citronelle High School's Manufacturing Academy, the University of Alabama in Birmingham, and with the Mobile Area Education Foundation. The Kemi mine collaborated with schools, such as Lapland University of Applied Sciences, in the training of engineers, miners, and supervisors. In Sheffield, UK, apprenticeships have been offered to local colleges, and student placements have been made available in the form of one-year programs.

During 2015, especially in Germany, Sweden, the United States and Finland, we organized meetings or cooperation with the local neighborhoods for various reasons. At the Kemi mine and also at the Tornio plant, we had open-door events for neighbors. Based on feedback and participation, both of these events were successes. The production units received a lot of good and constructive feedback, as well as some helpful ideas on how to reduce environmental impacts on the surrounding community. In Krefeld, Germany, yearly meetings on the Neighbors' Dialogue took place. In 2015, the new project to improve the cold-rolling facilities in Krefeld was presented and discussed. The Calvert plant in Alabama participates in local actions with "Partners for Environmental Progress," a coalition of business and education leaders who value natural resources and the economy.

In Bochum, Germany, Outokumpu established a local voluntary advisory committee, including neighbors, administration, NGOs and other interest groups, to share information and views on the Marbach landfill. In October 2015, the construction work and the use of the landfill was presented in this committee.

Traffic loads also have an impact on local communities, with the Kemi-Tornio region and Sheffield being good examples. Our Tornio site has participated in the new railway connection project in northern Sweden, called the North Bothnia Line (Norrbotniabanan), which would mean a 270 km extension of the Bothnia Line north of Umeå to Luleå and would provide a new transport route for the Tornio plant. The detailed planning of the project is ongoing. In Sheffield, Outokumpu is located very close to the UK's M1 motorway, and steps are being taken to ensure that our operations have minimal impact on this primary transportation route.

In Sheffield, representatives of the local police force, fire and emergency services, and national health organizations have attended health and safety days organized for Outokumpu employees. Local stakeholders are also taken into account in the Group's emergency planning.

In Avesta, Sweden, the renovation of our former, centuries-old production site, Koppardalen, received excellent feedback due to its efforts to preserve local cultural history. Yearly, 30,000 visitors visit the old mill building and art exhibition "Avesta Art".

As part of its community engagement, some Outokumpu sites also continued their dialogue with environmental NGOs related to ongoing permit processes or other environmental issues. In 2015, Outokumpu's Kemi mine participated in a project together with other mining companies, NGOs and stakeholders to create the criteria for sustainable mining and reporting guidelines for the Finnish mining industry. In Tornio and in the Haparanda area in Sweden, the two-year air quality monitoring project was completed in 2015 with excellent results: the air quality in the area is very good. The monitoring was initiated by local municipalities and environmental NGOs. As a whole, Outokumpu aims to further increase transparency and information related to these and to our products' sustainability properties.

"It is natural for Outokumpu, as a major employer in several locations, to have a strong presence in local society and activities in many ways."

Public sector and sponsoring

As defined in Outokumpu's sponsorship policy, our sponsorship decisions are based on clearly defined pre-conditions of strategic, brand image or sustainability criteria. Outokumpu also makes discretionary donations for the common good as a responsible corporate citizen. These donations are approved by the Leadership Team or by the Board of Directors. Total grants and community support have decreased during the recent economically difficult years. In 2015, these amounted to some EUR 0.1 million.

Outokumpu does not take part in or otherwise support political activities, whether they are local or national. This is clearly stated in our Code of Conduct, communicated internally and also including training as a part of the Code of Conduct by the global e-learning course for all white-collar employees. Outokumpu did not make any donations to any political parties or groups in any country in 2015, directly or indirectly.

However, Outokumpu's grants, donations or sponsorships are mainly for local events or communities. Typically, we offer scholarships to students, sponsor local sporting or cultural activities or charity work. Organizations that arrange activities for children are also supported. Outokumpu supports research related to its field of industry and maintains close cooperation with educational institutes. Apprenticeships have been offered to local colleges and student placements have been made available in the form of one-year programs, and schoolchildren and local students have been introduced to the Group's operations.

In Germany, Sweden, the UK, Finland and in the US, local cooperation with schools and universities is typical at every production site. For instance, in 2015 our Calvert plant worked with Citronelle High School's Manufacturing Academy to develop the career paths of students. In Krefeld, Germany, cooperation with a local school continued with a project concerning a care system at a local retirement home.

Local social sponsorship by units also continued in 2015: traditionally Outokumpu has been the main sponsor of local football clubs and other sports associations in Avesta and Degerfors (Sweden) and in Tornio (Finland). Outokumpu was one of the companies that sponsored the new modern fire station in Degerfors, Sweden, which was inaugurated in September. Our Tornio plant sponsored visits by kindergarten students to the local art museums. In terms of culture, in 2015, Outokumpu offered stainless steel material for a two-meter-tall steel sculpture in the shape of a heart to be installed in Rotherham town center in the UK. We also offered stainless steel sheets for a sculpture in Turku, Finland, promoting efforts to protect the Baltic Sea. In Avesta, Sweden, Outokumpu sponsors its own art club, Visentkonst.

Outokumpu units are also among the founders of a number of national technology, research or educational funds. These funds support and promote university-level research and teaching and business opportunities. Examples of these type of funds are the Technology Industries of Finland Centennial Foundation and the Fund for the Association of Finnish Steel and Metal Producers.

Taxes paid and public support received

Outokumpu contributes to the well-being of local, national and international communities through direct and indirect employment, tax payments and by participating in other societal activities.

The Group taxes totaled EUR 35 million for 2015 (2014: EUR 17 million). In 2015, most significant items relate to the withholding taxes from disposals. The 2015 amount presented for Germany includes EUR 20 million of withholding tax expenses, where the beneficiary is the Chinese Government. The 2015 amount presented for other Europe includes EUR 6 million of withholding tax expenses.

In 2015, Outokumpu received some EUR 0.9 million (2014: EUR 0.8 million), thereof EUR 0.5 million from Finland and EUR 0.4 million from Germany, from the public sector to support Group research and development of new technologies, products and applications.

Taxes by country

€ Million	**2015**	2014	2013
Finland	**1**	1	0
Sweden	**0**	0	0
The United Kingdom	**0**	1	0
Germany	**21**	1	0
Other Europe	**6**	2	3
The United States	**0**	0	0
Mexico	**6**	10	0
Asia and Oceania	**1**	2	0
Other countries	**0**	0	0
Total	**35**	17	4

Compliance

Outokumpu is strongly committed to legal compliance and to an ethical way of conducting business. Anti-corruption is an important part of this. Outokumpu's Code of Conduct sets zero tolerance for corrupt practices. In 2015, to further strengthen this message, Outokumpu issued a new Anti-Corruption Instruction. The aim of the Anti-Corruption Instruction is to deepen our understanding of responsible business practices. It was implemented throughout the Group with strong involvement and message from the top management as well as through internal communication and an e-learning training course. The Anti-Corruption e-learning course was compulsory globally for all white-collar employees and available in English, Finnish, German, Swedish, Spanish and Italian. The e-learning session covered some 3,700 people and achieved a completion rate of 99%.

Other compliance training sessions carried out during 2015 included targeted training in trade compliance. Compliance communication was further enhanced through the implementation of quarterly Compliance infoshots in various compliance topics, such as competition law, to raise awareness of fair competition practices. Outokumpu constantly develops its compliance program with special a special emphasis on defined key focus areas: competition law compliance, anti-corruption, trade compliance, and internal control and corporate governance. Compliance risks, including risks related to corruption, are assessed and reviewed annually and described in the Annual report's Risk management section (p. 107–111). In 2015, there were no legal actions for anti-competitive behavior, anti-trust or monopoly practices.

Outokumpu has a Helpline, a confidential contact channel through which employees or third parties can report suspected misconduct confidentially and anonymously by e-mail, mail or fax. Employees can also phone directly to Internal Audit. The Helpline is available on the company intranet and also on the company website at www.outokumpu.com. In 2015, Outokumpu issued a Reporting Misconduct Instruction, which is for internal company use only. The instruction describes the main principles and policy followed by Outokumpu in relation to reporting and investigating alleged breaches of Outokumpu's Code of Conduct. The top management and the Board Audit Committee receive regular updates on potential misconduct cases of specific importance. In 2015, there were 12 reports and subsequent investigations of alleged misconduct, fraud and/or theft of material or other assets.

"Outokumpu is strongly committed to legal compliance and an ethical way of conducting business."

Associations and federations

Outokumpu is an active and responsible actor in society. As a global stainless steel producer, the Group's opinion is voiced in many forums. Outokumpu is committed to sustainability and is a signatory to the International Chamber of Commerce (ICC) charter, follows and supports the United Nations Global Compact, and is an active member of the UN Global Compact Nordic Network. To demonstrate the Group's support for sustainability, Outokumpu has signed the World Steel Association's Sustainable Development Charter and the ISSF's Sustainable Stainless Charter. Under the conditions of the Group's publicly available Code of Conduct, participation in these networks is a way to promote sustainable progress throughout the whole business landscape, and outside the Group's own supply chain as well.

In 2015, Outokumpu's experts and top management continued to maintain effective contacts with numerous organizations. Top management and the CEO of Outokumpu participated in several stakeholder seminars and events, and highlighted our views on employee issues, megatrends, related to creating a competitive environment and the future of the stainless steel business. Within the Group, comprehension of approaches to social responsibility is expanded through active engagement with a variety of companies and organizations.

Outokumpu is a member of international organizations and confederations, including the World Economic Forum, International Chamber of Commerce (ICC), International Stainless Steel Forum (ISSF), International Chromium Development Association (ICDA), Eurofer, EUROALLIAGES and EUROSLAG. Outokumpu is also an associate member of the World Steel Association (worldsteel). Outokumpu provides relevant information to decision-makers and experts relating to the development of the business environment and legislation. The Group participates in the work of trade organizations. Outokumpu does not pressure decision-makers. Due to limited resources, our public affairs practice is to communicate via industrial associations like Eurofer and EUROALLIAGES. In these organizations, Outokumpu participates in different working groups whose aim is to provide expertise to help decision-makers. In these forums, members share best practices and obtain benchmark data relating to, among other things, the environment, R&D, product life cycles, product and chemical safety, and occupational safety. Members also contribute their own data for use in official industry or authority reports, such as the World Steel Association's sustainability reporting.

In Europe, Outokumpu is a member of industrial federations and associations in Germany, Sweden, Finland, France, Italy, the Netherlands, and the UK. National cooperation organizations advance industry views and contribute to legislation in Europe through national representatives in EU governing bodies. Outokumpu is also a member of business associations in North America and Australia.

Eurofer and EUROSLAG are collaborative organizations within the European iron and steel industry. Outokumpu contributes to Eurofer's commercial and trade issues at the presidency level, in committees that handle statistics, research, climate and the environment, and in working groups that focus on subjects such as air quality, water, and waste. Eurofer conveys opinions to EU governing bodies and promotes measures related to different legislation areas like the environment, chemicals, emissions trading, energy and products. EUROSLAG performs a similar role in issues related to slag and by-products.

Outokumpu is also active in corporate responsibility networks. To develop our expertise in corporate responsibility and improve Group performance, Outokumpu belongs to both the Finnish Business & Society company network and CSR Europe. To combat corruption and bribery, the Group participates in Transparency Finland, a national chapter of Transparency International.

Reporting on sustainable development

REPORTING SINCE 1975

The first environmental report from Outokumpu was published over 40 years ago. **p. 64**

In Outokumpu's reporting, the goal is to support open and transparent dialogue between the Group and its stakeholders. The Group's corporate responsibility principles cover all material topics of Outokumpu's operations and strategy and are also integrated into the way that we conduct our business.

TRANSITION TO THE GRI G4

The 2015 report follows the GRI G4 Guidelines in accordance with the core option. **p. 64**

INDEPENDENT ASSURANCE

Outokumpu's Sustainability report includes an independent practitioner's assurance report. **p. 75**

NEW INDICATORS

At least one indicator for the each material aspect is covered in Sustainability report. **p. 68–74**

ANNUAL REPORT

ANNUAL AND SUSTAINABILITY REPORT TOGETHER SHOW OUTOKUMPU'S SUSTAINABILITY DEVELOPMENT

Reporting on sustainable development

The first environmental report from Outokumpu was published in 1975. Since 2003, the Group has published an external Sustainability report covering social, economic and environmental dimensions annually, in addition to the Annual report. Reports are available in digital form on the Outokumpu Sustainability webpages. Our aim is to address the needs of current and future personnel, customers, suppliers, investors and other parties who have an interest in Outokumpu and its business operations. The 2015 report follows the Global Reporting Initiative G4 Guidelines in accordance with the Core option. Together with the Annual report, this Sustainability report shows Outokumpu's contribution to developing the future. Risk assessment on corporate social responsibility and specific risks from sustainability are included in the Annual report.

The results of the updated materiality assessment from 2015 where connected to specific material G4 aspects, and the aspects directs the contents of the sustainability reporting, also see p. 53. As required for GRI G4 core reporting at least one indicator for each material aspect is covered in the report and marked in table Outokumpu's material issues and GRI G4 material aspects.

Scope of the report

Sustainability reporting for 2015 is based on the continuing operations of Outokumpu. Divested assets, such as the mill in Shanghai, China, the closed mill in Bochum and the closed mill in Kloster, Sweden, are not included in the 2015 environmental and personnel figures of the Sustainability report. Some health and safety figures include the divested assets up until the moment of divestment.

Outokumpu publishes corporate responsible reporting annually, in form of the Sustainability report and the Annual report for the calendar year. The two supplementary reports are published as standalone reports on March 9, 2016. The previous Sustainability report for 2014 was published on March 4, 2015 together with the Outokumpu Annual report.

Comparability of statistics

Corrections made to figures reported in previous years are indicated in conjunction with the corrected figures. Since 2007, Outokumpu’s annual Sustainability reports have included an assurance report submitted by an independent assurance provider. This independent practitioner's assurance report is available on p. 75.

Figures in the financial statements under the section Financial Statements in the Annual report for 2015 have been audited.

Outokumpu's material issues and GRI G4 material aspects and aspect boundaries

GRI G4 Aspects	Aspect boundaries (G4 20/21)	Outokumpu's Material Issue
Economic		
Economic Performance	Group	Commitment to Sustainable Leadership, Sustainable Driven Commercial Opportunites, Accountable Transparent Governance and Reporting
Indirect Economic Impacts	Group	Accountable Transparent Governance and Reporting, Compliance, Stakeholder Engagement, Changes in Legislation and Taxation
Procurement Practices	Suppliers	Sustainable Supply Chain
Environmental		
Materials	Operation sites	Resource Efficiency
Energy	Operation sites	Resource Efficiency
Water	Operation sites, especially Mexico	Environmental Impact
Biodiversity	Operation sites Calvert, Dahlerbrück, Kemi and Tornio	Environmental Impact
Emissions	Operation sites	Environmental Impact
Effluents and Waste	Operation sites	Environmental Impact
Products and Services	Group	Management of Toxic and Chemicals
Compliance	Operation sites	Compliance
Transport	Production sites and service centers for products, Group for business traveling	Transport and Logistics
Overall	Group	Climate Change
Supplier Environmental Assessment	Group	Sustainable Supply Chain
Social		
Labor Practices and Decent Work		
Employment	Group	Labor Practices and Human Rights, Restructuring Investments and Closures
Occupational Health and Safety	Group	Management of Toxic and Chemicals, Safe and Healthy Workplace
Training and Education	Group	Human Resource Development
Diversity and Equal Opportunity	Group	Labor Practices and Human Rights
Human Rights		
Supplier Human Rights Assessment	Suppliers	Sustainable Supply Chain, Labor Practice and Human Rights
Society		
Local Communities	Operation sites	Community Relations and Development
Anti-corruption	Group	Compliance
Public Policy	Group	Compliance
Anti-competitive Behavior	Group, associations and federations	Compliance
Compliance	Group	Compliance, Changes in Legislation
Product Responsibility		
Customer Health and Safety	Group	Product Responsibility and Safety
Product and Service Labeling	Group	Management Systems and Product Certification
Compliance	Group	Product Responsibilty and Safety, Compliance

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.

Environmental responsibility

Financial information related to environmental investments is collected in accordance with Group-wide unified guidance following the principles outlined by the GRI and the World Steel Association. Environmental data concerning Outokumpu's operations is aggregated using the Group's Energy and Environment Reporting System, into which Group guidance has been integrated.

Environmental data cover Outokumpu stainless steel, ferrochrome and mining operations of the continuing operations of the Group. The environmental data has been adjusted to include continuing operations, unless otherwise stated. The baseline data from the period 2007–2009, used as a basis for long-term targets, has also been restated to show continuing data. The target set for CO_2 emissions in Outokumpu's energy and low-carbon program is calculated per tonne of stainless steel. Taking into account the cyclical nature of the steel industry, the figure for monitoring progress is a three-year moving average.

Greenhouse gas emission factors for CH_4 and N_2O are required in the site permits. Their Global Warming Potential is based on IPCC. The product transportation CO_2 emissions calculation method is based on typical emission factors from Swedish Network for Transport Measures according to transport system:

Transport	**CO_2 [kg/km/t]**
Truck + semitrailer	**0.057**
Container ship, EU	**0.0106**
Electric train, average size, EU	**0.00000001**
Freight train (Defra)[1]	**0.0271**

[1] In case of Sheffield and San Luis Potosí, another emission factor was used from Defra because NTM only provides emission factors for electric trains, and these factors are not suitable for use with diesel and coil train transport.

It includes the transport of products to customers and the internal transport between Outokumpu sites.

CO_2 emissions from business travel are given by the travel agencies for flights and calculated by CO_2 emission factors for every company car given by the leasing companies. For others, a reserve of 15% of the calculated amount was added.

Social responsibility

Health and safety figures

Health and safety figures reflect the scope of Outokumpu's operations as they were in 2015.

Injuries (LTI and TRI) per million hours worked

A lost-time injury is an injury or accident that has taken place during working hours at the workplace and 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 an Outokumpu employee, a person employed by a third party or a visitor has not been able to return to work on their next scheduled working day or shift. Returning to work with activity restrictions does not constitute lost-time injury status, regardless of how severe or minimal the associated restrictions were. The figure for the total rate of injuries includes lost-time injuries and injuries without lost time (non-LTI).

Proactive safety actions

Near-miss incidents and hazards refer to events that could have led to an accident, but where no injury occurred. 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 included to the previous mentioned categories. The number of proactive safety actions in all Group companies was collected via Outokumpu's reporting system.

Sick leave hours and absentee rate

Sick leave hours reported are total sick leave hours during a reporting period. Sick leave hours are reported per million working hours. 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 to 2015 include Outokumpu personnel in the continuing operations and do not therefore include divested sites/assets, such as SKS Shanghai, 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.

GRI and UN Global Compact

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
Strategy and Analysis					
G4-1	Provide a statement from the most senior decision-maker of the organization (such as the CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.		CEO's foreword (SR p. 3)	19	6.2
G4-2	Provide a description of key impacts, risks, and opportunities.		Environment (AR p. 24), Risks and uncertainties and followings (AR p.24–25), Financial risk management, capital management and insurances (AR p. 67), Risk management (AR p. 107), Management of landfill risks (SR p. 21), Emissions trading (SR p.25) Hazards are managed (SR p. 29), Emerging legislation as part of compliance (SR p. 33), New opportunities (SR p. 25)	19	6.2
Organizational Profile					6.2
G4-3	Report the name of the organization.		SR inside of back cover		6.2.1-6.2.3
G4-4	Report the primary brands, products, and services.		Corporate information (AR, p. 37), New product portfolio (SR p. 4)		6.2.1
G4-5	Report the location of the organization's headquarters.		SR inside of back cover		6.2
G4-6	Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.		Outokumpu and stainless steel market in 2015 (AR, p. 4), Material flow in Outokumpu's circular economy (SR p. 19)		6.2
G4-7	Report the nature of ownership and legal form.		Corporate information (AR p. 37), Shares and shareholders (AR pp. 112)		6.2
G4-8	Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).		Market environment (AR p. 8–11)		6.7.1
G4-9	Report the scale of the organization, including total number of employees, total number of operations, net sales (for private sector organizations) or net revenues (for public sector organizations), total capitalization broken down in terms of debt and equity (for private sector organizations) and quantity of products or services provided.		Outokumpu and stainless steel market in 2015 (AR p. 2–3), Personnel in numbers (SR p. 39–41)		

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
G4-10	a. Report the total number of employees by employment contract and gender. b. Report the total number of permanent employees by employment type and gender. c. Report the total workforce by employees and supervised workers and by gender. d. Report the total workforce by region and gender. e. Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	For supervised and self-employed workers, information not available. Reporting will be developed during 2016.	Personnel in numbers (SR p. 39–41)		
G4-11	Report the percentage of total employees covered by collective bargaining agreements.		Diversity and human rights (SR p. 46)		
G4-12	Describe the organization's supply chain.		Segment information (AR p. 47), Origin of electricity (SR p. 21), CO_2 emissions on product transportation (SR p. 24)		
G4-13	Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain.		Share development and shareholders (AR p. 26), Shares and shareholders (AR pp. 112), Scope of the report (SR p. 64)		6.2
G4-14	Report whether and how the precautionary approach or principle is addressed by the organization.		Risk management (AR pp. 107), Outokumpu's low-carbon program (SR p. 24)	7	6.5
G4-15	List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.		Highlights 2015 (SR p. 6–7), Associations and federations (SR p. 61)		6.2
G4-16	List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization holds a position on the governance body, participates in projects or committees, provides substantive funding beyond routine membership dues and views membership as strategic.		Associations and federations (SR p. 61)		
Identified Aspects and Boundaries					
G4-17	a. List all entities included in the organization's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.		Subsidiaries on December 31, 2015 (AR p. 87–88)		
G4-18	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.		Stakeholder engagement to focus on material issues (SR p. 53) Reporting on sustainable development and scope of the report (SR p. 64), Outokumpu's material issues and GRI G4 aspects and aspects boundaries (SR p. 65)		
G4-19	List all the material Aspects identified in the process for defining report content.		Outokumpu's material issues and GRI G4 aspects and aspects boundaries (SR p. 65)		
G4-20	For each material Aspect, report the Aspect Boundary within the organization, as follows: Report whether the Aspect is material within the organization. If the Aspect is not material for all entities within the organization (as described in G4-17), select one of the following two approaches and report either: - The list of entities or groups of entities included in G4-17 for which the Aspect is not material or - The list of entities or groups of entities included in G4-17 for which the Aspect is material Report any specific limitation regarding the Aspect Boundary within the organization.		Outokumpu's material issues and GRI G4 aspects and aspects boundaries (SR p. 65)		

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
G4-21	For each material Aspect, report the Aspect Boundary outside the organization, as follows: - Report whether the Aspect is material outside of the organization. - If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material. - In addition, describe the geographical location where the Aspect is material for the entities identified. Report any specific limitation regarding the Aspect Boundary outside the organization.		Outokumpu's material issues and GRI G4 aspects and aspects boundaries (SR p. 65), Reporting on sustainable development (SR p. 63), Material flow in Outokumpu's circular economy (SR p. 19), Suppliers (SR p. 53)		
G4-22	Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.		Strengthening of the financial position (AR p. 17), Environmental responsibility (SR p. 66)		
G4-23	Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.		Reporting on sustainable development (SR p. 64)		
Stakeholder Engagement					
G4-24	Provide a list of stakeholder groups engaged by the organization.		Stakeholder engagement to focus on material issues (SR p. 53), Corporate responsibility risks and stakeholders' materiality analysis (AR p. 111)		6.8
G4-25	Report the basis for identification and selection of stakeholders with whom to engage.		Stakeholder engagement to focus on material issues (SR p. 53)		6.8
G4-26	Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.		Stakeholder engagement to focus on material issues (SR p. 53), Reporting on sustainable development (SR p. 64), Community engagement (SR p. 58)		6.8
G4-27	Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.		Stakeholder engagement to focus on material issues (SR p. 53)		6.8
Report Profile					
G4-28	Reporting period (such as fiscal or calendar year) for information provided.		Scope of the report (SR p. 64)		
G4-29	Date of most recent previous report (if any).		Scope of the report (SR p. 64)		
G4-30	Reporting cycle (such as annual, biennial).		Scope of the report (SR p. 64)		
G4-31	Provide the contact point for questions regarding the report or its contents.		SR inside of back cover		
G4-32	a. Report the 'in accordance' option the organization has chosen. b. Report the GRI Content Index for the chosen option. c. Report the reference to the External Assurance Report, if the report has been externally assured.		Reporting on sustainable development (SR p. 64), Comparability of statistics (SR p. 64)		
G4-33	a. Report the organization's policy and current practice with regard to seeking external assurance for the report. b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided. c. Report the relationship between the organization and the assurance providers. d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.		Reporting on sustainable development (SR p. 64), Independent Assurance Report (SR p. 75)		7.5.3
Governance					
G4-34	Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.		Corporate governance (AR p. 98)		6.2

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
Ethics and Integrity					
G4-56	Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.		Diversity and human rights (SR p. 46), Communication and cooperation (SR p. 45), Stakeholder engagement to focus on material issues (SR p. 53), Suppliers (SR p. 55), Associations and federations (SR p. 61), Public sector and sponsoring (SR p. 59), Compliance (SR p. 60)		6.2
Disclosure Management Approach					
G4-DMA	Why is Aspect material, what is its impact and how is it managed, any related adjustments.		Outokumpu's material issues and GRI G4 aspects and aspects boundaries (SR p. 65), SR p. 5, 7, 16–17, 33, 42–43, 46, 48, 53, 55, 59, 61		6.8
Economic Performance					
G4-EC1	Direct economic value generated and distributed.		Outokumpu and society (SR p. 52), Public sector and sponsoring (SR p. 59), Local communities (SR p. 57)		
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	Financial implications not reported as considered being confidential information.	Emission allowances (SR p. 25, 34), Metal and energy price risk (AR p. 70)		
G4-EC3	Coverage of the organization's defined benefit plan obligations.	The percentage of salary contributed by employee or employer and the level of participation in retirement plans not reported. Information not available.	AR p. 77–81		
G4-EC4	Financial assistance received from government.		Taxes paid and public support received (SR p. 52,59)		
Indirect Economic Impact					
G4-EC7	Development and impact of infrastructure investments and services supported.		Significant impacts on communities (SR p. 57–58); Community engagement (SR p. 58–59)		
G4-EC8	Significant indirect economic impacts, including the extent of impacts.		Local communities (SR p.57–58)		
Procurement practice					
G4-EC9	Proportion of spending on local suppliers at significant locations of operation.	Percentage not reported, information not available. Reporting will be developed in 2016.	Material flow in Outokumpu's circular economy (SR p. 19), Suppliers (SR p. 55)		
Materials					
G4-EN2	Percentage of materials used that are recycled input materials.		Resource input for Outokumpu's steel (SR p. 20), Sustainable stainless (SR p. 10)	8, 9	6.5
Energy					
G4-EN3	Energy consumption within the organization.		Resource input for Outokumpu's steel (SR p. 20), Energy efficiency (SR p. 21)	8	6.5
G4-EN5	Energy intensity.		Resource input for Outokumpu's steel (SR p. 20)	8	6.5
Water					
G4-EN8	Total water withdrawal by source.		Water is worth saving (SR p. 30)	8	6.5
G4-EN10	Percentage and total volume of water recycled and reused.	Data of total volume water recycled not available.	Water is worth saving, examples Mexinox and Kemi (SR p. 30)	8, 9	6.5

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
Biodiversity					
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.		Biodiversity (SR p. 31–32)	8	6.5
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.		Biodiversity (SR p. 31–32)	8	6.5
G4-EN13	Habitats protected or restored.	Outokumpu has no restored area.	Biodiversity (SR p. 31–32)	8	6.5
G4-EN14	Total number of IUCN red list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.		Biodiversity (SR p. 31–32)	8	6.5
Emissions					
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1).		Resource input for Outokumpu's steel (SR p. 20), Carbon footprint of Outokumpu's steel (SR p. 24)	8	6.5
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (scope 2).		Carbon footprint of Outokumpu's steel (SR p. 24)	8	6.5
G4-EN18	Greenhouse gas (GHG) emissions intensity.		Goals and results (SR p. 17), Resource input for Outokumpu's steel (SR p. 20)	8	6.5
G4-EN19	Reduction of greenhouse gas (GHG) emissions.	Data on GHG reductions achieved as direct initiatives to reduce emissions are not available. Outokumpu aims at reporting them in 2016–2018.	Goals and results (SR p. 17), CO_2 emissions (SR p. 24–25)	7, 8, 9	6.5
G4-EN20	Emissions of ozone-depleting substances (ODS).		Resource input for Outokumpu's steel (SR p. 20)	8	6.5
G4-EN21	NO_x, SO_x, and other significant air emissions		Emissions into air (SR p. 27)	8	6.5
Effluents and Waste					
G4-EN22	Total water discharge by quality and destination.		Water is worth saving (SR p. 28)	8	6.5
G4-EN23	Total weight of waste by type and disposal method.		Waste management (SR p. 20)	8	6.5
G4-EN24	Total number and volume of significant spills.		Prevent leakage and soil contamination (SR p. 30)	8	6.5
Product and Services					
G4-EN27	Extent of impact mitigation of environmental impacts of products and services.	No quantitative data available as material is semi-finished product.	Outokumpu's stainless steel is safe (SR p. 10)	7, 8, 9	6.5
Compliance					
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.		Environmental legal compliance (SR p. 31)	8	6.5
Transport					
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce.		CO_2 emissions (SR p. 24)	8	6.5
Overall					
G4-EN31	Total environmental protection expenditures and investments by type.		Environmental investments and expenditures (SR p. 35), Investments in technology are reducing levels of dust emissions (SR p. 27)	7, 8, 9	6.5
Supplier Environment Assessment					
G4-EN32	Percentage of new suppliers that were screened using environmental criteria.	Percentage is not available. Outokumpu aims at reporting it in 2016.	Suppliers (SR p. 55)		
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken.	No information currently available. Outokumpu will continue developing its data gathering during 2016.	Suppliers (SR p. 55)		

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
Environmental Grievance mechanism					
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms.		Environmental legal compliance (SR p. 33)		
Employment					
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region.		Hires and leavers by region, age group and gender (SR p. 41)		
Occupational Health and Safety					
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender.	Some rates not reported by gender, information not available. Expect to report information by gender in 2017. Fatality not described in detail due to information security reasons.	Safe working environment (SR p. 48), Health (SR p. 49)		
Training and Education					
G4-LA9	Average hours of training per year per employee by gender, and by employee category.	Average hours not reported by gender and employee category, information not available.	Training and developing our people (SR p. 44)		
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.		Training and developing our people (SR p. 44), Talent Management (SR p. 44), Current and future employees (SR p. 56)		
Diversity and Equal Opportunity					
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity.	Percentage of age groups not reported for Board of Directors. Outokumpu does not collect the minority group status of employees.	Personnel in numbers (SR p. 39–41)		
Supplier Human Rights Assessment					
G4-HR10	Percentage of new suppliers that were screened using human rights criteria.	The percentage of all new suppliers screened is not available. Outokumpu aims at reporting it in 2016.	Suppliers (SR p. 55)		
Local Communities					
G4-SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs.	Percentage not reported, information not available. Reporting will be developed in 2016.	Community engagement (SR p. 58)		
G4-SO2	Operations with significant actual and potential negative impacts on local communities.		Significant impacts on communities (SR p. 57)		
Anti-corruption					
G4-SO4	Communication and training on anti-corruption policies and procedures.	Total number of white-collar employees received training reported. This includes the Outokumpu leadership team. The regional details are not reported due to high completion rate and privacy reasons. Data regarding business partners are not available. Reporting will be developed in 2017.	Compliance (SR p. 60), Personnel by employee group, region and gender (SR p. 41)		
Public Policy					
G4-SO6	Total value of political contributions by country and recipient/beneficiary.		Public sector and sponsoring (SR p. 59)		

		Omission	Annual/Sustainability report 2015	Global compact	ISO 26000
Anti-competitive Behavior					
G4-SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.		Compliance (SR p. 60), Significant legal proceedings (AR p. 25–26)		
Compliance					
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.		Environmental legal compliance (SR p. 33), Significant legal proceedings (AR p. 25–26)		
Customer Health and Safety					
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement.		Outokumpu's stainless steel is safe (SR p. 10)	1	6.7
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes.		Outokumpu's stainless steel is safe (SR p. 10)	1	
Product and Service Labeling					
G4-PR5	Results of surveys measuring customer satisfaction.		Customers (SR p. 54)		
Compliance					
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.		Outokumpu fulfills legal and customer requirements (SR p.10)	8	6.7

Independent Practitioner's Assurance Report

To the Management of Outokumpu Oyj

We have been engaged by the Management of Outokumpu Oyj (hereinafter also the Company) to perform a limited assurance engagement on selected sustainability disclosures for the reporting period January 1 to December 31 2015, disclosed in Outokumpu Oyj's Sustainability Report 2015 (hereinafter Sustainability Reporting). In terms of the Company's GRI G4 reporting and G4 Content Index, the scope of the assurance has covered economic, social and environmental sustainability disclosures listed within the Specific Standard Disclosures as well as General Standard Disclosures G4-10 and G4-11.

Management's responsibility
The Management of Outokumpu Oyj is responsible for preparing the Sustainability Reporting in accordance with the Reporting criteria as set out in the Company's reporting instructions, the G4 Sustainability Reporting Guidelines and the G4 Mining and Metals Sector Disclosures of the Global Reporting Initiative. The Management of Outokumpu Oyj is also responsible for such internal control as the management determines is necessary to enable the preparation of a Sustainability Reporting that is free from material misstatement, whether due to fraud or error.

Practitioner's independence and quality control
We have complied with the independence and other ethical requirements of the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

PricewaterhouseCoopers Oy applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's responsibility
Our responsibility is to express a limited assurance conclusion on the Sustainability Reporting based on the procedures we have performed and the evidence we have obtained. Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to Outokumpu Oyj for our work, for this report, or for the conclusions that we have reached.

We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". That Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Sustainability Reporting is free from material misstatement.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other disclosures in the Sustainability Reporting. The procedures selected depend on the practitioner's judgement, including an assessment of the risks of material misstatement of the Sustainability Reporting.

Our work consisted of, among others, the following procedures:
- Interviewing senior management of the Company.
- Visiting one site in Sweden.
- Conducting two video interviews with sites in Finland and the United States.
- Interviewing employees responsible for collecting and reporting the information presented in the Sustainability Reporting at the Group level and at the site level where our site visit and video interviews were conducted.
- Assessing how Group employees apply the Company's reporting instructions and procedures.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.
- Testing the consolidation of information and performing recalculations on a sample basis.

Limited assurance conclusion
Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Outokumpu Oyj's Sustainability reporting for the reporting period ended 31 December 2015 is not properly prepared, in all material respects, in accordance with the Reporting criteria.

When reading our assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

Helsinki, March 7 2016

PricewaterhouseCoopers Oy

Niina Vilske
Partner, Authorised Public Accountant
Assurance Services

Sirpa Juutinen
Partner
Sustainability & Climate Change

Outokumpu Oyj

Corporate Management
Riihitontuntie 7 B, P.O. Box 140
FI-02201 Espoo, Finland
Tel. +358 9 4211
Fax +358 9 421 3888

sustainability@outokumpu.com
www.outokumpu.com


www.outokumpu.com