

Sustainability Report 2012

Outokumpu's Annual Report 2012 is published online at www.outokumpu.com/reports

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CEO foreword



“Our track record as an industry leader in sustainability is testimony to our contribution to society.”

Check video:



The importance of sustainability has been growing alongside increasing concern about the accelerating deterioration of natural resources and the consequences for economic and social development. Along with increased awareness, companies have started to inject sustainability into their operations and rightly so; we all need to take responsibility for ensuring we do not consume our own planet.

Outokumpu developed its first environmental policy already in the 1960s. Since the 1990s, we have reduced our carbon footprint by 40%, and we are targeting a further reduction of 20% by 2020. We will achieve this by improving energy efficiency, using low-carbon energy sources and continuously improving our production processes.

Today, sustainability is an integral part of our operations and embedded in our products. Stainless steel in itself is a sustainable material, optimal for a more sustainable world; it is 100% recyclable, strong and durable, corrosion and heat-resistant and hygienic. The environmental impacts from its use are close to non-existent.

We have worked hard to form a perfect life-cycle, making sure that we create products that stand the test of time, even in the most demanding conditions; products that at the end of their long life-cycle are re-used to make new products. Today, the recycled content in our stainless steel is more than 80%, compared to the industry average of 60%, an achievement confirmed by an external auditor in 2012.

In 2012, we also continued to receive wide recognition for our sustainability work in general. Outokumpu was included in the Dow Jones Sustainability World Index for the sixth time running and the Carbon Disclosure Leadership index for the third consecutive year. For the first time, Outokumpu was also rated Prime company by oekom research AG. The recognition we have received is encouraging, and it spurs us on to improve our performance even further.

The Dow Jones Sustainability Index gave our climate strategy, environmental policy and management systems the highest possible score. I am particularly proud of the fact that in Occupational Health and Safety, Outokumpu was deemed to be the industry leader. The commitment of our highly skilled employees is key to our success, and we want to provide a safe working place everywhere we operate. Thus, we will continue to implement efficient safety systems and processes, and strive for full employee engagement.

At the end of 2012, after acquiring Inoxum, Outokumpu became the new global leader in stainless steel. We are now rapidly taking new production units and professionals from Inoxum on board our environmental program. We want to continue to be an industry leader in sustainability as well, and I have no doubt that we can achieve great results together.

We believe that stainless steel and high-performance alloys are the materials for building a long-lasting world. Sustainability sets the basis for our competitiveness and future growth. As global leader, we will continue to work together with our customers and partners to create solutions for the tools of modern life, and for the world's most critical problems like energy, clean water and efficient infrastructure.

Our track record as an industry leader in sustainability is testimony to our contribution to society.

Mika Seitovirta,
CEO

A question of common sense

Why stainless steel and producing it in a responsible way are Outokumpu's best contribution to sustainability

Outokumpu stainless steel builds renewable energy solutions

Torresol Energy of Spain uses Outokumpu steel in first commercial central-tower heliostat plant in the world, with heliostats reflecting the sun's heat to a central tower that absorbs 95% of the heat energy and generating enough electricity to power 30 000 homes when finished.

Shuweihat desalination plant in the United Arab Emirates provides water in a country which lacks natural freshwater resources. Outokumpu's duplex stainless steel was chosen for its high corrosion-resistance, strength and possibility of thinner material gauges.

Crescent Dunes Solar Energy Project in Tonopah, Nevada, USA is the largest power plant of its kind in the world, providing some 100 MW of clean renewable and sustainable energy, even when the sun hasn't shone for up to 15 hours. Outokumpu supplied constructors quarto plate tailored for their hot nitrate salt storage tanks.

A Buddhist temple in Chounburi, Thailand lays its concrete foundation with lean duplex reinforcement bar from Outokumpu. The ambitious goal is to have the structure of the Chedi, or the pagoda, to serve more than one thousand years.

Question: What is the single biggest stainless steel product in the world?
Answer: The humble kitchen sink. Along with cutlery, these common household items are used in hundreds of millions of homes around the world. It just so happens that the kitchen sink is also a great example of the benefits of stainless steel: the need to withstand daily wear and tear; constant subjection to water, corrosive substances and heat; the need to look good every single day of the year with a minimum of effort; and last but not least, the ability to uninstall the product and recycle it at the end of the product's life.

Outokumpu claims stainless steel is good for the planet and its future. And that producing more of it in a responsible way, as a substitute for more traditional materials, is the company's best contribution to sustainability.

This argument is based on the fact that the world needs stainless steel to build solutions to address the global megatrends in a sustainable way. These megatrends include the pursuit of economic growth, the rise in world population, urbanization and mobility, as well as climate change and the scarcity of natural resources.

The big industries of the world – oil and gas, chemical, engineering, medical, consumer goods, construction, transport and energy – are under immense pressure to deliver more goods in a sustainable manner, be it energy, clean water, housing or transport. To do that, they need machinery and equipment that is built from materials with exceptional properties: strong but light, durable, corrosion-resistant, heat-resistant, hygienic and recyclable, yet beautiful to the eye. They need stainless steel.

It's a well-researched fact that stainless steel is a far more sustainable material than carbon steel or similar materials, which rust and corrode, have more limited features or end up as landfill after some years. The simple fact is that high-quality stainless steel can last for centuries.

One of the most fascinating and unique qualities of stainless steel is its ability to self-repair. A damaged surface interacts with oxygen from either air or water to return the surface to its original state. This self-healing property, called self-passivation, means maintenance or replacement costs are virtually non-existent. It both increases the life span of the product, and preserves the natural beauty of stainless steel.

To be called stainless steel, the material must contain a minimum of 10.5% chromium. In fact, it's the chrome that makes stainless steel stainless: it gives stainless steel its corrosion and heat-resistant properties, ideal for applications like heavy industry, bridge-building and transport. Adding chrome to iron and other alloying compounds give stainless steel strength and durability, which allow lighter

components to be built without compromising safety or mechanical properties.

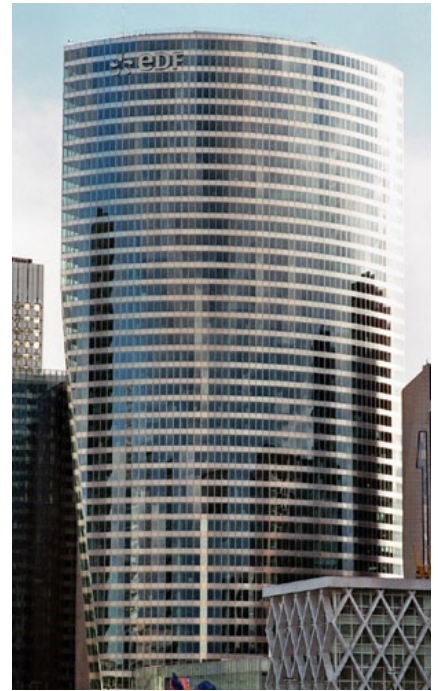
Outokumpu is the only stainless steel producer to be backward integrated – that is, to have its own chrome mine totally integrated with a large stainless steel mill to form a seamless operation that maximizes both efficiency and safety for the environment.

When a stainless steel product comes to the end of its life, we can feed 100% of the stainless steel back into production, without any degradation, to make new stainless steel and bi-products. This not only saves depletion of scarce natural resources, but also saves all the energy and costs related to mining and processing new materials.

Stainless steel from Outokumpu contains an average of over 80% recycled material compared to the industry average of 60%. Just to illustrate what this means for reduced energy consumption, this 20% difference in Outokumpu's own annual production alone already saves around 2 million tonnes of carbon dioxide a year, which is the weight of about four supertankers.

We only have one planet and it's important to understand how we can minimize the impact of our growing consumption on the environment while maximizing benefits for ourselves. By calculating the total life-cycle cost of materials – from supply and production to usage and end of life – we can see stainless steel affords the best of both. It neither benefits business or the environment to look at just short-term production cost or price.

Outokumpu carries on this life-cycle thinking in high-performance stainless steel and alloys. Because of superior characteristics, these advanced materials bring new opportunities for designing more sustainable products in, for instance, aerospace and medical appliances, where correspondingly heat-resistance and biocompatibility simply have to be the best there is. In the future, we might also see even other advanced materials such as carbon fibers and nanomaterials in special applications. Whatever tomorrow brings along, Outokumpu will be there, producing materials for a sustainable future. ■



“Architecture, building and construction are a focal point for sustainability because this sector represents such a large percentage of society's raw materials, energy, emissions and land fill waste. The latest demands from large building owners are for designs that achieve a minimum building service life of 75 years or more without replacement needs. Taller buildings are a good solution for sustainability because they help to counter urban sprawl, enable mass transit efficiency and allow for more green spaces. Metal cladding is a popular material choice for tall buildings because it reduces building weight, which in turn reduces structural component cost. Most of the world's population lives in areas with coastal and/or deicing salt exposure and in the developing world many locations also have high pollution levels. All these requirements for longevity, strength, corrosion-resistance and aesthetic properties make stainless steel a logical material choice in bridge decks, high-rise buildings and industrial structures alike.

“Selecting the correct stainless steel and finish is critical to achieving success in our sector. Outokumpu has sponsored atmospheric corrosion research in locations around the world and stainless structural research. Both characteristics led to the specification of 2205 duplex for the King Abdulaziz Center for Knowledge and World Culture in Saudi Arabia.”

Catherine Houska,
Senior Development Manager,
TMR Consulting

OUTOKUMPU STAINLESS STEEL

+80%

RECYCLED CONTENT*

100% recyclable - Products carbon footprint decreased 40% in 15 years - € 180 million in direct environmental investments in last 30 years - Energy efficiency improved by 4% since 2007 - Life cycle information on stainless steel products available online

OUTOKUMPU

More out of less

How embedding sustainability in operations
helps both Outokumpu and the planet



Photo courtesy of Rajakiiri Oy.

In addition to having excellent life-cycle qualities, stainless steel is an ideal material to build solutions for a more sustainable world. But it's not only what you do, it's how you do it. Outokumpu aims at responsible production because it makes the company more competitive as well as being good for the planet. For example, Outokumpu melt shops emit over 90% less direct carbon dioxide than steel production based solely on virgin materials, with 70% less energy consumption. As the new global market leader, the company wants to set a good example and be a benchmark in sustainable operations for the industry.

Helping the planet can mean helping profitability too

Juha Ylimaunu, Senior Vice President – Environment & Quality at Outokumpu, explains: “We have a long tradition in environmental protection. Energy efficiency, better use of raw materials and recycling go hand in hand with product development, production efficiency and economy. We have always aimed to make more out of less.”

Outokumpu ensures responsible practices across its operations via a cross-functional network. Guidance on everyday priorities is driven by a uniform strategy that also targets safety, stakeholder priorities, risk management and the needs of the environment.

Ethical sourcing of raw materials

Outokumpu has developed materials that make the most of nature's valuable and irreplaceable resources. It has an ongoing dialogue with its suppliers and business partners to ensure its own ethical and safety standards, legislation and increasing stakeholder expectations are taken into account in the materials it purchases. Outokumpu participates in the development of industry sourcing practices and trains its procurement staff extensively.

In 2012, the company undertook an extensive supplier survey to review the Environmental Management Systems (EMS) and Occupational Health and Safety (OHS) policies of its suppliers. The subsequent evaluation of supplier performance and practices covered more than 95% of Outokumpu's total spending on materials and supplies. From this, Outokumpu has created a set of supplier requirements covering over 90% of Outokumpu's spend on procurement and helping the company in doing site audits at suppliers.

Addressing climate change and energy efficiency

Because of the high temperatures and heavy machinery needed to produce stainless steel, the industry is very energy-intensive, even if that burden is offset by the net benefit of stainless steel for sustainability. Outokumpu prides itself on proactivity, and its Environmental Management System aims at continuous research and improvements in direct and indirect energy consumption and waste management.

Over the years, the company has made considerable progress reducing emissions, waste and the use of energy. The carbon footprint of Outokumpu's main products is over 40% smaller than it was in the 1990s, a massive 5.4 million tonnes reduction in CO₂ emissions. Over the last 10 years alone, the company has reduced CO₂ emissions by 25% for each tonne it produces. There is a further target to reduce direct and indirect CO₂ emissions by 20% per tonne by 2020 by energy efficiency, low-carbon electricity, optimal production levels and smarter travel and logistics.

For energy, Outokumpu uses natural gas, propane, heavy fuel oil and electricity. Its total energy consumption equals that of about 140 000 households or 20% of a nuclear power station. In the past five years the company improved efficiency by some 6%, equivalent to the energy consumed by about 7 000 homes. The company aims to save a further 5% energy consumption by the year 2020, through more efficient use of raw materials, process integration, heat recovery, and increasing use of low-carbon energy sources, such as hydro-electric wind power. Over 70% of the electricity Outokumpu uses already originates from low-emission sources.

Waste management

In waste management, the company tries to find preventative remedies through new processes, use of by-products and Best Available Technology. For example, when making fine concentrate at the mine, Outokumpu uses only gravity and water, no chemicals. Outokumpu also recycles waste materials like carbon monoxide throughout the production process.

The high temperatures in stainless steel production require huge amounts of water for cooling purposes. Outokumpu treats water with chemicals to render it clean and safe. In the Tornio plant, for instance, when water is eventually discharged, there are fewer metals in it than natural loadings in local rivers.

Outokumpu continues to research, monitor and develop solutions to reach its ultimate goal for zero waste material in stainless steel production.

The company carefully monitors former production sites and, if feasible, restores them to their natural state.

Recycling

By recycling throughout the entire value chain, from raw materials to end of life, Outokumpu is able to proactively reduce its energy consumption, emissions and waste. The company's recycling activities begin with feeding scrap into its manufacturing process. 80% of the company's stainless steel produce comes from recycled material, compared to the industry average of below 60%.

Outokumpu also recycles other production-related materials very efficiently. Over the last decade, Outokumpu has invested significant amounts of money and resources in order to find ways to utilize and recycle inevitable material streams related to steel and ferrochrome production. The Group has developed various different slag products, for instance using slag in road building as a substitute for crushed stone. As it turns out, Outokumpu's slag has proven to give better road performance in icy conditions than conventional road materials. Outokumpu solves the problem of dust by efficiently capturing over 99% of it, after which dust goes through treatment where metals are separated and returned to the melting process. Water is recycled and, for instance, at the mill in Tornio, used ten times on average. Afterwards it is used for making for instance concrete.

When in use, stainless steel has minimal environmental impacts throughout its life-cycle, as many studies into life-cycle management show. And, last but not least, the stainless steel end product at the end of its life cycle is fully recyclable. Outokumpu is playing its part to increase take-back through product design, training and campaigns, for instance with the World Steel Association's recycling initiative.

What next?

Says Juha Ylimaunu: “By 2020, 95% of all our production-related material side streams should be recycled and the carbon footprint of our main products should be further reduced by 20% per tonne. We are a global enterprise and the expanding markets are outside Europe. It is widely accepted that European steel is produced with less emissions than steel produced elsewhere and our technology is a front-runner. We have the will and the know-how, and that is the basis for sustainability.” ■

Health and safety in the genes

How health and safety grew to be a core principle of Outokumpu's operations

In 1975, around the time Outokumpu expanded its interests in stainless steel, a young medical doctor called **Markku Huvinen** got his first job as plant physician at the Tornio works. The company had 16 mines back then. Markku remembers a specific day on June 1975: “One of our sintering plant workers came in, blew his nose and asked me ‘What does this do to my health?’ It was a legitimate concern. I asked around about dust exposure in stainless steel production but to my surprise there was no scientific data available. I’m glad Outokumpu had the foresight to take this seriously. Unlike most stainless steel makers, having our own mine has forced us to prioritize health and safety in all our operations. It’s in our genes.”

“Outokumpu intends to remain the leader also in health and safety by researching, anticipating and responding to concerns.”

Markku Huvinen,
Chief Medical Officer

Markku initiated the world’s first systematic measurement of exposure to chromium and other compounds connected with stainless steel production and managed it for the next 13 years before moving to the head office. He has since gained his PhD in the effects of chromium exposure to respiratory health in the stainless steel industry.

To be fair, the company began protecting the health of its employees long before this. Outokumpu opened its own hospital in 1913 for staff and their families. It ran its next hospital for 35 years before selling it to the public health service for one Finnish Mark (about ten euro cents). The company first started monitoring dust exposure in 1938, a year after wet drilling was introduced, and held its first stakeholder safety committee in 1942.

In mines, there can be no compromise on safety. And today’s Outokumpu has benefited from that. The same people that made the company’s mines safe helped to build today’s steel mills, where lost-time injuries per million hours have dropped to over a quarter of what they were just during the last decade.

Making safety a science

Today, the company’s two main safety concerns are workplace accidents and emissions in the environment – be it substances or noise. The company constantly reminds people of this with its mantra of “Safety first – everyone, every time, everywhere”. As with most Nordic companies, Outokumpu’s Occupational Health and Safety (OHS) is characterized by a strong medical presence, differentiating it from many other stainless steel providers. The OHS team has a strong medical interest in the company’s workers, works with them in the field, conducts extensive medical studies and provides scientific evidence to help the leadership team make business decisions.

Says Markku with more than a little modesty: “It’s really the people who design, build and manage the technical solutions that ultimately make the working environment safe and healthy. We just help them out.”

With its chrome mine, Outokumpu has absolute control over the safety of its chrome sourcing and applies the same rigor to the safety declarations and ethical sourcing of other raw materials.

Although research has shown responsible stainless steel production is not harmful, the company continues to participate in studies about potential effects on health and environment. It carries out nonstop monitoring itself. All results point to negligible quantities of metals (iron, chromium, nickel) in harmless form in the air and water. In fact, the air quality around Tornio

plant, for instance, is better than that of similar-sized communities elsewhere in the Nordic countries.

Transparency helps everyone

As new technology emerges, Outokumpu constantly introduces improvements to its processes that promote safe production. Supported by the OHS team, the company also aims to live up to today’s expectations regarding speed in disseminating information and responding to concerns, which today is measured in hours, even minutes. Markku and his team run seminars, open houses and community debates to address public concerns and to share the latest research results.

The integration with Innoxum opens the door to sharing best practice in safety. As the new market leader in stainless steel and high-performance alloys, Outokumpu will have an even broader role to play in health and safety.

“It’s trickier than it sounds because each country has its own practices and legislation. That’s why our work with industry forums, like ISSF, WSA, Eurofer and ICDA are so important,” says Markku. “We will take a global view to exposure monitoring with Tornio as the benchmark, but with such a wide scope, we will prioritize research that makes the most sense. We’re committed to publishing all research so that customers, business partners and even competitors can benefit.”

The benefits of securing a safe working environment for Outokumpu are clear. As well as having the information to proactively minimize potential business risks, the company can contribute to a healthier, happier workforce, secure product quality, minimize production downtime and build reputation.

The work of Markku and his team continues. The latest in a long line of published studies is a cancer study that strongly indicates there is no added risk of cancer to individuals working in steel mills and living nearby. Next year will see the publication of results and recommendations of ongoing research into exposure to noise levels in order to prevent loss of hearing.

Outokumpu has built a reputation for scientific research and cooperation, resulting in safer operations and healthier environment. And all because underground mining gave an extra safety dimension to the company’s operations.

Says Markku: “When I look back, it has been worth all the effort. The physical hazards of producing stainless steel are real. Outokumpu can’t remove those risks but it can control them. Outokumpu intends to remain the leader also in health and safety by researching, anticipating and responding to concerns.” ■

Transparency in stainless steel

Why Outokumpu is raising the level of its stakeholder engagement to that of its sustainability performance

It's understandable that industry leaders face increased stakeholder expectations on their sustainable performance and transparency. And it's no different for Outokumpu, the world's new number one in stainless steel and high-performance alloys.

Outokumpu's philosophy around sustainability performance reporting is to be open and visible, recognized and respected. And there are clear benefits to making this philosophy a reality. In the same way that sustainable performance is both good for the planet and makes a company more competitive, so transparency into a company's performance meets stakeholder's needs for information as well as strengthening the company's own performance, brand and reputation. Outokumpu aims to set a positive benchmark in the industry in both performance and reporting.

In the public eye

There is growing interest in sustainability worldwide. Customers, banks and investors often demand verified sustainability information as part of their contractual requirements. Media headlines about carbon footprint, use of raw materials, recycling and supply chain ethics are more commonplace than ever. Assuming the role of global market leader involves communicating with stakeholders on an even broader scope.

When it comes to basic information about its operations, Outokumpu has a comprehensive and systematic approach to transparency in energy consumption, emissions, health and safety statistics, product declarations and other sustainability-related activities. In its quest for integrated and balanced reporting across economic, social and environmental issues, it is one of the industry's first companies to adopt compliance with the new ISO 26000 standard, in addition to its GRI-compliant reporting structure.

But openness is demonstrated also by how a company uses this information. In society at large, Outokumpu interacts with a diverse range of stakeholders: customers, employees, local communities, shareholders, investors, analysts, suppliers, associations, the public sector, authorities, non-governmental organizations and communities, even individual members of the public. Each has their own specific information need but Outokumpu has to make sure the source and accuracy of the information is the same.

In 2012, the company carried out an extensive survey in the Asia-Pacific region on customers' perception of sustainability. It showed that environmental issues, such as Environmental Product Declarations (EPDs) are becoming even more important in purchasing decisions and that customers want a high level of confidence in the overall sustainable performance of their suppliers. Outokumpu is committed to expanding customer communication through seminars, workshops, discussion panels, and various customer channels, such as its customer feedback system.

As market leader, Outokumpu will seek to expand its presence in global forums; industry bodies, including the World Steel Association, International Stainless Steel Federation and Eurofer; various public sector bodies, such as the UN Global Compact, ICC and the World Economic Forum; numerous organizations concerned with corporate responsibility, such as Transparency International and CSR Europe; national and regional medical institutions and authorities; and an international network of universities.

Building relationships with local communities

Outokumpu's relationship with local communities is important because of the symbiotic relationship that governs the demand and supply of labor, resources, talent, knowledge and subcontracting. In Tornio, northern Finland for example, the site of Outokumpu's state-of-the-art, integrated chrome mine and stainless steel mill, the company builds dialogue with local stakeholders through open days, meetings, information sessions, training, apprenticeships and company visits.

Says Pekka Pelttari, Chairman of the Board of Tornio City Council: "People in and around Tornio are proud and happy to have Outokumpu here. I'd go so far as to say that the company is a pillar of society. As the main employer in the region, providing a quarter of the jobs, they bring economic wealth, creating a knock-on effect for other companies to thrive and generating local tax revenue. More than that, they bring a degree of security and stability to the area in a time of economic unrest. When we heard that Outokumpu was acquiring Inoxum we considered the effect on our community but we strongly believe that Tornio will continue to have a central role in Outokumpu's future and vice versa."

Recently Outokumpu has injected a huge 410-million-euro investment into the area, which has offset job reductions that some other companies in the area have been forced to make. For their part, the city authorities have made sure that land use and town planning serve the interests of economic development and that there is open communications between companies, employee representatives and the media.

"Heavy industry naturally sometimes attracts criticism. There have been a couple of unfounded environmental claims about Outokumpu, which has actually annoyed local inhabitants. But we take a pragmatic approach based on facts, independent research and constructive dialogue with all parties. Even though emissions are well within stringent legal limits, they can always be lower. That's why Outokumpu continues its program for improvements and is one of the best in the world.

"These days, information channels are faster, easier and cheaper for both organizations and individual people to access. But in the end it's a question of trust. Once you get to know people on a personal level, you can explore mutual interests to create a very positive influence for all the people that live here." ■

Outokumpu in indices

- Dow Jones Sustainability World (sixth year)
- Carbon Disclosure Leadership Index (third year)
- oekom research Prime company (first year)

Sustainability – strategic success factor

Outokumpu's business is based on sustainable products. We want to provide added value for customers and the Group's stakeholders. We are committed to operate in ethically sound manner through responsible business practices and sustainable production, throughout our supply chain.

Sustainability is a precondition for long-term competitiveness and future growth opportunities. Its growing role in the future world highlights issues like resource scarcity, urbanization, global climate and water challenges, combined with high and ever growing public attention. These are well acknowledged as strategic issue for Outokumpu.

Based on our business thinking, we want to answer the future demand for more sustainable societies and solutions. Responsibility has become an element in the selection of preferred supplier, while customers are demanding more efficient products and solutions. For Outokumpu materials, sustainability is an embedded feature. We see this trend as an opportunity and want to be industry frontrunner and secure our leadership by proactively seeking new ways and solutions, continuously aiming at a higher level of performance.

Outokumpu has strong position and excellent results in this area. Our decades of effort in the fields of sustainability have been recognized by several independent institutions. Group is currently ranked best sole stainless steel manufacturing company by Dow Jones Sustainability Index. Recycled input of our material is more than 80%, well over the industry average. The carbon footprint of products today is over 40% lower than in the 1990s. Energy efficiency has been improved and best available technology utilized. We have significantly reduced waste landfilled. Our long standing program for occupational health and safe workplace, also for suppliers and contractors, are some examples of our responsible practices.

Although the past year 2012 was shadowed by challenging business environment, we managed to progress with our sustainability work as planned. We finalized supply chain evaluation and created new supplier requirements in order to secure and strengthen responsible sourcing. Group started to implement ISO 26000 standard for social responsibility. We reduced our carbon profile and improved energy efficiency. We commissioned new ferrochrome facility with almost 60 million euros of environmental investments. Outokumpu continued active stakeholder dialogue, focusing on customers, investors and local communities.

Group starts new era in 2013, after the acquisition of Inoxum we face the even wider responsibility as the largest stainless steel producer in the world. Now we truly have the possibility to show leadership and lead by example. Our first challenge is to integrate and implement new company structure and culture with responsible business practices, including setting new targets for sustainability. This will mean great deal of work but we are convinced about our bright future and achievable results. Together we are stronger than separate, building on strengths of the combined Group. New businesses have great prospects for added value for the new concept of sustainable Outokumpu. For instance, former Inoxum units are known for quality, improvements of process efficiency and high performance products.

We are in a unique position with our customers and partners to create materials for the sustainable future. We continue to build on our strong heritage in sustainability and responsibility, product quality and technical expertise. Together we are set for outstanding results and prosperity.

We want to build a sustainable world

Our product is an important aspect of sustainability.

Stainless steel offers solutions that address humanity's growing demand for clean energy and pure water, and new opportunities for use of the material are emerging. Renewable energy solutions such as solar power, biofuels and wind power require materials that can be sustainably sourced with low life-cycle costs. In applications such as these, stainless steel is often the optimal choice. In the past year Outokumpu stainless steel has been used in innovative solutions such as the Crescent Dunes Solar Energy Project in Nevada, USA, and the joint Japanese-European experiment on nuclear fusion. Energy from nuclear fusion, if rendered commercially feasible, is hailed as the answer to the energy, environmental and climate challenges facing humankind.

The environmental footprint of stainless steel products has been identified as being an area of material importance to Outokumpu. Outokumpu has two externally-verified environmental product declarations (EPD) that comply with green building standards. To complement these Outokumpu is launching EPDs for long products, such as stainless steel reinforcement bars.



All the latest requirements for longevity, strength, corrosion-resistance and aesthetic properties make stainless steel a logical material choice in bridge decks, high-rise buildings and industrial structures alike.

Catherine Houska,
Senior Development
Manager, TMR Consulting

Forerunner in green building requirements

Outokumpu is the forerunner in adapting into green building requirements. The Group provides third party verified Environmental Product Declarations (EPDs) for cold and hot rolled stainless steel. Part of our customer-oriented focus is to provide information on the latest life-cycle demands. Our ability to provide information for architects and builders a means for assessing the sustainability performance achieved through the use of stainless steel, over the entire building life-cycle, has been recognized by our customers.

For example in 2012, Outokumpu delivered austenitic stainless steel for a unique student housing project in Education City in Doha, Qatar. The planned facility puts a high emphasis on sustainability in building and aims to achieve a platinum rating in line with the LEED (Leadership in Energy and Environmental Design) Green Building Rating System. LEED is an internationally recognized mark of excellence in sustainable

construction. Sustainability factors were decisive throughout the project for all suppliers involved in the construction phase. Stainless steel is an inherently sustainable material and to support this Outokumpu has issued factsheets for the LEED and other international building standards specifying how sustainability aspects are supported by stainless steel.

We build the future from the past

Steel is the world's most recycled material. Estimates indicate that the current end-of-life recycling rate for stainless steel is some 82%. In global terms, approximately 60% of the raw material used in making new stainless steel is recycled steel. In Outokumpu's manufacturing operations, the recycled content typically exceeds 80%, and the average for all stainless steel products produced by the Group in 2012 was 87%.

The most important raw materials used by Outokumpu in producing stainless steel are recycled stainless and carbon steels. Together with metals recovered from waste products and by-products of the production process, they enable the recycled content of stainless steel produced by the Group to be raised even over 90%, significantly higher than the global industry average of 60%. In addition to recycled steel, alloying elements including iron-containing alloys and other metals such as chromium, nickel and molybdenum are also required.

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. 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.

Sustainable building solutions

"Architecture, building and construction are a focal point for sustainability because this sector represents such a large percentage of society's raw materials, energy, emissions and land fill waste," says Catherine Houska, Senior Development Manager at TMR Consulting. "The latest demands from large building owners are for designs that achieve a minimum building service life of 75 years or more without replacement needs. Taller buildings are a good solution for sustainability because they help to counter urban sprawl, enable mass transit efficiency and allow for more green spaces. Metal cladding is a popular material choice for tall buildings because it reduces building weight, which in turn reduces structural component cost. Most of the world's population lives in areas with coastal and/or deicing salt exposure and in the developing world many locations also have high pollution levels. All these requirements for longevity, strength, corrosion-resistance and aesthetic properties make stainless steel a logical material choice in bridge decks, high-rise buildings and industrial structures alike.

"Selecting the correct stainless steel and finish is critical to achieving success in our sector. Outokumpu has sponsored atmospheric corrosion research in locations around the world and stainless structural research. Both characteristics led to the specification of 2205 duplex for the King Abdulaziz Center for Knowledge and World Culture in Saudi Arabia."

Sustainable Products

After the initial investment in resources and energy to manufacture stainless steel, the use phase, in which the material is utilized in end products such as home appliances, interior design or kitchen equipment, demonstrates many sound sustainable characteristics.

Since only extremely low levels of metal ions are released from exposed stainless products in most normal environments, no harmful impacts on the environment result. In addition to its corrosion resistance, stainless steel also has good mechanical properties, and these can be exploited by manufacturing lighter components and products without compromising safety requirements. In addition to its excellent recyclability and the high levels of recycling achieved, Outokumpu stainless steel has other properties that support a sustainable society.

Durability

The durability of stainless steel has a positive impact on life-cycle costs. The fact that only minimal maintenance is required is good for both the environment and society. The combination of corrosion resistance and durability increases product lifetime. One result of increased durability is that unnecessary replacements and repairs, and the consequent need for virgin resources, can be avoided during the product life-cycle and recycling phases.

Hygienic and non-toxic

Stainless steel has a long history of use in applications where cleanliness and maintaining high levels of hygiene are important. Good examples are the medical and food-processing sectors. Stainless steel is the preferred choice for hospital equipment and surgical instruments as it can be easily cleaned and sterilized without degradation. For the same reason, much of the equipment used in pharmaceutical applications and food preparation is also manufactured out of stainless steel.

The unique properties of stainless steel have also helped make the process of desalination – producing potable water from seawater – economically viable. Many arid areas of the world now enjoy the benefits that follow from the availability of clean water.

Stainless steel surfaces do not affect the taste of food and drink and are easy to clean and disinfect. The quantities of metal ions released from stainless steel surfaces are not toxic to humans or the environment, and do not have a negative effect on indoor air quality in buildings.

Strong, light and safe

The high-strength stainless steels in Outokumpu's portfolio offer economic benefits: less material is required for a specific level of performance and fewer resources are therefore consumed in its production. High-strength steels can also absorb larger amounts of collision energy, improving safety levels in vehicles and other structural components and systems.



Recycled or reused when service life ends

The phase in a product or solution life-cycle when active use ends is known as "end-of-life". Events at this point in time are significant in terms of environmental efficiency. In practical terms, as stainless steel always has value, recycling techniques are efficient and the recycled steel market is a viable large-scale business. Due to the long service life of stainless steel, it is highly possible that the material is still fully "usable" even when the product it is part of has reached its end-of-life. In such cases, reuse of steel components should be considered, since avoiding the need to re-melt the steel could save even more resources. This is a particularly viable option in the construction sector.

Another method of improving sustainability is to take steps during a design phase of products that aid efficient recycling in the end-of-life phase. The environmental and sustainability benefits associated with recycling, including the conservation of non-renewable resources, related energy savings, the avoidance of undesirable emissions and reduced levels of waste, affect the whole of society. The average end-of-life recycling rate (also called the recovery ratio after use) for stainless steel is in the range of 80–90%. Stainless steel is used in a wide range of sectors, from architecture, building and construction and industrial machinery where the average recycling rate is over 90%, to sectors where the recycling rate is only some 60%. Based on these sectoral rates, also known as recovery ratios, the stainless steel industry follows the overall recycling efficiency.

Added value

Outokumpu supports customers by providing relevant information on the selection and use of different stainless steel grades. Outokumpu has, for example, registered materials in the IMDS database for the automotive sector. The Group is also ready to provide useful information on how to take advantage of stainless steel's unique properties in forms of sustainable construction.

Achieving results through cooperation

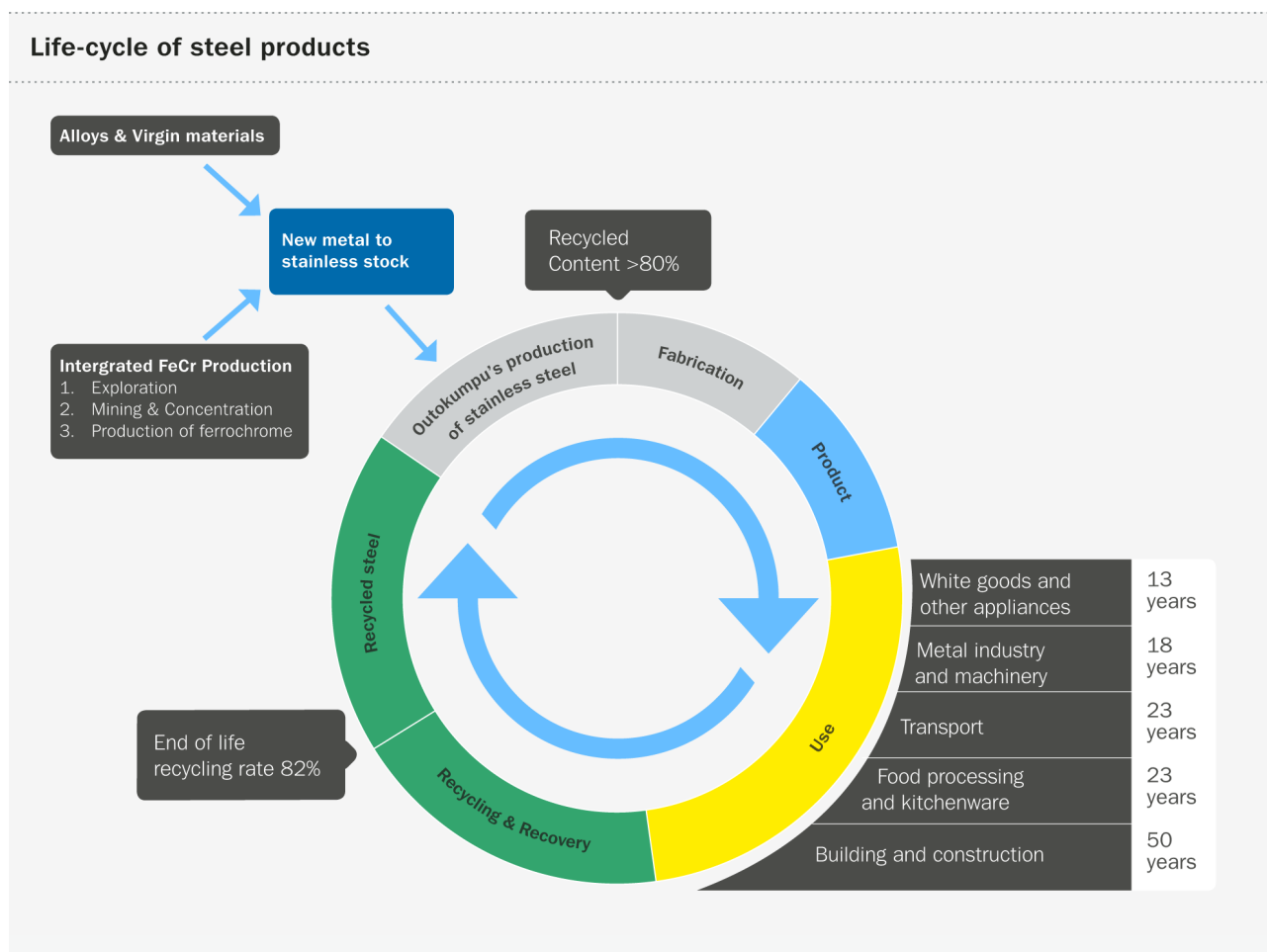
Outokumpu also cooperates with and supports customers by providing information about the sustainable and environmental properties of our stainless steels. For example, when the project proposal for the new Karolinska Hospital in Solna, Sweden was made, a number of environmental criteria and targets were established. Outokumpu helped supply the information on stainless steel required for the material to qualify for use in this huge construction project.

Product life-cycle

A life-cycle analysis reveals the environmental impact of a product over its entire life. The strengths of stainless steel are particularly visible from a life-cycle perspective.

In general terms, the material's properties enable lower life-cycle costs combined with lower environmental impact. For the last eight years, Outokumpu has been involved in Ecocycle, a wide-ranging research project being carried out in Sweden that has studied each aspect of steel's life-cycle with a view to defining the potential for improving environmental performance.

Life-cycle studies and related analyses have shown that raising the level of recycled content (recycled steels and recovered metals) in stainless steel production is one of the most efficient ways of reducing the overall environmental impact of the manufacturing process. As recycled material is a scarce resource and the metallurgical properties of some alloying elements are always required, achieving 100% recycled material content in the production process is not possible. Outokumpu has, however, succeeded in raising the input of recycled material to levels that are well above the industry average. The Group's efficient energy usage, choice of sustainable electricity sources and efficient use of raw materials in production also make important contributions to reducing life-cycle impacts.



To ensure we have a comprehensive view of life-cycle aspects involving stainless steel, Outokumpu is actively involved in related research projects such as the Swedish Ecocycle project. The primary conclusion resulting from

such studies is that the environmental burden associated with manufacturing one kilogram of a construction material such as stainless steel is not the best way of measuring its overall environmental impact. When impacts throughout a product's life-cycle are taken into account, materials which involve a higher initial burden per kilogram can turn out to be better choices from the environmental perspective.

Life-cycle analysis reveals the benefits of stainless steel

Scientific research indicates that the strength advantages offered by stainless steel allow lighter structures, saving significant amounts of energy over each product life-cycle, reducing the associated carbon footprint and leading to overall cost savings.

The safe use of stainless steel

Billions of people come into contact with stainless steel on a daily basis, and the lack of any resulting harmful effects is strong evidence of the material's non-toxic properties.

To underwrite this fact, Outokumpu and other companies in the industry have invested considerable effort and resources in studying safety aspects connected with the use of stainless steel. Outokumpu has also invested in the testing of specific materials for their safety in food-contact and drinking-water applications.

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. Health and safety issues are important not only during the manufacturing of stainless steel, but also when the Group's customers are further processing Outokumpu stainless steel, when products made out of stainless steel are being used, and when end-of-life steel is being recycled.

Since stainless steel is inert and non-reactive when employed correctly, the potential impact on people's health and safety is extremely limited. This is one of the reasons why stainless steel is so widely used in medical appliances and when manufacturing the equipment and tools employed in the food-processing industry.

Our impact on the environment

Stainless steel is 100% recyclable, hygienic, corrosion-resistant and the environmental impacts resulting from its use are almost non-existent. On the other hand, its production – both the manufacturing and reprocessing stages – does have an impact on the environment.

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

Because the life-cycle of stainless steel products is very long and recycling rate the highest among metal products the environmental impacts have to be analyzed always per life span, not only related to production phase. The use of steel in the modern society minimizes emissions by creating efficiency in e.g. transport, construction, industries and energy production. Due to these facts steel products are solutions in climate compact and protection of environment.

Outokumpu's way of managing environmental issues

Outokumpu's firm objective is to minimize the environmental burden of the Group's operations as much as economically and technically feasible. The basis of this work is the Environment, Health, Safety and Quality (EHSQ) Policy. This policy was renewed in July 2012 by CEO according to the feedback from internal units and customers.

All Outokumpu's production sites employ either Environmental Management Systems (EMS) or risk-based management systems, which help in avoiding spills and accidents that could be harmful to humans or to the environment. All these Group systems operate in accordance with the Group EHSQ policy and ISO 14 001, the international standard for environmental management systems. Typically energy efficiency is integrated into environmental management system, although many of Group's sites have certified also ISO 50 001 standards for energy efficiency. Additionally sites comply with the quality standard ISO 9 001, Outokumpu production sites have also Safety management system, some sites are also certified according to Occupational Safety standard OHSAS 18 001.

Both internal and external audits monitor the functioning of these management systems. With the help of these systems, the Group also provides the appropriate authorities with reports on its operations in all countries. At Group level, environment network meets regularly in working groups and environment committee to manage environmental operations and share best practices.

Outokumpu's aim is to harmonize and integrate internal EHSQ management systems. In 2012, e.g. Ferrochrome and General Stainless business areas had one integrated environmental certification. In July the second edition of Outokumpu EHSQ system manual and Group governance was published. The EHSQ Group perspective is aligned with the Group's management process and annual planning.

Operational efficiency is ensured by co-operating with one certification body, where Outokumpu's EHSQ and Energy management systems and certification is monitored using both internal and external audits. The number of EHSQ and Energy management systems non-conformities found by external auditor in our units during 2012 was less than 2011. Typically these non-conformities were minor and corrective actions were made as soon as possible. The Group also provides the appropriate authorities with reports on Outokumpu's operations in all the countries in

which we operate. At Group level, our operations are managed and best practices applied through our environment network and sub groups which meet once during each quarter.

Information on life-cycles and footprints demands reliable data

Stainless steel's very low environmental impact during its use, its durability and minimal maintenance requirements are widely recognized. And, at the end of their life, stainless steel products are also fully recyclable. Outokumpu's aim is to improve levels of sustainability in each phase of stainless steel products' life-cycle, from production through to reuse, and to secure a sustainable supply chain all the way from suppliers of recycled steel to the production of stainless steel products.

Many applications that employ stainless steel already have a beneficial impact by reducing the total environmental burden exerted by human society. On a global scale, current trends towards achieving sustainability and reducing the extent of climate change are strong.

Environmental management has to be able to answer both these challenges and needs for sustainable products and solutions. During 2012, Outokumpu focused increased attention on life-cycle-oriented environmental management. The importance of life-cycle data, both for internal use in highlighting areas where improvements are required and for external purposes in communications with customers and other stakeholders, has already been recognized.

As a sector leader Outokumpu continued to publish life-cycle-inventory data in own Environmental Product Declarations (EPDs) for Outokumpu's main stainless steel products. These are public documents which describe the main environmental effects and energy needs of the Group's stainless steel grades throughout their supply chain. We started a new project to gather similar data and make an EDP for our long products. Also new life-cycle inventory (LCI) data for ferrochromium products were updated in 2012.

In new Outokumpu our next challenging task is to collect and combine Innoxum units LCI data for new declarations. Our aim is to build similar knowledge over the high performance alloy products in order to cover full range of advanced materials offered by Group. The availability of robust and verified data is the starting point for managing sustainability throughout a product's life-cycle. Outokumpu's environmental and energy reporting, data management and analysis are supported by an Energy & Environment Reporting (EER) system which provides internal reporting and analysis tools for all the Group's production sites.

Emerging legislation and public initiatives

One element in operational environmental management is maintaining an awareness of emerging legislation. Outokumpu continuously monitors and evaluates legislative initiatives and evaluates their impact on the Group's operations. Outokumpu also participates in communicating the effects of emerging legislation and aims to supply decision makers with both industry-specific and expert information. Emerging legislation has also been identified as a sustainability issue of material importance to the Group. During 2012, we identified the main legislative initiatives and their probable financial impact; both these activities and impacts have been integrated into the Group's risk management processes and Group EHS experts continue to communicate and gather data in legislative issues together with industrial organizations.

The main new or upcoming items of legislation which have been identified include: implementation of the Industrial Emissions Directive in the European Union together with binding BAT values; the renewed Emissions Trading Directive; European legislation related to chemicals and product safety; the EU's Sulphur Directive, effective as of 2015, and the International Maritime Organization's decision on the sulphur content of marine fuels, waste and other environmental taxation, water and air quality legislation. The EU classification of nickel metal as a suspect carcinogen is a concern for austenitic stainless steel business. This non-scientific classification as a criterion to

exclude substances from use is included in the EU Ecolabel Regulation. The derogation is possible and already approved for certain product groups (mobile phones, laptops/computers) but needs intensive communication. The impact of all these initiatives on Outokumpu's operations is analyzed as part of the Group's annual environmental risk rating process.

The follow-up of site environmental permit status and legal compliance is a routine in quarterly internal Environmental Committee meetings. E.g. in August Tornio site got the new environmental permit as the first large steel plant in EU according to new Industrial Emission Directive and binding Best Available Techniques conclusions. Especially terms related to emissions of mercury, sulphur dioxide and nitrogen oxides were strict. Despite these Swedish authorities appealed the permit and the court process will start in Finland in 2013. Wildwood plant in Florida, USA got the closure permit for the percolation pond. Melt shop in Sheffield, the UK, continued the new permitting process by making BAT gap analyses in 2012. In Degerfors risk assessments update were done regarding EU Seveso directive.

Environmental goals and results

Target-setting is part of our continual improvement ideology and included environmental management systems. Outokumpu sets both Group-wide and site-level environmental targets. Group-wide targets are common targets that affect most Outokumpu sites. Targets at production sites are more specific.

Annual routines at all Outokumpu production locations include the setting and monitoring of independent environmental targets. These processes are built into the Group's environmental management systems and key targets are also set at Group level. Having concrete, measurable targets for our operations is a way of focusing attention on specific environmental and energy aspects throughout Outokumpu.

Outokumpu is committed to the long-term target of reducing the Group's carbon emissions profile (indirect and direct emissions) by 20% per produced tonne by 2020. The setting of this challenging target is a clear demonstration of Outokumpu's desire to improve the Group's energy efficiency, to contribute to reducing global emissions of carbon dioxide, and to participate in the transformation to a low-carbon society.

As with almost all corporate programs, environmental target setting and associated long-term goals will naturally be affected by the combination of operations with Inoxum. The baseline for long-term targets will be recalculated and the program reviewed during 2013. Units producing products other than stainless steel also have to be taken into account when defining specific targets. We will retain our way of working in which setting ambitious targets is part of our culture.

Environmental goals and targets

Group-wide goals for 2013

- No significant environmental incidents.
 - Climate change: Reduction of emissions in line with Outokumpu's long-term target of achieving a 20% reduction in direct and indirect CO₂ emissions by 2020, against the program baseline 2007–2009.
 - Energy efficiency: A further reduction of 1% in energy consumption per tonne of stainless steel processed (with 2007–2009 as the base period).
 - Materials efficiency: Further reduction in the amount of waste landfilled per produced tonne.
-

Site-specific goals for 2013

- Kemi mine: Reuse of barren rock and fly ash 500 000 tonnes and 250 000 tonnes respectively in 2013.
 - Tornio: Operational use rate of air-emission reduction equipment at processes over 99%.
 - Calvert: Develop concept for on-site briquetting solution enabling recycling of rolling, annealing and pickling side streams directly on the site, without external treatment.
 - Avesta: Reduction of direct process-related CO₂ emissions by 9% against 2012.
-

- Degerfors: Improvement of energy efficiency according to long-term target, 7% against 2012.
-

Group-wide results 2012

Based on the Group-wide targets for 2012, environmental work yielded great results.

- No significant environmental incidents: There were no significant environmental incidents involving Outokumpu operations during 2012. 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 CO₂ emissions by 2020, against the program baseline 2007–2009. The Group's total carbon profile per tonne of steel produced was reduced by some 8.5% compared to baseline figures. The main contributors to this achievement were improved energy efficiency, lower specific emissions and sourcing less carbon-intensive electricity.
 - Energy efficiency: The target of achieving a further reduction of 1% in energy consumption per tonne of stainless steel processed (with 2007–2009 as the base period) was achieved. Energy efficiency improved by 1.1% compared to 2011. Total cumulative improvement achieved during Group's low carbon program in energy efficiency against program baseline was 7.5%, equaling annually some 340 GWh.
 - Materials efficiency: The target was to further reduce waste to landfill per tonne of stainless steel produced. Material efficiency was not improved against the baseline, remaining virtually on same level.
-

Site-specific results 2012

- At the Tornio site, the energy efficiency goal is to achieve a 5% reduction in overall energy consumption by 2016 (compared to 2005) through the implementation of cost-effective energy-saving actions. Target for 2012 was to improve energy efficiency along the target of 2016 and it was achieved.
 - Kemi mine: Target to utilize more than 2 500 tonnes of fly ash from the Tornion Voima power plant and more than 250 000 tonnes of lumpy and barren rock to backfill the stopes of the underground mine were not reached. Due to interruption in mine production caused by the F3 project works to double the mining and ferrochromium production it was not possible to reach targets. The utilized amount of fly ash was 1 700 tonnes and over 99 000 tonnes was used in backfilling stopes. This was a good result under reduced production.
 - Improvement in materials efficiency at Tornio: The target to utilize more than 50% of steel melting slag as construction material was reached.
 - Melt shop in Sheffield, the UK: 70% of refractory bricks not sent to landfill as the material was utilized in useful ways according to the target.
 - Wildwood: The target to recycle and re-use pickling process water more efficiently, with the aim of achieving a 25% reduction in related volumes of wastewater, was reached.
-

Materials efficiency

Outokumpu's ultimate target is zero-waste stainless steel production. All streams of material which result from the Group's production activities are studied to find ways in which they can be fully recycled, reused or sold as by-products.

In general terms, all of Outokumpu manufacturing processes are developed in ways that allow valuable metal content to be retrieved from any resulting material streams. Outokumpu's strategy is to improve production processes by projects, continuous improvement tools like business excellence and OK>1 projects or by research programs which are often made together with external partners like universities or technology companies.

Slag and dust are the main by-products and waste which result from steelmaking. Considerable research and development effort has been invested by Outokumpu in methods of recovering valuable metals from slag and dust as they can then be used as substitutes for virgin raw materials in Group processes. One example is the filters used to minimize emissions into the environment by collecting more than 99% of the dust generated by Outokumpu's steel production operations. Dust generated by the company's melt shops is recycled, with collected dust fractions that have the highest metal content being used without further treatment and the remainder passing through a metal-recovery process. In the Nordic region, residues requiring treatment are transported to an external facility located in Sweden. The same facility is also used to recycle metal oxide material recovered from the Avesta acid-regeneration plant in Sweden. In the UK, the in-house metal-recovery facility is located on site and uses direct-current electric-arc melting to recover alloying metals such as chromium and nickel.

Materials efficiency and by-products

Outokumpu has invested more than EUR 10 million in developing slag-based products since 2001. The resulting products are employed in construction projects and used for neutralization purposes in industrial applications. In road construction, for example, slag products can replace virgin materials such as crushed stone aggregate. In northern Finland, where frost resistance is a very important property of road foundations, the technical performance offered by slag-based materials is actually better than that of natural alternatives. Since the 1970s, all ferrochromium slag from Outokumpu operations in Finland has been sold as road construction purposes, typically some 300 000 tonnes annually. Between 2010 and 2012 steel slag was also used for in-house construction projects, totally some 270 000 tonnes. During 2012, 90% of the slag produced in the UK was used in road construction. When used in an asphalt mix, slag offers increased grip values, a decrease in rut formation, reduced occurrence of aquaplaning and improved resistance to abrasion.

An example of continuous systematic search for increased waste utilization is a waste water sediment utilization project at the Tornio ferrochrome plant. Technical investigations and results from a test installation showed that the sediment material's properties make it a very effective barrier to water flow: after trials this waste material was used to seal the old Tornio landfill, replacing corresponding amounts of bentonite. The total amount used during the closure operations was 290 000 tonnes and the sealing was completed during 2012 according to environmental permit and legislation.

Improved waste utilization and less landfill waste

Outokumpu has the two fold aim of improving the Group's efficiency in the use of materials and reducing 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 now recycled and the amounts of waste sent to landfill have consequently been reduced at many Group sites.

At the Sheffield melt shop in the UK, this has been achieved in two ways: by reducing the total volume of waste and increasing the proportion of material sold as by-products. In recent years, two leading schemes have allowed the amounts of waste sent to landfill to be significantly reduced. The first of these uses processed slag as a replacement for virgin aggregate; on average 90% of all the slag produced at the Sheffield melt shop is now being used as a component in the asphalt used in road construction. Secondly, waste volumes have been reduced by crushing refractory bricks no longer suitable for use in making steel to produce a substitute for lime. Compared to the situation in 2006, the total amount of waste sent to landfill in 2012 was down by two-thirds. Development work is continuing, with the aim of eventually achieving the complete utilization of all by-products and waste materials produced by Outokumpu.

A new process for drying waste hydroxide sludge is being developed together with the Swedish recycling company SAKAB. The aim is to employ a vacuum process in generating a useful by-product as this involves significantly lower energy consumption than conventional drying methods.

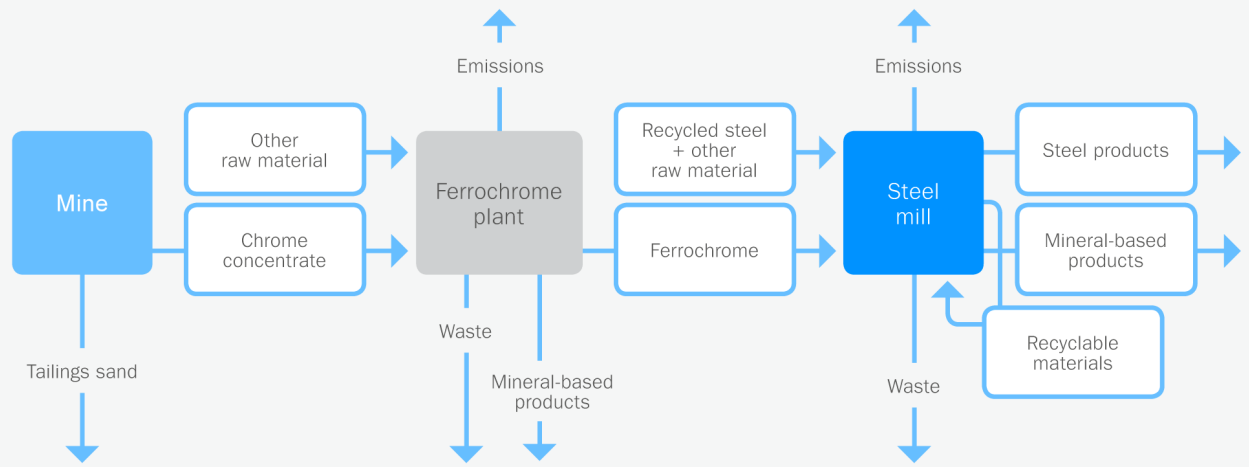
In Outokumpu's North American production facilities, mill scale, shot dust and other metallic residues are all sent off site for re-melting. Refractory elements from furnaces are recycled with any recoverable metals being first reclaimed before the refractory is crushed and utilized as aggregate in concrete. General waste from offices and canteens is collected and sent off site to be converted to electricity via waste-to-energy plants. From an environmental perspective, this sustainable waste-disposal solution is superior to landfill as it is a source of clean energy, conserves land and also lowers the risk of groundwater contamination.

Investing in research projects

Almost all significant waste streams resulting from Outokumpu's production processes are studied with the aim of reducing their environmental impact and eventually diverting all streams from landfill. Environment-related research projects coordinated by the Group's Tornio research facility during 2012 included:

- Steel slag as a raw material in concrete and for use in backfilling mine workings.
- Tests to evaluate fine steel slag as a material for neutralizing acidic mine effluents.
- The reuse in nickel production of acid regeneration salts produced at Tornio.
- Developing a method of manufacturing briquettes in an electric-arc furnace to recover metals from internal waste streams.
- Dust prevention studies in the melt shop. Research and development of AOD processing has been successful and the amounts of bag filter dust reduced significantly.
- Studies of slag foaming briquettes at the melt shop. The aim is to cause slag foaming in order to extend the life of refractories and also to treat metal oxide waste fractions in a feasible way in a separate electric arc furnace. A new slag product has been developed from material previously sent to landfill. This product replaces calcium oxide in the steel making process and is 100% reusable, hence decreasing the amount of landfilled material.
- Closure of tailings sand ponds at the Kemi mine with innovative structures made from a variety of residuals from a pulp mill, a power plant and the ferrochrome plant (for example gas cleaning sludge). Pilot-scale structures were built in 2012 and the project continues in 2013.

Material flow in the Kemi-Tornio area



Material balance

The table below provides details of the main material flows in Outokumpu's stainless steel production operations for the past three years.

Material balance

Materials used, tonnes	2012	2011	2010
Recycled steel	1 388 456	1 524 560	1 387 051
Recovered metals	79 985	57 325	80 408
Ferrochrome	249 215	240 417	230 508
Nickel alloys	105 690	92 120	71 674
Other alloys	89 923	88 294	82 356

Additives, tonnes	2012	2011	2010
Slag formers	261 542	259 583	251 446
Meltshop process gases	215 678	209 752	205 950
Pickling acids bought	10 151	12 292	12 668
Pollution prevention materials	30 800	33 705	34 705
Packaging materials used for final products	13 491	13 392	13 577

Energy, million GJ	2012	2011	2010
Electricity	9.7	10.2	10.0
Propane	4.1	4.1	4.1
Carbon monoxide gas	1.2	1.4	1.5
Natural Gas	0.5	0.6	0.6
Light and heavy fuel oil	0.7	0.8	0.8

Output, tonnes	2012	2011	2010
Steel	1 691 514	1 707 114	1 610 053

Emissions to air, tonnes	2012	2011	2010
Carbon dioxide	785 650	809 786	827 256
Nitrogen oxides	2 002	1 858	1 742
Sulphur oxides	441	378	279
Dust	240	185	182
Ozone-depleting substances	0	0	0
Carbon dioxide per tonne of steel	0.46	0.47	0.51

Emissions to water, tonnes	2012	2011	2010
Metals	18.6	18.1	19.0
Nitrates	420	494	528

Hazardous waste, tonnes	2012	2011	2010
Oily sludge to the treatment	4 889	5 260	4 916
Hydroxide sludge landfilled	49 834	44 460	42 802
Steel making dust to recovery	40 018	39 914	37 047

Wastes and by-products, tonnes	2012	2011	2010
Slag, total	376 510	420 460	451 124
Slag utilized, t	231 745	280 260	121 847

Energy efficiency

The steel industry is energy intensive and Outokumpu's steelmaking and rolling processes are no exception. Achieving the highest possible level of energy efficiency is very important for the Group.

Outokumpu's aim is to minimize total energy usage and the related environmental impact. Even though significant amounts of energy are used in its production, stainless steel is an enabler for more energy-efficient solutions that save energy during the use phase. Steel grades whose production consumes more energy than others can sometimes be the most efficient solution when viewed from a life-cycle perspective. Improvements in energy efficiency are, in many cases, based on the use of stainless steel. In the energy industry, in transportation, and in building and architecture, the use of stainless steel is essential as its energy efficiency offers a way of satisfying new stricter standards and achieving society's targets. Some biofuel applications which require specific levels of corrosion resistance, for example, would not be possible in practice without the use of stainless steel.

Outokumpu manufacturing sites use a range of fuels including direct energy sources such as natural gas, propane, heavy fuel oil and electricity. Energy use by the Group totaled 16.3 million GJ in 2012 of which electricity consumption totaled 9.7 million GJ (2.7 million megawatt hours). Total energy consumption decreased by 3% compared to the previous year. Total annual energy consumption by Outokumpu is approximately equivalent to the amount of energy consumed by 140 000 Scandinavian households. The electricity consumption compares to about 20% of the annual output of a modern 1 600 MW nuclear power plant.

Energy used 2012

GWh	Electricity	Fuel energy	Total
Tornio	1 975	1 150	3 125
Avesta	353	346	699
Sheffield	174	99	273
Other	202	240	442
Total	2 702	1 835	4 537

Outokumpu's approach to energy efficiency is long-term and the target is continuous improvement. Energy efficiency is a component in the environmental management systems at Group mills. Major Outokumpu production sites also have long-term, prioritized energy efficiency investment plans. In overall terms, the largest energy-saving potential lies in the recovery of waste heat, improved process integration and improved efficiency in using raw materials. E.g. in Degerfors investments of new oxygen plant and new cooling water capacity (6.5 million euros) for new batch furnaces were done in 2012. Long Product unit ASR in the UK installed a new mill water cooling tower (250 000 euros) and at the melt shop in Sheffield, the UK, the new EAF transformer regulator and control system was installed (2 million euros). All these investments will reduce energy use. Read more on the page Environmental investments.

Large, energy-specific investments are however not the only way of improving energy efficiency within the Group. The systematic monitoring and analysis of energy consumption plays a very important role, as does life-cycle analysis when purchases of new electrical equipment are being considered. Outokumpu provides its production personnel with training in energy efficiency.

To meet long-term targets for improvements in energy efficiency, Outokumpu maps energy efficiency initiatives and investment proposals in order to quantify their improvement potentials and any associated costs. This mapping process supports the optimization of energy efficiency investments at Group level, the aim being a 5% improvement in Outokumpu's energy efficiency by 2020.

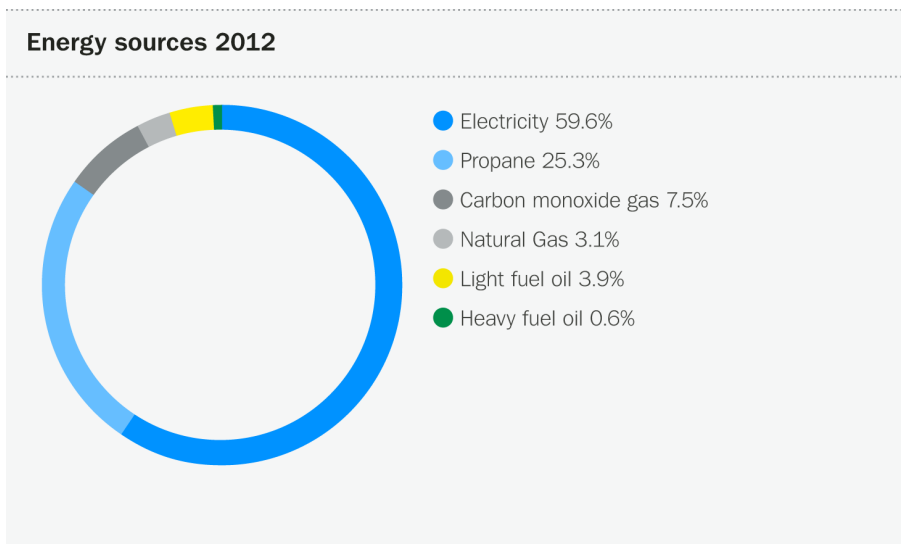
Improvements in energy efficiency achieved by Outokumpu during 2007–2012 totaled 7.5%, equivalent to annual savings of some 340 GWh. The proportion of low-carbon electricity obtained from renewables and nuclear power was 67%. Read more about Outokumpu's investments on the page Environmental investments.

Origin of electricity 2012

%	
Renewable sources	38
Nuclear	29
Fossiles and turf	33

Sustainable power solutions

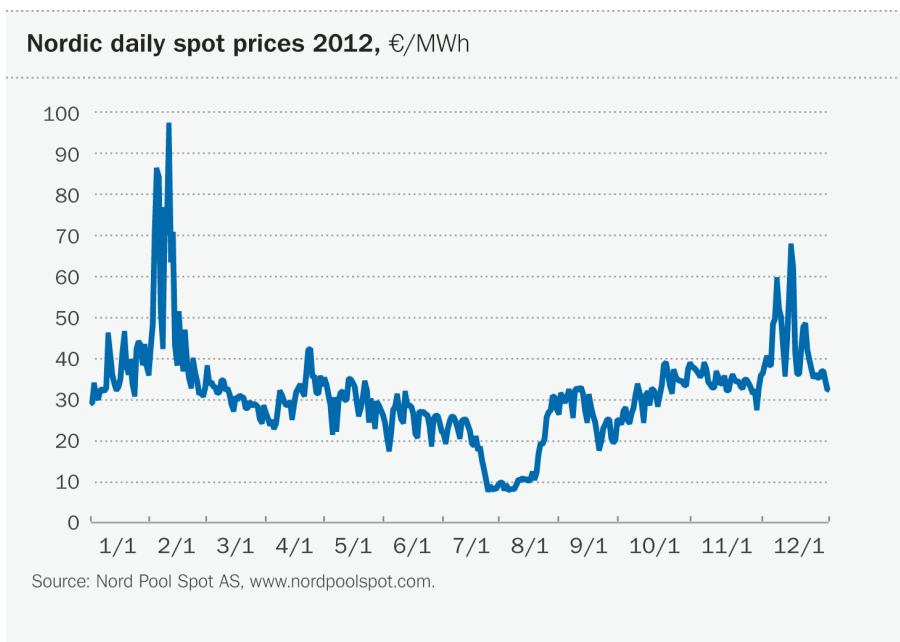
Outokumpu's Energy function is responsible for the Group's energy strategy and procurement of the electrical energy employed in Outokumpu's operations. The primary objective is to secure predictable, competitive and stable prices for the Group's future power supply. Other important tasks carried out 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. E.g. at Kemi mine oil boilers were replaced during 2012 by a biofuel plant using wood chips for heat and steam production.



Price of electricity

In 2012 the average system price of electricity in Nord Pool, the Nordic Power Exchange, was 31 euros per MWh. The strong hydrological situation and lower consumption kept power prices at low levels and the monthly average system price in July was the lowest monthly price since 2000. During the third quarter, the difference between the system price and the price in Finland was very large. Primarily because of the weak hydrological situation and cold weather, market prices in the first quarter were at high levels. During the year, the improved hydrological situation, reduced fuel and EU prices and a mild autumn brought power prices to lower levels.

Outokumpu's power procurement is executed using a long-term procurement strategy, in which the Group's aim is to achieve predictable, competitive and stable prices for electricity. 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 by entering into agreements with parties in the power market. By participating in new power plant projects, Outokumpu can also promote competition in Nordic power markets and contribute to adequate power production capacity being constructed in the future.

Nuclear power

Outokumpu has a 20 MW or 1.3 % share in the Olkiluoto 3 nuclear power plant project by Teollisuuden Voima Oyj (TVO). Construction of the power plant in Finland is currently ongoing. Outokumpu also has a 150 MW or 10% share in the nuclear power plant project by Fennovoima. Fennovoima continue the tendering process in 2012 for the Pyhäjoki site, and the power plant design, supplier and scope of supply will be decided in 2013. Finland's Parliament has granted both these projects permission to build new nuclear power plants as a Decision-in-Principle. In addition, Outokumpu also has a minor 10 MW or 0.7% share in the Olkiluoto 4 project by TVO.

Hydropower

Since 2005, Outokumpu has had a 104 MW share of Norwegian hydropower capacity in Rana, Norway through a long-term leasing agreement which is valid until 2020. In 2012, Outokumpu's consumption of electricity from renewable hydropower sources totaled approximately 460 GWh.

Wind power

Outokumpu is a minority shareholder in Rajakiiri Oy, a wind power company. Rajakiiri installed eight shoreline wind turbines with the total capacity of 28.8 MW in Tornio in 2010, and commercial production of electricity started at the end of that year. Technical availability of the wind turbines has been excellent and after the first full operation year levels of power production have exceeded expectations. Rajakiiri's wind power farm is currently one of Finland's largest individual operational wind power installations. In 2012, Rajakiiri's wind power farm was accepted into the Finnish feed-in-tariff scheme for 12 years. This scheme was adopted by the Finnish Government in 2011.

to improve economic feasibility of wind power and lower the electricity market price risk for investors. Read more on the page Public sector, sponsoring and NGOs.

In 2012 Rajakiiri initiated a feasibility study including safety inspections and applications for permits to expand the current wind power facility by 4–5 new turbines located close to the ones already operating in Tornio. The related investment decision will be made in 2013 and commercial operation is expected to start in 2013–2014.

Rajakiiri also has plans for an offshore wind farm with an installed capacity of up to 225 MW. The company is also looking for new onshore sites suitable for new wind power installations.

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 CO₂ emissions in the Tornio-Haparanda region. Read more about energy and emissions trading on the page Climate change.

LNG project

In 2012, Outokumpu and three industrial companies agreed to carry out a project development and feasibility study for a new LNG (liquefied natural gas) importation terminal located in Tornio Harbor that could serve both Swedish and Finnish markets in the Nordic region. The use of LNG in maritime traffic and industrial applications results in significantly lower levels of CO₂, SO_x and NO_x emissions than the use of oil-based products. The feasibility study together with the environmental impact assessments of investment alternatives for the LNG project is scheduled to be completed in 2013.

Voluntary energy efficiency agreements

Outokumpu has participated in voluntary national energy-efficiency agreements in Finland, Sweden and the UK for many years. The Tornio site joined the Finnish program at the beginning of the 1990s. Energy savings in electricity, heat and fuel achieved during 2012 totaled 1 121 GWh. To ensure that systematic improvements in energy efficiency continue to be achieved, Outokumpu sites in Finland signed new energy-efficiency agreements in December 2007 covering the 2008–2016 period. For example, the Group's Tornio operations decided in 2011 to align internal targets and action programs in an agreement aimed at achieving annual savings of 150 GWh by 2016.

In Sweden, Outokumpu is also participating in the second round of the PFE (*Programmet för energieffektivisering i energiintensiv industri*) agreement from 2009 to 2014. The target in this second period is to achieve annual savings in electricity consumption of 11 GWh. In the first round, which ended in the summer of 2009, annual savings of 8 GWh were achieved. In connection with energy issues, Outokumpu usually works closely with national organizations – with Motiva in Finland and Jernkontoret forum in Sweden.

Climate change

Outokumpu's energy and low-carbon program

In the past ten years, Outokumpu has reduced the Group's direct carbon dioxide (CO₂) emissions by 25% per tonne of stainless steel produced. Outokumpu targets to further reduce the Group's specific carbon emission profile in stainless steel production by 2020, as announced in the Group's energy and low-carbon program in 2010. When assessing and measuring the Group's carbon profile, we utilize a method of calculation which focuses on factors that Outokumpu can manage and control.

The targets set in Outokumpu's energy and low-carbon program highlight not only specific reductions but also the Group's production efficiency, as emissions are calculated per tonne of stainless steel produced. These targets connect our materials and energy efficiency and supply chain management to the Group's business targets. The figure for monitoring progress is a 3-year moving average that is compared to baseline figures from the 2007–2009 period. Targets of the energy and low-carbon program represent optimal Group-wide environmental objectives for both Outokumpu and combating climate change. They also support the Group's strategic goals and their achievement is supported by different energy and quality programs. As the targets are both quantitative and a clear demonstration of our long-term commitment in this area, they encourage continuous improvement.

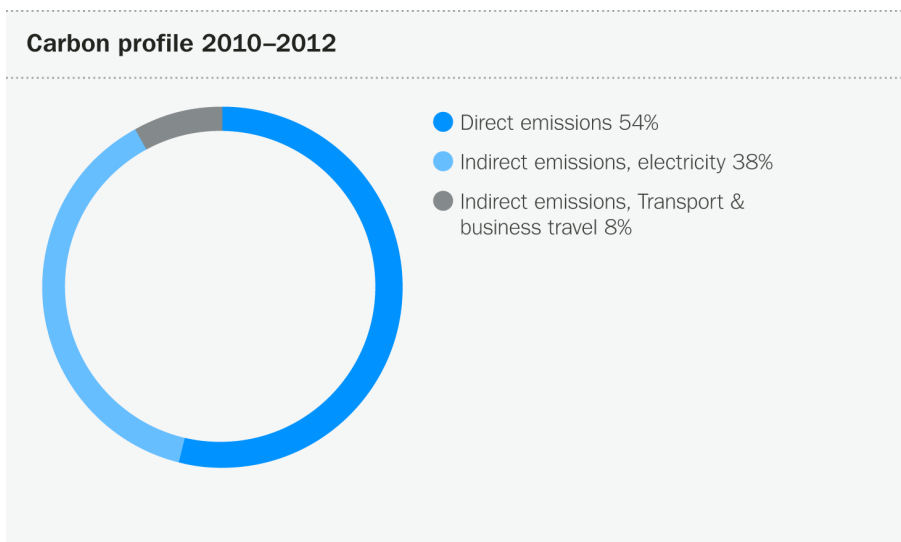
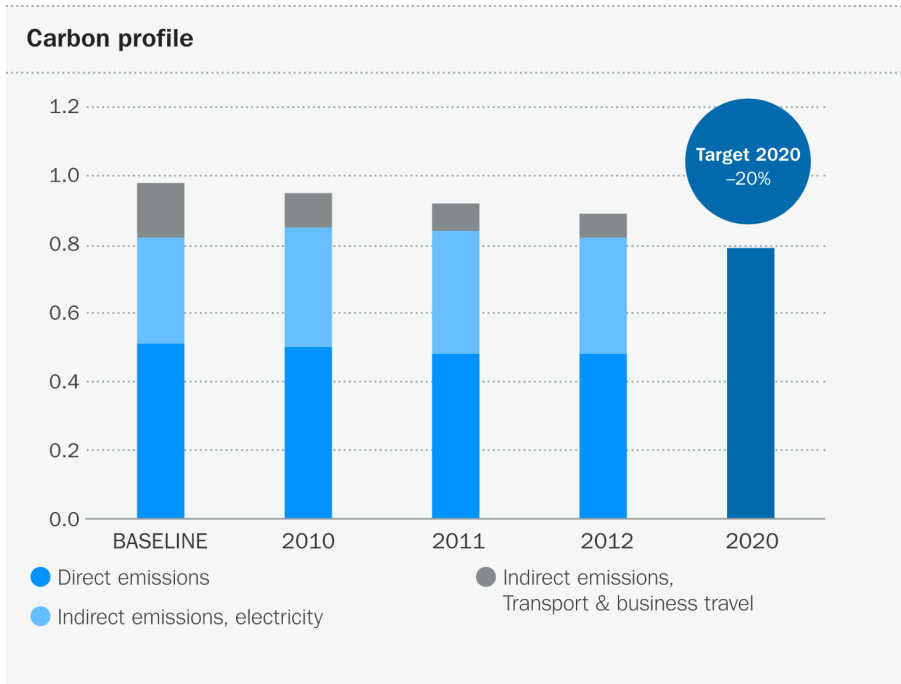
In terms of current capacity and production before Inoxum acquisition, the annual reduction in CO₂ emissions being targeted is approximately 370 000 tonnes by 2020, a total reduction of 2 200 000 tonnes over the 2010–2020 program period. During 2013 Outokumpu will recalculate baseline and targeted emission reductions for the new combined group.

Our actions and the results achieved

Primary actions included in the program consist of making further improvements in energy efficiency, increasing the proportion of low-carbon electricity and targeting efficiency improvements through optimal levels of production. An internal air-travel compensation scheme has been implemented for business travel, and sustainable aspects are gradually being integrated into our logistics and transportation solutions. These actions involve Outokumpu operations in all locations and business areas.

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 produced. After 2012, the Group's carbon profile was 8.5% 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. Also indirect emissions from electricity consumption were lower. On the other hand, indirect emissions from transportation of products were somewhat higher than in the previous year, offsetting the improvement.

CO₂ emissions resulting from business travel by Outokumpu personnel in 2012 totaled 3 768 tonnes (includes business air travel and company cars). To compensate for emissions resulting from business air travel in accordance with guidelines in the energy and low-carbon program that reflect such activity, an investment will be made in environmental projects that lead to emissions reductions. The level of such investments will depend on the price of emission allowances, the total number of kilometers travelled and specific emissions by air carriers. During 2012, a project in order to replace heavy fuel oil boilers at Kemi mine with biofuel solution was completed. External contractor commissioned 2.0 MW biofuel boilers for supplying the energy needed to replace heavy fuel oil boilers. Outokumpu made a long-term contract with local company. The annual reduction in CO₂ amounts to over 3 200 tonnes. Investment reduces also sulphur dioxide, nitroxide and dust emissions.



Emissions trading

Outokumpu's main production operations in terms of energy consumption and carbon emissions are located in Europe. More than 90% of the Group's direct emissions fall under the CO₂ Cap and Trade system. The European Union Emissions Trading Scheme (EU ETS) places a direct financial cost on production emissions and the indirect costs of emissions trading are reflected through higher electricity prices. Indirect extra electricity costs for Outokumpu were during the previous EU Emission Trading period 2005–2010 some EUR 45 million per annum. These two elements raise Outokumpu's marginal production costs in relation to our global competitors. Outokumpu emphasizes the need for global regulation in efforts to transfer to low-carbon forms of society. EU Commissions proposals to "set-a-side" and postpone auctioning of emission allowances during next emission trading period 2013–2020 would increase these costs further are harmful for whole European manufacturing and electricity intensive industry.

Major emissions of greenhouse gases by Group operations are twofold: direct releases of CO₂ from the company's sites as a result of combusting fossil fuels and process-related emissions from Outokumpu's steelmaking operations. Outokumpu's CO₂ emissions in 2012 totaled 785 650 tonnes. Outokumpu's emissions trading

activities fully comply with the relevant EU laws and regulations, with agreed procedures and with the Group's trading and risk policies. Carbon dioxide emissions under the EU ETS continued to be at lower than normal levels in 2012 due to reduced levels of production, which totaled approximately 759 000 tonnes (2011: 801 844 tonnes). Outokumpu's CO₂ allowances in Finland, Sweden and the UK were sufficient for the Group's planned production.

Following the Inoxum acquisition, Outokumpu has in total 13 active sites (excluding Terni) operating under ETS from the beginning of 2013. Innoxum had three sites, including Terni, in the trading period ending 2012. Due to the widening of ETS scope for the trading period 2013–2020 also smaller German VDM units, altogether six units, will come in to the system. Five Outokumpu sites, with Tornio integrate as one, continue in the system. Preliminary allocation for year 2013 is estimated to be sufficient for group operations during the 2013.

The EU Emissions Trading Scheme after 2012

The EU Emissions Trading Scheme (ETS) will continue, with the next trading period being 2013–2020 according to the decision made by the European Commission (EC) and the European Parliament. During this third emissions trading period, 2013–2020, the ETS will become a more restrictive system. Both the cap on total annual emissions in Europe and the proportion of free emissions allocations will gradually be reduced. Auctions will be the main form of issuing allowances. Outokumpu's operations under ETS will continue to receive free emissions allocations according to efficiency-based benchmarks and historical activity.

As emissions are correlated with production activity and capacity utilization rates our position in the long term is difficult to foresee. Current estimates indicate that the Group will not be short of allowances during the initial years of the trading period and that the situation within Group companies will probably vary more than before. One important issue for Outokumpu has been to qualify for a free allocation of emissions allowances during 2013–2020 by being part of an industry sector in which there is a significant risk of carbon leakage. According to an EC decision, all of Outokumpu's ETS operations currently qualify. All five Outokumpu sites covered by the emissions trading system have applied for free allocations for the upcoming trading period and are in full compliance with authority requirements.

The renewed ETS directive states that member states can compensate for CO₂-related increases in electricity prices. As Outokumpu has three electricity-intensive installations in three different EU countries, this is an important aspect. Outokumpu considers it to be an important correction mechanism for the most profound flaw in the ETS system.

Emissions, effluents and waste

One of Outokumpu's operating principles is to use best available techniques (BAT) to reduce emissions and minimize harmful environmental impacts which could result from the Group's operations. In this context, BAT means the best available pollution prevention technology from both technical and economic perspectives.

Employing BAT solutions means that the latest technology will be used to keep emissions from Outokumpu's operations at the lowest achievable level. Outokumpu continuously develops Group processes and pollution-prevention techniques to maintain as high levels of emission control in the future. Outokumpu is also an active participant in the process of updating the reference documents (BREF) which specify related technologies, helping to set the high standards applicable within the European Union.

Efficient systems help prevent spills and instances of non-compliance

All Outokumpu's larger production sites employ either Environmental Management Systems (EMS) or risk-based management systems which help avoid spills and accidents that could be harmful to humans or to the environment. All of these Group systems operate in accordance with ISO 14 001, the international standard for environmental management systems.

The Outokumpu site in Tornio was granted a new environmental permit on August 15, 2012 which makes it possible to take the extension to the Group's ferrochrome production facilities into use. The terms of the permit are in accordance with the new Iron & Steel BREF document (BAT conclusions) and are very challenging and strict. Even with these conditions, authorities in Sweden have lodged an appeal with a higher court. Because the permit came into force despite the appeal, this will not delay the start of the doubled ferrochrome production.

In 2012, 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 2012 shows that there were total of 24 environmental non-compliances or breaches of permitted limits. At Tornio total of 15 breaches occurred 2012, all of these were resulted by occasional malfunctions of individual filters leading to breach of required monthly operational level (the required operational level of 97% in dust-filtering units was not achieved). On every case automatic notification was sent to environmental authorities and corrective actions undertaken. From the breaches 12 related to the ferrochrome facility and three to melt shop. Avesta reported five separate occasional permit breaches all related to water emissions. There was also one minor breach reported at Kemi mine, Finland; Sheffield melt shop and rod mill in the UK, and New Castle in the US. There was also one small oil leakage which may lead to a financial penalty. On all these occasions, the environmental authorities were informed and no environmental damage was reported.

Radioactive material detected before it entered the production process

As recycled steels are 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

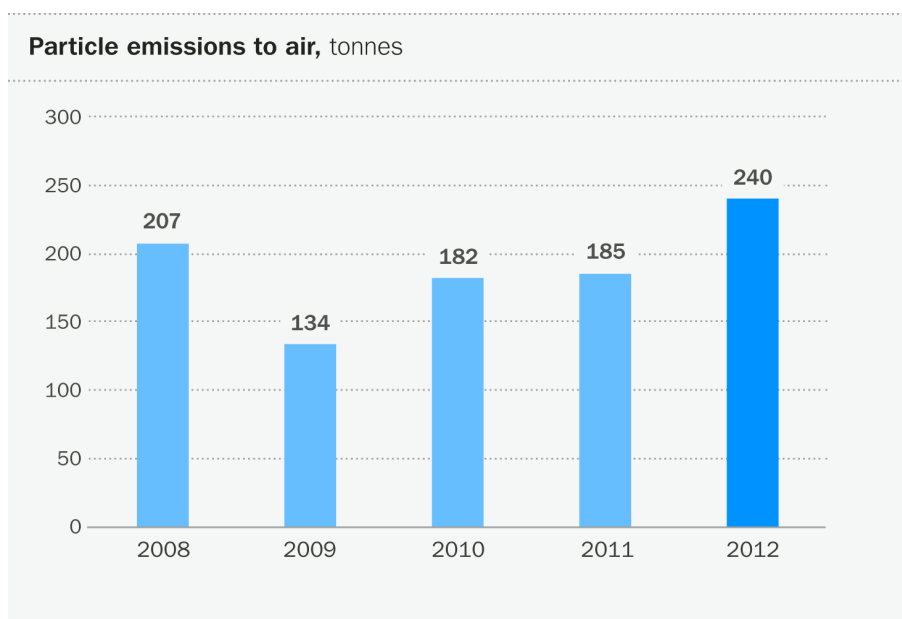
radiation in some cases consists of components from items of measuring equipment extensively used by heavy industry. The amounts of radioactive isotopes involved are small, with maximum quantities measured in grams, and sources of this type are normally detected before they enter the Outokumpu production process. Major Outokumpu sites prescreen recycled steel for radioactivity using special radiation monitoring equipment. During 2012 the internal guidelines for radioactivity control were checked and harmonised revision will be prepared during 2013.

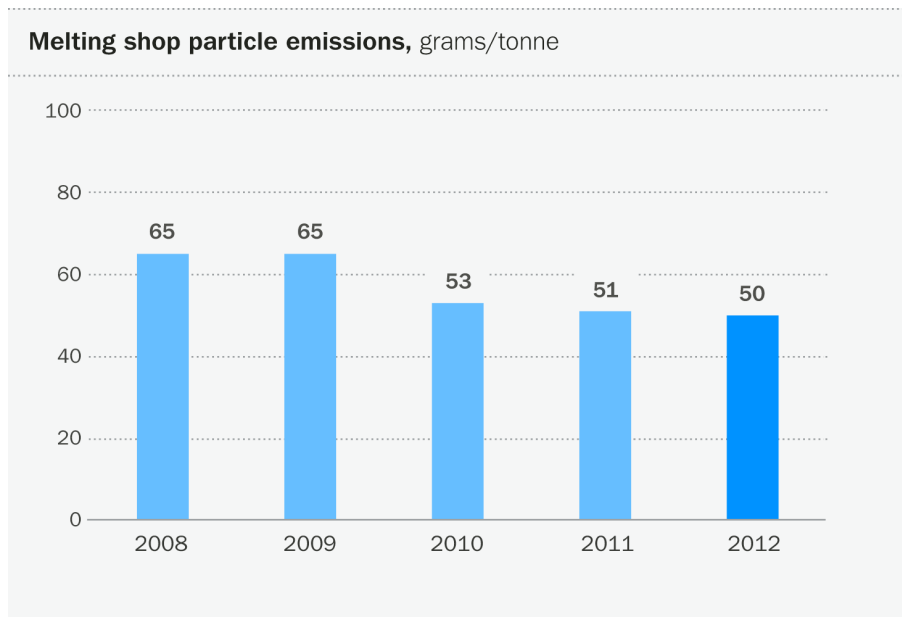
In 2012, one incident which involved radioactive material entering an electric arc furnace despite the presence of alarm systems occurred at Outokumpu's facilities in Tornio in Finland. Four similar incidents occurred at Sheffield in the UK. The radioactive material concerned was identified as americium-241, an isotope employed in measurement instruments. All dusts and slag from the affected melt were separated and levels of radioactivity measured, and the 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 these cases was not at a level harmful to humans.

Investments in technology are reducing levels of dust emissions

Dusts of different types have traditionally formed the most significant emissions resulting from operations by the steel industry. The majority of Outokumpu's particle emissions originate from the Tornio, Avesta and Sheffield steel mills and the New Castle hot rolling mill. In 2002–2006, more than EUR 20 million was invested at the Group's steel plants to improve their environmental performance and minimize dust emissions. Even though total production of stainless steel has increased since 2000, levels of dust emissions from the Group's operations have declined significantly.

At Tornio, more than EUR 60 million was invested in environmental applications during construction of the new ferrochrome sintering and melting line during 2011–2012. Most of these investments were made to prevent emissions into the air, but steps were also taken to reduce emissions into water. The largest individual investments were dust-filtering units, gas scrubbers and a new unit for handling process water.





Dust emissions by Outokumpu in 2012 totaled 240 tonnes, 23% more than in 2011. This was mainly due to the occasional malfunction of dust-filter unit in Tornio. Since the dust-filtering system is extremely efficient, normally catching 99% of dust emissions, therefore even short malfunctioning leads to high increase in total emissions.

A clean mine

The Kemi chrome mine is the only mine of its type located within the European Union. As the ore-bearing minerals are very stable and chemicals are not used in the beneficiation process, mining operations have only a minor effect on local water quality. Metal discharges from mining activities are small, and their effect is only observable as slightly elevated concentrations of nitrogen, solids, calcium and iron in watercourses. The largest emissions into the air result from the transportation of ore and waste rock, from operations in the product loading area and from piles of concentrate. All mining operations are now carried out underground after a shift from open-pit to underground operation was completed during 2005. Even though dust emissions into the air have therefore become minimal (totaling approximately less than half a tonne in 2012), the effect of particulate emissions on air quality is still monitored regularly by studying levels of suspended particulate matter. Results from the most recent monitoring period show that the emissions situation has remained stable and that concentrations of dust in air at and around the site are low.

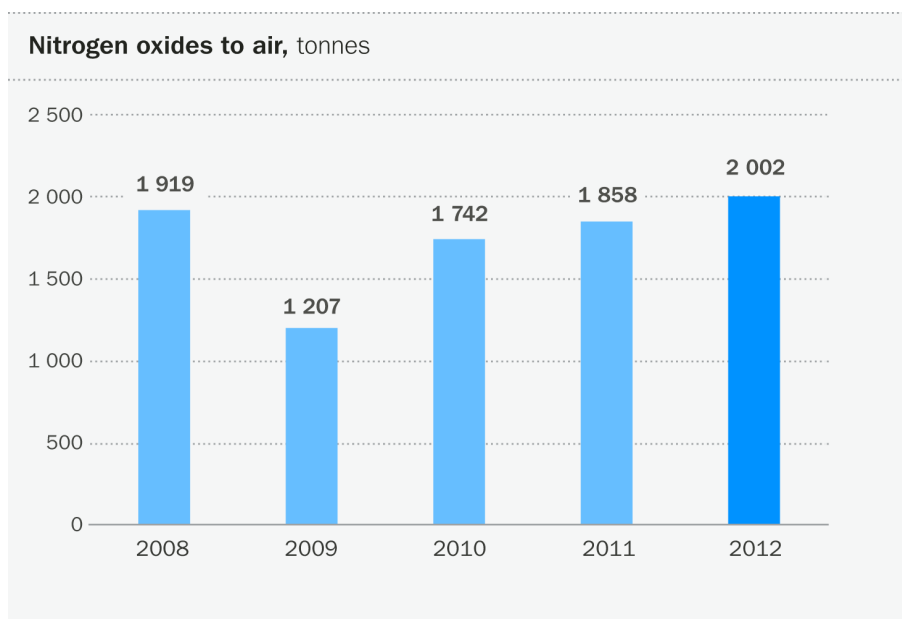
At the Kemi chrome mine, piles of barren rock, former open-pit mining activities and the beneficiation and clarification basins all have long-term effects on the landscape. Tailings basins are landscaped when they are full. Barren rock is used in backfilling underground workings. As the concentration processes at the mine employed are based on gravimetric separation, only water and small amounts of flocculant are used. The total amount of water used in 2012 was some 1.4 million cubic meters, of which 95% was recycled rainwater. Noise generated by blasting operations is almost inaudible, even within the mine area. According to environmental impact assessments carried out in 2009, the only significant noise-related effects result from the increased levels of road traffic involved in transporting concentrate from the mine to the Tornio ferrochrome plant. These effects have been further mitigated by a new road that was taken into use in 2010, minimizing any potential disturbance to residential areas.

The amount of rain that fell in 2012 in Finland and the Kemi region was extraordinary. In May, the temperature rose quite quickly and melted the snow covering the ground in a very short period. Heavy flooding resulted, with some water-level monitoring stations at the mine being submerged and destroyed. The summer of 2012 was also rainy and water levels remained high, with the amount of water conducted away from the mine site being almost three times the average. Even though such water is clean, the calculated load of some components (for example suspended solids) was larger than normal.

Reductions in emissions

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.

Increased levels of stainless steel production in 2012 resulted in Outokumpu's emissions of nitrogen oxides (NOx) being at a higher level (2 002 tonnes) than in 2011 (1 858 tonnes). To minimize NOx emissions, Group production sites in Avesta and Nyby in Sweden and Tornio in Finland employ the latest burner technology and Selective Catalytic Reduction (SCR) technologies in certain processes.



To further reduce undesirable discharges into bodies of water, there is a large sedimentation pool for handling wastewater in use at Tornio. All wastewater is first conducted to a 70-hectare dredging pool located in front of the plant. The water then slowly filtrates into the sea. This arrangement allows almost all suspended solids to be filtered out and reduces metal loadings drastically.

During construction of the new ferrochrome sintering and melting plant the wastewater handling system was renovated and the circulation of process water is now almost totally closed. Waters are circulated through cooling towers and solid material is separated in settling ponds and by using centrifugal apparatus. Only a small fraction of water used is conducted out of the circulation system, reducing metal loading on the environment.

Emissions of sulfur dioxide (SO₂) from the sintering plant will also be reduced. During 2012, a project to utilize alkaline water in gas scrubbers was launched. The water being used comes either from the slag handling unit or from lime milk tanks. The new process will enter service during the summer of 2013 and will cut annual SO₂ emissions by some 20% (100 tonnes).

A new acid regeneration plant at Avesta in Sweden was commissioned in May 2011. This method of handling acids is designed to result in lower levels of acid consumption, with significant corresponding reductions in nitrate levels in water discharged at this location. As the new process also generates a metal oxide which can be used as a raw material in the steel melting process, the new system is also reducing the amounts of sludge sent to landfill.

Continuous improvement in the monitoring of Outokumpu's production operations reduces risks to the environment. Particle emissions from the steel melt shop in Tornio, for example, have been monitored non-stop since the beginning of 2007. The detailed daily emissions data obtained from the monitoring system allows

potential filter leakages to be rapidly identified so that immediate remedial action can be taken. The Group's new ferrochrome sintering and melting plant is also equipped with continuous dust measurement units. In a similar manner, the particle filter system in the Sheffield melt shop stops the melting process if particle emissions are too high, giving environmental protection the highest priority. All these process control measures can be seen to represent industry best practice.

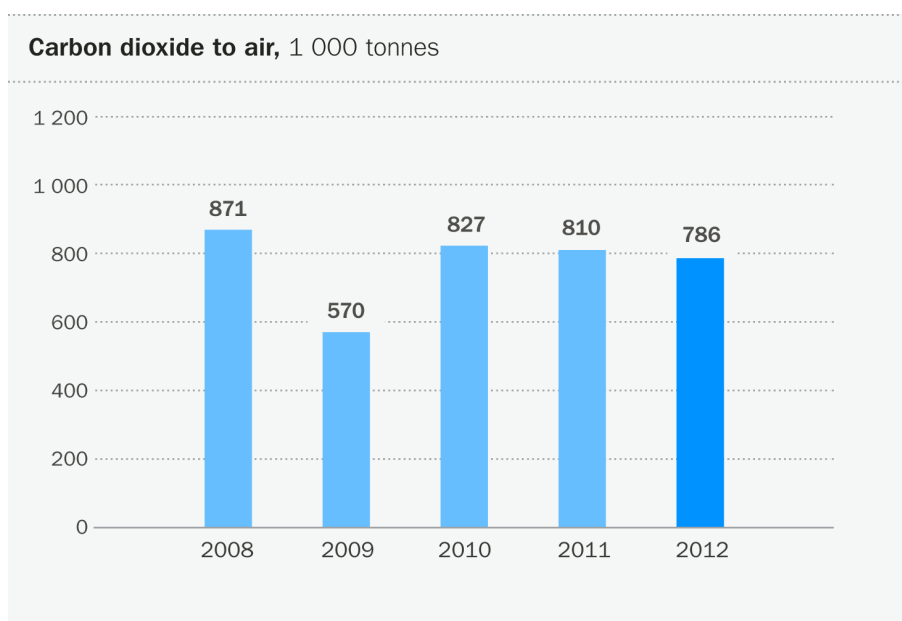
At the steel melting shop in Tornio, a system for the continuous measurement of mercury emission levels was taken in use during 2012. The measurement equipment (MERCER 300Z) will circulate on a non-stop basis between potential mercury emission sources.

Air quality assessments conducted at many Outokumpu production sites enable the Group to correctly assess and determine the environmental impact of production and other operations. At the Sheffield melt shop, for example, the monitoring of particle levels – PM10, PM2 and PM1 – has now been conducted for the last ten years. The results obtained show that during 2012, levels of particle emissions were below the required limits for 98% of the time with only minor deviations occurring close to plant buildings, with no exceptions occurring outside the site boundary.

In Tornio local ambient air quality study (diffuse emissions, PM10) was done by the Finnish Meteorological Institute during 2011 and early 2012. Published results showed that European air quality guideline or limit values were not exceeded. The emissions concentrations measured were well below guideline and limit values. As a conclusion the Finnish Meteorological Institute stated that "the air quality in Tornio is very similar to any other small or medium-size town in Finland".

The Finnish Meteorological Institute conducted also another study during 2012 related to expansion of ferrochromium plant. The results showed that estimated emissions from the new ferrochromium plants together with existing ones from the whole Tornio integrate do not cause exceeding of European ambient air limit values in Tornio and Haparanda area. Emissions generated by Outokumpu's production operations have not been found to have any significant adverse effect on air quality in the regions they operate in.

At Avesta, actions to optimize operation of the main walking beam furnace at the hot rolling mill have increased thermal efficiency by approximately 20%. The recovery of heat from furnace exhaust gases at the Tornio and Avesta Works also reduces Outokumpu's total energy consumption, and emissions of nitrogen oxides, CO₂ and sulfur dioxide are correspondingly lower as the amounts of fuel required to generate heat are reduced. Successful implementation of a variety of energy efficiency measures has also reduced the Group's specific CO₂ emissions.



Improving waste handling and preventing soil contamination

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 alloying elements they contain – these include nickel, chromium and molybdenum. When necessary, specialist recovery techniques are employed such as the Direct-Current Arc Furnace at the Group's melt shop in Sheffield or external treatment facilities operated by other companies. The total quantity of dusts and scale collected and treated by Outokumpu in 2012 was 53 362 tonnes.

Wastes from Outokumpu production units are sent to appropriate treatment facilities or to landfill sites licensed to accept such materials. Both hazardous and non-hazardous wastes are involved, and pre-treatment of the waste material is completed whenever this is required. Hazardous wastes consisting of oily wastes and hydroxide sludge generated by the Group's operations in 2012 totaled 54 723 tonnes. All such materials are treated, reused or disposed of in accordance with current legislation and best practices.

Outokumpu owns and manages landfill sites at some production sites in Finland, in Sweden and in the UK. Operations in these locations meet stringent EU requirements and standards. At Avesta in Sweden, Landfill No. 7 has now been covered, with slag by-product rather than virgin material being used as the initial covering layer. In Sheffield, the operational landfill has been partially capped to help limit the influx of rainwater and thereby reduce the generation of landfill leachate that requires treatment prior to being removed from the landfill cell. Wildlife is being encouraged to flourish by planting substantial areas with native tree and plant species. The closure of old Tornio landfill was completed in 2012 according to permit requirements and legislation.

Working hard to prevent leakage and soil contamination

Some form of soil contamination was unfortunately a typical feature of large-scale metal industry operations at former production sites and Outokumpu was no exception. Planned soil-contamination mapping or remediation operations were ongoing at some Group sites in 2012.

Two water analyses were made in 2012 at Avesta Koppardalen in Sweden, as decided together with the regulating authority after the previous soil investigation in 2011. Next water analyses will be made in 2013. These 2012 analyses showed that leachate levels were either on the same level or lower than in previous 2011 investigations. Similar studies were also carried out at Outokumpu sites in Nyby, Torshälla in Sweden.

The recycling of waste materials is a priority

Wastes from Outokumpu production units are either sent to appropriate treatment facilities for recycling or recovery or to landfill sites licensed to accept such materials. Both hazardous and non-hazardous wastes are involved, and pre-treatment of the waste material is carried out whenever this is required. Hazardous wastes generated by the Group's operations in 2012 totaled 95 421 tonnes (including all hazardous waste streams, such as dust collected and recovered and recycled on site). Of this amount, 29 000 tonnes was exported from the country of origin to be treated and its metal content to be recovered. All such materials are treated, reused or disposed of in accordance with current legislation and best practices.

Water

A natural resource used for cooling

Steelmaking operations involve high-temperature processes with extensive cooling requirements. To protect personnel and manufacturing equipment, Outokumpu's primary production operations employ water for this purpose and considerable volumes – in annual terms approximately 27.5 million cubic meters – are used, particularly in the Group's melting and rolling operations.

Since interruptions in supplies can result in significant damage to plant and equipment, the availability of water is a factor of major importance in high-temperature processes. At Outokumpu production sites, local water supplies are abundant and the Group's usage of water has only a minimal effect on the resources available. Water is used to either cool steel surfaces through direct contact or indirectly via heat exchangers and cooling systems. To control the growth and subsequent spread of legionella pneumophila bacteria – a naturally-occurring cause of Legionellosis (known as "Legionnaires' disease") and related diseases – many Outokumpu systems which incorporate water recirculation are treated with chemicals to remove harmful organisms. Discharges from these systems are monitored and managed to either eliminate or reduce the impact of the chemicals employed. In many cases, water extracted from such systems is transferred for further processing at off-site treatment facilities operated by local authorities before it is discharged into the environment.

The water used in Outokumpu's operations in 2012 was obtained from a variety of sources. More than 95% was surface water from rivers and the sea or rainwater collected for process use. Usage of groundwater was minimal, totaling approximately 0.1%. Municipal water sourced from rivers or lakes accounted for some 3%. Water supplied by local municipalities is used by the Group primarily in food preparation activities and for sanitary purposes, not in steelmaking processes.

Water withdrawal and discharges

Water withdrawal by source	2012	2011	2010
Surface water, million m ³	25.2	26.7	24.0
Municipal water, million m ³	0.9	0.8	1.0

Water discharges by type and destination	2012	2011	2010
Cooling water out, million m ³	9.5	9.6	8.2
Waste water out, million m ³	16.8	15.3	13.1
Metal discharges to water, t	18.5	18.1	19.0
Nitrogen in nitrates, t	420	494	528

Water reused multiple times

To minimize the risk of polluting local resources, a high proportion of the water used in Outokumpu manufacturing processes is cleaned and recirculated. At Avesta in Sweden, for example, the total quantity of water in circulation is approximately 50 million cubic meters. To replenish Group systems, 5.5 million cubic meters are pumped from the Dalälven river each year, a recirculation rate of almost 90%. This means that on average, water is used for cooling purposes some 10 times, with cleaning being carried out between each use.

Water recycling rates vary with the seasons. In winter, only some of the cooling water used at Tornio in Finland is recycled as the balance is discharged into the harbor basin to help reduce the amount of ice in the port. Preventing ice formation in this way reduces the need for icebreakers and emissions.

At the Kemi chrome mine, the ore concentration process uses approximately 2 million cubic meters of water each year. All this water is recirculated via a settling-pool system which covers an area of more than 200 hectares. The three large pools in the system are in an almost natural state and hold a healthy population of fish and bird species.

Rainwater is collected and treated

As many Outokumpu sites cover large areas of land, the volumes of rain and snow which fall on these areas are considerable. At a number of Group sites, rainwater is collected and treated in oil-separation facilities to minimize any possible environmental impact.

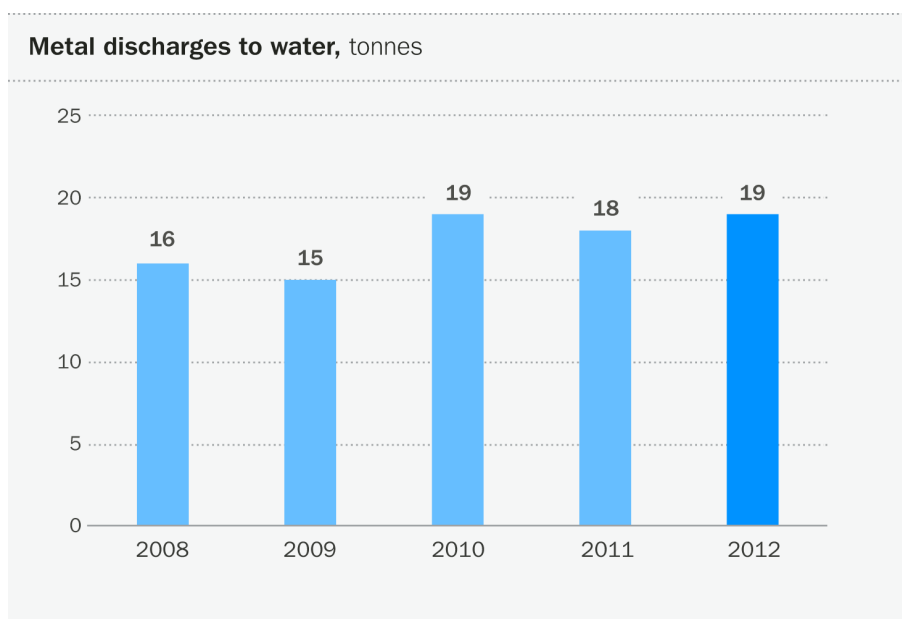
The smaller amounts of rainwater that fall on landfill areas located on Outokumpu sites may come into contact with alkaline wastes that could be contaminated with hexavalent chromium, a hazardous compound. Water of this type is therefore treated to reduce the already-small chromium content to its naturally-occurring level, either through direct treatment in landfill areas or by pumping it to neutralization plants.

Paying attention to water discharges

From an environmental perspective, the most significant components in water discharged from Outokumpu's manufacturing processes are metal compounds and the nitrates which result from neutralizing acidic waste generated in cold rolling units. Effluent discharges at all of the Group's production units are controlled in order to minimize any impact on the environment. At Tornio site, for example, external studies conducted in the 2000s showed that levels of metals in primary discharges from the plant are much lower than the natural loadings of metals in local rivers flowing into the Gulf of Bothnia.

During 2012 waste water treatment at Tornio site has been functioning extraordinary well despite of challenging circumstances, such as ferrochromium expansion project and flooding and heavy rains. Local waste water team managed to handle occasional excessive water load through fast actions and sharing best practices. One concrete measure was sewer capacity investment of 160 000 euros and new waste water sedimentation pond able to handle water load.

After the use of new large sedimentation pond at Tornio the metal load from waste waters is much lower than the reported figures which are taken from sewer measurements before the pond. The company has to report the sewer load to the sedimentation pond as "load to sea" due to difficulties in measurements. In practice the Outokumpu's metal discharges to water are significantly lower in 2012 than reported (figure below).



A new waste water permit was granted to Outokumpu's Tornio site at the end of 2010. Voluntary reductions in the limit values related to several metals and 2012 continued actions are a clear indication of the Group's determination to further reduce the already minimal effects of water discharges on marine life.

Developing discharge handling techniques

Nitrate loadings in water used for cooling by Outokumpu originate in the pickling acids employed in descaling operations involving stainless steel. A number of different techniques are employed by the Group to reduce nitrate loadings in effluent discharged from these operations, including acid-recycling technologies. Work to develop discharge-handling techniques which will further reduce effluent loadings continues.

At the Kemi chrome mine, the main source of nitrates is explosives used in underground blasting – a small proportion of the charges used enters the facility's water-circulation system. After being directed through three large ponds totaling almost 200 hectares, the nitrate content of this water is reduced by some 60%. As the ponds form natural removal units and are located upstream of the point at which discharges into Iso-Ruonaoja (the recipient water system) take place, there are no associated negative impacts.

In Tornio, to further reduce nitrate concentrations and levels of suspended solids, usage of the large sedimentation pond began in 2011 as a post-treatment process. Samples taken in 2012 from this pond show water that is of similar quality to water taken from the sea. The pond also supports a healthy population of various species of fish.

It has been decided that from 2013 on all sanitary waters at Tornio will be conducted to the local municipal water-cleaning unit, further reducing emissions to the sea.

Read more about the health of water ecosystems in the Biodiversity section.

Biodiversity

Natural surroundings at stainless steel production sites remain unharmed.

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 which is generally considered unacceptable.

Environmental impacts are regularly evaluated

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. Although the Group does not have any significant operations in ecologically sensitive areas, impacts on biodiversity at Outokumpu production sites are evaluated on a regular basis as part of the Group's environmental management processes.

No disturbance to local biodiversity

Environmental authorities have investigated the EU Natura areas located near the Outokumpu site in Tornio. Reports and statements issued in the 2000s indicate that the Group's activities do not have a significant negative impact or threaten biodiversity in these areas.

At the Outokumpu site in Sheffield in the UK, an area has been established to provide protection for species of wading birds which nest there in springtime. Measures are taken to ensure that these nesting activities are not disturbed. At the Kemi chrome mine, water circulation ponds have increased local biodiversity by creating new nesting sites for waterfowl. At Avesta in Sweden, Outokumpu owns some 300 hectares of forest certified by the Forest Stewardship Council (FSC), an international organization established to promote responsible management of the world's forests.

Former production sites are returned to their natural state

Outokumpu ensures that areas formerly used for the Group's production operations are returned to their natural state. At the Kemi chrome mine, waste rock extracted during mining operations is now being utilized and intermediate rock-storage locations are being used in underground construction and for gallery-filling operations.

Outokumpu's use of one 22.5-hectare concentrating sand pond in production processes at the Kemi chrome mine ended in 2008. Drying out started in 2010 and landscaping and reforestation operations will be carried out in accordance with the remediation plan. Ponds still in active use support a rich waterfowl population which includes rare species. The Group is currently investigating more ecologically-efficient ways of capping and landscaping disused ponds with industrial by-products.

At the Tinsley Park landfill site in Sheffield in the UK, approximately 50% of the landfill area has been capped after the completion of waste-tipping operations in these locations. As part of Outokumpu's commitment to future follow-up in this area, restoration work being carried out by the Group will add to natural levels of biodiversity. Plants being introduced are native species and operations being conducted include establishing areas of meadow.

Species of wildflower are also being sown to provide an environment in which invertebrates such as butterflies and bees can thrive.

The decommissioning of Outokumpu's production sites at Meadowhall and Stockbridge in the UK (closed in 2009) proceeded in accordance with plans agreed with the local authorities in 2011. No environmental issues have emerged in these locations.

Marine ecosystems are in good health

As Outokumpu's Tornio site is located on the Tornionjoki river estuary on the coast of the Gulf of Bothnia and close to nature reserves, the Group's manufacturing operations have, from the beginning, been developed to be environmentally sound. Many studies monitoring the biological, physical and chemical conditions which prevail near the Tornio site have been carried out since the 1970s. In 2008, a report on voluntary research concerning the impact of nitrates on recipient water at the Tornio site and the Kemi chrome mine was published. The results showed that impacts are restricted to the immediate proximity of the discharge points at Tornio and cause slight eutrophication. At the Kemi Mine, the impacts on sea areas are essentially negligible.

Pollution prevention techniques being employed by Outokumpu mean that increases in emissions can be avoided. Further reductions from earlier emissions levels will also be achieved in many cases, even at higher-than-current production levels. Annual studies carried out by Pöyry, a consulting company, have shown that impacts on sea areas close to the Group's production plants have diminished over the last ten years and that associated marine ecosystems are in good health. Results from the latest biological and fish population monitoring study will be published in early 2013.

A number of studies, including the continuous monitoring of discharge levels, have shown that discharges of chromium and nickel are now 60–80% below the levels that prevailed ten years ago. Considered to be the most significant metals released into the sea by Outokumpu's production activities at Tornio, current discharges of chromium and nickel only represent a fraction of the total metal loading which originates in the main from natural sources in the northern part of the Gulf of Bothnia. Tornionjoki and Kemijoki, the two major rivers in the locality, carry far greater concentrations of these metals into the sea than the total amount discharged by Group facilities. Activity in local fisheries located near the Tornio Works is at healthy levels and commercial fishing operations are carried out close to Outokumpu's production plant. Research indicates that the metals released from Group facilities do not accumulate in marine food chains. During 2012 Tornio site participated also voluntary local sea sediment monitoring study.

Measures to improve the condition of the Baltic Sea continue

Outokumpu is participating in the Baltic Sea Challenge. Practical measures instituted at the Tornio site in the 2000s continue to be employed and the Group will also take action in the future to improve the condition of the Baltic Sea. In 2010, permission was given to take into use a 70-hectare suction-dredging basin to handle effluents as a final sedimentation pond before filtering water into the sea. As described earlier this pond is used since summer 2011 and is reducing significantly suspended solids and metals discharged into the sea. The quantities of nitrogen in wastewater released by Outokumpu are also estimated to be lower than previously.

All Tornio sanitary waters will be conducted to local municipality water cleaning unit in 2013 and this will decrease the load to the sea even more. All the measures detailed above will help in further reducing the Group's environmental impact on the Baltic Sea.

Sustainable supply chain

The sustainability of the Outokumpu supply chain is important to the Group. We want to secure sustainable sourcing and manufacturing of our products and promote sustainability towards our suppliers.

The aim is threefold: to carry out business operations in a responsible manner, to develop continuously our performance, and to improve the sustainability of Outokumpu's supply chain together with the Group's business partners and subcontractors. The target is full accountability and sound, stable, and fair business relationships with our suppliers. In addition, Outokumpu provides and updates product statements and declarations covering the supply chain.

Evaluation of suppliers 2012

An essential element in ensuring Outokumpu's sustainability is regular evaluation of our suppliers' sustainability policies, practices, and related performance. The Group's sustainability evaluation of current suppliers was finalized in 2012. The scope of the study was all raw material producers and strategic suppliers in general procurement. Coverage of completed answers and evaluated companies was more than 90% of Outokumpu's total spending on materials and supplies to these companies (study excluded energy purchases).

The evaluation process is based on analyzing primary factors which determine sustainability performance: ethical issues, human rights, attitudes to social responsibility, environmental, occupational, and health and safety performance. These areas are weighted and numerically valued allowing comparison and the possibility to identify development areas.

Data collected is used in the Group's program for developing a comprehensive and sustainable sourcing process. The results obtained from the evaluations form the basis of both development work and audit planning. The process is also an important element in managing supply chain risks. Awareness of such issues is the only way to provide Outokumpu's customers with accurate sustainability information, and to guarantee to end-users that the Group's stainless steel products are produced in a responsible manner.

Work continues

The results were analyzed in addition to coverage in a number of recipients and in terms of spending covered. Aggregated individual answers were also summarized for both groups during Q2. Internal common supplier requirements were developed and approved during 2012, and these requirements are in line with our policies and statements regarding sustainability. Implementation of these requirements has been started. During 2013 we will evaluate the existing ways of working internally related to supply chain processes of former Inoxum units and plan how to implement new Group-wide requirements.

To develop their performance, Outokumpu provides Group personnel with regular training. The principles underlying sustainability, responsible business practices and good corporate governance are integrated into the materials used in commercial training, all the way from introductory courses to training courses designed to enhance contracting and procurement skills.

During 2013 we will evaluate the existing ways of working internally related to supply chain processes within the new Group operations and plan how to implement common requirements together with evaluation of new suppliers.

Product declarations

As a leading producer of advanced materials Outokumpu has public product statements such as a conflict minerals statement, a statement related to product safety and health, radioactivity and chemical safety statements, and environmental product declarations. All of these statements require the Group to have knowledge about its suppliers and supplies.

In addition to the evaluation process, Outokumpu monitors the performance of Group suppliers and subcontractors through auditing. Regular external audits carried out in accordance with the local EHSQ (Environmental Health Safety and Quality) management systems used at Outokumpu's operational sites were conducted during 2012 as planned.

Outokumpu product safety information for customers and the Safety Information Sheet of products will be updated for the new company in early 2013. Because life cycle and environmental data of products is becoming more important Outokumpu is expanding Environmental Product Declarations (EDP's) to cover also our Long Products and Rebar in 2013. Our EDPs are verified by an external independent institute. Read more about EDPs in the Sustainable stainless section.

Improved transportation efficiency reduces emissions

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 are included in the Group's carbon profile and integrated into Outokumpu's long-term climate-change-related targets.

Total CO₂ emissions resulting from product transportation in 2012 totaled 92 669 tonnes. The proportion of products and deliveries transported by road, rail, and sea were 41%, 26%, and 33%, respectively. The total volume of finished products transported in 2012 was 1.24 million tonnes, a bit lower than in the preceding year (2011: 1.41 million tonnes). Total emissions increased slightly (81 tonnes), although volume was somewhat lower than 2011. The main reason is the increase in long distance sea transport, meaning that although emissions per unit were lower, transported distances were longer on average.

Actions supporting Outokumpu's long-term strategy of transferring product transportation from road to rail and/or sea freight continued in 2012. The proportion of products transported by road declined from 49% to 41%. Rail transportation increased by 2% to 26% – a record level – and the proportion of Group products transported by sea increased to 33%.

Transportation of Group products by mode in 2012

%	2012	2011	2010
by road	41	49	50
by sea	33	27	26
by rail	26	24	24
Finished products, 1 000 tonnes	1 243	1 411	1 357

Outokumpu is working hard to increase levels of efficiency in the Group's transportation networks. Improved efficiency is an important factor in improving environmental performance.

An excellent example of the benefits resulting from increased efficiency is improved utilization of the vessel that travels between the production site in Tornio, Finland and the Outokumpu service and distribution center in Terneuzen, the Netherlands. By optimizing material movements, dispatching direct loads destined for European customers to Terneuzen by sea and then managing delivery to customers on arrival, utilization of this vessel has

been significantly improved. The net effect is a saving of around 1 100 truckloads (approximately 27 500 tonnes) on an annual basis. During 2012 Terneuzen in particular increased the share of rail transportation, while Tornio further increased sea transport.

Another example illustrating Outokumpu's strategy of transferring transportation from road to rail and/or sea freight is the switching of deliveries from road to rail. The EuroLink railway system that connects Group sites is Outokumpu's primary internal, rail-ship-rail transportation solution for production materials. A project to switch deliveries originating in Tornio and destined for the UK to the EuroLink system commenced in 2011, and during the first full-year in 2012 the savings were around 400 truckloads (approximately 10 000 tonnes).

A big challenge for the company in 2013–2014 is to reorganize a part of logistics and transports according to new business plans and material flows. The leading principles in this work are efficiency and optimising, including environmentally sound transport methods whenever applicable.

Environmental investments secure leadership in sustainability

Costs for environment-related activities within Outokumpu totaled EUR 59.2 million in 2012, of which costs associated with operational environmental management totaled EUR 54.9 million. Operational costs include process-related treatment, disposal and remediation costs for waste, air emissions and water. Provisions and guarantees in connection with environmental considerations totaled EUR 38 million, including Innoxum, and additional provisions for the aftercare of former mining sites totaled EUR 1 million. Environmental investments by Outokumpu in 2012 totaled approximately EUR 64.4 million (2011: EUR 7.8 million), a clear indication of the Group's commitment to achieving continual improvements in sustainability despite the challenging business environment.

Main environmental investments

Environmental investments associated with the investment to double ferrochrome production amounted to EUR 59.5 million.

Other major environmental investments in 2012 included:

- At Degerfors, Sweden: Direct environmental investment to new water treatment plant (EUR 6.5 million in 2011–2013) together with investments significantly improving environmental performance – two heat treatment furnace replacements and upgrade of existing walking heart furnace – which are also continuing in 2013.
- At Avesta, Sweden: Group has changed from steam to district heating for heat exchanges at annealing and pickling line.
- At Sheffield rod mill in the UK: New mill cooling tower was installed.
- At Tornio, Finland: Two new energy efficient pressurized air compressors and a new control system were commissioned (EUR 1.5 million).
- At Tornio, Finland: Investment at hot rolling mill heating furnaces for high-level oxygen lancing (EUR 1.6 million).

Investments to improve energy efficiency

At Outokumpu's Tornio site, two new energy efficient pressurized air compressors and a new control system were commissioned in the end of 2012. The new compressors replaced several smaller screw and piston compressors. The targeted reduction in annual electricity consumption is 6 800 MWh. The investment cost is EUR 1.5 million.

Investing into the state-of-art method for high-level oxygen lancing at Tornio hot rolling mill proved to be success. In addition to reducing the energy consumption by 10%, this investment also reduces air emissions and CO₂ emissions. Importantly, this investment makes process flow more efficient by reducing heating time required per slab. This investment was commissioned in 2012, and its cost was EUR 1.6 million.

A number of medium sized investments aiming at decreased energy consumption has been carried out at Avesta, Sweden during 2012. Among these are preheating of scrap and improved heating of acid tank in the pickling line.

Continuous improvement, efficient operations and effective maintenance procedures are essential elements in improving energy efficiency in Outokumpu's operations. At the Group's sites in Avesta, Degerfors, Kloster and Nyby in Sweden energy management system ISO 50 001 was taken into use and certified in 2012.

When Outokumpu's new ferrochrome plant comes on stream, the quantities of carbon monoxide (CO) produced – gas which can be used as fuel – will increase. New gas pipelines, blowers and changes in end-consumption units were completed in 2012.

Investments yielded substantial reduction in air emissions

At the plate mill in New Castle, Indiana, USA, earlier reported investment to spray pickling line accompanied by new wet scrubber for emissions yielded great results. After first full year of operations in 2012, nitric acids were reduced by 87% and hydrofluoric acids by 91%. This achievement was also reported to and acknowledged by the Environmental Protection Agency's pollution-prevention programs.

Our people

In response to a challenging market situation, Outokumpu initiated further actions during 2012 to reduce costs in order to enable sustainable profitability for the Group. Strong short-term performance is a prerequisite for long-term success. In the beginning of 2012, the acquisition of Inoxum was announced. The combined effect of these events was continued uncertainty amongst the Group's workforce.

Within Outokumpu, there is a strong belief that we can make things happen together. With a focus on the short-term agenda, everyone can contribute. Regarding the integration with Inoxum, Outokumpu wants to share the energy and passion among the Group's employees to become the new global leader in stainless steel. To achieve this, communication and transparency are crucial. For this reason, Outokumpu invested significant effort in employee communications during 2012.

Before the completion of the Inoxum transaction at the end of December 2012, Outokumpu had 7 249 employees in more than 30 countries. More than 1 200 job reductions were made in 2012 as a result of cost-saving actions related to the P100 program. After the transaction was completed, Outokumpu has 19 334 employees in more than 40 countries, including the discontinuing operations, and 16 649 excluding the operations in Terni, Italy.

Outokumpu's People Strategy has provided both a framework and direction for all people-related activities. The three strategic themes: Leadership, Execution capability and Competence renewal define the actions required to achieve our targets. Outokumpu's People Strategy takes into account our business strategy, the business environment we work in and other internal and external factors. Many of these elements have changed drastically over the last few years; Outokumpu's People Strategy will therefore be reviewed for the new company in 2013. Within Human Resources, the focus during 2012 has largely been on the upcoming integration process. Planning work has been done to ensure that common people processes are in place in 2013 and to facilitate the organizational design work for the new company.

Especially at times like this, the behavioral guidelines offered in Outokumpu's Leadership Principles and Behaviors are a good basis for all employees in their everyday work. Managers are given practical guidance on the kinds of behavior expected from all Outokumpu personnel. The LEADER program, targeted at new managers, is also based on these principles and has been developed to support managers.

The highest ethical principles are observed in all Outokumpu activities. The Group's people management practices follow Outokumpu's Code of Conduct. Outokumpu observes the laws and other regulations of the countries that the Group operates in, and complies with the agreements and commitments we have made. Outokumpu ensures that all of our working methods and operational activities are based on ethical practices. Outokumpu respects and promotes human rights; everyone should be treated equally and fairly. Outokumpu is totally opposed to the use of child and forced labor and the Group condemns all forms of corruption and bribery. Human dignity and diversity is valued and discrimination and intolerance of all kinds condemned. The Group's internal policies are in line with the UN Global Compact principles.

Please note that all personnel figures are counted only for Outokumpu personnel before the completion of the Inoxum acquisition on December 28, 2012, except for headcount at the end of 2012, which is counted for both Outokumpu stand-alone and combined Group, as well as personnel by country, which is counted for the combined Group.

Personnel figures

To respond to the challenging business situation and achieve sustainable profitability, a P100 cost-reduction program was initiated at the end of 2011 with the aim of achieving savings totaling EUR 100 million by the end of 2012. As part of this cost-reduction program, job reductions were required during 2012.

Please note that all personnel figures are counted only for Outokumpu personnel before the completion of the Inoxum acquisition on December 28, 2012, except for headcount at the end of 2012, which is counted for both Outokumpu stand-alone and combined Group, as well as personnel by country, which is counted for the combined Group.

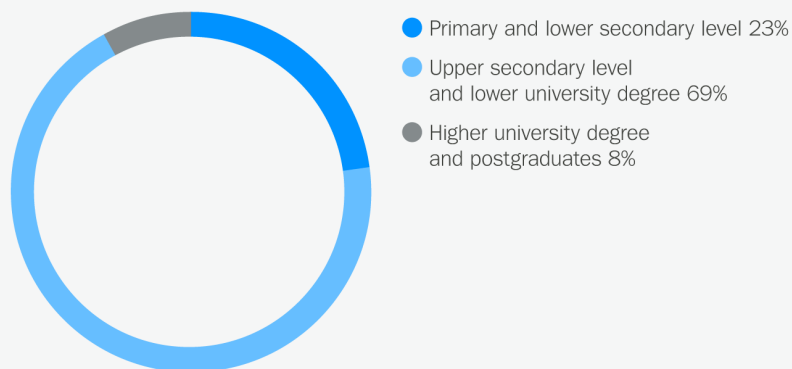
At the end of December 2012, Outokumpu employed 7 249 people (2011: 8 253, 2010: 8 431). Some 61% of the Group's employees are blue-collar workers. 17% are women (2011: 18%, 2010: 17.4%) and 83% are men. 92% of the Group's employees were located in Europe (38% in Finland, 34% in Sweden and 8% in the UK).

In 2012, the number of permanent employees who have worked for Outokumpu for more than 30 years was 1 115 and the number of people employed for five years or less was 1 339 (6–10 years 1 331). The average length of service of the Group's permanent employees was 17 years and the average age was 45 years.

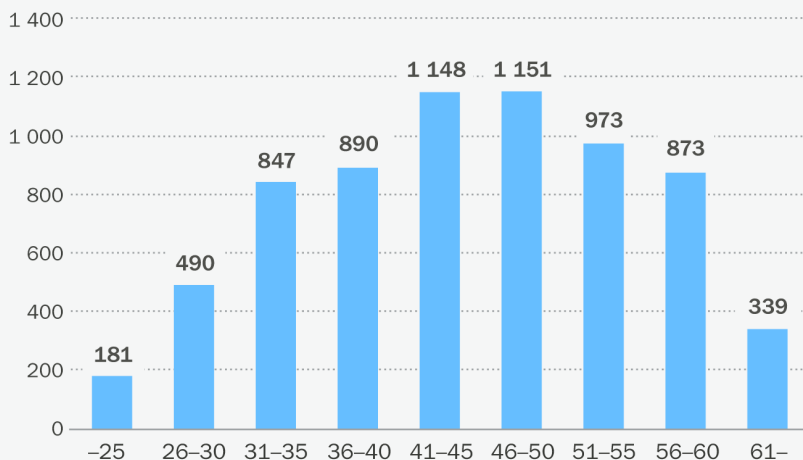
Of all Outokumpu's permanent employees, 151 people work on a part-time basis. In terms of full-time equivalent (FTE), this means 92 FTEs.

Outokumpu hired 157 new employees in 2012. The average turnover among permanent employees in 2012 was 8.0% (in 2011: 5.5%, in 2010: 5.4%), the hiring rate was 2.3% and the leaving rate was 13.8%. More than 1 200 employees left the company as a result of cost-saving actions related to the P100 program. The voluntary leaving rate was 3.1%. The number of people employed on fixed-term contracts was 358. In both restructuring measures and lay-offs, Outokumpu complies with local legislation, collective bargaining agreements and other applicable regulations.

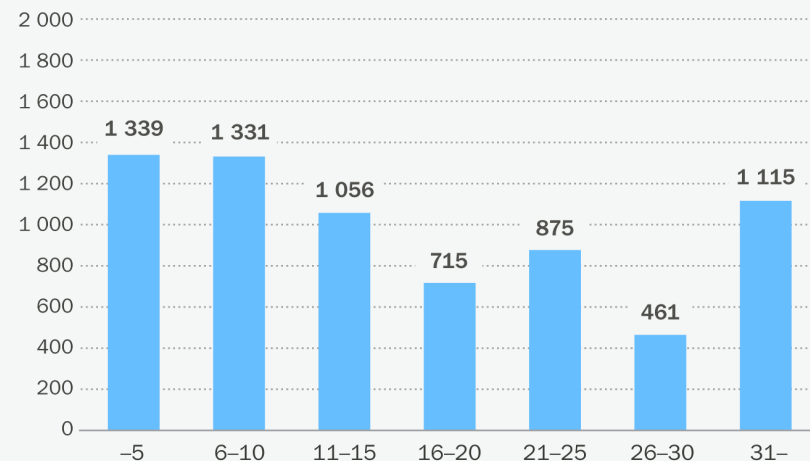
Educational background, permanent employees



Personnel age profile, permanent employees



Personnel by years of service, permanent employees



Key figures

	2012	2011	2010
Sales/person, € million	0.6	0.6	0.5
Training costs of total personnel costs, % ¹⁾	0.6	0.8	1.0
Training days / person	1.5	2.0	2.4 ³⁾
Incentives of total personnel costs, % ¹⁾	3.2	3.2	3.2
Days lost due to strikes	8.0	14.0	0.0
Personnel turnover, % ²⁾	8.0	5.5	5.4 ³⁾

¹⁾ Personnel costs in 2011 have been restated due to change in accounting principle of defined benefit obligations and other long-term employee benefits. Restatement carried back to January 1, 2011, thus figures for 2010 have not been restated accordingly.

²⁾ Average turnover: (new hires + leavers) / (2 x permanent employees on Dec 31, 2012)

³⁾ As of 2011 Outokumpu reports actual headcounts instead of FTE's – these figures have been restated to be comparable.

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Personnel figures

Personnel by country

	2012 Headcount	2012 FTE	2011 Headcount	2011 FTE	2010 Headcount	2010 FTE
Europe						
Germany	6 342	6 021	228	189	239	215
Italy	3 115	3 105	297	273	314	304
Finland	2 753	2 599	2 879	2 745	2 870	2 752
Sweden	2 466	2 365	2 957	2 818	3 026	2 896
The United Kingdom	615	609	648	642	649	636
The Netherlands	227	221	397	383	425	412
France	119	119	73	72	80	77
Turkey	84	84	3	3	4	4
Spain	57	55	17	15	20	17
Poland	54	52	29	28	32	31
Estonia	39	38	48	47	52	50
Hungary	33	33	12	12	18	17
Austria	21	19	17	16	18	17
Denmark	16	16	20	20	24	24
Russia	12	12	13	12	12	11
Norway	11	11	12	11	12	12
Belgium	5	5	24	23	48	46
Portugal	3	3	4	4	4	4
Czech Republic	1	1	19	18	22	21
Romania	1	1	2	2	2	2
Ireland	0	0	6	6	9	9
Lithuania	0	0	5	5	5	5
	15 974	15 368	7 710	7 344	7 885	7 562
Americas						
The United States	1 333	1 332	309	309	331	330
Mexico	1 103	1 103	0	0	0	0
Argentina	103	103	0	0	0	0
Canada	32	32	26	26	28	27
Brazil	6	6	5	5	6	6
	2 577	2 576	340	339	365	362
Asia						
China	597	597	44	44	40	40
Saudi Arabia	78	78	73	73	58	58
Hong Kong	17	17	15	15	17	17
India	16	16	16	16	14	14
Singapore	13	13	12	12	12	12
Japan	12	12	9	9	7	7
United Arab Emirates	5	5	5	5	5	5
South Korea	4	4	0	0	0	0
	742	742	174	174	153	153
Australia	37	36	25	25	23	23
Africa						
South Africa	4	4	4	4	5	4
	4	4	4	4	5	4
Group total	19 334	18 726	8 253	7 886	8 431	8 104

Goals and results

Goals for 2012

- Further improve the Group-wide communication of KPIs related to our key people processes. Establish a channel to share these KPIs on a quarterly basis.
 - Conduct the O'People employee survey and improve the O'People index from its previous level.
 - Improve performance management by raising the overall PDD completion rate from the 2011 level. Focus on differentiation in performance management. Enhance and improve Outokumpu's performance culture by executing regular and objective evaluations.
 - Implement Strategic Workforce Planning throughout the Group.
-

Results 2012

- In line with what was introduced in 2011, Outokumpu continued to deliver a monthly HR Performance Board, including KPIs related to the Group's key People Processes (e.g. PDD and job rotation). No concrete development was introduced other than increasing awareness of the relevance of having these numbers available for steering our processes.
 - Due to the challenging business situation and the upcoming integration with Inoxum, we faced several challenges with implementing the O'People employee survey. The main concern was that only Outokumpu would be covered as Inoxum personnel would not be included before the completion of the transaction. In April 2012, a decision was made to postpone the O'People survey until 2013.
 - The PDD completion rate in 2012 was 74%, a decrease compared to 2011 (87%). Continuous follow-up and support is needed to improve Outokumpu's performance culture. Improvement actions will continue in 2013.
 - The Strategic Workforce Planning process was implemented for some parts of Outokumpu's business (e.g. the IT function) during 2012. The main reason for not implementing this process within the whole of the Group's organization is that the Group strategy process, the key input for the Strategic Workforce Planning process, did not take place due to the focus on integration planning. The basics of the Strategic Workforce Planning process have however been used extensively for planning the new organizational structure after the integration with Inoxum.
-

Goals for 2013

- Define the People Strategy which supports Outokumpu's business in an optimal way.
-

- Conduct the O'People employee survey and utilize the output to identify new building blocks for the new company culture.
- Ensure good implementation of the PDD process and improve the PDD completion rate from the 2012 level. Focus on defining the performance management process at individual level for the new Outokumpu.

Diversity and equal rights

Outokumpu maintains a consistent policy of freedom of association, which means that employees in all of the Group's operational locations are free to join trade unions in accordance with the rules and regulations that apply in local labor markets.

In 2012, approximately 86% of Outokumpu's permanent employees were covered by collective agreements. There were 8 days lost due to strike in 2012 (2011: 14, 2010: 0).

Outokumpu is committed to providing equal opportunities through unified and transparent resourcing processes. The Group also values diversity in all its forms. The Group's Code of Conduct forbids discrimination of any type. People must be treated equally and fairly irrespective of their ethnic origin, nationality, religion, political views, gender, sexual orientation or age.

The overall percentage of women in Outokumpu's permanent workforce is 17% (2011: 18%, 2010: 17%). Three members of the Outokumpu Board of Directors and one member of the Leadership Team were female in 2012, and 51 women hold key leadership positions within the Group, corresponding with the overall percentage of women in Outokumpu.

Open communication

Employee commitment and motivation are valued within Outokumpu. The Group firmly believes that open and timely communication has a direct impact on people's motivation and commitment. In 2012, Outokumpu placed particular focus on this topic because of the different challenges and change processes being faced within the Group.

Good relationships between employees and managers are an essential component in the Group's success. To contribute to this, news relating to Outokumpu's strategy and highlights on the company's internal and external business activities are published on the Group intranet on a regular basis. Special efforts have been taken to keep employees up to date with the integration planning process. Activities in this connection include integration planning newsletters which were published nine times during 2012, internal CEO roadshows in different countries and CEO letters to employees to mark important milestones. A variety of communications channels such as the Group intranet, teleconferences and videos are used to distribute messages.

Managing change and cultural differences

In order to smoothen the transformation period, Outokumpu and Inoxum arranged training for white-collar staff in both organizations targeted for those employees who will most likely work together in international teams. Subject of these training sessions were change management in the working place and adapting to cultural differences.

Outokumpu Personnel Forum

Outokumpu's Personnel Forum is a joint consultative body which provides a channel for transferring information between Outokumpu management and the Group's employees. Established in 1994 in response to a European Works Council Directive, the forum includes 33 employee representatives from the Group's European operations, representatives of the Outokumpu HR function and members of the Group's senior management teams. Usually convened once each year, the 2012 Personnel Forum was held in Sheffield, UK. The primary focus of the 2012 forum was the upcoming integration with Inoxum.

The Personnel Forum appoints a working committee which is responsible for ongoing cooperation between management and Outokumpu employees. During 2012, this committee held six meetings with members of the senior management team, including the Group CEO. In 2013, the Outokumpu Personnel Forum will be further developed to ensure that it meets new demands.

Read more about Outokumpu's communication with students as future employees in the section Outokumpu and society.

Compensation and benefits

Outokumpu's intention is to provide a competitive base salary for all Group employees based on the scope of their role and their individual performance.

According to this philosophy, rewards are earned on the basis of each employee's performance in their work. Typically, base salary levels also vary according to the stage each individual has reached in their career.

Outokumpu's principles require that base salaries are determined by considering the requirements of the position together with the relevant competencies and experience of the employee. In overall terms, levels of remuneration for Group employees are in accordance with local agreements and the labor market in each country where Outokumpu conducts operations. At the national level, Outokumpu's aim is for base salaries to be at the market median. Incentive schemes are used in addition to base salaries as an element in total individual compensation. Incentive payments totaled 3.2% of the Group's total personnel costs in 2012.

Read more about management's remuneration on the Corporate Governance statement 2012 in the Annual Report 2012.

Training and development

In the challenging business situation that Outokumpu is currently facing, the Group recognizes the need to proactively develop our resource and competence base to meet the requirements of a rapidly-changing business environment. Two of the strategic themes in the Outokumpu People Strategy – Competence Renewal and Leadership – are designed to achieve this goal.

Within Outokumpu, employees have the main responsibility for their personal development and career planning while managers are accountable for employee development. These roles and responsibilities are described in Outokumpu's People Management Principles. Outokumpu Human Resources supports, enables and challenges both managers and employees in aligning corporate and individual perspectives in personnel development. During Performance and Development Dialogues (PDD), managers and employees together identify competence gaps and the actions required to support each individual's future development.

In 2012, training costs in Outokumpu amounted to 0.6% of total personnel costs (2011: 0.8%, 2010: 1%). The Group provided 1.5 training days per employee (2011: 2.0, 2010: 2.4).

Developing our people

In Outokumpu, we highlight the fact that people learn in variety of ways. The development opportunities and methods offered within the Group therefore vary. Most learning happens through learning on the job, especially when taking on new challenging tasks (job rotation); one can also learn from more experienced colleagues (mentoring) or by being supported in realizing one's own potential (coaching); sometimes formal training is exactly what is needed to develop oneself further.

Since most learning happens on the job, Outokumpu aims to enhance internal job rotation. In 2012, despite the challenging year, Outokumpu was able to keep the job rotation level at 5.1% (2011: 6.5%). The cost-reduction measures and organizational changes that took place during 2012 affected the level of job rotation. An excellent example of Outokumpu's job rotation practices is the expansion project for the Ferrochrome business in Finland. This provided jobs for 120 people of whom the majority were internal employees who have been with Outokumpu for several years. Experienced employees used knowledge gained in previous projects to benefit this challenging expansion project. In-house and on-the-job learning like this are valuable ways of supporting knowledge transition and increasing competence levels within the organization.

Outokumpu wants to develop its leaders in better managing performance in their organization and in supporting empowerment of their team members. The Group therefore continued to focus on the area of coaching. A coaching leadership style is also valued by younger generations. A new training program for managers was piloted during the second quarter of 2012. Implementation will start in 2013 and the training provided will be facilitated using Outokumpu's own Business Coaches. During 2012, Outokumpu's internal Business Coaches coached people from different parts of the Group. Outokumpu also launched its third Business Coaching Program in the autumn of 2012 and this group will complete its training in January 2013. In addition to coaching, several additional development programs and training activities were executed at both Group and local level.

During the second quarter, Outokumpu's Talent Review Process continued playing an important role by providing a forum for business management and HR to discuss topical people issues. Because of the continued uncertainty among the Group's workforce, the focus in the 2012 Talent Review Process was on personnel retention.

Performance management

Performance management is one of Outokumpu's key internal processes. Business success demands high-quality performance management processes at both individual and Group level.

At individual level, Performance and Development Dialogues (PDD) support Outokumpu's strategy execution and reinforce a performance-driven mindset. The essence of the process is engaging and involving Outokumpu personnel in the Group's strategy implementation.

Each PDD consists of a formal annual review of both an employee's performance against defined targets and development achieved in the preceding 12 months, together with development of a new performance and development plan for the next 12-month period. In PDDs, business targets are cascaded into individual targets to ensure that actions are aligned with Outokumpu's business strategy and support the Group's success. PDD discussions are held once a year with a recommended mid-year discussion. In 2012, the PDD completion rate declined to 74% from 87% (2011). The most feasible way of implementing target setting and development discussions in the new company is planned during 2013.

Outokumpu's aim is to support efficient implementation of Group strategy through continuous evaluation and improvement of the PDD process. In 2012, a team with representatives from different business units continued to gather feedback for this purpose. During the year it was noted that more guidelines were needed to support use of the PDD tool. Guideline improvements together with tool enhancements were implemented in 2012.

The work done by leaders is extremely important when the operating environment is challenging and Outokumpu's PDD process provides them with a useful and important tool. Outokumpu will continue to support leaders in this area through a stronger focus on achieving high-quality discussions that have a positive impact on both manager and employee – with a corresponding positive effect on Outokumpu's performance. Successful PDDs increase individual motivation, help improve employee performance and are an effective way of supporting the Group's business activities.

Safety – the foundation of a good company

Health and safety are key issues for Outokumpu and Group management is committed to developing both topics and achieving sustainable improvements.

All Outokumpu personnel, contractors and visitors must be provided with safe and healthy working environments in Group production sites and facilities.

Health and well-being activities continue to be a long-term undertaking and a number of work streams have been progressed during 2012.

In the area of safety, the total injury rate in Outokumpu declined in 2012 despite an increase in the number of lost time injuries. This reflects the challenge presented by trying to improve safety performance during a period of significant organizational change and the ongoing use of external contractors for major capital development projects. Efforts to improve safety performance in Outokumpu continue and the Group's ultimate goal continues to be zero accidents.

Health and safety in the genes

In 1975, around the time Outokumpu expanded its interests in stainless steel, a young medical doctor called Markku Huvinen got his first job as plant physician at the Tornio works. Markku remembers a specific day on June 1975: "One of our sintering plant workers came in, blew his nose and asked me 'What does this do to my health'. It was a legitimate concern. I asked around about dust exposure in stainless steel production but to my surprise there was no scientific data available. I'm glad Outokumpu had the foresight to take this seriously. Unlike most stainless steel makers, having our own mine has forced us to prioritize health and safety in all our operations. It's in our genes."

Markku initiated the world's first systematic measurement of exposure to chromium and other compounds connected with stainless steel production and managed it for the next 13 years before moving to the head office. He has since gained his PhD in the effects of chromium exposure to respiratory health in the stainless steel industry. To be fair, the company began protecting the health of its employees long before this. Outokumpu opened its own hospital in 1913 for staff and their families. It ran its next hospital for 35 years before selling it to the public health service for one Finnish Mark (about ten euro cents). The company first started monitoring dust exposure in 1938, a year after wet drilling was introduced, and held its first stakeholder safety committee in 1942.

Outokumpu has built a reputation for scientific research and cooperation, resulting in safer operations and healthier environment. And all because underground mining gave an extra safety dimension to the company's operations. Says Markku: "When I look back, it has been worth all the effort. The physical hazards of producing stainless steel are real. Outokumpu can't remove those risks but it can control them. Outokumpu intends to remain the leader also in health and safety by researching, anticipating and responding to concerns."

Staying healthy in the workplace

As a responsible company, Outokumpu initiated systematic health studies with world-class independent expert institutes in the 1980s.

The main targets in these studies have been individual levels of exposure to chromium and other compounds in the stainless steel production chain and their long-term effects on respiratory 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. Issues related to working environments within Outokumpu are also studied through joint research projects carried out in collaboration with universities and specialist institutions.

In 2012, an average of 5 980 days per million hours worked by Outokumpu employees were lost as a result of sickness or injury (2011: 5 846). The number of cases of occupational disease diagnosed in the Group in 2012 was 16 (2011: 15).

Hearing loss caused by occupational exposure to noise has been the most common occupational disease in the Group in recent years. An extensive research and development project was launched in cooperation with the Finnish Institute of Occupational Health at the Tornio site in 2011 and continued until the spring of 2012. The aim of the project was to improve hearing protection by developing guidelines for the whole Group in connection with the individual selection of hearing protection equipment. The results of the research project and corresponding recommendations were published in autumn 2012. Implementation of the guidelines and recommendations will start in 2013.

Study of occupational exposure and respiratory health effects at Tornio

Outokumpu has been studying individual levels of exposure to chromium compounds in the stainless steel production chain and their long-term effects on respiratory health since 1985. The latest phase in this research program – a joint clinical study involving Outokumpu and the Finnish Institute of Occupational Health and co-sponsored by the Finnish Work Environment Fund – was carried out in 2009. Lung function and inflammation biomarkers in the 350 Group employees who participated were investigated. Occupational hygiene measurements included chromium speciation and assessments of particle-size distributions (coarse to ultrafine). The results obtained were subjected to extensive analysis in 2010 and 2011.

The scientific article based on the results of the joint clinical study is in the manuscript phase. The intention is to submit the article for publication in a peer-reviewed journal.



Unlike most stainless steel makers, having our own mine has forced us to prioritize health and safety in all our operations.

Markku Huvinen,
Chief Medical Officer

Cancer incidence among Finnish ferrochromium and stainless steel production workers

In the beginning of 2012, an epidemiological cohort study was launched in co-operation with the Finnish Cancer Registry to investigate the incidence of cancer among Finnish ferrochromium and stainless steel production workers. The cohort consists of 8 100 employees who have been employed by Outokumpu mine in Kemi and production site in Tornio since 1967. People living in northern Finland are the reference population in the study. Preliminary results were available in October and indicate that the total number of cancer cases in the cohort equals the number of cases expected in the reference population. The incidence of lung cancer is 20% lower than in the reference population. Detailed results will be presented in a scientific article which will be submitted for publication in a peer-reviewed international medical journal.

Safety

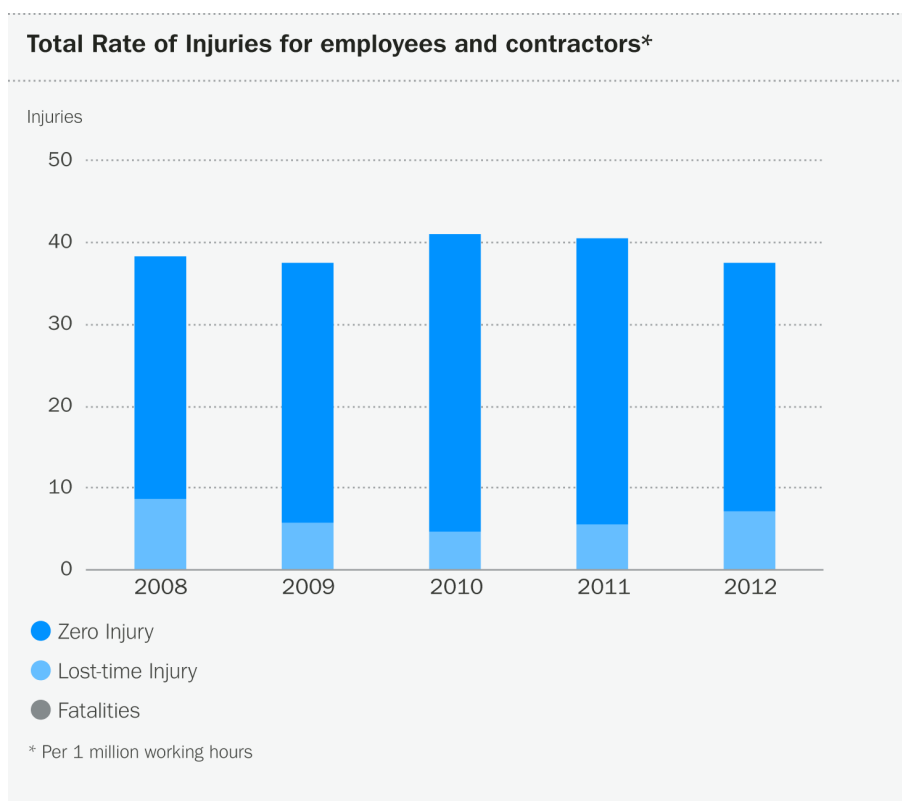
Safety commitment

Outokumpu is committed to providing all of its employees with safe and healthy working environments in the Group's production sites and facilities. Outokumpu is also accountable for the safety of the contractors, suppliers and visitors while they are working at or visiting these locations.

Safety remains a key line management responsibility. In Outokumpu, occupational safety measures are reported and reviewed by local and corporate management using common performance metrics and reporting processes. To support line management, a small corporate team has been established to take a holistic picture of safety and, where appropriate, develop common standards, audit processes and best practice/information sharing. Safety is one of the Group's key performance indicators.

Safety performance during a challenging year

The total injury rate in 2012 improved to 37.5 injuries per million hours worked (including all subcontractors) from 40.5 injuries per million hours worked in 2011. However, the number of lost time injuries in the Group increased to 7.2 injuries per million working hours worked from 5.6 in 2011 due to the significant organization changes and ongoing use of external contractors for capital projects in Finland. Only a small proportion of the lost time injuries were of a severe or potentially-severe nature or resulted in extended employee absence. There were no fatalities, and no significant injuries were sustained. The level of non-lost time/zero injuries (with no time lost from work) reported in the Group continues to be satisfactory and improved by over 15% in 2012 acting as a good barometer for safety actions being undertaken in operating units. Safety statistics reporting within Outokumpu is carried out in accordance with definitions issued by the World Steel Association.



Outokumpu has been introducing a greater focus on proactive attitudes to safety and a number of leading safety indicators are therefore measured. The number of recorded safety behavioral observations performed in 2012 was 11 533 and the number of near-miss and hazard situations reported was 17 376 (2011: 10 316).

Outokumpu continues to have a number of plants that have reported zero lost time injuries for multiple years. Many plants continue to work with operational excellence (e.g. 5s, Autonomous Management, Daily Management etc.) and this has had a positive impact on safety performance through the wide-ranging involvement of employees. These plants continue to provide good internal best practice benchmarks and are also receiving "reference plants" visits from external companies.

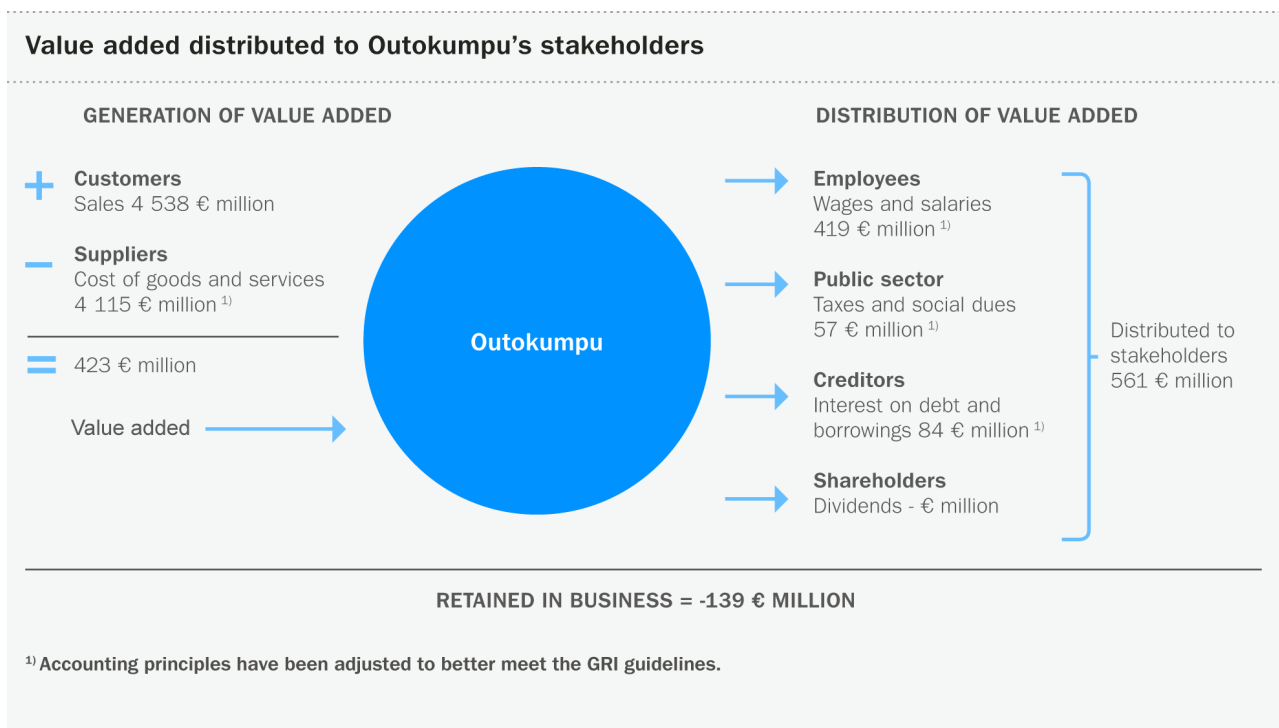
Safety ambitions – a benchmark in the industry

Outokumpu management is committed to improving safety performance in a sustainable and transparent manner. The company aims to be a benchmark for occupational health and safety in the steel industry. The focus during 2012 has been on stabilizing safety performance and preparing the foundations for a new Safety Strategy for the new Outokumpu Group. The Safety Strategy follows our existing safety principles and is built on the three themes of having Visible Safety Leadership, Employee Ownership of Safety and sound Safety Systems and Processes.

New Outokumpu, wider social responsibility

To enhance transparency and accountability Outokumpu strives for a continuous, systematic, and open dialogue with key stakeholders, such as shareholders, employees, customers, suppliers, as well as public and non-governmental organizations.

Outokumpu wishes to be a valuable partner in creating well-being in society. We also feel the responsibility for setting a positive benchmark as an industry leader.



During 2012 the Innoxum transaction affected our stakeholders and set a new role for the Group in society. The new and expanded presence globally creates a lot of new stakeholders. We have a larger geographical presence and new production sites, which means new cultures and local stakeholder groups. Being twice the size means roughly twice the number of employees and suppliers, and twice as much attention from public and non-governmental organizations. During the integration planning in 2012 and continued in implementation work in 2013, efficient stakeholder dialogue is one of the main goals.

Both externally and internally special attention was paid to secure communications. A special separate community was visible to both companies and during the integration a special newsletter was published.

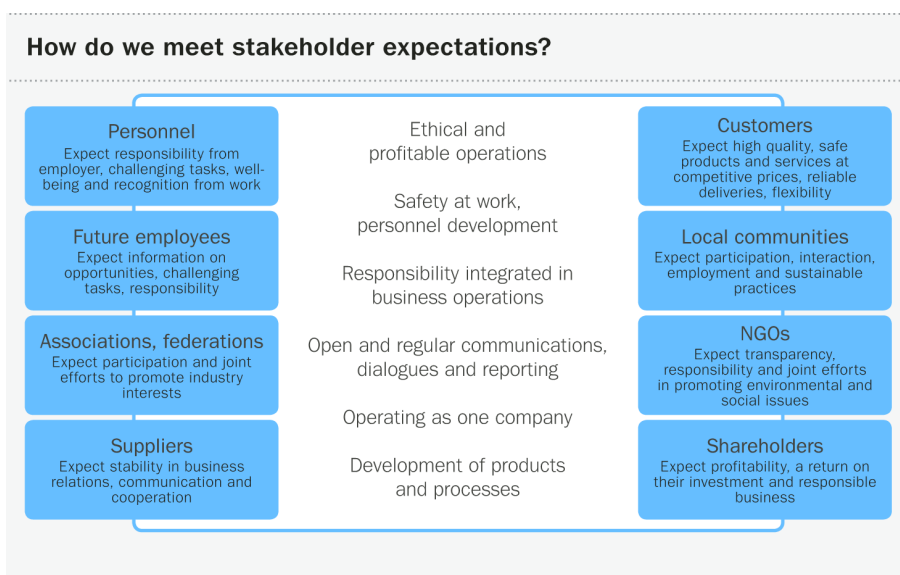
In order to clarify the framework for social responsibility issues and operate in a more organized way, especially in the new and wider Outokumpu scope, we have decided to adopt the international standard ISO 26 000; guidance on social responsibility. The Group has begun the implementation of this guideline and started to follow its fundamental principles. By aligning our social responsibility practices with this voluntary guidance, we can improve our performance and get a more structured and systematic structure for our future work.

During 2012 Outokumpu conducted a gap analysis of our current way of working against ISO 26 000 guidance. Based on our analysis, we currently comply with most of the standard's guidance, and cover its core subjects well.

Outokumpu has identified its main stakeholder groups and recognized the different needs considering reporting, information and interaction in general. During 2012, we focused our resources on the aim of upholding relationships with all stakeholder groups and initiating only strategic stakeholder projects related to the Innoxum transaction. We wanted to secure the correct perception of Outokumpu Group by local communities and employees of Innoxum, and stakeholders such as unions and investors were also targeted in stakeholder dialogue. The Group had an active dialogue with shareholders, especially with institutional investors and Solidium, who was the largest individual shareholder until the completion of the Innoxum transaction in December 2012.

The largest project effort conducted during 2012 was the supplier sustainability evaluation process, which affects the supply chain and highlights the responsibility issues within society and local communities. During this process the Group also evaluated the penetration of ethical principles and fair business practices among our suppliers and communicated the importance of these issues.

Different forms of interaction with Outokumpu's stakeholders continued in 2012 with face-to-face meetings in many forums, such as seminars, workshops and discussion panels, during road shows and at fairs and exhibitions. In this ongoing dialog, particular attention is given to contacts with analysts, investors, employees, future employees, non-governmental organizations (NGOs), customers, and suppliers. Other key stakeholder groups are local communities, industrial and business organizations, authorities, schools, and universities. Our stakeholders' involvement in the Group's activities and the trust they place in the Group are fundamental elements of Outokumpu's business operations.



Customers

Outokumpu serves various customers all over the world. Outokumpu aims to add value to our customers' products or improve related manufacturing techniques by understanding and satisfying customer needs. Continuous feedback and interaction with customers helps us to improve our understanding of their needs, the challenges they face and the business environment our customers and Outokumpu operate in.

First-hand feedback shows Outokumpu is strong in all key areas

Outokumpu conducted a customer survey in June 2012. More than 700 stainless steel customers were interviewed in 14 different countries worldwide. Customers ranked both Outokumpu and Inoxum as the best stainless steel companies in many key areas. The survey showed that most important issues for our customers are product quality, price, delivery reliability and technical expertise.

In addition to this survey, Outokumpu continued to obtain continuous, first-hand feedback from customers through a global customer feedback system. The system was deployed already in 2011. It is used to collect and utilize customer insight in a uniform manner in all Outokumpu countries, making the analysis and benchmarking of results easier. The data obtained through the system support the achievement of Outokumpu's growth targets. It is also used in strategic and operational decision-making as a driver for continuous learning and improvement of our operations with the aim of increasing the satisfaction of our customers.

In 2012, Outokumpu was in the middle of completing the Inoxum transaction. In 2013 Outokumpu and Inoxum will emerge as the new global leader in stainless steel and high-performance alloys. In these situations, Outokumpu focuses its efforts to managing the change to ensure business continuity and customer satisfaction. We increased customer communication in 2012 to ensure our customers that we will do our utmost to serve them and their business and deliver according to the customer needs throughout the transaction process and the following integration of two companies.

Outokumpu sales organization was reorganized at the year-end to serve the customers of the combined entity even better. For example in the Stainless Coil EMEA, sales are organized according to customer segments, and there is a sales network to take care of the day-to-day customer interaction. Outokumpu Group trains its employees to increase their awareness of customers and their needs. In 2013, one of the key priorities is high quality service to all customers globally to ensure that we meet continue to meet their expectations.

Finding the right steel grade

It is important for Outokumpu's success that our customers find the right steel grade for their applications quickly and easily. Our technical services provide customers assistance with the selection process. Then there are e.g. the webinars, customer days and mill visits, which are widely used to acquaint customers with the products and possibilities we offer. There are even online tools such as the Steel Finder that enable customers to make searches for products based on characteristics they define, browse our offering and establish which stainless steel grades fit that exact profile. A number of characteristics can be included in each search query: chemical composition, corrosion resistance, mechanical or physical properties, fabrication characteristics, formability and

the machining index. Customers can also compare products, obtain data on available dimensions and generate related data sheets.

The importance of sustainability is increasing in all business environments, as customers and authorities put more and more emphasis on sustainability. At Outokumpu, sustainability is embedded in the product – in the new company, more than 80% of the material used to produce our stainless steel is recycled, and at the end of its life-cycle, stainless steel products of Outokumpu are 100% recyclable. Outokumpu works to continuously develop its production processes to minimize the environmental impact of stainless steel production. Read more of our sustainable operations on the page Sustainability – strategic success factor.

Outokumpu provides customers information on the sustainability of its products and production operations, to help customers to make informed decisions. These facts are compiled into Sustainability Fact Sheet which includes information on recycling, carbon footprint, energy efficiency, product safety, product economics, management and reporting.

Suppliers

The largest item in Outokumpu's costs are raw material purchases. In 2012, Outokumpu delivery volumes increased to 1 428 000 tonnes, some 3% from the previous year. The cost of goods and services fell by 7% in 2012 from the previous year, mainly due to the decline in raw material prices.

Primary raw materials – nickel, ferrochrome, recycled stainless and carbon steel – are purchased on the open market. Part of the ferrochrome are sourced internally from the Group's own chromium mine and ferrochrome operations. The doubling of ferrochrome capacity is being ramped up in 2013, after which the production capacity of ferrochrome will double by 2015.

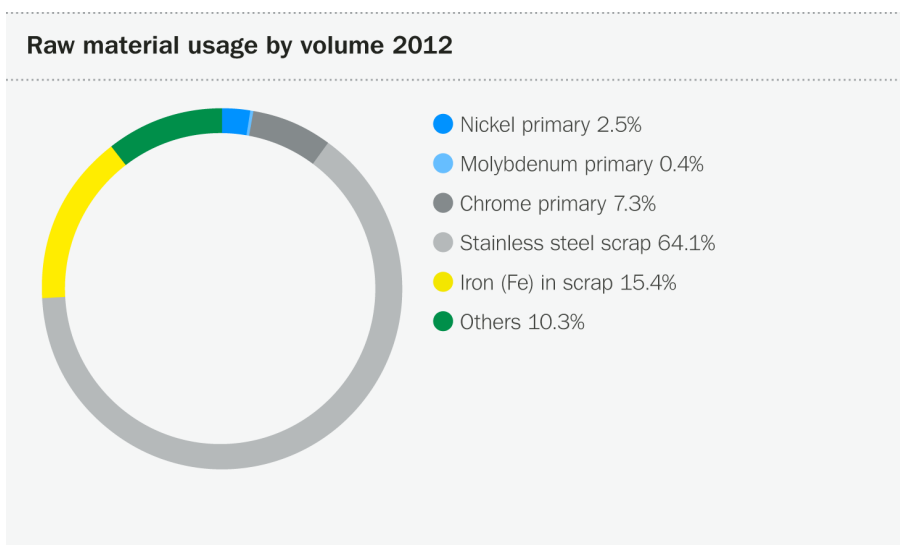
During 2012 Outokumpu evaluated its suppliers from the sustainability point of view, highlighting the responsibility issues within society and local communities. The scope of the study was all raw material producers and strategic suppliers in general procurement. Coverage of all completed answers and evaluated companies was more than 90% of Outokumpu's total spending on materials and supplies to these companies.

Read more about sustainable supply chain in Our impact on the environment section.

Cost of goods and services ¹⁾

€ million	2012	2011	2010
Raw materials and merchandise	2 824	3 161	2 414
Fuels and supplies	375	387	344
Energy expenses	227	254	269
Freights	167	168	165
Maintenance	102	108	106
Hire processing	38	37	32
Rents and leases	23	28	26
Other expenses	359	288	243
	4 115	4 430	3 599

¹⁾ Accounting principles have been adjusted to better meet the GRI guidelines.



Current and future employees

Both current and future employees are crucial stakeholders for Outokumpu as their energy and commitment is a fundamental part of the Group's business.

As some 9 000 employees (12 000 including the discontinuing operations) joined Outokumpu through the integration with Inoxum, dialogues with our employees will provide important guidance for continuous improvement. Outokumpu's workforce will be one of the key building blocks for creating the Group's organizational culture. Within Outokumpu, safety and sustainability are key values. This explains why they are incorporated into the Group's brand, both internally and externally.

Building Outokumpu's employer brand

Outokumpu's People Strategy is geared towards achieving the Group's vision and long-term goal of being the most attractive employer. During 2012, Outokumpu continued its long-term efforts to develop the Group's employer brand. In Finland and Sweden, co-operation with schools and universities is an important means of communicating Outokumpu's employer brand. In Finland, the main academic partners are Aalto University and the University of Oulu. For Sweden, these partners are the KTH Royal University of Technology and the University of Linköping. Primary activities that Outokumpu engaged in to enhance its employer brand included participation in career fairs, the sponsoring of student events, and advertorials featuring Outokumpu employees in student and business magazines. In Sweden, Outokumpu has also been recognized this year for its excellent efforts in employer branding activities by being nominated for a Universum award.

By offering summer job opportunities, Outokumpu aims to further build its employer brand. For students, this is a perfect opportunity to become acquainted with Outokumpu as an employer and to learn about the opportunities that Outokumpu offers. During the summer of 2012, the Group employed some 575 summer workers in Finland, mainly in Tornio. Approximately, 225 summer workers were employed at Outokumpu sites in Sweden.

The Group's employer brand was also assessed in the annual Universum Ideal Employer Rankings in 2012. Outokumpu was ranked as 35th most attractive employer among engineering students in Finland. Outokumpu considers it important to continue work to enhance the Group's employer brand, especially as the merger with Innoxum creates new challenges in this field. Being the global leader in stainless steel requires a more global approach in terms of employer branding.

Wages and salaries by country ¹⁾

€ million	2012	2011 ²⁾	2010
Finland	165	174	171
Sweden	141	176	145
Britain	29	30	25
Germany	10	13	15
Other Europe	38	52	50
Other countries	35	27	39
Total	419	472	445

¹⁾ Accounting principles have been adjusted to better meet the GRI guidelines.

²⁾ Wages and salaries in 2011 have been restated due to change in accounting principle of defined benefit obligations and other long-term employee benefits. Restatement carried back to January 1, 2011, thus figures for 2010 have not been restated accordingly.

Economic impact

Salary payments including pensions and other benefits paid by Outokumpu in 2012 decreased compared to the previous year by some 11% to EUR 419 million (2011: EUR 472 million). Bonuses received by Group personnel in 2012 amounted to EUR 15 million (2011: EUR 17 million). The Group's benefit plans are primarily based on operational or financial targets and vary by country.

Creative sustainability

Outokumpu participated in Aalto University's Master's Degree program "Creative Sustainability". This program is multidisciplinary learning platform, bringing together students from different fields of study, increasing understanding and enabling adapting more holistic approach to sustainability. Outokumpu hosted one course project group where the aim was to study possibilities of sustainable stainless in the Asian market. Throughout the project, learning curve was very steep. Students learned great deal about stainless steel as a material and Outokumpu as responsible producer. Outokumpu received valuable information about the role of sustainability in Asia market through the project work and collected valuable feedback on attitudes and ideas among future talents – one of our stakeholder groups.

Investors and analysts

Outokumpu's regular and active dialogue with global investors and analysts continued in 2012. From January onwards, the pending Inoxum transaction resulted in increased interest in Outokumpu from the capital markets.

Outokumpu met investors and analysts in various events throughout the year. The Group organized both the Extraordinary General Meeting (in February) and the Annual General Meeting (in March), and held quarterly results webcasts to investors and analysts for the Annual Accounts in February and for the interim reports in April, July and October. Outokumpu's representatives also attended seminars and conferences arranged by banks and organized roadshows to meet investors. In addition, Outokumpu arranged a total of 19 roadshows in Europe and in the US. Two site visits for analysts and institutional investors were arranged in 2012, one to both the Group's mine in Kemi and the stainless steel plant in Tornio, Finland and the other to the stainless steel plant in Tornio. Almost 300 one-on-one meetings, conference calls and video conferences with investors were held during the year.

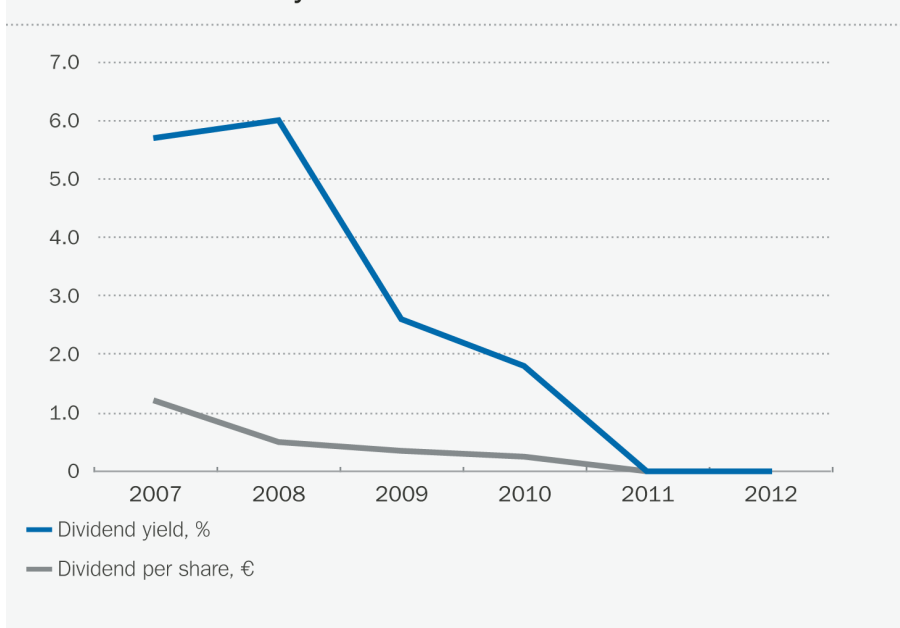
Read more about Outokumpu share and shareholders, Outokumpu's activities in the capital markets and stock exchange releases published in 2012 in Investor Information.



The market outlook, especially in Europe, is pretty grim for the coming years. Maybe not as bad as previous years but certainly a challenge for a company like Outokumpu which has plans to expand.

Luc Pez,
Analyst at Exane BNP Paribas

Dividend and dividend yield



Local communities

Outokumpu is an important member of the community in many of the locations in which the Group has industrial operations.

We are a major employer in Avesta, Degerfors, Långshyttan (Kloster), and Storfors in Sweden, in Sheffield in the UK, in New Castle in the US, and in the Kemi-Tornio region in Finland. A continuing dialogue is maintained with community officials and representatives, other commercial companies, and with schools and universities.

New Outokumpu has new locations where we aim to implement our sustainability program and actively listen to local communities. Outokumpu's most significant impacts on local communities include direct and indirect employment as well as environmental and energy issues, these are also key topics in discussions with local community representatives. Emissions from the Group's plants are measured and strictly monitored, and effective corrective actions are taken if deviations from permitted limits occur. Both vigilance and a responsive attitude to issues that affect local communities and their concerns are important.

Local discussions continued

The Tornio site got a new environmental permit in August 2012. One Swedish newspaper raised serious doubts about the health-related effects of Outokumpu's emissions in the Tornio-Haparanda area during 2011 and this continued in 2012. The newspaper has now written in total over 120 articles on Outokumpu's emissions and possible effects on inhabitants and the environment. This communication has been against fact-based argumentation of authorities and health experts and the company has not been able to participate or communicate its own view. It seems that there were not any findings or evidence behind the claims but the campaign has caused appeals from Sweden against the new environmental permit. The authorities in Finland have not appealed. Outokumpu communicated locally in co-operation with health and environmental authorities and presented scientific views.

In October, November, and December, Outokumpu participated in an open forum and discussions with local inhabitants and NGOs related to the environmental and health impacts of the steel industry in Haparanda, Sweden, and Tornio. For example, new preliminary health study results were presented. In fact, the employees of the Outokumpu Tornio works and the Kemi mine are the most studied steel workers in the industry globally. As a result of health studies conducted since the 1980s, there are no indications of occupational or other diseases caused by metal or other chemical exposures. These workers are the "worst case scenario group" in relation to air emissions and metal concentrations due to fact that their level of exposure to air and emission-based chemicals is much higher than other local inhabitants.

As a large employer, decisions regarding the Group's operations have a major impact on communities; not only on Outokumpu personnel and their families, but also on local goods suppliers and service providers. The two current strategic investments will have a positive impact on the surrounding districts: the EUR 410 million investment to expand the Group's ferrochrome production in Tornio, and the EUR 100 million investment to increase stainless quarto plate production capacity in Degerfors. Completion of the ferrochrome expansion during 2012 will result in the addition of around 120 permanent jobs in the Kemi-Tornio region.



People in and around Tornio are proud to have Outokumpu here. As the main employer in the region, it brings economic wealth and a degree of stability to the area in a time of economic unrest.

Pekka Pelttari,
Chairman of the Board of
Tornio City Council

The Group's Kemi mine collaborates with several educational establishments in the training of engineers, miners, and supervisors. In Sheffield in the UK, apprenticeships have been offered to local colleges and student placements have been made available in the form of one-year programs. Outokumpu's employees have given presentations in local schools and universities and we have worked with local employment agencies to find for people positions within the Group. Schoolchildren and local students have been introduced to the Group's working environment through tours and discussions with employees.

Managing impacts on local communities

Traffic loads have an impact on local communities, with the Kemi-Tornio region and Sheffield being good examples. In Sheffield, Outokumpu is located very close to the UK's M1 motorway, and steps are taken to ensure that our operations have minimal impact on this primary transportation route. As the effects associated with the transportation of goods and raw materials can be major, the Group's general logistical arrangements are carefully planned to avoid road congestion and minimize impacts on other road users. In recent years, increased transportation of alloys by rail has had a positive impact in connection with road traffic densities.

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

Communication with employees on sites

Maintaining employee well-being is Outokumpu's aim, and productive dialogue is the key element in achieving this. Avesta, Sheffield, and Tornio, Outokumpu's largest industrial sites, have many similarities. In addition to regular meetings with personnel representatives, employees are met once or twice every year or at special events. Daily operational meetings include reporting on health and safety and environmental issues. Actions to resolve these are usually taken immediately after completing a risk assessment. Management team members are encouraged to walk through Group facilities, including production plants, and to talk with employees engaged in manufacturing operations.

Production employees are represented by their unions in plant management discussions at both Avesta and Sheffield. In Avesta, both formal and informal meetings are held at the plant level and on site on a regular basis. In the UK, trade union engagement at Outokumpu sites is active, with work on many issues, including health and safety, salaries, working hours, shift patterns, and other mutually beneficial issues, being conducted in close co-operation. Dialog between the management team and an employee forum, a cross-functional group, takes place monthly. The issues raised are debated and action plans instituted. The Group's "one team" approach does not distinguish between white-collar and blue-collar workers. Nominated safety and union representatives are able to engage in direct and open dialogue with members of the plant management team. In Tornio, individuals heading large departments are members of the management team. Three personnel representatives are appointed as members of the board of Outokumpu Stainless Oy.

Outokumpu's UK sites arrange open days for employees' relatives, helping them to become familiar with the locations where their family members work. Quarterly health and safety and well-being sessions are organized for employees and these incorporate the family-related aspects of their occupations. Close work with Fitness First Gym, which visits the Group's UK sites on a quarterly basis, reinforces well-being and fitness programs. At Avesta in Sweden, a recreation committee organizes a wide variety of events for both employees and their families, such as lectures and family days. Participation in sports such as biking, skiing, and swimming is sponsored. At Tornio in Finland, sporting events involving employees' children are organized in both the summer and winter. Personnel clubs, which reduce the costs associated with enjoying cultural and other events, are supported.

"People are proud to have Outokumpu here"

In Tornio, northern Finland for example, the site of Outokumpu's state-of-the-art, integrated chrome mine and stainless steel mill, the company builds dialogue with local stakeholders through open days, meetings, information sessions, training, apprenticeships and company visits.

Says Pekka Pelttari, Chairman of the Board of Tornio City Council: "People in and around Tornio are proud and happy to have Outokumpu here. I'd go so far to say the company is a pillar of society. As the main employer in the region, providing a quarter of the jobs, they bring economic wealth, creating a knock-on effect for other companies to thrive and generating local tax revenue. More than that, they bring a degree of security and stability to the area in a time of economic unrest. When we heard that Outokumpu was acquiring Inoxum we considered the effect on our community but we strongly believe that Tornio will continue to have a central role in Outokumpu's future and vice versa."

Recently Outokumpu has injected a huge 400-million-euro investment into the area, which has offset job reductions that some other companies in the area have been forced to make. For their part, the City authorities have made sure that land use and town planning serve the interests of economic development and that there is open communications between companies, employee representatives and the media.

"Heavy industry naturally sometimes attracts criticism. There have been a couple of unfounded environmental claims about Outokumpu, which has actually annoyed local inhabitants. But we take a pragmatic approach based on facts, independent research and constructive dialogue with all parties. Even though emissions are well within stringent legal limits, they can always be lower. That's why Outokumpu continues its program for improvements and is one of the best in the world."

"These days, information channels are faster, easier and cheaper for both organizations and individual people to access. But in the end it's a question of trust. Once you get to know people on a personal level, you can explore mutual interests to create a very positive influence for all the people that live here."

Associations and federations

Outokumpu is an active and responsible actor in society. As the world's largest stainless steel producer, the Group's opinion is voiced in many forums.

In 2012, Outokumpu experts and top management continued to maintain effective liaisons with the authorities and numerous organizations. Top management participated in dialogue concerning issues such as social well-being, the global financial situation, and the future of the stainless steel business. Mika Seitovirta, Outokumpu's CEO, was an active participant in the discussions, especially those regarding society's role in creating an operative environment that can enhance development, knowledge, and investments in Finland. 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, Eurofer, EuroInox, EuroSlag, and the International Chromium Development Association. Outokumpu is also an associate member of the World Steel Association (worldsteel) and a member of the International Stainless Steel Forum (ISSF), a stainless-steel-specific sub-organization.

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 or use hard lobbying on decision-makers. As a member of Eurofer, worldsteel and ISSF, Outokumpu participates in different policy groups whose aim is to provide expertise and help decision-makers in connection with issues such as the global mitigation of greenhouse gas emissions by the iron and steel industry. In these forums, members share best practices, 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 Sustainability Report.

In Europe, Outokumpu is a member of several federations and associations in Finland, France, Germany, Italy, Sweden, 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 which handle statistics, research and the environment, and in working groups which focus on issues such as climate change, air quality, water, and waste. Eurofer conveys opinions to EU governing bodies (the European Commission, the European Parliament, and the European Council), and promotes measures such as the renewal of the Integrated Pollution Prevention and Control IPPC Directive, the implementation of REACH (the Registration, Evaluation and Authorisation of Chemicals), and continuation of the European Emissions Trading Scheme (EU ETS). 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. Outokumpu 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 Worldsteel Sustainable Development Charter and the ISSF's Sustainable Stainless Charter. Although countering bribery and corruption are clearly defined in the Group's publicly available Code of Conduct, participation in these networks is a way to promote progress throughout the whole business landscape, also outside the Group's own supply chain.

Public sector, sponsoring and NGOs

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

In 2012, taxes and social security contributions paid by the Group totaled EUR 57 million (2011: EUR 62 million). In 2012, Outokumpu posted a loss and thus also the amount of taxes paid remained low, some EUR 4 million for the financial year (2011: EUR 6 million). The impact of taxes on societal well-being is both direct and indirect.

Taxes and social dues by country ¹⁾

€ million	2012	2011	2010
Finland	8	10	8
Sweden	31	31	27
Other Europe	16	18	15
Other countries	3	3	2
Total	57	62	53

¹⁾ Accounting principles have been adjusted to better meet the GRI guidelines.

Public sector support received

In 2012, Outokumpu received some EUR 0.9 million (2011: EUR 1.4 million) from the public sector to support Group research and development of new technologies, products, and applications.

Grants and community support given

Outokumpu supports higher education and research by donating funds to universities. In 2012, the co-operation between Aalto University, a new multidisciplinary science and art community, proceeded in the fields of science, economics, art, and design. Outokumpu has supported Aalto University from the establishment of the institution, including the initial fund donation of EUR 1 million made in 2010.

Co-operation with Aalto University offers Outokumpu the chance to harness top-level know-how and a multidisciplinary approach. Aalto's core research fields – materials research and design – will round out Outokumpu's in-house R&D, offering new opportunities for innovation and exchanging know-how. During 2012, Outokumpu was an active partner in projects defined under joint research teams. Outokumpu participated in a course under the name "Creative Sustainability" and hosted a project for international students on how to market Outokumpu's great sustainability credentials efficiently. Read more about creative sustainability in the Current and future employees section in this report.

Outokumpu is one of the founders of the Technology Industries of Finland Centennial Foundation Fund for the Association of Finnish Steel and Metal Producers, established by five Finnish steel and metal producing companies. The fund was founded to promote university-level research and teaching of technology and business opportunities in metals production. In 2012, the fund awarded grants of some EUR 0.3 million.

As defined in Outokumpu's sponsorship policy, the Group's sponsorship decisions are based on clearly defined pre-conditions of strategic, brand image, and sustainability criteria. Outokumpu also makes discretionary donations for the common good as a responsible corporate citizen. These donations are organized by sustainability management and approved by the Leadership Team or by the Board of Directors.

Total grants and community support in 2012 amounted to some EUR 0.3 million.

Outokumpu does not take part in or otherwise support political activities, whether they are local, communal, or national. Outokumpu does not make donations to any political parties or groups.

Dialogue with environmental NGOs continued

In 2012, Outokumpu continued its dialogue with environmental NGOs. Issues that were discussed included the role of steel recycling and sustainable stainless steel.

Outokumpu participated in many open forums and discussion with local inhabitants and NGOs related to the environmental and health impacts of the steel industry in Haparanda, Sweden. As a result, Outokumpu aims to increase further the transparency and information related to these issues and our products.

Reporting on sustainable development

Outokumpu produces stainless steel, a sustainable material, by using a sustainable production chain in a responsible manner.

As the Group's corporate responsibility principles cover all aspects of Outokumpu's operations and strategy and are also integrated into the way that we conduct our business, our view is that all related issues should be reported in an integrated manner. Outokumpu aims for open and transparent communications. Outokumpu's reporting reflects the view that all of the Group's operations – and our dialogue with stakeholders – must be based on ethical and sustainable business practices, since these provide the basis for our long-term competitiveness.

This is the fourth year that Outokumpu's reporting has been presented in a fully integrated form. The report presents the Group's relevant and material sustainability issues. Issues on Sustainable development and Corporate responsibility requirements are reported openly and transparently following the Global Reporting Initiative (GRI) G3 guidelines.

This sustainability reporting has been assured by an external assurance provider. This report includes a separate GRI and UN Global Compact reporting index, where all the indicators regarding responsibility practices are listed together with links to the pages on which they are addressed.

Outokumpu's Annual Report also meets other requirements within sustainability reporting. Outokumpu decided to adopt the ISO 26 000 "Guidance on social responsibility" standard. This is the first report in which we have the ISO 26 000 core subjects and issues comparison table together with GRI reporting index.

The Group is a signatory to the UN Global Compact. Outokumpu also follows International Chamber of Commerce policies by utilizing ISO-based management systems in connection with issues relating to Environment, Health and Safety and Quality management. Read more about the Group's social responsibility.

The Group has also signed the Sustainable Development Charter published by the World Steel Association and the International Stainless Steel Forum. Together with the Group's internal policies and practices these frameworks have requirements for external reporting, which have been taken into account in this Annual Report.

To better satisfy stakeholders' information needs, a separate Sustainability summary can be formed as a PDF, and the printed Sustainability brochure has also been created in order to communicate effectively the key points to new stakeholders.

Focus on material issues

To ensure that limited resources are allocated in the most efficient manner, Outokumpu analyzed the most material sustainability issues. The results of this analysis, which identified the internal and external issues most relevant to the Group, formed a natural basis for sustainability-related actions and developments in 2012.

The results of the materiality analysis, issues with high significance for both Outokumpu and the Group's stakeholders, were mostly those which have been on Outokumpu's sustainability agenda in previous years. This confirms that we are working with the correct issues and that further improvements are still needed. The analysis process has helped the Group initiate new actions and programs in an optimal manner. During 2012, Outokumpu took action in connection with all issues identified as having a material significance and related developments are detailed in this report.

The Outokumpu Board of Directors reviewed the sustainability analysis and related actions at its December 2012 meeting. 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. This arrangement ensures that sustainability issues are an integral element in Outokumpu operations from the lowest to the highest levels.



GRI and UN Global Compact

We have self-declared our reporting to be Application Level B+ of the GRI G3 Guidelines. PricewaterhouseCoopers Oy has checked our reporting and has confirmed it to be Application Level B+.

This GRI and Global Compact reporting index refers to the Annual Report 2012 published in full at www.outokumpu.com/reports.

GRI Index

	GRI Profile Disclosures	Included	Annual Report Section(s) 2012	Global Compact	ISO 26000	Comment
1.	Strategy and Analysis					
1.1	CEO's statement	Yes	CEO's review		6.2	
1.2	Key impacts, risks and opportunities	Yes	Risks and stakeholders Climate change risks Market review CEO's review Focus on material issues Environmental goals and results Goals and results Outokumpu and society		6.2	
2.	Organizational Profile				6.2	
2.1	Name of the organization	Yes	Corporate Governance in 2012		6.2.1 – 6.2.3	
2.2	Primary brands, products and services	Yes	Business areas until December 28, 2012		6.2.1	
2.3	Operational structure	Yes	Our group		6.2.1	
2.4	Location of organization's headquarters	Yes	Contact us		6.2	
2.5	Number of countries and location of operations	Yes	Our operating environment		6.2	
2.6	Nature of ownership and legal form	Yes	Corporate Governance in 2012		6.2	
2.7	Markets served	Yes	Our operating environment Customer industries		6.7.1	
2.8	Scale of the reporting organization	Yes	Highlights and key figures Market review		6.2	
2.9	Significant changes regarding size, structure or ownership	Yes	Our group Review by the Board of Directors		6.2	
2.10	Awards received in the reporting period	Yes	R&D		6.2	
3.	Report Parameters					
3.1	Reporting period	Yes	Reporting principles			
3.2	Date of most recent report	Yes	Reporting principles			
3.3	Reporting cycle	Yes	Reporting principles			
3.4	Contact point for questions regarding the report	Yes	Contact us			

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3.5	Process for defining report content	Yes	Focus on material issues Reporting principles			
3.6	Boundary of the report	Yes	Reporting principles			
3.7	Limitations on the report's scope or boundary	Yes	Reporting principles			
3.8	Basis for reporting subsidiaries and joint ventures	Yes	Reporting principles			
3.9	Data measurement techniques and bases of calculations	Yes	Reporting principles			
3.10	Explanation of re-statements	Yes	Reporting principles			
3.11	Significant changes from previous reporting periods in the scope, boundary or measurem. methods	Yes	Reporting principles			
3.12	GRI content index	Yes	GRI and UN Global Compact			
3.13	Assurance policy and practice	Yes	Reporting principles Assurance report		7.5.3	
4.	Governance, Commitments and Engagement					
	Governance					
4.1	Governance structure of the organisation	Yes	Corporate Governance in 2012 Board committees		6.2	
4.2	Position of the Chairman of the Board	Yes	Members of the Board of Directors		6.2	
4.3	Independence of the Board members	Yes	Members of the Board of Directors		6.2	
4.4	Mechanism for shareholder and employee consultation	Yes	General Meeting of Shareholders		6.2	
4.5	Executive compensation and linkage to organization's performance	Yes	Remuneration		6.2	
4.6	Processes for avoiding conflicts of interest	Yes	Board of Directors		6.2	
4.7	Processes for determining expertise	Yes	Board of Directors Corporate Governance in 2012		6.2	
4.8	Implementation of mission and values statements, code of conduct and other principles	Yes	Financial reporting Our people		6.2	
4.9	Procedures of the Board for overseeing management of sustainab. perform., incl. risk management	Yes	Financial reporting Focus on material issues		6.2	
4.10	Processes for evaluating the Board's performance	Yes	Board of Directors		6.2	
	Commitments to External Initiatives					
4.11	Addressing precautionary approach	Yes	Our impact on the environment	7	6.5	
4.12	Voluntary charters and other initiatives	Yes	Associations and federations			

Sustainability Report 2012
GRI and UN Global Compact

4.13	Memberships in associations	Yes	Associations and federations			
	Stakeholder Engagement					
4.14	List of stakeholder groups	Yes	Outokumpu and society		6.8	
4.15	Identification and selection of stakeholders	Yes	Outokumpu and society		6.8	
4.16	Approaches to stakeholder engagement	Yes	Outokumpu and society		6.8	Approaches to stakeholder engagement are presented under the sections describing various stakeholders.
4.17	Key topics raised through stakeholder engagement	Yes	Customers Local communities		6.8	
5.	Management Approach and Performance Indicators					
	Management approach to economic responsibility	Yes	Our strategy Targets and dividend policy Local communities Strategic and business risks Operational and financial risks Management review Compliance	1, 4, 6, 7	6.2	
	Management approach to environmental responsibility	Yes	Our impact on the environment Environmental goals and results Climate change risks Compliance	7, 8, 9	6.5	
	Management approach to labor practices and decent work	Yes	Our people Goals and results Operational and financial risks Training and development Compliance	1, 3, 6	6.4	
	Management approach to human rights	Yes	Our people Compliance Internal audit Diversity and equal rights		6.3	
	Management approach to society	Yes	Local communities Compliance Internal audit		6.8	
	Management approach to product responsibility	Yes	Compliance Customers Safe use of stainless Product properties		6.7	
	Economic Performance Indicators					
	Economic Performance					

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GRI and UN Global Compact

EC1*	Direct economic value generated and distributed	Yes	Outokumpu and society Public sector, sponsoring and NGOs		6.8	
EC2*	Risks and opportunities due to climate change	Yes	Climate change risks	7	6.8	
EC3*	Coverage of defined benefit plan obligations	Partly	Remuneration 25. Employee benefit obligations		6.4	
EC4*	Significant subsidies received from government	Yes	Public sector, sponsoring and NGOs Shareholding		6.8	
	Market presence					
EC5	Entry level wage compared to minimum wage	No		1		
EC6*	Spending on local suppliers	Partly	Sustainable supply chain			Evaluation of suppliers' sustainability policies described.
EC7*	Local hiring	No		6		
	Indirect Economic Impacts					
EC8*	Infrastructure investments provided for public benefit	No				
EC9	Significant indirect economic impacts	Yes	Local communities			
	Environmental Performance Indicators					
	Materials					
EN1*	Materials used by weight or volume	Yes	Material balance	8	6.5	
EN2*	Recycled materials used	Yes	Sustainability – strategic success factor Material balance	8, 9	6.5	
	Energy					
EN3*	Direct energy consumption	Yes	Material balance Energy efficiency	8	6.5	
EN4*	Indirect energy consumption	Partly	Material balance Energy efficiency	8	6.5	Electricity consumption and origin of electricity reported
EN5	Energy saved due to conservation and efficiency improvements	Yes	Energy efficiency Environmental goals and results Environmental investments	8, 9	6.5	
EN6	Initiatives to provide energy-efficient or renewable energy based products and services	Partly	Energy efficiency	8	6.5	
EN7	Initiatives to reduce indirect energy consumption	Yes	Sustainable supply chain Climate change	8	6.6.6	
	Water					
EN8*	Total water withdrawal	Yes	Water	8	6.5	
EN9	Water sources significantly affected by withdrawal of water	Yes	Water	8	6.5	
EN10	Percentage and total volume of water recycled and reused	Yes	Water	8, 9	6.5	

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	Biodiversity					
EN11*	Location and size of land holdings in areas of high biodiversity	Partly	Biodiversity	8	6.5	
EN12*	Description of significant impact of activities, products, and services on biodiversity	Yes	Biodiversity	8	6.5	
EN13	Habitats protected or restored	Yes	Biodiversity	8	6.5	
EN14	Managing impacts on biodiversity	Yes	Biodiversity	8	6.5	
EN15	Species with extinction risk with habitats in areas affected by operations	Yes	Biodiversity	8	6.5	
	Emissions, Effluents and Waste					
EN16*	Total direct and indirect greenhouse gas emissions	Yes	Material balance Climate change	8	6.5	
EN17*	Other relevant indirect greenhouse gas emissions	Yes	Climate change	8	6.5	
EN18	Initiatives to reduce greenhouse gas emissions	Yes	Climate change Environmental goals and results	7, 8, 9	6.5	
EN19*	Emissions of ozone-depleting substances	Yes	Material balance	8	6.5	
EN20*	NOx, SOx, and other significant air emissions	Yes	Material balance Emissions, effluents and waste	8	6.5	
EN21*	Total water discharge	Yes	Water	8	6.5	
EN22*	Total amount of waste	Yes	Material balance Emissions, effluents and waste	8	6.5	
EN23*	Significant spills	Yes	Emissions, effluents and waste	8	6.5	
EN24	Transported, imported, exported, or treated hazardous waste	Partly	Emissions, effluents and waste	8	6.5	
EN25	Water bodies and habitats affected by discharges of water	Yes	Biodiversity Water	8	6.5	
	Products and Services					
EN26*	Mitigating environmental impacts of products and services	Yes	Environmental goals and results Materials efficiency Climate change Emissions, effluents and waste	7, 8, 9	6.5	
EN27*	Reclaimable products and reuse	No		8, 9		
	Compliance					
EN28*	Significant fines and sanctions for non-compliance with environmental regulations	Yes	Emissions, effluents and waste	8	6.5	No significant fines or non-compliance nor incidents
	Transport					
EN29	Environmental impacts of transportation	Yes	Sustainable supply chain	8	6.5	

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	Overall					
EN30	Total environmental protection expenditures and investments	Yes	Environmental investments	7, 8, 9	6.5	
	Social Performance Indicators					
	Labor Practices and Decent Work					
	Employment					
LA1*	Total workforce by employment type, employment contract and region	Partly	Personnel figures		6.4	
LA2*	Total number and rate of employee turnover	Partly	Personnel figures	6	6.4	
LA3	Employee benefits	No				
	Labor/Management Relations					
LA4*	Coverage of collective bargaining agreements	Yes	Diversity and equal rights	1, 3	6.3, 6.4	
LA5*	Minimum notice period regarding operational changes	Yes	Personnel figures	3	6.4	
	Occupational Health and Safety					
LA6	Representation in joint health and safety committees	Partly	Local communities	1	6.4	
LA7*	Rates of injury, occupational diseases, lost days, fatalities and absenteeism	Yes	Health Safety	1	6.4	
LA8*	Education and prevention programmes regarding serious diseases	Partly	Health Local communities	1	6.4	
LA9	Health and safety topics covered in formal agreements with trade unions	No		1		
	Training and Education					
LA10*	Average training hours per year	Partly	Training and development		6.4	
LA11	Programmes for skills management and lifelong learning	Yes	Training and development		6.4	
LA12	Employees receiving regular performance and career development reviews	Yes	Performance management		6.4	
	Diversity and Equal Opportunity					
LA13*	Composition of governance bodies and breakdown of employees	Yes	Personnel figures Diversity and equal rights	1, 6	6.4	Breakdow of total workforce by gender, age and education. Composition of governance bodies by gender.
LA14*	Ratio of basic salary of men to women by employee category	No		1, 6		
	Human Rights					
HR1*	Investment agreements with human rights clauses or that have undergone human rights screening	No		1-2, 4-6		

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HR2*	Suppliers and contractors that have undergone human rights screening	Partly	Sustainable supply chain	1-2, 4-6	6.6	
HR3	Human rights related training for employees	No		4, 5		
HR4*	Incidents of discrimination and actions taken	Yes	Internal audit	1, 2, 6	6.4	
HR5*	Supporting right to freedom of association and collective bargaining in risk areas	Yes	Internal audit	1, 2, 3	6.4	No major risks were identified during the audits of units or systems.
HR6*	Measures taken to eliminate child labour in risk areas	Yes	Internal audit	1, 2, 5	6.4	No major risks were identified during the audits of units or systems.
HR7*	Measures taken to eliminate forced labour in risk areas	Yes	Internal audit	1, 2, 4	6.4	No major risks were identified during the audits of units or systems.
HR8	Human rights related training for security personnel	No		1, 2		
HR9	Incidents involving rights of indigenous people and actions taken	No		1, 2		
	Society					
	Community					
S01*	Managing impacts of operations on communities – also issues of Mining and Metals supplement notes	Partly	Local communities		6.8	
	Corruption					
S02*	Business units analyzed for corruption risks	Partly	Internal audit	10	6.6, 6.2	
S03*	Anti-corruption training	No		10		
S04*	Actions taken in response to incidents of corruption	No		10		
	Public Policy					
S05*	Public policy positions and participation in public policy development and lobbying	Yes	Associations and federations	10	6.6, 6.8	
S06	Contributions to political parties and related institutions	Yes	Public sector, sponsoring and NGOs	10	6.8	
S07	Legal actions for anti-competitive behaviour, anti-trust, and monopoly	Yes	Compliance		6.6	
	Compliance					
S08*	Fines and sanctions for non-compliance with laws and regulations	Yes	Compliance		6.6	
	Product Responsibility					
	Customer Health and Safety					
PR1*	Assessment of health and safety impacts of products	Yes	Safe use of stainless	1	6.7	
PR2	Non-compliance with regulations concerning health and safety impacts of products	No		1		
	Product and Service Labeling					

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PR3*	Product information required by procedures	Partly	Product properties	8	6.7	
PR4	Non-compliance with regulations concerning product information and labelling	No		8	6.6	
PR5	Customer satisfaction	Yes	Customers		6.7	
	Marketing Communications					
PR6*	Adherence to marketing communications laws, standards and voluntary codes	No				
PR7	Non-compliance with marketing communications regulations and voluntary codes	No				
	Customer Privacy					
PR8	Complaints regarding breaches of customer privacy	No		1		
	Compliance					
PR9*	Fines for non-compliance concerning the provision and use of products and services	No				
	Mining and Metals supplement					
MM4	Number of strikes and lock-outs exceeding one week's duration, by country.	Yes	Diversity and equal rights		6.3	Strike days reported.
MM11	Programs and progress relating to materials stewardship	Yes	Product life-cycle Safe use of stainless Public sector, sponsoring and NGOs		6.7	

* GRI Core indicator

Reporting principles

In Outokumpu's reporting, the goal is to support open dialogue between the Group and its stakeholders. Our aim is to address the needs of current and future personnel, shareholders, customers, and other parties who have an interest in Outokumpu and its business operations.

We use reporting as an opportunity to illustrate what Outokumpu has done to ensure that the Group's business operations are sustainable, and to indicate actions we expect to take in the future to enhance individual well-being and the natural environment. Outokumpu has a long history of responsible business practices and we are working to make our operations more sustainable. As well as reporting on matters we consider important and relevant to our business operations, we also cover current global themes, which affect the Group's operations and our stakeholders.

If you have questions regarding the content of this report, please contact Outokumpu.

Scope of the report

The closing of the Inoxum transaction took place on December 28, 2012. The new Outokumpu as a combined entity started its operation in December 29, 2012. Reporting in 2012 is based on Outokumpu prior to the combination.

Outokumpu's Corporate Responsibility report is published annually, and the reporting period is the same as the Group's financial reporting period (one calendar year). This report for 2012 was published online on February 25, 2013 as part of the 2012 Outokumpu Annual Report. The most recent report for 2011 was published on February 17, 2012.

The 2012 Outokumpu Annual Report is the fourth to be published online, and the fourth in which the Group's Corporate Responsibility report has been fully integrated.

Since 2004, Outokumpu's reporting has been based on guidelines provided in the widely-recognized and applied Global Reporting Initiative (GRI) (G3.0 from 2007), but the integrated reporting format now used by Outokumpu does not follow the tripartite division into economic, social, and environmental responsibility suggested by GRI.

A comparison of Outokumpu's reporting against the GRI 3.0 guidelines and the 10 principles of the UN Global Compact together with ISO 26 000 core issues can be found on the GRI and UN Global Compact section.

Economic and social information covers the whole of the Outokumpu Group. Environmental indicators are used at all Outokumpu stainless steel production plants.

Comparability of statistics

Corrections made to figures reported in previous years are indicated in conjunction with the corrected figures. Since 2007, Outokumpu's Annual Reports have included an assurance report submitted by independent external assurance providers. This independent assurance report is available on the Assurance report section. Figures in the financial statements under the section Financials in the Annual Report 2012 have been audited.

Measurement techniques

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 accounts 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:

Generation of value added

Sales invoiced to customers during the financial year are used when calculating the generation of value added. Discounts or indirect taxes are deducted from sales figures.

The cost of goods and services purchased by Outokumpu during the financial year is deducted from sales when calculating the generation of value added by the Group.

Distribution of value added

Value added which is distributed to employees consists of wages and salaries paid to Outokumpu employees during the financial year. Pension payments and related accruals are included in this figure. Outokumpu changed the accounting principle of defined benefit obligations and other long-term employee benefits in 2012. The expected return on plan assets and interest expenses are recognized in financial items and therefore not included in employee benefit expenses anymore. In addition, the previously used corridor method has been eliminated and all actuarial gains and losses are now recognized directly in other comprehensive income.

The distribution of value added to the public sector includes taxes, social charges, and other payments which resemble taxes. No deferred taxes are included in this figure.

To determine creditors' share of value added, interest costs on debt booked during the financial year are presented. Capitalized interest is deducted from this figure.

The distribution of value added to shareholders is the total dividend which Outokumpu's Board of Directors proposes for distribution to shareholders from the parent company's distributable funds.

Environmental responsibility

Financial information related to environmental investments is collected in accordance with Group-wide unified guidance following 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 and reporting covers Outokumpu's stainless steel, ferrochrome and mining operations, excluding Inoxum operations that became part of Outokumpu on December 29, 2012. Outokumpu stainless tubular production (OSTP) units, formerly fully Outokumpu owned operations, were partly divested when the OSTP joint venture was formed in July 2011, after Outokumpu decided to exit from the tubular business as part of its restructuring program. As of January 2013, Outokumpu remains as a minority shareholder with a 49% stake in the joint venture. Former OSTP unit that was not part of the joint venture but remained part of Outokumpu operations

is included in the environmental reporting, while the OSTP joint venture is now an associated company and therefore not included.

Social responsibility

Lost-time injuries (LTI) per million hours worked (the World Steel Association principle)

A lost-time injury is an injury or accident that has taken place during working hours at the workplace and caused at least one instance of sick leave for one day (excluding the day of the injury or accident). Sick leave of one day means that an Outokumpu employee or a person employed by a third party has not been able to return to work on their next scheduled working day. Returning to work with activity restrictions does not constitute lost-time injury status, regardless of how severe or minimal the associated restrictions.

EU average LTI

From statistics supplied by the World Steel Association. Member companies follow the World Steel Association definition of losttime injury (LTI) in related reporting.

Near miss incidents

Near miss incidents refer to events that could have led to an accident but no injury occurred. The number of near miss incidents occurring in all Group companies is collected via Outokumpu's financial consolidation system. Related information is provided by the Group's safety reporting system.

Sick leave days

Sick leave days reported are total sick leave days during a reporting period. Reporting units provide data on absence due to illness and occupational diseases on a monthly basis in connection with financial reporting. With effect from January 1, 2009, sick leave days have been reported per million hours worked, not as a percentage figure.

Personnel figures

From 2011, the Group has been reporting actual headcounts. This has also been applied in calculating some of the personnel figures.

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.

Bonuses

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

Personnel turnover

$((\text{newly hired} + \text{leavers})/2)/\text{year end headcount}$

The divider has since 2010 been changed from twice the average headcount to twice the year-end headcount. Compared to 2011, the formula has been specified in order to unify it with the formula recommended by KILA (Kirjanpitolaautakunta).

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.

Independent Assurance Report

To the Management of Outokumpu Oyj

We have been engaged by the Management of Outokumpu Oyj to perform a limited assurance engagement on the quantitative information on economic, social and environmental responsibility for the period of January 1, 2012 to December 31, 2012, disclosed in the Sustainability section in Outokumpu Oyj's online Annual Report 2012 (hereinafter "Sustainability Reporting").

The scope of the Sustainability Reporting covers the Outokumpu Group.

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 Outokumpu Oyj's reporting instructions and the Sustainability Reporting Guidelines of the Global Reporting Initiative (version 3.0).

Practitioner's Responsibility

Our responsibility is to express a conclusion on the Sustainability Reporting based on our work performed. Our assurance report has been made 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 work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This Standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance whether any matters come to our attention that cause us to believe that the Sustainability Reporting has not been prepared, in all material respects, in accordance with the Reporting criteria.

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 judgment, including an assessment of the risks of material misstatement of the Sustainability Reporting. Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of Outokumpu Oyj.
- Interviewing employees responsible for Sustainability at Outokumpu Oyj.
- Visiting Outokumpu Oyj's Head Office as well as one production unit in the United Kingdom.
- Interviewing employees responsible for collection and reporting of the information presented in the Sustainability Reporting at the Outokumpu Group level and at the production unit level.
- Assessing how Outokumpu Group employees apply Outokumpu Oyj'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.

Conclusion

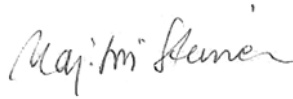
Based on our limited assurance engagement, nothing has come to our attention that causes us to believe that the Sustainability Reporting has not been prepared, in all material respects, in accordance with the Reporting criteria. Our assurance report should be read in conjunction with the inherent limitations of accuracy and completeness for sustainability information. This independent assurance report should not be used on its own as a basis for interpreting Outokumpu Oyj's performance in relation to its principles of sustainability.

Helsinki, 22 February 2013

PricewaterhouseCoopers Oy



Sirpa Juutinen
Partner
Sustainability & Climate Change



Maj-Lis Steiner
Director, Authorised Public Accountant
Sustainability & Climate Change

Highlights and key figures of 2012

Year 2012 in brief

- Highlight of the year and the starting point of the company's turnaround was the completion of the Inoxum transaction. This transaction is the starting point for the company's turnaround – synergy savings and mill closures will lead to higher capacity utilization and market leadership.
- The underlying operational result for 2012 remained weak at EUR -168 million.
- Stainless steel deliveries for the full year increased to 1 428 000 tonnes. The year was marked by a weak market environment, especially during the second half, leading to an underlying operational loss of EUR 168 million. Including non-recurring items of EUR -200 million and raw material-related inventory losses of EUR 17 million the operating loss was EUR 385 million. The primary reasons for the weak performance were declining stainless steel base prices, a weaker product mix and the decline in nickel prices. Contributing to the loss were also the costs related to finalization of the expansion of ferrochrome production and the impact this had on production.
- Operating cash flow for the full year remained strong at EUR 266 million.
- Following the Inoxum transaction, net interest-bearing debt increased to EUR 2 620 million, leading to a gearing of 88.7%.
- The Board is proposing that no dividend be paid for 2012.

External deliveries

1 000 tonnes	2012	2011	2010
Cold rolled	728	740	698
White hot strip	315	309	312
Quarto plate	88	106	83
Long products	59	60	58
Semi-finished products	261	187	182
Stainless steel ¹⁾	193	129	114
Ferrochrome	68	58	68
Tubular products	44	48	51
Total external deliveries	1 495	1 449	1 383
Stainless steel external deliveries	1 428	1 391	1 315

¹⁾ Black hot rolled, slabs, billets and other stainless steel products

Outokumpu stand-alone key figures ¹⁾

EUR million	2011	2012
Stainless steel deliveries ²⁾	1 391	1 428
Sales	5 009	4 538
Adjusted EBITDA ³⁾	174	71
Operating result	-251	-385
Underlying operational result ³⁾	-61	-168
Operating cash flow	338	266
Net result	-180	-535

¹⁾ Not including Inoxum figures

²⁾ External deliveries, 1 000 tonnes

³⁾ Excluding raw-material-related inventory gains/losses and non-recurring items, unaudited.

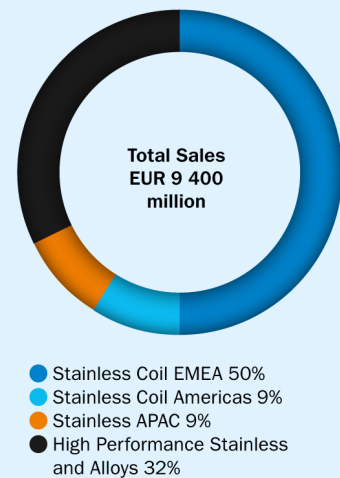
Key figures

Pro-forma EUR million	2012 Excl. non-recurring items	2012 Reported
Sales	9 400	9 400
Gross margin	249	120
EBITDA	24	-147
EBIT	-340	-660
Operating cash flow *	120	120

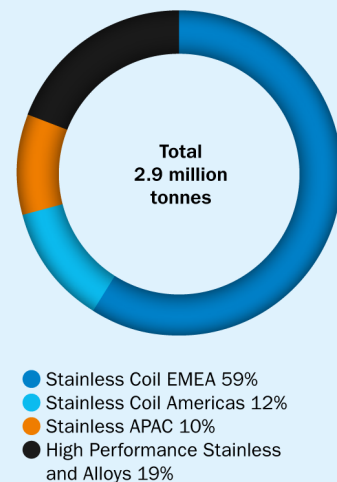
Capital structure

EUR million	2011	2012
Net cash generated from operating activities	338	266
Net interest-bearing debt at the end of period	1 720	2 620
Equity	2 050	2 953
Equity-to-assets ratio at the end of period, %	39.3	30.6
Debt-to-equity ratio (gearing), %	83.9	88.7

Sales ^{*}



Deliveries ^{*}



* Unaudited management estimates

Sustainability Report 2012
Highlights and key figures of 2012

Group key figures

		2012	2011 ¹⁾
Sales	€ million	4 538	5 009
Operating result	€ million	-385	-251
EBITDA	€ million	-50	89
Non-recurring items in operating result	€ million	-200	-146
Result before taxes	€ million	-523	-244
Non-recurring items in financial income and expenses	€ million	-	216
Net result for the period	€ million	-535	-180
Capital employed on Dec 31	€ million	5 573	3 770
Return on capital employed	%	-8.2	-6.3
Net cash generated from operating activities	€ million	266	338
Capital expenditure	€ million	3 155	255
Net interest-bearing debt on Dec 31	€ million	2 620	1 720
Equity-to-assets ratio	%	30.6	39.3
Debt-to-equity ratio	%	88.7	83.9
Earnings per share ²⁾	€	-0.46	-0.62
Equity per share	€	1.41	11.19
Dividend per share	€	0.00 ³⁾	0.00
Share price on Dec 31 ⁴⁾	€	0.79	1.33
Market capitalization on Dec 31 ⁴⁾	€ million	1 650	930
External deliveries	1 000 tonnes	1 495	1 449
Stainless steel external deliveries	1 000 tonnes	1 428	1 391
Stainless steel base price	€/tonne	1 172	1 181
Personnel on Dec 31, continuing operations		16 649	8 253

¹⁾ 2011 restated.

²⁾ Calculated based on the rights-issue-adjusted weighted average number of shares.

³⁾ The Board of Directors' proposal to the Annual General Meeting.

⁴⁾ Source: NASDAQ OMX Helsinki.

Our operating environment

Stainless steel and high-performance alloys are versatile and widely used materials. They play an important part in many areas of human life, such as urbanization and transportation, and enable the production and consumption of food, drink and energy. As a result, in recent decades the consumption of stainless steel has been growing more rapidly than that of any other metal.

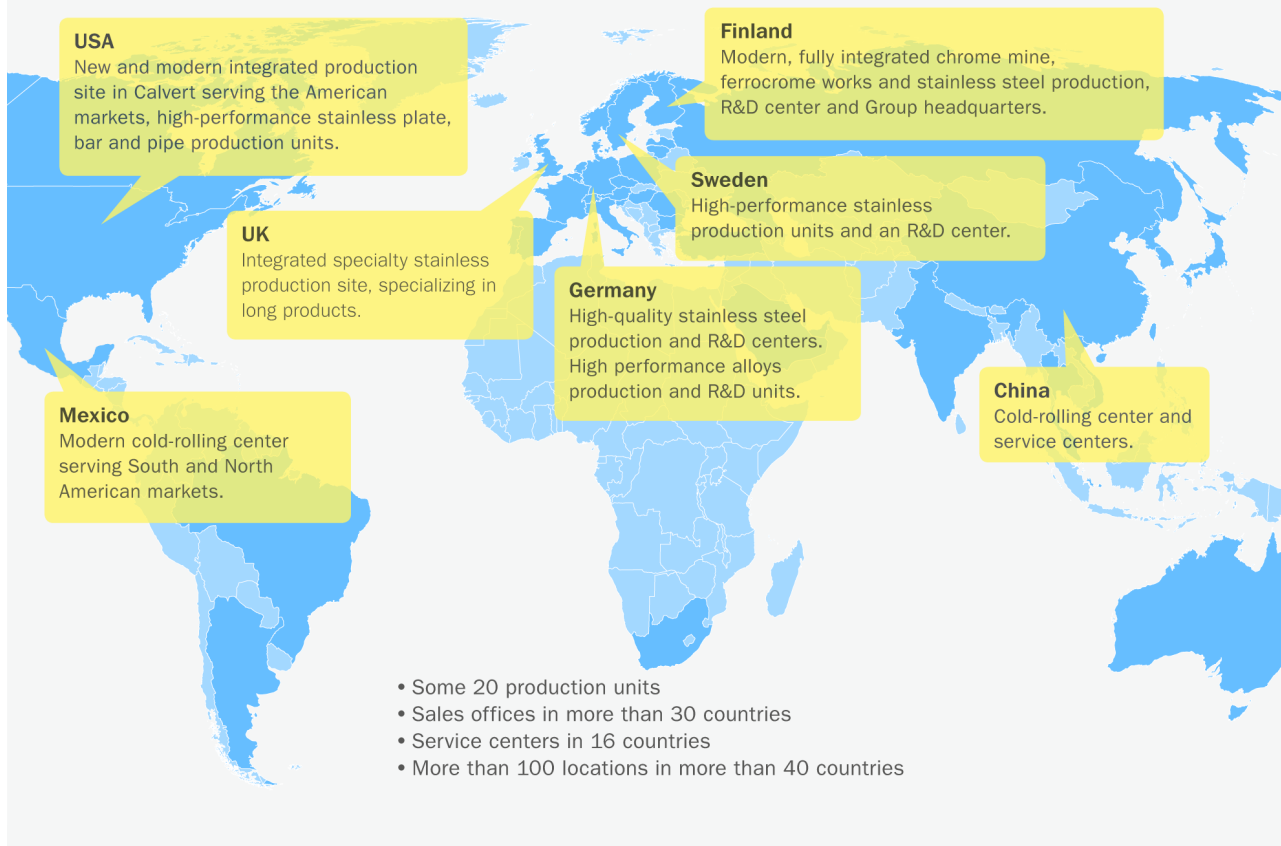
In 2012, Outokumpu was one of the leading stainless steel producers, becoming the leading company in the industry after acquiring Inoxum, the stainless steel unit of its former German competitor, ThyssenKrupp AG.

After the transaction, Outokumpu operates around the world. Its main production facilities are located in China, Finland, Germany, Mexico, Sweden, the UK and the US. The Group's site in Tornio, Finland is one of the world's most cost-efficient and highly-integrated single-site stainless steel production facilities which focuses on high-volume standard grades of stainless steel. The Group's production sites in Germany focus on more customized deliveries of ferritic and austenitic grades, including bright annealed surfaces, and production sites in Sweden focus on special grades. The Group is ramping up a new and modern integrated production site in Calvert, Alabama, USA.

At the end of the year, Outokumpu had an approximately 40% share of stainless steel production in Europe and a 12% share globally in (22% in Europe and 5% globally in 2011). Global stainless steel production increased to 34.9 million tonnes in 2012 (33.7 million tonnes in 2011, source: CRU). Over the last 10 years, world stainless steel production has grown at an annual growth rate (CAGR) of 5.6%. In Europe, stainless steel production remained at 7.5 million tonnes, and has not yet fully recovered from the impacts of the financial crisis and returned to pre-crisis levels. Rapid growth in stainless steel production has occurred in China during the last 10 years, increasing from 0.9 million tonnes in 2001 to 15.4 million tonnes in 2012.

Outokumpu's business areas are Stainless Coil EMEA, Stainless Coil Americas, Stainless APAC and High Performance Stainless and Alloys. According to unaudited management estimates, in 2012 EMEA accounted for 50% of the Group sales, HPSA 32%, Americas 9% and APAC 9%.

Outokumpu around the world



Major stainless steel producers

Estimated slab melting capacity

tonnes	2012	2015
Outokumpu	5 531	5 775
Acerinox	3 283	3 283
Aperam	3 000	3 000
Posco	3 000	3 000
Tisco	3 000	3 000
Yusco	2 780	2 780
Baosteel	2 360	2 360

Source: CRU, including Terni operations in the Outokumpu figures.

Market review

Demand for stainless steel in 2012 was again heavily influenced by adverse global economic conditions, leading to only modest growth compared to the previous year.

Driven by traditional seasonal re-stocking and rising raw material prices, stainless steel real demand increased by 3% in the first half of 2012 compared to the second half of 2011 and was up 3% year-on-year. Due to seasonality, increased concerns over the global economy and the resulting deterioration in business sentiment, real demand declined by 2% to 15.2 million tonnes in the second half of 2012 from 15.4 million tonnes in the first half. In overall terms, real demand for stainless steel in 2012 increased by only 2% year-on-year to 30.6 million tonnes, compared to growth of 9% in 2011.

Demand for stainless steel in APAC region has grown rapidly in recent years and has been the main factor supporting global growth in demand for the material. In 2012, growth in APAC region's stainless steel real demand slowed to 3%. However, APAC continued to be the largest region contributing to the total increase in real demand, with real demand totaling 20.5 million tonnes. Real demand in the Americas region increased at a rate of 6% to 3.3 million tonnes, reaching pre-crisis levels. Real demand in EMEA region, however, decreased by 2% to 6.8 million tonnes. EMEA was the only region in which demand contracted in 2012 with real demand remaining below the pre-crisis level of 7.0 million tonnes (2007).

In 2012, growth rates in demand from all end-use segments were lower than in 2011. The annual growth in real demand in the Automotive and Chemical, Petrochemical and Energy segments were 6% and 3%. Consumer goods & Medical and Architecture, Building and Construction grew by 2% from the previous year. Heavy Industries only grew by 1% compared to 2011.

Growth of 3% in stainless steel real demand in the Chemical, Petrochemical and Energy segment in 2012 was substantially lower than the growth of 12% that took place in 2011. Growth in demand slowed in all regions and demand in Europe contracted. Demand is expected to improve somewhat in 2013, driven especially by orders from Chinese process equipment suppliers and petrochemical projects in Asia.

Stainless steel real demand within the Consumer Goods & Medical segment increased by 2% in 2012, after having increased by 8% in 2011. This was the result of reduced consumer confidence in Europe and only modest growth in China, and these are also expected to contribute to slight recovery in demand in 2013.

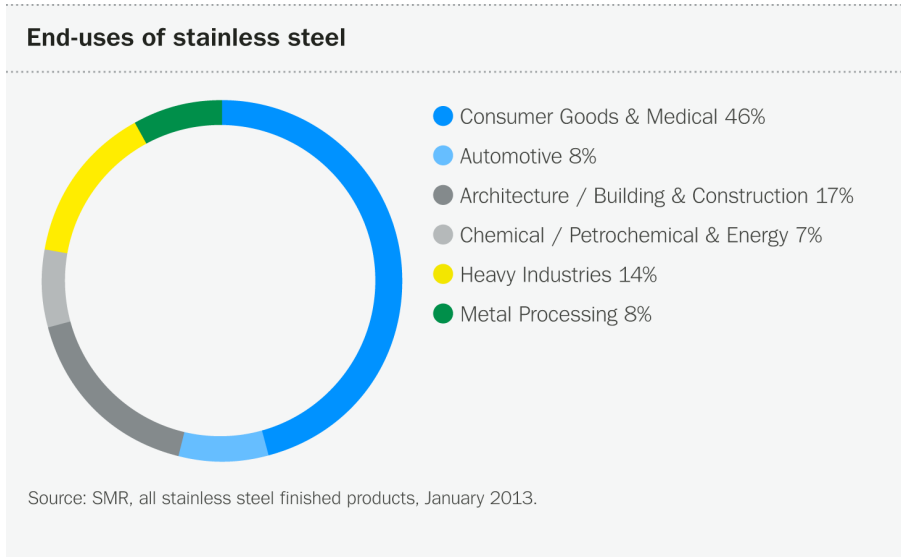
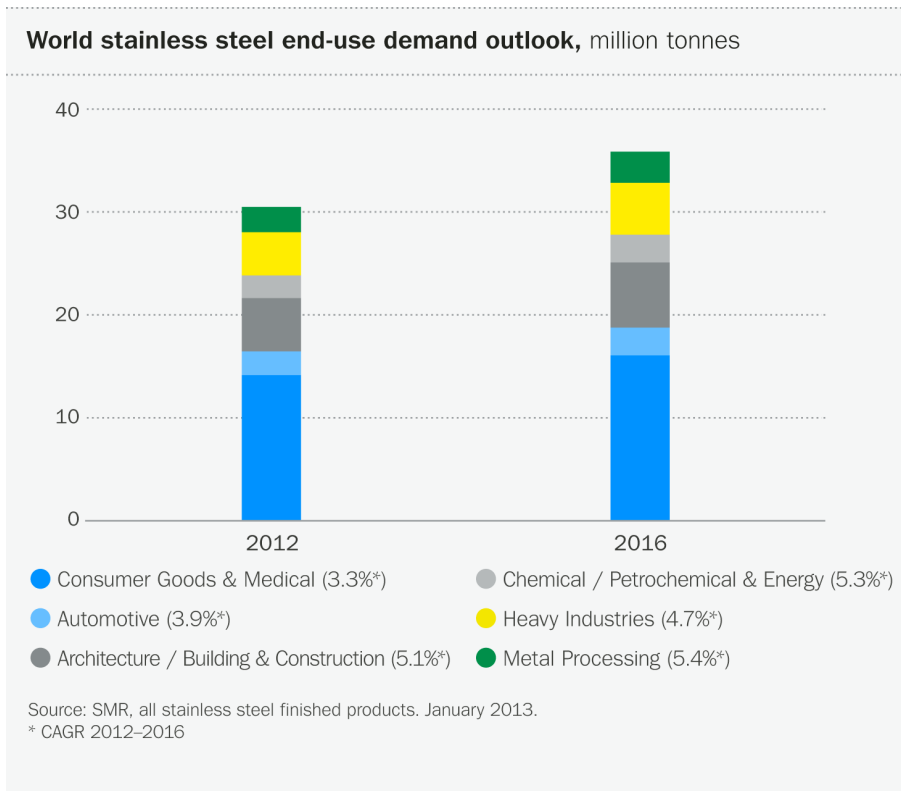
Stainless steel real demand within the Heavy Industries segment increased by only 1% in 2012, compared to growth of 10% in 2011. Demand in APAC and Americas regions grew only slightly, meanwhile demand in EMEA contracted. In 2013, demand is expected to stagnate with only slow growth rates as a result of softer order intake in the second half of 2012.

In the Architecture, Building & Construction segment, global growth in stainless steel real demand of 7% in 2011 slowed to only 2% in 2012, an effect visible in most geographical regions. Growth in demand is expected to improve in 2013, driven by APAC, while demand in EMEA is expected to stagnate after contracting in 2012.

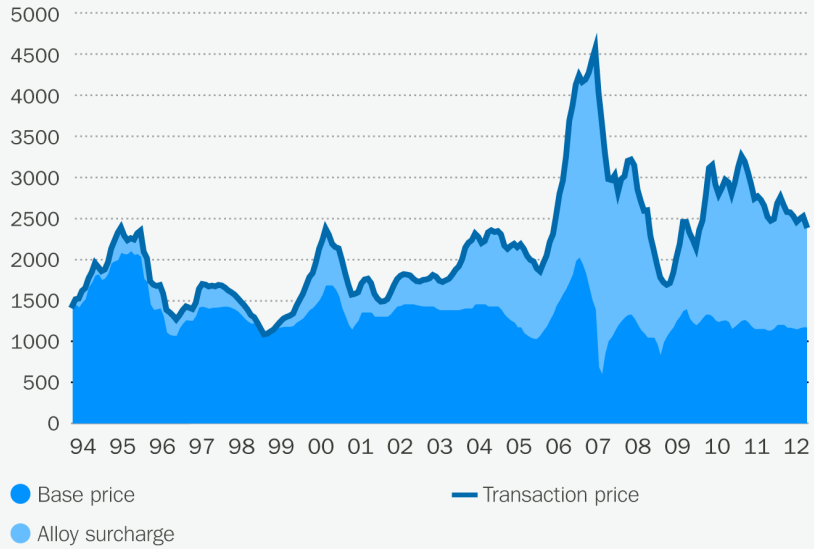
In the Automotive segment, real demand for stainless steel grew by 6% in 2012, having grown by 9% in 2011. Growth rates in 2012 were lower than in 2011 in all geographical regions except APAC. Higher rates of growth in demand are only expected after 2013.

Long-term prospects for stainless steel consumption remain robust. Key global megatrends in urbanization, modernization and increased mobility, combined with growing global demand for energy, food and water, will ensure the continuing growth of stainless steel consumption in the future. Steel & Metals Market Research (SMR) estimates indicate that the average annual growth in world-wide stainless steel real demand over the 2012–2020

period will be 3.6% (CAGR). As a leading producer of stainless steel, Outokumpu is well positioned to capitalize on the world's growing need for this material.

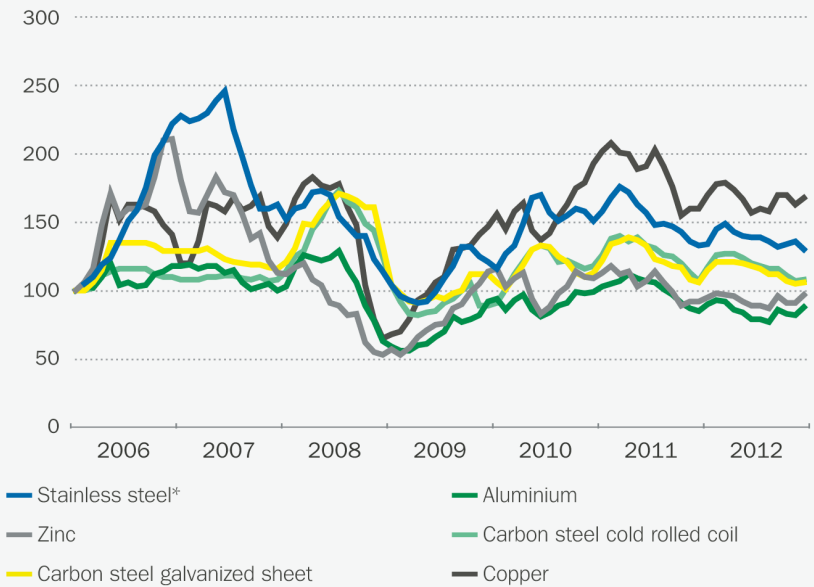


Stainless steel price*, EUR/t



Source: CRU. Including December 2012.
* Stainless steel prices for grade 1.4301

Market price comparison with competing materials, 2006=100



Source: CRU, LME and Metal Bulletin. Including December 2012.
* Stainless steel prices are for grade 1.4301

Nickel price, USD/t



Source: LME, monthly average prices, including December 2012.

Ferrochrome price, USD/lb



Source: Quarterly contract prices agreed between South African ferrochrome producers and European buyers, including Q4/2012.



Customer industries

Outokumpu serves a wide spectrum of customer needs. Customer segments include consumer goods and medical equipment; chemical, petrochemical and energy industries; automotive and heavy transport; construction & architecture; heavy industries such as mining industry; metal processing and distributors.

The acquisition of Inoxum in 2012 balanced Outokumpu's customer base to include more consumer good sectors, and the new Outokumpu thus has a well-balanced customer base across both industrial and consumer goods. End users and processors account approximately 60% and distributors approximately 40% of Outokumpu sales.

Read more about the development in the customer industries in Market review.

Segment group		Customer segments
Consumer goods & Medical		Household & Commercial appliances
		Catering and Food & Drink
		Sinks & Hoods
		Pharmaceutical
Chemical, Petrochemical & Energy		Chemical
		Oil & Gas
		Energy
		Renewable energy
Automotive & Heavy Transport		Automotive
		Heavy transport
		Aerospace & Turbines
Construction & Architecture		Elevators
		Cladding & Structures
		Heating, Cooling & Ventilation
Heavy Industries		Pulp & Paper
		Mining Industry
		Environmental projects
Metal Processing		Tubes
		Metal processing
Distributors		Distributors

Our group

In 2012, Outokumpu became the global leader in stainless steel and high performance alloys after acquiring the Inoxum stainless steel unit from former competitor ThyssenKrupp. Outokumpu now employs more than 16 000 professionals in over 40 countries.

During 2012, Outokumpu had two organizational structures. Following completion of the Inoxum transaction in December 2012, Outokumpu's new organization, announced in April 2012, came into force at the year-end.

As of December 29, 2012, Outokumpu is organized into four Business Areas:

- Stainless Coil Europe, Middle East and Africa (EMEA)
- Stainless Coil Americas
- Stainless Asia and Pacific (APAC)
- High Performance Stainless and Alloys (HPSA).

Business Areas are responsible for sales, profitability, production and supply chain management.



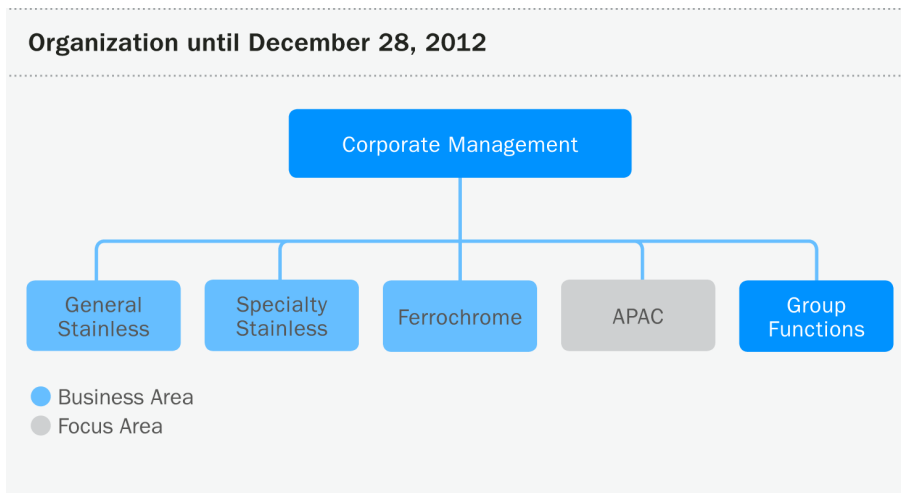
In addition to the Business Areas, strong Group functions with global processes ensure operational efficiency as follows:

- CFO's Office (Finance and Control, Finance Integration & Transformation, Taxation, Treasury and Risk Management, Internal Audit, Corporate Affairs and Compliance, Energy)
- Strategy and Integration (Integration and Mergers & Acquisitions, Strategy, Raw Material Procurement, General Procurement, IT and Legal)
- Human Resources and Health, Safety and Sustainability (HSS)

- Marketing, Communications and Investor Relations.

Until December 28, 2012 Outokumpu was organized into three Business Areas, in addition to which Asia-Pacific was a focus area. The Business Areas were:

- General Stainless
- Specialty Stainless
- Ferrochrome.



Stainless Coil EMEA

Stainless Coil EMEA is the largest of Outokumpu's business areas, and it accounts for half of all Outokumpu sales. Stainless Coil EMEA produces the high-volume and tailored standard grades.

In 2012, Outokumpu's market share in the area was strengthened by the Inoxum acquisition. For example in Europe the company now has approximately 40% market share. The new combined entity has more comprehensive range of grades and products and more flexible and effective delivery routes in the region.

The integrated stainless steel mill in Tornio, Finland, is one of the largest production sites in the world, and it focuses on high-volume austenitic and ferritic grades. Outokumpu mills in Krefeld, Bochum, Dillenburg, Dahlebrück and Benrath in Germany focus on more customized deliveries of ferritic and austenitic grades, including bright annealing surfaces. Close proximity to customers in Germany, the largest stainless steel market in Europe, offers Outokumpu a key competitive advantage.

Stainless Coil EMEA has a finishing unit in Terneuzen, the Netherlands, also close to the key customers. The business area has an extensive sales network across Europe, Middle-East and Africa.

Since the year-end, ferrochrome operations are also part of the EMEA business area. This will ensure smooth cooperation with the EMEA region which is the most important user of ferrochrome in the Group.

The new company has strong customer relationships in the EMEA region. Over the years, it has delivered stainless steel to various applications – to name a few, the BMW Welt building in Germany, the huge Chalvignac wine tanks in France, the Burj Khalifa Tower in Dubai, metro trains that traverse German cities and oil rigs that straddle the North Sea.

Own chrome mine

Chromium is what makes stainless steel stainless. Further step in the stainless steel production process is ferrochrome, an alloy of chromium and iron. Outokumpu has its own chrome mine in Kemi, Finland and newly expanded ferrochrome works in Tornio, Finland just down the road. Outokumpu is currently doubling the annual production capacity of ferrochrome to 530 000 tonnes, which will be reached by 2015. The role of chromium and ferrochrome operations remain as important as ever, as it gives Outokumpu competitive advantage of access to an essential raw material.

The mine boasts the largest known chromite reserves in Europe. Proved mineral reserves at the mine total approximately 33 million tonnes and after further studies in 2012, the quantity of mineral resources (estimated to a depth of one kilometer) totals now some 105 tonnes.



Market situation in Europe is particularly tough. Outokumpu now has the combined skills and strengths to really change things in the coming years.

Ulrich Albrecht-Früh,
President – Stainless Coil
EMEA

Kemi mine and Tornio ferrochrome smelter

Production	2012	2011
Ore excavated, million tonnes	0.8	1.4
Chromite concentrates, 1 000 tonnes	452	693
Ferrochrome, 1 000 tonnes	229	231

Mineral Reserves and Mineral Resources

Dec 31, 2012	Million tonnes	Grade
Mineral Reserves		
Proved	33	26.1% Cr ₂ O ₃
Mineral Resources		
Measured	21	30.3% Cr ₂ O ₃
Indicated	13	29.5% Cr ₂ O ₃
Inferred	71	29.2% Cr ₂ O ₃

Cr₂O₃ = chromium oxide

A Mineral Resource is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. A Mineral Reserve is the economically mineable part of the measured and/or indicated Mineral Resource. Mineral Reserves are not included in the Mineral Resources.

Stainless Coil Americas

Americas represent a diverse region of market growth for stainless steel with the United States topping the league with a 2-million-tonne stainless steel consumption. In 2012, Outokumpu strengthened its foothold in the area with the Innoxum acquisition.

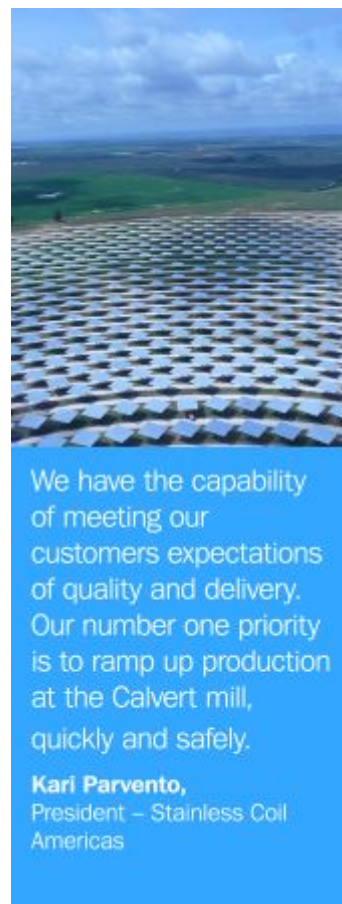
Outokumpu now has 20% market share in the Americas, where it serves multiple industries including automotive and transport, consumer appliances, oil and gas, chemical and petrochemical, food and beverage processing as well as building and construction industries.

Outokumpu's split in stainless coil fully reflects the industry's needs, about 70% austenitic and 30% ferritic. Outokumpu has several production facilities in the region. There is a cold-rolling mill in San Luis Potosí, Mexico, facilities that produce long products in New Castle, Richburg and Wildwood, USA as well as high-performance alloys production plants in Florham Park and Reno, USA. Outokumpu even has a service center in Buenos Aires, Argentina and sales offices located in USA, Mexico and Brazil.

Outokumpu is well poised to further expand its market share in the Americas, as it is ramping up a new integrated melt shop and cold-rolling mill in Calvert, Alabama, USA. The ramp-up continues in 2013, and the facility is expected to be in full production in 2014. Calvert will be one of the lowest cost stainless steel production facilities in North America, and it will be the only producer in the America's to be able to provide 72"-wide steel. Located close to one of America's largest harbors in Mobile, Calvert will serve customers inside the US and elsewhere in the Americas. Alabama has cost-efficient energy sources, for both electricity and gas.

In 2013, Outokumpu's main focus in the Americas will be getting the Calvert plant up and running, creating an organization for the future and reaching profitability. With the strong local asset base, some of the goals are to enable shorter delivery cycles for customers and for Outokumpu to lower its costs. Once fully ramped up, the Calvert mill will offer customers a very competitive range of products.

Outokumpu's stainless steel is on prominent display across the American continent – for example in the One World Trade Center's Freedom Tower, the crown of the Chrysler building in New York, the Cloud Gate or "the Bean" sculpture in Chicago; as well as in an advanced solar energy plant in Nevada and in the metro railcars in Brazil.



Stainless APAC

Asia-Pacific (APAC) currently accounts for some 60% of global stainless steel consumption and is the region where growth is highest.

In 2012, the acquisition of Inoxum expanded Outokumpu's presence in Asia by adding a cold-rolling mill and two service centers. Outokumpu also doubled its sales force in the Asia-Pacific region in 2012. The Stainless APAC Business Area accounts for 9% of the new combined Group's sales.

Outokumpu's cold-rolling mill is located in Shanghai, China. A joint venture between Outokumpu and Baosteel, much of the production by this SKS mill consists of high-quality stainless steel flat products for China's consumer and automotive industries. Outokumpu service centers are located in Australia and in Kunshan and Guangzhou in China. Outokumpu has an extensive sales network in the Asia-Pacific region and stock locations in Australia, India and Japan.

Outokumpu now has a solid platform for sales growth and enabling faster delivery times. As customers are increasingly demanding higher-quality products, specialty steels and enhanced service-orientation from suppliers, and governments are placing increased pressure on companies to innovate and adopt approaches that are environmentally sound, Outokumpu has great opportunities. While the Combined Group offers both standard and specialty stainless grades in Asia-Pacific, demand for specialty stainless grades, in which the margins are higher and where Outokumpu has a competitive advantage, is increasing.

Recent successes in the region include an important contract in China for hot-water storage tanks in domestic water heaters following production of a successful prototype in 2011 through cooperation between Outokumpu and Phinx, a local fabricator. Outokumpu stainless steel can be found in demanding applications around the Asia-Pacific region – from the Stonecutters Bridge in Hong Kong to a timeless Buddhist temple in Thailand; from the Marina Bay Bridge in Singapore to an experimental nuclear fusion facility in Japan, and from large-scale household heaters in China to stainless cathode plates for a copper refinery in Australia.



No one succeeds in Asia without putting the customer first. We are making progress: we have doubled our sales force and continue to invest in customer-facing expertise.

Austin Lu,
President – Stainless APAC

High Performance Stainless and Alloys

High performance stainless grades and alloys are designed to the highest requirements for grade, thickness and surface finish.

They have even higher corrosion resistance, improved resistance to extreme temperatures – both high and low – and the strength to withstand high pressures. All of these enable customers to manufacture thinner, lighter and more cost-effective equipment. High performance materials represent approximately 20% of Outokumpu's production capacity but some 30% of sales. The higher levels of revenue come from the fact that tailored products of superior quality provide customers with lower overall life-cycle costs than standard stainless steel.

Outokumpu is the global market leader in specialty stainless and number two in high performance alloys. The company's current portfolio of high performance materials is a fusion of Outokumpu's specialty stainless steel and Inoxum's nickel-based alloys (VDM), with strength-to-weight ratios and biocompatibility in a class of their own. These products are used in demanding applications in the oil and gas, chemical and petrochemical, desalination, long-haul transportation, process industry and construction sectors.

Outokumpu's extensive offering of high performance stainless steel and alloys includes special grades such as duplex, high performance austenitic and heat-resistant stainless grades as well as nickel, titanium, cobalt and zirconium alloys.

The bulk of Outokumpu's high performance stainless steel products is supplied by five business lines – Special Coil, Thin Strip, Special Plate, Long Products and High Performance Alloys (Outokumpu VDM). High performance stainless steel is produced in Sweden at Avesta and Nyby (Special Coil), Kloster (Thin Strip) and Degerfors (Special Plate); in the UK at Sheffield (Long Products); and in the US at New Castle (Special Plate), Wildwood and Richburg (Long Products). High performance alloys supplied by the Outokumpu VDM unit are produced at Werdohl, Altona, Siegen, Essen and Unna in Germany as well as at Florham Park and Reno in the US.



Outokumpu and Inoxum have an intense common interest in advance technology and we are really looking forward to working together. This can only be good for our customers.

Jarmo Tonteri,
President – HPSA

Business areas until December 28, 2012

Before the completion of the Inoxum transaction and launch of new Outokumpu, Outokumpu was organized in the following business areas:

- General Stainless: Stainless steel operations in Tornio, finishing plant in Terneuzen and coil service centres in Europe as well as sales companies in Europe, Middle East, Africa and Americas.
- Specialty Stainless: Special Coil, Special Plate, Kloster and Long Products including the Sheffield melt shop and plate service centers.
- Ferrochrome: The chrome mine in Kemi and ferrochrome operations in Tornio, Finland.

In addition to the three Business Areas, Outokumpu also had specified Asia Pacific as a focus area in order to strengthen the Group's presence and improve its business in markets with the highest growth potential for stainless steel.

General Stainless

General Stainless as business unit was responsible for the production and sales of high-volume standard stainless steel products, such as coil and sheet as well as entire supply chain of those, from raw material purchasing and steel production to sales. Customers of General Stainless were primarily distributors and processors who stock and process stainless steel to serve customers, in architectural, building and construction, transportation, catering, appliances, chemical, petrochemical and energy sectors as well as other process industries. The main market of General Stainless continued to be Europe, where Outokumpu's market share in the high-volume segment was approximately 20%. Its annual production capacity was 1.6 million tonnes in melting and hot rolling, which in turn translates into an annual production capacity of 1.2 million tonnes in finished products. Production operations in Tornio are located near Outokumpu's own chromium mine in Kemi, Finland and ferrochrome production in the same site in Tornio. This kind of integration is a competitive advantage to General Stainless.

General Stainless represented approximately half of Outokumpu's total business in 2012.

Specialty Stainless

Specialty Stainless business area was responsible for the entire supply chain, from purchasing and production to sales, of high-value-added and customized stainless steel grades such as hot and cold rolled coil, plate, precision strip, long products and heavy plate. Specialty Stainless represented approximately one third of Outokumpu's overall business. Its primary production facilities located in Avesta, Nyby, Degerfors and Kloster, Sweden; in Sheffield, the UK and in New Castle, the US. The unit's annual melting capacity was 800 000 tonnes, which means 700 000 tonnes in finished products. The products produced by Specialty Stainless are targeted to customers who set very high standards on the grade, shape, thickness and surface finish of the steel. Applications where specialty stainless is used are typically found in oil and gas, chemical and petrochemical, pulp and paper industries as well as nuclear power and desalination plants.

In 2012, the main markets of specialty stainless were Europe and North America, with growth opportunities also in the Asia-Pacific region. In Europe, Outokumpu's market share in specialty stainless products was approximately 20%. In heavy plate, Outokumpu was the global market leader with a market share of more than 30%, and in duplex, it was the global market leader with a market share of approximately 50%.

Ferrochrome

In 2012, Outokumpu's third business area was Ferrochrome, which was responsible for ferrochrome operations – the chrome mine in Kemi, Finland and ferrochrome smelter in nearby Tornio, Finland. The objective was to maximize the growth opportunities offered by in-house ferrochrome production. Chromium is what makes the stainless steel stainless. Outokumpu owns the largest known chromite reserves in Europe and has unique competitive advantage compared to other producers of stainless steel. For Outokumpu's stainless steel production, the existence of an in-house source of ferrochrome is a major operational benefit as this raw material for stainless steel production can be transferred to the Tornio melt shop in liquid form. The resultant savings in both energy consumption and logistics costs are considerable.

The Group decided to increase its ferrochrome production in mid-2010. The investment project to double the annual production to 530 000 tonnes continued through 2011 and 2012. The production will be ramped up in 2013, to reach the new production levels by 2014. Increasing the production capacity makes Outokumpu self-sufficient in ferrochrome and also allows it to sell ferrochrome to external customers. When the expansion and ramp-up of production are finished, Outokumpu's ferrochrome production accounts for approximately 5% of global charge-grade ferrochrome capacity. Other major ferrochrome producers are South Africa, China, Kazakhstan and India.

Proved mineral reserves at the Kemi chrome mine total approximately 33 million tonnes. After new findings in 2012, the quantity of mineral resources (estimated to a depth of one kilometer) is now estimated to total some 105 million tonnes. In addition, data in a seismic research report indicates the existence of resources sufficient to allow several hundreds of years of mining activity even with doubled annual production volumes.

Research and development

The main strategic target of research and development is to support Outokumpu's current and future competitiveness and profitable growth. Increasing our customers' competitiveness and supporting the differentiation of Outokumpu products and services are the other key elements of Outokumpu's R&D strategy.

We develop new, more life-cycle-efficient steel grades, and improve the quality and properties of our current products, and we provide our customers and sales organization with technical support in utilizing our stainless steel products. Continuous development of stainless steel and ferrochrome production processes and technologies is vital to ensuring and improving the efficiency and sustainability of our operations.

Outokumpu continued to invest in R&D and innovation in 2012. Related expenditure totaled EUR 18 million (2011: EUR 21 million and 2010: EUR 22 million). The Group's two research centers are located at Tornio in Finland and at Avesta in Sweden. R&D activity also takes place at the Group's production sites. Outokumpu's R&D operations employ a total of almost 200 professionals.

In 2012, process and technology development activities were focused on improving product quality and production efficiency. Efforts to improve the cost, energy, and environmental efficiency of our production processes were continued.

The driving forces behind Outokumpu's product development are seen in global trends that include, for instance, high and volatile raw material prices and technology trends in our customer industries. Outokumpu's main response to the increasing nickel price has been the significant investment in development of nickel-free ferritic stainless steels and low-nickel duplex stainless steels. Renewable energy and clean water are examples of application areas where emerging new technologies provide direction for our product development, particularly in the area of value-added special stainless steel grades.

Outokumpu's R&D has extensive, in-depth experience and knowledge of the properties and uses of stainless steels. This knowledge is used to help our customers and our own sales organization in selecting optimal steel grades, in the optimization of customers' manufacturing processes, and in the evaluation of material performance. The well-known Outokumpu Corrosion Handbook, with close to 80 years of history, is an excellent example of the tools and handbooks we create to support our customers and market development activities. Through close cooperation with our customers we can better understand customer needs and ensure that customers get the best stainless steel solutions. Furthermore, cooperation enables us to monitor new application areas and requirements set by emerging new technologies.

Outokumpu's R&D promotes open innovation through utilizing an extensive network of external research partners. Collaborative research conducted with partner universities, research institutes, customers, and other metal producer companies not only lets us benefit from external competencies and resources, but also lets us promote the use of stainless steels in new application areas and have more focus on long-term R&D. External research is carried out within both national and European research programs. Examples include FIMECC (the Finnish Metals and Engineering Competence Cluster), research activity organized by RFCS (the Research Fund for Coal and Steel) and Jernkontoret (the Swedish Steel Producers' Association). The Group is also an active participant in ISSF (the International Stainless Steel Forum), Eurofer (the European Steel Association), and EuroInox (The European Stainless Steel Development Association).

Outokumpu was awarded with FIMECC Prize 2012 for the research carried out within Light and Efficient Solutions research program together with Aalto University. FIMECC (Finnish Metals and Engineering Competence Cluster) is an open innovation company managing collaborative research between Finnish companies, universities and

research institutes. FIMECC Prize is awarded annually for the most innovative and exploitable result obtained in FIMECC research programs.

Research and development activity in Outokumpu resulted in the filing of three patent applications in 2012. Work on developing and implementing systematic processes and methods for improving efficiency in the Group's R&D operations continued.

Since the completion of the Inoxum transaction in December 2012, Outokumpu R&D activity increases with Inoxum's R&D operations. Inoxum has R&D centers for both stainless steel and high performance alloys in Germany, and as in Outokumpu, R&D is also carried out in the production sites.

Paving the path for profitability

In 2012, Outokumpu made progress in its savings programs and engineered a major acquisition to pave the way towards sustainable profitability.

Two years ago, radical changes that had been happening in the market required Outokumpu to make some quick decisions to increase its business focus and pursue global expansion. Since then, the company has rearranged its organization and shifted its operations up a gear through ambitious plans and fast implementation. This move already resulted in improved cash flow and capital management in 2012, though not enough to stop a continuous company-wide drive for even faster change. Outokumpu simply has to change faster than the world around it.

Eyes on the road

In 2012, Outokumpu made good headway in two key financially related programs – P100 and P250. P100 aimed to cut annual costs by 100 million euros by the end of 2012, while P250 targets the reduction of working capital tied up in inventories by 250 million euros.

P100 was a success and cut annual costs by 100 million euros per year. The full impact of these savings materialized already at the beginning of 2013. To cut costs, Outokumpu reduced production shifts, streamlined the organization, outsourced some support functions and divested non-core businesses, such as the remaining brass-rod business. Unfortunately, the necessary streamlining of the organization resulted in a reduction of close to 1 200 jobs. Approximately half of the 100 million euros savings came from job-related costs and the other half from fixed costs, such as transportation, material efficiency and IT.

The progress made in P100 has been a key principle for planning and budgeting for 2013. Developments are being closely followed by the management to ensure that the company maintains lower cost levels also in the future.

P250 has also reaped significant benefits, releasing cash and improving inventory efficiency in 2012. At the year-end, inventory days stood at 87 days. This released a total of some 600 million euros of cash from inventory between June 2011 and December 2012. Including accounts payable and receivable, the cash released from working capital was some 886 million euros.

Cash flow management continues to be one of the main priorities also in 2013, as do efforts to improve inventory efficiency and capital management.

Strategic acquisition for significant synergy savings and global expansion

In 2012, Outokumpu announced and completed the acquisition of Inoxum, the stainless steel arm of ThyssenKrupp. This deal created a new global leader in stainless steel and paves the path for profitability through significant synergy savings – savings that neither company could have reached alone.

Outokumpu expects the combination of these two stainless steel powerhouses to bring annual synergy savings of 200 million euros. More than one third of these will come from production site closures in Germany, which will also help to balance the company's melting capacity and cold-rolling capacity. Further opportunities for capacity utilization and optimization – through specialization, product swaps and lower variable costs – will bring another quarter of the synergy savings. Economies of scale and the centralization of vast procurement and raw material

purchases allow savings of some 50 million euros on an annual basis, accounting for another quarter of the synergy savings. Last but not least, a reduction in general costs, including streamlining of sales offices, service centers, head office and IT, will bring the remaining 15% of savings.

All in all, in the face of a very challenging market situation, the company managed not only to make progress in its savings programs but also to go a good deal further with an acquisition that is enabling structural change, significant synergy savings and expansion to growth markets in Asia and the Americas. Although progress made in 2012 was not sufficient to turn Outokumpu's fortunes around, it provides the right platform to continue to reshape operations through necessary restructuring, to capitalize on the investments the company has made and to utilize the growth opportunities that lie ahead.

Key priorities in 2013

- High quality service to Outokumpu and Inoxum customers globally through superior product quality, technical service and delivery reliability.
 - Implementation of the synergy benefits of 200 million euros.
 - Ramp-up of the Calvert integrated mill in the US and Tornio ferrochrome smelter in Finland.
 - High focus on cash flow in operational management.
-

Management review on financial performance

Demand for stainless steel in 2012 was again heavily influenced by adverse global economic conditions, leading to only modest growth compared to the previous year. Demand in the first half of the year was supported by the traditional seasonal re-stocking and increasing raw material prices. However, the positive momentum did not carry over to the second half of the year, and increased concerns over the global economy and the resulting deterioration in business sentiment impacted underlying demand for stainless steel negatively. Raw material prices were mostly on a declining trend during the second half of the year. Overall, the weak market conditions especially in Europe resulted in continued negative results for the full year despite significant cost savings programs implemented.

The difficult market situation highlights the importance of the strategic restructuring of Outokumpu, which the closing of the Inoxum transaction on December 28, 2012 enables. Outokumpu bought Inoxum from ThyssenKrupp AG for a consideration of EUR 3 160 million (EUR 2 720 total consideration transferred and EUR 440 million assuming pension and other financial debt of Inoxum). As part of the transaction, ThyssenKrupp became a major shareholder in the new Outokumpu through the directed share issue, holding 29.9% of shares in the combined entity.

In 2012, Outokumpu made progress in its savings programs. Initiated in October 2011, actions to reach sustainable profitability, improve cash generation and strengthen the balance sheet were completed at the end of 2012. Compared to the situation in June 2011, Group targets included reducing annual costs by EUR 100 million by the end of 2012 (the P100 cost-savings program) and reducing the amount of working capital tied up in inventories by EUR 250 million by mid-2013 (the P250 working capital reduction program), together with a focus on accounts payable and accounts receivable. Both efficiency programs were at or clearly above targets in the end of the year and have delivered tangible improvements in both profitability and cash flow.

As a result of the difficult market conditions, Outokumpu's operating result was clearly negative at EUR -385 million in 2012 (2011: -251 million). Total non-recurring items of EUR -200 million (2011: EUR -146 million) are included in the operating result, along with raw material -related inventory losses of EUR 17 million (2011: losses of EUR 43 million). The Group's underlying operational result in 2012 was EUR -168 million (2011: EUR -61 million). Although stainless steel deliveries increased in 2012 to 1 428 000 tonnes (2011: 1 391 000 tonnes), Outokumpu's underlying performance was constrained by declining stainless steel base prices, a weaker product mix and costs related to finalization of the expansion of ferrochrome production and the impact this had on production. A clear reduction in fixed costs in-line with targeted savings from P100 had a positive impact on 2012 underlying performance. To maximize cash flow, Outokumpu continued to reduce working capital levels in 2012 in-line with P250 targets. This led to a positive operative cash flow of EUR 266 million (2011: EUR 338 million).

The stainless steel market in Europe and globally remains weak, and the starting point for the new Outokumpu is challenging. Outokumpu will focus on implementing the targeted EUR 200 million of synergy savings in a decisive manner and will also be seeking further opportunities to make savings during 2013. The focus on cash flow generation – minimizing capital expenditure and implementing tight management of working capital – continues. Outokumpu is also determined to achieve further price increases to improve profitability.

Update on major strategic initiatives

The highlight of the fourth quarter as well as the whole of 2012 was completion of the Inoxum transaction on December 28, 2012. Outokumpu bought Inoxum from ThyssenKrupp for a consideration of EUR 3 160 million (EUR 2 720 total consideration transferred and EUR 440 million assuming pension and other financial debt of Inoxum). As part of the transaction, ThyssenKrupp became a major shareholder in the new Outokumpu through the

directed share issue, holding 29.9% of shares in the combined entity, and Guido Kerkhoff, CFO of ThyssenKrupp, joined the Outokumpu Board of Directors.

The new Outokumpu started operations on December 29, 2012 with a new structure and leadership team. The company is the new global leader in stainless steel with close to 40% market share in Europe and 12% globally. The company plans to achieve significant annual synergy benefits of EUR 200 million, with EUR 50 million expected in 2013 and up to EUR 150 million in 2014. These benefits will be achieved through mill closures, savings in procurement and improved capacity utilization as well as streamlining of the sales organization and support functions. These restructuring efforts are expected to result in an overall reduction of up to 2 000 jobs over the next four years. The new Outokumpu has the industry's broadest product portfolio, a wide customer base covering all industry segments and an extensive local presence in Europe, APAC and the Americas.

Approval of the Inoxum transaction by the European Commission was conditional on the divestiture of certain remedy assets, including the Terni stainless steel mill in Italy and a service center in Willich, Germany. Outokumpu initiated the divestiture process in November 2012 and negotiations with prospective buyers are ongoing. The signing of contracts for the divestment of remedy assets is expected during the second quarter of 2013.

Integration of the two companies began immediately after completing the transaction on December 28, 2012 and significant resources are being invested to ensure the smooth and efficient integration of key activities. Integration will continue to be an important part of Outokumpu's route forward.

In 2012, Outokumpu made good headway in two key programs – P100 and P250. P100 aimed to cut annual costs by EUR 100 million by the end of 2012, while P250 targeted the reduction of working capital tied up in inventories by EUR 250 million. P100 was a success and cut annual costs by EUR 100 million per year. The full impact of these savings materialized already at the beginning of 2013. To cut costs, Outokumpu reduced production shifts, streamlined the organization, outsourced some support functions and divested non-core businesses, such as the remaining brass-rod business. Unfortunately, the necessary streamlining of the organization resulted in a reduction of more than 1 200 jobs.

The P250 working capital reduction program exceeded its targets before the end of 2012. Efficiency in the Group's supply chain has clearly improved in a sustainable manner. Inventory days stood at 87, some 20% better than in the reference period (the second quarter of 2011). Cash released from inventories totaled some EUR 600 million, clearly higher than the targeted EUR 250 million. At the end of 2012, the amount of cash released from working capital since June 2011 totaled EUR 886 million and included a significant positive contribution from the efficient handling of accounts payable and accounts receivable.

As part of the P250 program, Outokumpu divested part of its European stock operations to Amari, a privately-owned group of companies focusing on multi-metal distribution. The transaction was completed in September 2012. As part of this transaction, 10 of Outokumpu's stock operation units and 100 employees transferred to Amari.

Restructuring actions at OSTP (Outokumpu tubular operations' joint venture) continued in 2012. Cost savings had a gradual impact throughout the year. OSTP reported an operating result of EUR -3 million (2011: EUR -79 million). On January 18, 2013, Outokumpu announced that Tubinoxia S.r.l., Outokumpu's partner in the OSTP tubular joint venture, had exercised its call option and acquired an additional 15% of shares in the joint venture from Outokumpu. Tubinoxia thus increased its stake in OSTP from 36% to 51%. The OSTP joint venture was formed in July 2011 when Outokumpu decided to exit the tubular business as part of its restructuring program. Outokumpu maintains a non-controlling interest of 49% in the joint venture. Both the consideration and the impact of the transaction on Outokumpu's cash flow were marginal.

Actions to return Outokumpu's precision strip mill in Kloster in Sweden to sustainable profitability also continued in 2012. The mill operated at lower production levels and continued to optimize both the product mix and material flows and focused on maintaining reduced cost levels. Price increases were implemented throughout the year. The operating result at the Kloster thin strip unit for 2012 was EUR -25 million (2011: EUR -86 million). The result in

2012 includes a non-recurring impairment of fixed assets of EUR 16 million. The result in 2011 includes non-recurring losses of EUR 63 million, consisting of a EUR 60 million fixed asset impairment.

Cost efficiency and working capital management will also be areas of high focus in 2013, learning from the completed Outokumpu stand-alone program and building on its success. The new Outokumpu will continue its strict focus on cost management by implementing a new P150 cost reduction program. The aim of this program is to reduce Outokumpu's annual costs by EUR 150 million with the first effects being seen in 2013 and full implementation by the end of 2014. Cash flow and working capital management will continue to be given strong priority, with a new P300 program being established to achieve a EUR 300 million release in working capital for the combined entity. Finalization of this program is also scheduled by the end of 2014.

Major investments

Outokumpu finalized the EUR 410 million ferrochrome investment program in the fourth quarter of 2012 ahead of schedule and below budget. By the end of fourth quarter, the whole expansion project from the underground mine and concentrating plant in Kemi to sintering and smelting in Tornio had been started up. The ramp-up of new capacity has progressed as planned, with ferrochrome production of approximately 400 000 tonnes expected in 2013 and full production capacity of 530 000 tonnes in 2015.

Construction of the new integrated stainless steel mill in Calvert, USA was largely finalized by the end of 2012. The plant has been constructed in accordance with the planned schedule and within the overall budget of USD 1 600 million. Ramp-up of the melt shop with its 900 000 tonnes annual capacity began in December 2012 with the first successful melts. Ramp-up to full capacity is expected to take some 18 months and the company's target for both melt shop and cold rolling is a minimum of 200 000 tonnes production in 2013. Ramp-up of the Calvert mill is expected to significantly improve Outokumpu's competitiveness in the NAFTA market, enabling the company to increase both its market share and profitability in 2013 and thereafter.

Market review

According to SMR, global demand for cold-rolled stainless steel flat products rose to 20.4 million tonnes in 2012, up by 2% compared to 2011. Growth was mainly driven by increased consumption in China (from 8.5 to 8.7 million tonnes) and in the NAFTA region (from 1.6 to 1.9 million tonnes). In Europe, cold-rolled demand fell slightly in 2012 from 3.3 to 3.2 million tonnes. While the first quarter of 2012 started with a high level of total shipments by European stainless steel producers, the second quarter and especially the second half of 2012 were characterized by shipments at very low levels caused by economic weakness and declining raw material prices. Shipments of stainless steel in 2012 by producers based in the NAFTA region remained stable in 2012 compared to 2011.

Growth rates in demand in all end-use segments were lower in 2012 than in 2011. Annual growth in real demand in the Automotive and Chemical, Petrochemical & Energy segments were 6% and 3%, respectively. Consumer goods & Medical and Architecture, Building & Construction grew both by 2% from the previous year. Heavy Industries segment was up by only 1% compared to 2011.

Average imports from non-EU countries are estimated to represent approximately 18% of total demand in the EU in 2012. Largest countries in terms of imports to EU included Taiwan, USA, China, South Korea and India. Average imports from non-NAFTA countries are estimated as having represented approximately 19% of total demand in the NAFTA region in 2012, similar to the level in 2011.

Average transaction prices (base price plus alloy surcharge) for 2mm cold-rolled 304 stainless steel sheet in Europe, North America and China were significantly lower in 2012 than in 2011. The 2012 average price level in Europe was 3 308 USD/tonne (2011: 4 000 USD/tonne), North America at 3,182 USD/tonne (2011: 3 905 USD/tonne) and China at 2 668 USD/tonne (2011: 3 289 USD/tonne), respectively. While the average transaction prices in all three regions declined steadily in the first three quarters of 2012, transaction prices in

Europe and China recovered slightly in the final quarter. The average transaction price in North America stabilized and was at the third quarter level in the final quarter of 2012.

The price of nickel rose in early 2012 because of re-stocking and hit its highest level for the year of 21 830 USD/tonne in early February 2012. Increased concern regarding the state of the global economy, the resulting deterioration in business sentiment and a strengthening US dollar resulted in the price declining from early February until mid-August, when it reached 15 190 USD/tonnes, its lowest level for the year. The average nickel price in 2012 was 17 513 USD/tonnes, 23% lower than the 22 790 USD/tonnes it was in 2011.

After declining to 1.15 USD/lb in the first quarter of 2012, the European benchmark price for ferrochrome rose to a level of 1.35 USD/lb in the second quarter, driven by improved demand for stainless steel in the first quarter and the reduced South African ferrochrome supply due to a power buy-back program from the national electricity supplier. The benchmark price dropped to 1.25 USD/lb in the third quarter and then to 1.10 USD/lb in the fourth quarter, driven by poor demand for stainless steel and economic outlook. The average benchmark price for ferrochrome in 2012 was 1.21 USD/lb, down by 3% from 1.25 USD/lb in 2011. For the first quarter of 2013 the quarterly benchmark price for ferrochrome was settled at 1.125 USD/lb.

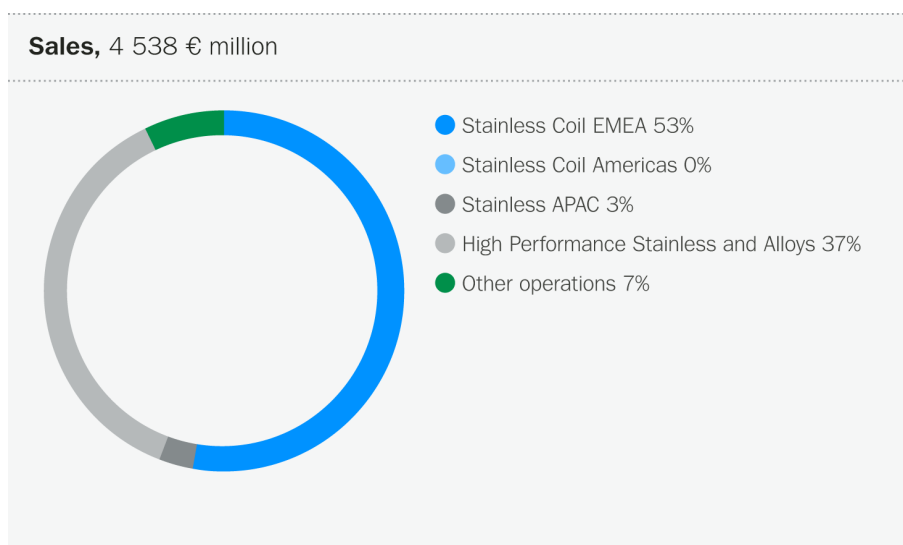
The ferro-molybdenum price declined throughout 2012. The quarterly average price fell from 34.86 USD/kg in the first quarter to 33.60 USD/kg in the second quarter, to 30.00 USD/kg in the third quarter and to 28.04 USD/kg in the fourth quarter. The average price in 2012 was 31.43 USD/kg, down by 18% from 38.40 USD/kg in 2011.

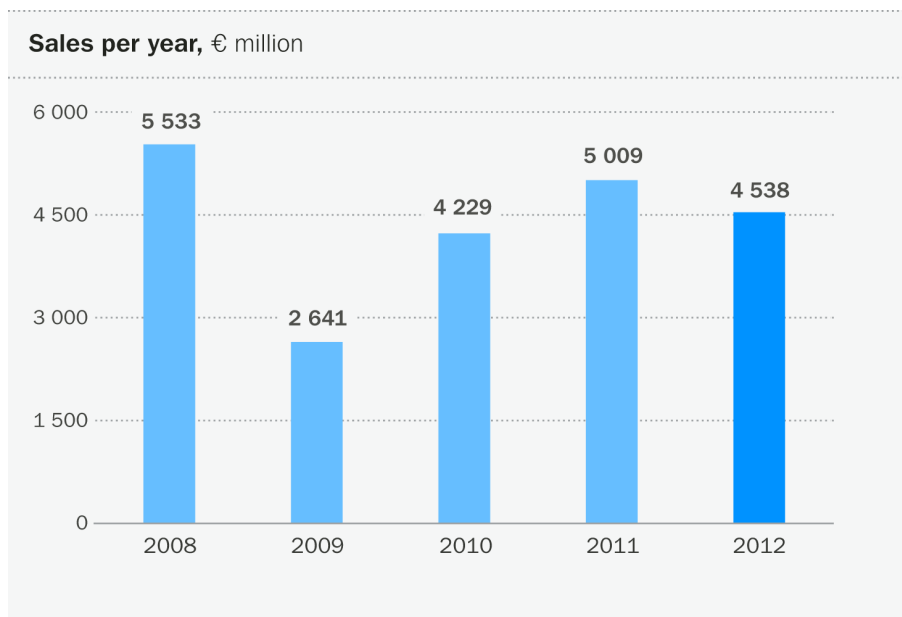
The carbon steel scrap price declined in the first three quarters of 2012. The quarterly average price was down from 413 USD/tonne in the first quarter to 394 USD/tonne in the second quarter and remained at 362 USD/tonne in the third and fourth quarter. The average price in 2012 was 383 USD/tonne, down by 11% from 429 USD/tonne in 2011.

The price of stainless steel scrap followed price developments in its components, i.e. nickel, chrome and molybdenum. Discounts on the intrinsic metal values remained at relatively high levels because of sufficient availability in the market and price pressure from nickel pig iron.

Disappointing result in an adverse market

Although delivery volumes increased to 1 428 000 tonnes in 2012 (2011: 1 391 000 tonnes), lower transaction prices for stainless steel resulted in a decrease of Group sales to EUR 4 538 million for the year (2011: EUR 5 009 million).

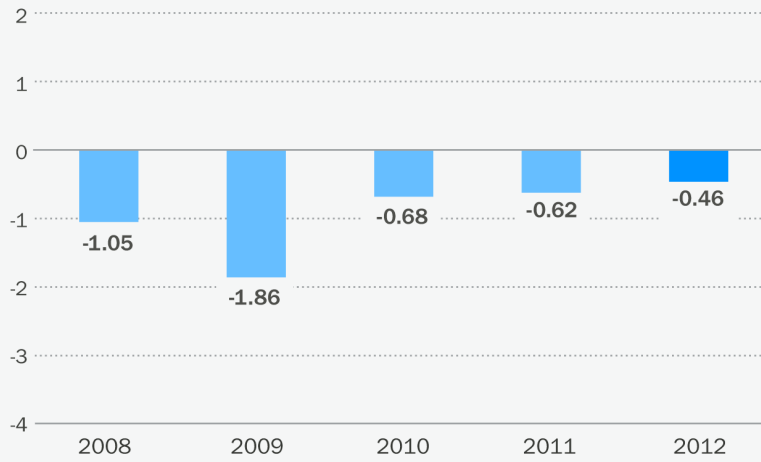




The operating result in 2012 totalled EUR -385 million (2011: EUR -251 million). Net non-recurring items of EUR -200 million are included in the 2012 operating result (EUR 86 million of impairments related to Nyby and Kloster thin strip, EUR 64 million costs related to the Innoxum transaction, EUR 19 million of aged inventory write-downs, EUR 18 million of losses from the divestment of the Group's Brass operations, EUR 10 million of impairments due to stock locations divestment and EUR 3 million of redundancy provisions). In 2011, the operating result was EUR -251 million, including net non-recurring items of EUR -146 million (EUR 126 million of impairments related to OSTP and Kloster thin strip, EUR 44 million of provisions related to ongoing restructuring and EUR 23 million of operating income from the sale of royalty rights). Raw material-related inventory losses in the 2012 operating result totalled EUR 17 million (2011: losses of EUR 43 million). The underlying operational result for 2012 was EUR -168 million (2011: EUR -61 million). The primary reasons for the weak performance were declining stainless steel base prices and a weaker product mix. Contributing to the loss were also the costs related to finalization of the expansion of ferrochrome production and the impact this had on production. A clear reduction in fixed costs in-line with targeted savings from P100 had a positive impact on 2012 underlying performance.

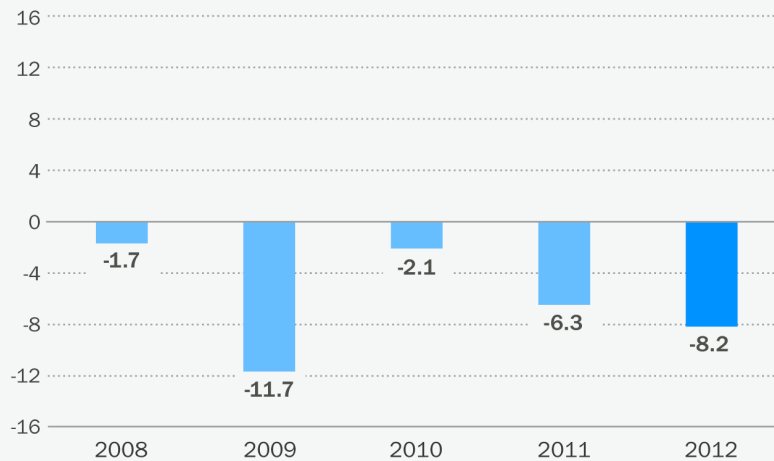
Net financial income and expenses in 2012 totalled EUR -138 million (2010: EUR 12 million) and included no non-recurring items (2011: EUR 216 million). In 2011, non-recurring financial income of EUR 216 million included EUR 242 million of capital gains from the divestment of shareholding in Tibnor AB and Talvivaara and fair valuation of financial assets. In 2011, non-recurring financial expenses includes an impairment of EUR 13 million on a loan receivable from Luvata and a EUR 13 million capital loss from the divestment of Nordic Brass. In 2012, the Group's loss before tax was EUR 523 million (2011: EUR -244 million). Net loss for the year totalled EUR 535 million (2011: EUR -180 million), earnings per share totalled EUR -0.46 (2011: EUR -0.62) and earnings per share excluding non-recurring items -0.29 (2011: EUR -0.84). Return on capital employed during the year was clearly below targets at -8.2% (2011: -6.3%), and excluding non-recurring items at -4.0% (2011: -2.6%).

Earnings per share, €



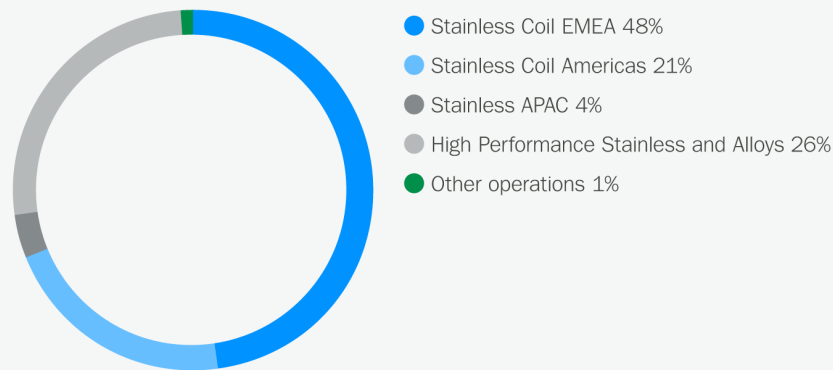
Year 2011 restated due to change in accounting principle of defined benefit plans and other long-term employee benefits, and adjusted based on the rights-issue-adjusted weighted average number of shares.

Return on capital employed, %

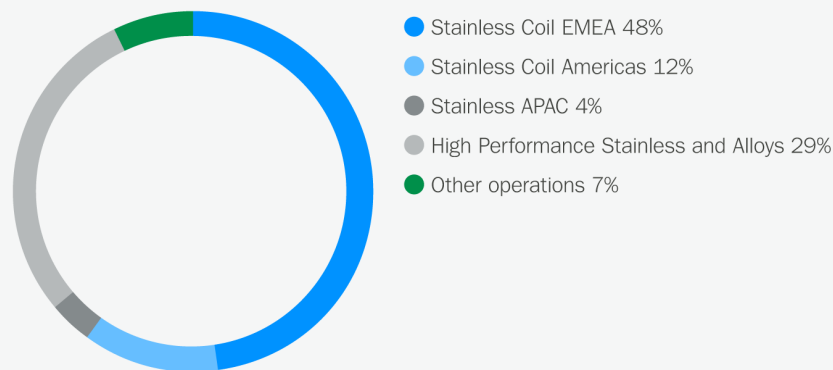


Years 2010 and 2011 restated due to change in accounting principle of defined benefit plans and other long-term employee benefits.

Operating capital, 5 574 € million



Personnel at year-end, 16 649



For the combined entity, excluding discontinuing operations.

Balance sheet and financing

Outokumpu's balance sheet at the year-end shows major changes compared to the end of 2011 due to the inclusion of Inoxum, with December 28, 2012 being the effective acquisition date. Following inclusion of the Inoxum assets, total assets increased from EUR 5 227 million to EUR 9 671 million, with EUR 4 658 non-current, mainly property, plant and equipment. Current assets, mainly inventories and trade and other receivables, increased by EUR 1 354 million to EUR 3 687 million. The goodwill arising from the preliminary purchase price allocation is EUR 7 million. For more details on the business combination, see the note related to the Inoxum acquisition in the 'Financial statements' section of this report.

Assets held for sale and liabilities related to these assets including the remedy assets and related liabilities are EUR 1 326 million and EUR 786 million, respectively. These figures stem from the net value of EUR 539 million for Terni and Willich in the balance sheet.

Total non-current interest bearing liabilities increased from EUR 1 197 million to EUR 2 974 million and include the ThyssenKrupp loan note of EUR 1 229 million. Total pension liabilities and other long-term employee benefits included in provisions are EUR 434 million (2011: EUR 78 million).

Outokumpu has 12 months from the completion of the Inoxum transaction for further PPA adjustments in the opening balance sheet.

Gearing at the end of the year was 88.7%, higher than the maximum target level of 75%. Net cash generated from the operating activities in 2012 decreased from 2011, but was still clearly positive at EUR 266 million (2011: EUR 338 million). The main driver for the positive operating cash flow was a significant release of working capital, mostly from inventories and account receivables. In 2012, EUR 394 million of cash was released from working capital (2011: EUR 310 million). Capital expenditure in 2012 totalled EUR 3 155 million (2011: EUR 255 million). In addition to the Inoxum transaction, the Group's main investment projects in 2012 were the ferrochrome expansion project in Tornio and Kemi in Finland and the quarto plate investment project in Degerfors in Sweden. The ferrochrome investment program was finalized in the fourth quarter of 2012 ahead of schedule and below budget, and the quarto plate investment project is proceeding according to plan.

On March 1, 2012, the Extraordinary General Meeting of Outokumpu Oyj authorized the Board of Directors to decide on a share issue in which the shareholders were granted pre-emptive rights to subscribe for new shares in proportion to their shareholdings in Outokumpu Oyj. On March 7, 2012, the Board of Directors resolved to issue a maximum of 1 274 020 027 new shares and raise gross proceeds of approximately EUR 1 billion in a rights offering to fund the cash payments related to the acquisition of Inoxum. According to the terms of the rights issue, one Subscription Right entitled its holder to subscribe for seven Offer Shares at the subscription price of EUR 0.79 per Offer Share. Subscription Period started on March 15, 2012 and ended on April 4, 2012. The rights issue was fully underwritten through shareholder subscription commitments and bank underwriting. The rights offering was oversubscribed by 22% and no underwriting was utilized. Outokumpu's total number of shares amount to 1 457 038 776 after the rights offering.

In other financing arrangements, Outokumpu signed a EUR 400 million committed multicurrency revolving credit facility to cover working capital requirements in April 2012. The credit facility became available after completion of the Inoxum transaction. Following the issuance of the EUR 150 million bond in June 2012, the amount of this revolving credit facility was reduced to EUR 250 million. This EUR 150 million 4-year bond with an annual coupon of 5.875% was issued and listed on the NASDAQ OMX Helsinki in June 2012. The proceeds were used for refinancing and general corporate purposes.

Additionally, in December 2012, Outokumpu entered into a EUR 250 million forward start revolving credit facility (FSF) with Nordea to replace the remaining commitments under the EUR 400 million credit facility that Outokumpu signed in April 2012, which matures in June 2013. The new facility will become available in June 2013 and matures in January 2014. Amounts drawn under the facility will bear interest at a floating rate and the undrawn amount will be subject to a commitment fee. The facility agreement includes customary covenants, customary events of default and a customary change of control clause. It also includes a financial covenant based on net gearing (as defined in the agreement) that requires Outokumpu to maintain a level of net gearing that is equal to or lower than 115% before June 2013 and 95% thereafter. The FSF commitments shall be cancelled by each EUR in excess of EUR 750 million raised in refinancing of the EUR 750 million and EUR 400 million revolving credit facilities.

At the end of 2012, the Group's equity-to-assets ratio was 30.6% (2011: 39.3%). Net interest-bearing debt at the end of 2012 stood at EUR 2 620 million (end of 2011: EUR 1 720 million). Group cash and cash equivalents were EUR 222 million at the end of the year (2011: EUR 168 million), and committed undrawn credit facilities totalled some EUR 1.2 billion. All in all, Outokumpu's liquidity position remained good throughout 2012. The committed credit facilities include a three-year EUR 750 million revolving credit facility, with options to extend it by one year in June 2012 and June 2013. This committed credit facility replaces the comparable three-year facility signed in June 2009 and is used for general corporate purposes. The loan agreement includes a financial covenant based on gearing at the level of 115%. The gearing covenant from July 2013 onwards will decrease to 95%. At the end of 2012, EUR 592 million of the facility was drawn.

Dividend

Group earnings per share totaled EUR -0.46 in 2012 (2011: EUR -0.62). In accordance with the Board of Directors' established dividend policy, the payout ratio over a business cycle should be at least one-third of the Group's profit for the period with the aim of making stable annual payments to shareholders. In its annual dividend proposal, the Board of Directors, in addition to financial results, takes into consideration Outokumpu's investment and development needs. The Board of Directors is proposing to the Annual General Meeting to be held on March 18, 2013 that no dividend be paid for 2012. No dividends were paid in 2012 (2011: EUR 45 million).

Factors affecting Outokumpu's profitability

The stainless steel business is cyclical. In addition to the company's own actions, Group profitability depends on the current stage in the global economic cycle and particularly on the levels of industrial investment activity. Historical long-term demand for stainless steel has been growing at an annual rate of 5–6%. Changes in regional or global production capacity can sometimes have an adverse effect on stainless markets, resulting in temporary imbalances between supply and demand. Increasing stainless steel production capacity in China will continue to have an effect on the global supply situation in future years.

A key factor that directly affects Outokumpu's profitability is developments in stainless steel base prices. Price levels are linked to the economic cycle, and also to levels of industrial investment in the Group's main customer segments. Changes in base prices are also attributable to strong fluctuations in demand from distributors engaged in either de-stocking or re-stocking. Outokumpu's current dependence on traditional nickel-containing standard austenitic grades exposes the Group to demand volatility caused by fluctuations in the nickel price. The distributor sector in particular postpones placing orders for stainless steel when nickel – and thus stainless steel transaction prices – are expected to fall, resulting in unnecessary volatility without any changes in underlying demand.

Transaction prices for stainless steel comprise the base price plus an alloy surcharge. The alloy surcharge applied in Europe and North America includes the cost of alloying materials when the prices of these exceed predefined trigger-price levels. The cost of alloying materials for stainless steel – nickel, chrome, molybdenum, iron and titanium – is invoiced by stainless steel producers to customers through the alloy surcharge mechanism, thus reducing producers' price risks associated with these alloying materials. Even so, the price paid for alloying materials feeds through into the amounts of capital tied up as working capital. As Outokumpu's throughput time is longer than the time period applied in the alloy surcharge mechanism, changes in the price of alloying materials may lead to timing differences that impact profitability. The alloy surcharge is based on a 30-day average of raw material prices calculated backwards from the 20th day of the preceding month.

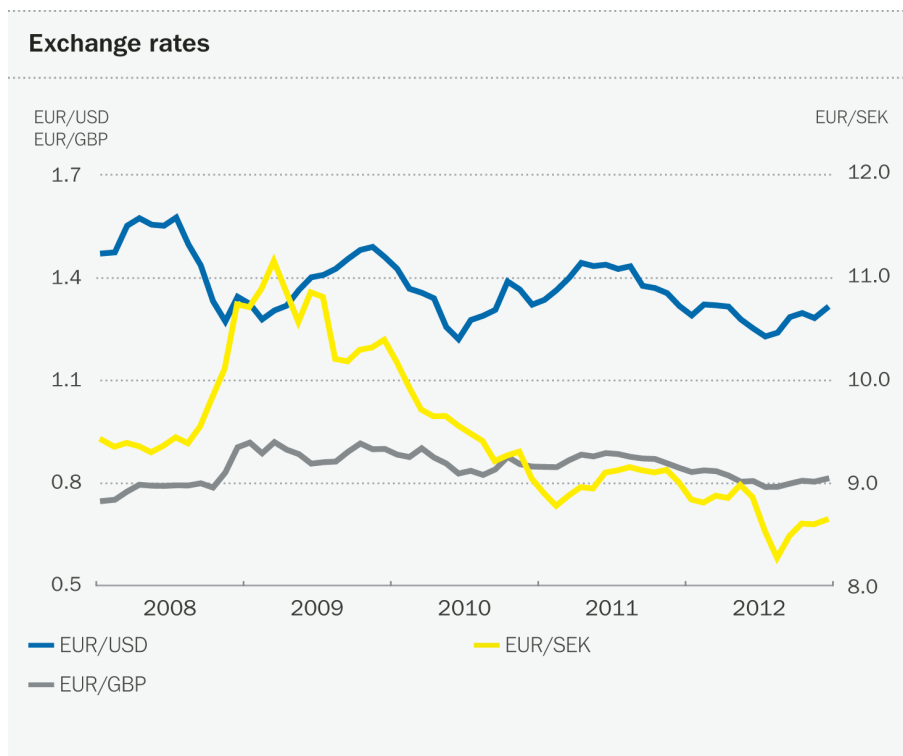
Outokumpu's operating profits are affected not only by changes in base prices but also by delivery volumes, unit costs and the product mix. In the manufacture of stainless steel, capacity utilization rates also have a major impact on operating profit. Production volumes depend on levels of demand for stainless steel, with products mostly being produced to meet orders received. The product mix also has an impact on profitability, with higher value-added products being more profitable.

The Group's chrome mine in Finland near Tornio and the ferrochrome production in Tornio, supply Outokumpu with the majority of its needs for ferrochrome at the cost of production. This has a direct positive impact on Group profitability.

Stainless steel is fully recyclable. Alloying materials can usually be bought at a discount when sourced as recycled stainless steel and Outokumpu is therefore constantly maximizing its usage of recycled steel in the Group's manufacturing process. The size of this discount varies in accordance with market conditions. When prices for alloying materials are high, financial benefits from using recycled material can be significant. Some 60% of the raw materials used by Outokumpu are sourced in the form of recycled stainless steel.

As a general rule, currencies in which stainless steel products are priced are determined by market area: euros in Europe and US dollars in the United States and Asia. Price levels in Europe, the United States and Asia can differ.

Outokumpu is exposed to fluctuations in currency exchange rates primarily because of sales to Asian and US markets and the Group's own production of ferrochrome, which is priced in US dollars. Exchange rates may also have an impact on the relative competitiveness of stainless steel producers located on different continents. For the most part, Outokumpu's production costs are incurred in euros, US dollars, Swedish crowns and pounds sterling. Prices for raw materials are determined primarily in US dollars, and the alloy surcharge mechanism transfers changes in exchange rates to euro prices in Europe.



Outokumpu and stainless steel markets going forward

The Inoxum acquisition was finalized at the end of 2012 and Outokumpu has begun to implement its new strategy to return to sustainable profitability. The transaction will enable Outokumpu to reduce fixed costs significantly and to expand the company's business in both Asia and the Americas, where the market environment is healthier than in Outokumpu's traditional home market of Europe. The ramp-up of the new integrated mill in Calvert, USA and the ferrochrome production are two key priorities in 2013.

Due to continued short-term weakness in the markets for stainless steel in Europe and globally, the starting point for new Outokumpu is more challenging than anticipated 12 months ago. Outokumpu will be implementing the targeted EUR 200 million synergy savings in a decisive manner and will also be seeking further opportunities to make savings during 2013. The focus is on cash flow generation, minimizing capital expenditure and implementing tight management of working capital. To this end, the two newly established efficiency programs (P150 for a EUR 150 million annual cost reductions and P300 for a EUR 300 million reduction of net working capital) have been initiated. Outokumpu expects these two programs to be fully implemented by end of 2014 and to show first positive effects already in 2013. Outokumpu is also determined to achieve further price increases to improve profitability. Different alternatives to strengthen the balance sheet will also be evaluated during the course of 2013.

Despite the difficult market situation currently, the long-term prospects for stainless steel consumption remain robust. Key global megatrends in urbanization, modernization and increased mobility, combined with growing global demand for energy, food and water, will ensure the continuing growth of stainless steel consumption in the future.

Steel & Metals Market Research (SMR) estimates indicate that the average annual growth in world-wide stainless steel real demand over the 2012–2020 period will be 3.6% (CAGR). As the new global leader in stainless steel with close to 40% market share in Europe and 12% globally, Outokumpu is favourably positioned to take advantage of one of the world's fastest-growing metal markets.

Targets and dividend policy

Key priorities in 2013

- High quality service to Outokumpu and Inoxum customers globally through superior product quality, technical service and delivery reliability.
- Implementation of the synergy benefits of 200 million euros.
- Ramp-up of the Calvert integrated mill in the US and Tornio ferrochrome smelter in Finland.
- High focus on cash flow in operational management.

Targets for 2013

- Outokumpu expects stronger performance during the second half of the year as a result of improved financial performance by both ferrochrome operations and Stainless Coil Americas, synergy cost savings and targeted price increases.
- Capital expenditure is expected to decline from combined entity EUR 760 million to EUR 350 million.
- Synergy savings from the Inoxum acquisition expected to reach EUR 50 million during 2013.
- Savings from P100 to reach full level of EUR 100 million in 2013.
- Ferrochrome production is targeted to grow to approximately 400 000 tonnes, when it was 230 000 tonnes in 2012.
- Outokumpu expects clear reduction of losses at the integrated mill operations in Calvert, Alabama, USA in 2013.

Dividend policy

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

Corporate Governance in 2012

Regulatory framework

Outokumpu Oyj, the Group's parent company, is a public limited liability company incorporated and domiciled in Finland. In its corporate governance and management, Outokumpu Oyj complies with Finnish legislation, the company's Articles of Association and the Corporate Governance Policy resolved and approved by the company's Board of Directors.

Outokumpu Oyj follows the Finnish Corporate Governance Code (available at <http://cgfinland.fi/en/>), effective as of October 1, 2010 issued by the Securities Market Association and adopted by the NASDAQ OMX Helsinki Stock Exchange. Outokumpu Oyj complies with all regulations and recommendations issued by NASDAQ OMX Helsinki.

Tasks and responsibilities of governing bodies

The governing bodies of the parent company Outokumpu Oyj, i.e. the General Meeting of Shareholders, the Board of Directors, and the President and Chief Executive Officer (CEO), have ultimate responsibility for Group management and Group operations. The Outokumpu Leadership Team (formerly the Group Executive Committee) reports to the CEO and is responsible for the efficient management of the Group's operations. Outokumpu's primary corporate governance information source is the Group's corporate governance website at <http://www.outokumpu.com/Investors/Corporate-Governance/>. Please visit the website for the latest Corporate Governance Statement and the latest corporate governance information.

Outokumpu's organizational structure

In 2012, the Outokumpu organization consisted of three Business Areas (General Stainless, Specialty Stainless and Ferrochrome) and one Focus area, APAC, all supported by Group level functions and with each Business Area fully accountable for sales, profit and assets.

As of December 29, 2012, Outokumpu's new organization is based on four Business Areas with sales, profit, production and supply chain management responsibility, while Group Functions with global processes ensure efficiency.

The Business Areas are:

- Stainless Coil EMEA
- Stainless Coil Americas
- Stainless APAC
- High Performance Stainless and Alloys

Read more about the new organization in the Our group section of the Outokumpu Annual Report 2012.

General Meeting of Shareholders

The General Meeting of Shareholders normally convenes once a year. Under the Finnish Companies Act, certain important decisions such as the approval of financial statements, decisions on dividends and increases or reductions in share capital, amendments to the Articles of Association, and election of the Board of Directors and auditors fall within the exclusive domain of the General Meeting of Shareholders.

The Board of Directors convenes a General Meeting of Shareholders. The Board of Directors can decide to convene a General Meeting on its own initiative, but is obliged to convene a General Meeting if the auditor or shareholders holding at least 10% of Outokumpu's shares so request. In addition, each shareholder has the right to bring before a General Meeting any matter that falls within the domain of the General Meeting, provided that a written request to do so has been received by the Board of Directors early enough to allow the matter to be placed on the agenda included in the notice announcing the General Meeting. According to its Articles of Association, Outokumpu has only one single class of shares and all shares have equal voting power at General Meetings.

Board of Directors

The general objective of the Board of Directors is to direct Outokumpu's business in a manner that secures a significant and sustained increase in the value of the company for its shareholders.

Board members offer their expertise and experience for the benefit of the company. The tasks and responsibilities of the company's Board of Directors are determined on the basis of the Finnish Companies Act as well as other applicable legislation. The Board of Directors has general authority to decide and act in all matters not reserved for other corporate governing bodies by law or under the provisions of the company's Articles of Association. The general task of the Board of Directors is to organize the company's management and operations. In all situations, the Board of Directors must act in accordance with the company's best interests.

The Board of Directors has established rules of procedure which define its tasks and operating principles. The main duties of the Board of Directors are as follows:

With respect to directing the company's business and strategies:

- To decide on Outokumpu's basic strategy and monitor its implementation;
- To decide on annual limits for the Group's capital expenditure, monitor related implementation, review quarterly plans and decide on changes;
- To decide on major and strategically important investments;
- To decide on major and strategically important business acquisitions and divestments;
- To decide on any significant financing arrangements; and
- To decide on any other commitments by any Group companies that are out of the ordinary in terms of either their value or nature, taking into account the size, structure and field of the Group's operations.

With respect to organizing the company's management and operations:

- To nominate and dismiss the CEO and his deputy, and to decide on their terms of service, including incentive schemes, on the basis of a proposal made by the Board's Remuneration Committee;
- To nominate and dismiss members of the Outokumpu Leadership Team, to define their areas of responsibility, and to decide on their terms of service, including incentive schemes, on the basis of a proposal made by the Board's Remuneration Committee;
- To monitor the adequacy and allocation of the Group's top management resources;
- To decide on any significant changes to the Group's business organization;
- To define the Group's ethical values and working methods;
- To ensure that policies outlining the principles of corporate governance are in place;
- To ensure that policies outlining the principles behind managing the company's insider issues are being observed; and
- To ensure that the company has guidelines for any other matters which the Board deems necessary and which fall within the scope of the Board's duties and authority.

With respect to the preparation of matters to be resolved by General Meetings of Shareholders:

- To establish a dividend policy and issue a proposal on dividend distribution; and
- To make other proposals to General Meetings of Shareholders.

With respect to financial control and risk management:

- To discuss and approve interim reports and annual accounts;
- To monitor significant risks related to the Group's operations and the management of such risks; and
- To ensure that adequate procedures concerning risk management are in place.

The Board of Directors also assesses its own activities on a regular basis.

The Board of Directors is quorate when more than half its members are present. A decision by the Board of Directors shall be the opinion supported by more than half of the members present at a meeting. In the event of a tie, the Chairman shall have the casting vote.

The Annual General Meeting elects the Chairman, the Vice Chairman and the other members of the Board of Directors for a term expiring at the close of the following Annual General Meeting. The entire Board of Directors is therefore elected at each Annual General Meeting. A Board member may be removed from office at any time by a resolution passed by a General Meeting of Shareholders. Proposals to the Annual General Meeting concerning the election of Board members which have been made known to the Board of Directors prior to the Annual General Meeting will be made public if such a proposal is supported by shareholders holding a minimum of 10% of all the company's shares and voting rights and the person being proposed has consented to such nomination.

Under the company's Articles of Association, the Board shall have a minimum of five and a maximum of twelve members. The company's largest shareholders have confirmed that they are in favor of a principle according to which members of the company's Board of Directors should, as a rule, be qualified experts from outside the company. According to the Articles of Association, a person aged 68 years or older cannot be elected as a member of the Board of Directors. A Board consisting of seven members was elected at the 2012 Annual General Meeting. In addition to the seven members, the 2012 Annual General Meeting decided that following the completion of the transaction to combine Outokumpu Oyj and Innoxum announced by Outokumpu on January 31, 2012, the Board of Directors would consist of eight members and Mr. Guido Kerkhoff, would be elected as the eighth Board member. Mr. Kerkhoff's Board membership took effect as of December 29, 2012, following the completion of the Innoxum transaction. Seven members of the current Board of Directors are independent of the company and its main shareholders and Mr. Kerkhoff is independent of the company.

The Board of Directors meets at least five times each year. In 2012, the Board of Directors met 19 times and the average attendance rate was 92%.

See the Members of the Board of Directors section in this report.

Shares and options of the members of the Board of Directors on December 31, 2012

Member	Shares
Ole Johansson	80 990
Iman Hill	13 441
Elisabeth Nilsson	23 681
Harri Kerminen	13 441
Heikki Malinen	13 441
Siv Schalin	23 681
Guido Kerkhoff	-
Olli Vaartimo	36 756
	205 431

Board committees

The Board of Directors has set up two permanent committees consisting of Board members and has confirmed rules of procedure for these committees. Both committees report to the Board of Directors.

The Audit Committee comprises four Board members. The task of the Audit Committee is to deal with matters relating to financial statements, auditing work, internal controls, the scope of internal and external audits, billing by auditors, the Group's tax position, the Group's financial policies and other procedures for managing Group risks. In addition, the Audit Committee prepares a recommendation for the Annual General Meeting concerning the election of an external auditor and auditing fees. The Audit Committee met six times during 2012 and the average attendance rate was 91%.

The Remuneration Committee comprises the Chairman of the Board and three other Board members. The task of the Remuneration Committee is to prepare proposals for the Board of Directors concerning appointment of the company's top management and principles relating to the compensation they receive. The Board of Directors has authorized the Remuneration Committee to determine the terms of service and benefits enjoyed by the Outokumpu Leadership Team members other than the company's CEO. The Remuneration Committee met three times during 2012 and the average attendance rate was 100%.

To handle specific tasks, the Board of Directors can also set up temporary working groups consisting of Board members. These working groups report to the Board of Directors. No such working groups were set up in 2012.

See the Board of Directors section in this report.

Nomination Board

The Outokumpu 2012 Annual General Meeting decided to establish a Nomination Board to annually prepare proposals on the composition of the Board of Directors along with director remuneration for the Annual General Meeting.

The Outokumpu 2012 Annual General Meeting also decided that according to the Charter of the Nomination Board, the Nomination Board consists of the representatives of Outokumpu's four largest shareholders, registered in the Finnish book-entry securities system on October 1, who accept the assignment and that the Chairman of the Board should act as an expert member of the Nomination Board.

Outokumpu's largest shareholders were determined on the basis of shareholdings registered in the Finnish book-entry system. Holdings by shareholders who have an obligation under the Finnish Securities Markets Act to disclose changes in shareholdings (the flagging obligation) are divided into several funds or registers and will be summed when calculating the related share of voting rights, provided that a written request to this effect was presented by the shareholder or shareholders concerned to the Board of Directors of the Company no later than September 30, 2012. Should a shareholder not wish to use the nomination right, the right to nominate is transferred to the next largest shareholder who would otherwise not have a right to nominate.

Shareholder representatives on the Nomination Board in 2012 were: Solidium Oy, The Social Insurance Institution of Finland, Ilmarinen Mutual Pension Insurance Company and Varma Mutual Pension Insurance Company. These shareholders chose the following individuals as their representatives on the Nomination Board: Kari Järvinen, Managing Director of Solidium Oy, Tuula Korhonen, Investment Director of The Finnish Social Insurance Institution, Harri Sailas, Chief Executive Officer of the Ilmarinen Mutual Pension Insurance Company and Risto Murto, Executive Vice-President, Varma Mutual Pension Insurance Company. Kari Järvinen was elected as Chairman of the Nomination Board and Ole Johansson, Chairman of the Outokumpu Board of Directors, served as an expert member. Furthermore, according to a resolution of the 2012 Outokumpu Annual General Meeting the composition of the Shareholders' Nomination Board for the Annual General Meeting 2013 would include one expert member nominated by ThyssenKrupp AG. This resolution would only take effect on the day following the completion of the Inoxum transaction. Following completion of the Inoxum transaction on December 28, 2012, Mr. Kerkhoff was nominated to serve on the Nomination Board.

The Nomination Board has submitted its proposals regarding Board composition and director remuneration to Outokumpu's Board of Directors, and the Board has incorporated these proposals into the notice announcing the Outokumpu 2013 Annual General Meeting of Shareholders.

CEO and Deputy to the CEO

The Chief Executive Officer (CEO) is responsible for the company's operational management, in which the objective is to secure significant and sustainable growth in the value of the company for its shareholders.

The CEO prepares matters on which decisions are to be made by the Board of Directors, develops the Group's operations in line with the targets agreed with the Board of Directors, and ensures the proper implementation of Board decisions. The CEO is also responsible for ensuring that existing legislation and applicable regulations are observed throughout the Group.

The CEO chairs meetings of the Outokumpu Leadership Team. The deputy to the CEO is responsible for attending to the CEO's duties in the event that the CEO is prevented from doing so. Since 2011, the Group's Chief Financial Officer has acted as deputy to the CEO.

Leadership Team

The task of the Outokumpu Leadership Team (previously the Group Executive Committee) is the overall management of Outokumpu's business. Members of the team have extensive authority in their individual areas of responsibility and their duty is to develop the Group's operations in line with the targets set by the Board of Directors and the CEO.

In 2012, the Group Executive Committee consisted of six members appointed by the Board of Directors. In 2012, the members of the Group Executive Committee held the following positions: Chief Executive Officer, Executive Vice President – Chief Financial Officer, Executive Vice President – General Stainless, Executive Vice President – Specialty Stainless, Executive Vice President – Ferrochrome, Group Research and Development and Executive Vice President – Human Resources and Health and Safety.

Since January 2013, the members of the Outokumpu Leadership Team hold the following positions: Chief Executive Officer, Executive Vice President – Chief Financial Officer, President – Stainless Coil EMEA, President – Stainless APAC, President – Stainless Coil Americas, President – High Performance Stainless and Alloys, Executive Vice President – Integration and Strategy, Executive Vice President – Communications, Marketing and IR, and Executive Vice President – HR and HSS. The Leadership Team typically meets at least once a month.

See the Members of the Leadership Team section in this report.

Shares and options of the Leadership Team members on December 31, 2012

Member	Shares	Share-based incentive program 2010–2012	Share-based incentive program 2011–2013	Performance Share Plan 2012–2014	Restricted Share Pool 2012–2014
Mika Seitovirta	200 000		96 000	544 000	
Esa Lager	224 000	36 000	36 000	170 000	
Ulrich Albrecht-Früh					117 284
Austin Lu				65 200*	
Jarmo Tonteri	144 282				
Reinhard Florey					117 284
Kari Tuutti	20 000			65 200	
Pii Kotilainen	12 000	36 000	36 000	170 000	
Kari Parvento	8 000	36 000	36 000	170 000	
Total	608 282	108 000	204 000	1 184 400	234 568
Board and Leadership Team	813 713				

*Due to local legislation, the possible LTI reward will be paid in cash instead of shares.

Group management

Outokumpu's corporate management consists of the Chief Executive Officer (CEO), members of the Outokumpu Leadership Team, and managers and experts who assist the CEO and members of the Leadership Team.

The task of corporate management is to manage the Group as a whole. Duties include the coordination and execution of strategy and corporate planning, integration, financial control, tax, internal audit, human resources, environment, energy, health and safety, communications and investor relations, corporate responsibility, R&D, legal affairs, corporate affairs and compliance and IPR, as well as treasury and risk management. Certain support functions have also been centralized at Group level. The Outokumpu Group is managed in accordance with the organization of its business, in which the Group's legal company structure also provides the legal framework for Outokumpu's operations. Clear financial and operational targets have been established for all the Group's operational businesses.

In 2012, Outokumpu's business model was based on three Business Areas, each fully accountable for sales, profit and assets, improving the Group's ability to respond rapidly to customer needs. The three Business Areas were:

- General Stainless: the Group's stainless steel operations in Tornio and a finishing plant in Terneuzen in the Netherlands,
- Specialty Stainless: Special Coil, Special Plate, Kloster and Long Products in Sweden and in the UK, including the Sheffield melt shop in the UK, and
- Ferrochrome: the Kemi Chrome Mine and ferrochrome production at Tornio in Finland.

Since 2011, OSTP, the Outokumpu's tubular products unit, in which Tubinoxia S.r.l. (an Italian company) is a majority owner, has been managed through OSTP's Board of Directors, on which Outokumpu has one seat.

As of December 29, 2012, Outokumpu's new organization is based on four Business Areas with sales, profit, production and supply chain management responsibility, with the focus being on improving the ability to respond rapidly to customer needs, while Group-level functions with global processes ensure efficiency.

The Business Areas are:

- Stainless Coil EMEA
- Stainless Coil Americas
- Stainless APAC
- High Performance Stainless and Alloys

As well as being responsible for their own sales, Business Areas are responsible for profit and operating cash flow and are supported by Group-level functions in key areas such as financial control, taxation, human resources, environment, energy, health and safety, communications, corporate responsibility, R&D, legal affairs, compliance and IPR, as well as treasury and risk management. The Business Areas are geared to achieve the Group's business and synergy targets while maintaining the focus on responding to customer needs.

Outokumpu Business Areas report directly to individual Leadership Team members.

Remuneration

As confirmed by the 2012 Outokumpu Annual General Meeting, annual remuneration for members of Outokumpu's Board of Directors are as follows: Chairman EUR 80 000, Vice Chairman EUR 45 500 and other members EUR 36 000, with 40% of this paid as Outokumpu shares purchased from the market and 60% paid in cash.

The annual fee is paid once a year and members of the Board are not entitled to any other share-based rewards. In addition to their annual remuneration, all members of the Board of Directors are paid a meeting fee of EUR 600 (EUR 1 200 for members of the Board of Directors residing outside Finland). The meeting fee is also payable for attending meetings of Board committees.

The service contract of Outokumpu's CEO is valid until further notice and may be terminated by Outokumpu with 12 months' notice or by the CEO with six months' notice. Upon termination by Outokumpu or a material change in ownership of Outokumpu, the CEO will receive additional compensation equivalent to his basic salary in the preceding 12 months plus the monetary value of his employee benefits at the moment of termination provided that his employment is terminated for a reason unconnected with his performance or events interpreted as him having failed in his duties. For the Finnish members of the Leadership Team (former Group Executive Committee), the notice period is six months for both parties, in addition to which there will be additional compensation equivalent to their basic salary in the preceding 12 months plus the monetary value of their employee benefits at the moment of termination provided that their employment is terminated for another reason than one caused by the employee. Based on earlier contractual obligations, the termination benefits of the Germany based Leadership Team members include an additional 12 months' salary during a transition period of 1,5 years after which the termination benefits will be gradually reduced to six months' notice and 12 months' severance. In line with earlier contractual obligations, the severance amount is calculated based on base salary, benefits and incentives.

In the 2013 financial year, the level of the performance-related incentive payable to the Group CEO and members of the Leadership Team in addition to their salary and employee benefits will be based on: the Group's EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) target and operational targets and individual targets set separately. The maximum level of this incentive payment is 50% of annual base salary for the CEO and other members of the Leadership Team. The total amount of short-term and long-term incentives must not exceed 200% of an individual's annual salary. Should this limit be exceeded, the share-based element of the incentive reward will be reduced accordingly.

No separate remuneration is paid to the Group CEO or members of the Leadership Team for membership of this committee or the Group's other internal governing bodies.

The retirement age for the members of the Leadership Team is 63 years, with the exception of members who were appointed to the Group Executive Committee before December 2009, who are thereby entitled to retire at the age of 60. For Finnish members of the Leadership Team appointed to the Group Executive Committee before January 1, 2007, pension benefits amount to 60% of the total average annual salary in the last five full years of service. For other Finnish members of the Leadership Team, the targeted pension is 60% of the annual salary at the age of either 60 or 63 depending on the date when the executive concerned was appointed to the Group Executive Committee or Leadership Team. Earnings calculated from the year of appointment, including fringe benefits and performance-related short-term incentives, are used as the basis for the insurance premium. The maximum premium is 25% of an individual's annual earnings. In line with Outokumpu's policy, the CEO's retirement age is 63 and the targeted pension is 60% of the annual salary at the age of 63. One member of the Leadership Team resides in Sweden and is covered by the Swedish ITP pension plan and two members reside in Germany and are entitled to pension benefits in accordance with Essener Verband.

Outokumpu did not provide any guarantees or other similar commitments on behalf of members of its Board of Directors in 2012. No members of the Board of Directors or the Leadership Team or closely-related persons or institutions have any significant business relationships with the Group.

Fees, salaries and employee benefits paid

2012

€	Salaries and fees with employee benefits	Performance/ project-related bonuses	Annual remuneration***	Options	Total
Board of Directors					
Chairman of the Board, Johansson	12 600	-	80 000	-	92 600
Vice Chairman of the Board, Vaartimo	13 800	-	45 500	-	59 300
Board member, Henkes*	8 400	-	-	-	8 400
Board member, Nilsson	21 600	-	36 000	-	57 600
Board member, Nilsson- Ehle*	9 600	-	-	-	9 600
Board member, Pesonen*	3 600	-	-	-	3 600
Board member, Schalin	12 600	-	36 000	-	48 600
Board member, Hill	13 200	-	36 000	-	49 200
Board member, Kerminen	7 800	-	36 000	-	43 800
Board member, Malinen	9 000	-	36 000	-	45 000
CEO, Seitovirta	882 692**	90 000	-	-	972 692
Deputy CEO, Lager	300 341	70 636	-	-	370 977
Other Leadership Team Members****	1 390 112	194 314	-	-	1 584 426

* March 1–31, 2012

** This figure includes the compensation of 271 223 euros for taxes and social security contributions related to the Inoxum transaction incentive scheme.

*** Annual remuneration: 40% is paid as Outokumpu shares purchased from the market and 60% paid in cash.

**** Hautala Jan 1–Dec 28, 2012, Lu, Tuutti, Albrecht-Früh and Florey Dec 29–31, 2012

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2011

€	Salaries and fees with employee benefits	Performance/ project-related bonuses	Annual remuneration****	Options	Total
Board of Directors					
Chairman of the Board, Johansson	10 200	-	80 000	-	90 200
Vice Chairman of the Board, Vaartimo	8 400	-	45 500	-	53 900
Board member, Henkes	16 800	-	36 000	-	52 800
Board member, Nilsson	13 200	-	36 000	-	49 200
Board member, Nilsson- Ehle	20 400	-	36 000	-	56 400
Board member, Pesonen	9 000	-	36 000	-	45 000
Board member, Schalin	7 200	-	36 000	-	43 200
Board member, Saarinen	1 800	-	-	-	1 800
Board member, Soila	1 200	-	-	-	1 200
Board member, de Margerie	1 200	-	-	-	1 200
CEO, Seitovirta*	451 840	-	-	-	451 840
CEO, Rantanen**	2 323 074	149 648	-	-	2 472 722
Deputy CEO***	338 797	67 636	-	-	406 433
Other Group Executive Committee Members	2 136 405	246 582	-	-	2 382 987

* March 1–Dec 31, 2011

** Jan 1–Aug 17, 2011

*** Jan 1–Oct 31, 2011

**** Annual remuneration: 40% is paid as Outokumpu shares purchased from the market and 60% paid in cash.

Insider issues

Outokumpu's insider rules are based on and comply with the Guidelines for Insiders issued by the NASDAQ OMX Helsinki stock exchange. Permanent insiders with a duty to declare consist of members of the company's Board of Directors, the Auditor in Charge, the CEO, and other members of the Outokumpu Leadership Team.

Outokumpu maintains a public register of permanent insiders who have the duty to declare. Employees of the Group who receive inside information on a regular basis as a result of their position or the duties they perform are registered in a non-public register of permanent company-specific insiders. Permanent insiders must not purchase or sell securities issued by the company in the 14 days prior to the publication of interim reports or the company's annual accounts (the so-called "closed window").

Separate, non-public, project-specific insider registers are maintained for insider projects. Persons defined as project specific insiders are those who, in the course of their duties in connection with a project, receive information concerning the Group which, if or when realized, is likely to have a significant effect on the value of the company's publicly-traded securities.

Outokumpu's Head of Corporate Affairs and Compliance is responsible for the coordination and supervision of insider issues.

See the year-end 2012 shareholding of the Board of Directors in the Board of Directors section and Leadership Team in the Leadership Team section.

Up-to-date information on holdings by Outokumpu's permanent insiders who have a duty to declare see is available on Outokumpu's website.

Financial reporting

According to the Finnish Limited Liability Companies Act and the Finnish Code of Corporate Governance, the Board of Directors is responsible for a company's internal controls. The purpose of this chapter is to provide shareholders and other parties with a description of how internal control and risk management of financial reporting is organized in Outokumpu.

As a listed company, the Group has to comply with a variety of regulations. To ensure that all the stated requirements are met, Outokumpu has introduced principles for financial reporting and internal control and distributed these throughout the company's organization.

Control environment

The foundation for Outokumpu's control environment is the business culture established within the Group and its associated methods of operation. The basis for the company's control routines is provided by Group policies and principles which define the way in which Outokumpu's organization operates. These policies and principles are, for example, the Group's Corporate Responsibility Policy, Ethical Principles and the Outokumpu Leadership Principles. The Outokumpu Code of Conduct describes the Group's basic values and offers standardized, practical guidelines for managers and employees to follow. The Outokumpu performance management process is a key management activity and an important factor in enabling an efficient control environment. In all sections of the Group's operations, planning activities and the setting of both operational and financial targets are executed in accordance with Outokumpu's overall business targets. Management follow-up of related achievements is carried out through monthly management reporting routines and in performance review meetings.

Outokumpu operates in accordance with the risk management policy approved by the Group's Board of Directors. This policy defines the objectives of risk management activities, the approaches to be taken and areas of responsibility. As well as supporting Outokumpu strategy, risk management activities help in defining a balanced risk profile from the perspective of shareholders and other stakeholders such as customers, suppliers, personnel and lenders. More information on risk management within Outokumpu in the Risk management section.

Outokumpu's control process for financial reporting is based on Group policies, principles and instructions relating to financial reporting as well as on the responsibility and authorization structure within the Group. Policies relating to financial reporting are usually owned and approved by the CEO, the CFO or the Corporate Controller. Financial reporting in Outokumpu is carried out in a harmonized way using a common chart of accounts.

Financial reporting is prepared in accordance with International Financial Reporting Standards (IFRS). The Outokumpu Accounting Principles (OAP) are Outokumpu's application guidance as regards IFRS. The aim of the OAP and other financial reporting instructions is to ensure that unified financial processes and reporting practices are used throughout the Group. Financial statements by the parent company and stand-alone Finnish subsidiaries are prepared in accordance with generally accepted accounting principles in Finland, while foreign subsidiaries follow local accounting principles. Outokumpu also complies with regulations regarding financial reporting published by the Financial Supervisory Authority (FIN-FSA) and NASDAQ OMX Helsinki.

The Outokumpu Controller's Manual contains financial reporting policies and instructions. Policies and instructions for financial reporting are reviewed on a regular basis and revised when necessary. During the 2012 financial year, the instructions were updated with some minor changes and the language was revised. Also, as the corridor approach was eliminated, pension accounting instructions were updated to follow the new accounting policy. In 2013, Outokumpu will continue to follow changes in IFRS standards closely. No major implementations of new standards are expected.

Risk identification and assessment

Risk management processes connected with the Group's financial reporting are coordinated by Outokumpu's Treasury and Risk Management function. Related risks are classified as operational risks and can arise as a consequence of inadequate or failed internal processes, employee actions, systems or other events such as misconduct or crime. The aim of the Outokumpu risk management process is to identify, evaluate, control and mitigate such risks. Major risks are reported to and evaluated by the Audit Committee on a regular basis. Outokumpu's risk management process includes arranging workshops on the identification of key risks, including operational risks, for Business Areas and other Group functions. Deliverables include risk maps and risk identification plans.

Internal audit

Outokumpu's Internal Audit function has an independent role and a twofold objective: to provide assurance and to offer consulting services which add value and improve the organization's operations. Internal Audit's most important task is assisting the Audit Committee and the Leadership Team in fulfilling their control functions. To do this, Internal Audit identifies and monitors significant operational risks within the Group, ascertains the adequacy and effective operation of internal controls and provides the Audit Committee and the Leadership Team with a direct source of correct and reliable information. Other tasks carried out by Internal Audit include monitoring the Group's principles, controls and policies and follow-up of the audit conclusions by the company's external auditors.

The internal auditor reports to the Audit Committee and administratively to the CFO.

Control activities

In addition to the Board of Directors and Audit Committee, operational management teams in Outokumpu are responsible for ensuring that internal controls relating to financial reporting are in place at all Outokumpu units. The aim of control activities is to discover, prevent and correct potential errors and deviations in financial reporting. Control activities also aim to ensure that authorization structures are designed and implemented in a way that conflicting divisions of work do not exist (i.e. one person performing an activity and also being responsible for controlling that activity). Control activities consist of different kind of measures and include reviews of financial reports by Group management and in Business Area management teams, the reconciliation of accounts, analyses of the logic behind reported figures, forecasts compared to actual reported figures and analyses of the Group's financial reporting processes, among others. A key component is the monitoring of monthly performance against financial and operational targets. These control activities take place at different levels in the organization. The most important accounting items in Outokumpu are the valuation and reporting of inventories and other items of working capital. Also, in difficult market situations, asset impairment calculations and related sensitivity analyses are increasingly important. These items are carefully monitored and controlled both within Business Areas and at Group level.

Information technology and solutions play an important role in guaranteeing that the Group's internal controls have a solid foundation.

Information and communication

Group-wide policies and principles are available to all Outokumpu employees. Instructions relating to financial reporting are communicated to all the parties involved. The main communication channels employed are Outokumpu's intranet and other easily-accessible databases. Face-to-face controller meetings are also organized. Senior Controller meetings are organized on quarterly basis or more frequently when considered necessary to share information and discuss issues of topical interest to the Group.

Outokumpu has established different networks and communities in which financial reporting and internal control issues and related instructions are discussed and reviewed. These networks usually consist of personnel from the Business Areas and Group functions. The aim of these networks, communities and common instructions is to ensure that unified financial processes and reporting practices are used throughout the Group. The networks and communities play an important role in establishing the effectiveness of internal controls relating to financial reporting and in developing Outokumpu policies, instructions and processes.

Follow-up

Both management in all Outokumpu companies and personnel in accounting and controlling functions are responsible for the follow-up and monitoring of internal controls connected with financial reporting. The Internal Audit and Risk Management functions also engage in follow-up and control activities. The findings of the follow-up procedures are reported to the Audit Committee and the Outokumpu Leadership Team on a regular basis.

Auditors

Under its Articles of Association, the company shall have a minimum of one and a maximum of two auditors who are qualified auditors or firms of independent public accountants authorized by the Central Chamber of Commerce of Finland.

The Annual General Meeting elects the auditors to a term of office ending at the close of the next Annual General Meeting. Proposals to the Annual General Meeting on the election of auditors, which have been made known to the Board of Directors prior to the Annual General Meeting, will be made public if the proposal is made by the Board Audit Committee or if it is supported by shareholders holding a minimum of 10% of all the company's shares and voting rights and the person or company proposed has consented to such nomination. The company's auditors submit the statutory auditor's report to the company's shareholders in connection with the company's financial statements. The auditors also report their findings to the Board Audit Committee on a regular basis and at least once a year to the full Board of Directors. The parent company, Outokumpu Oyj, is audited by KPMG Oy Ab, and the responsible auditor is Virpi Halonen, Authorized Public Accountant. KPMG Oy Ab is also responsible for overseeing and coordinating the auditing of all Group companies.

Both Outokumpu and KPMG Oy Ab emphasize the requirement that an auditor be independent of the company being audited. In its global independence policy, KPMG Oy Ab has stated its commitment to observing and complying with the Code of Ethics of the International Federation of Accountants (IFAC).

Outokumpu's Board Audit Committee continuously monitors non-audit services purchased by the Group from KPMG Oy Ab at a global level. In 2012, auditors were paid fees totaling EUR 5.7 million, of which non-auditing services accounted for EUR 3.8 million.

Risk management

Outokumpu operates in accordance with the risk management policy approved by the company's Board of Directors. This defines the objectives, approaches and areas of responsibility in the Group's risk management activities. As well as supporting Outokumpu strategy, the aim of risk management is identifying, evaluating and mitigating risks from the perspective of shareholders, customers, suppliers, personnel, creditors and other stakeholders.

Risk management organization

The Outokumpu Board of Directors carries ultimate responsibility for risk management within the Group.

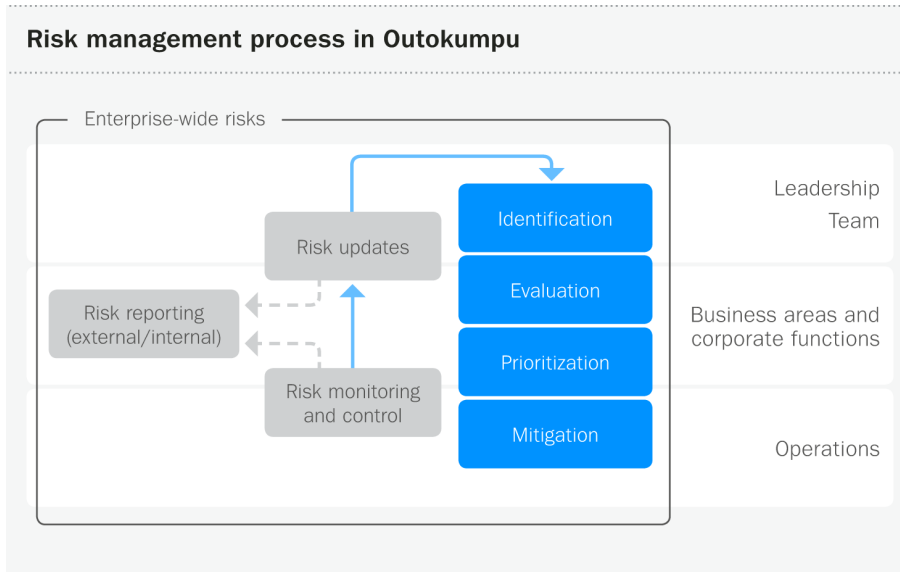
Outokumpu's CEO and members of the Leadership Team are responsible for defining and implementing risk management procedures, and for ensuring that risks are both properly addressed and taken into account in strategic and business planning. Business Areas and Group functions are responsible for managing risks connected with their own operations.

Auditors and Internal Audit monitor risk management processes, and the Leadership Team, the Board's Audit Committee and the Board of Directors review both key risks and actions taken to manage these risks on a regular basis. The Treasury & Risk Management function supports implementation of Outokumpu's risk management policy, facilitates and coordinates risk management, and prepares quarterly risk reports for management, the Board's Audit Committee and the Group's auditors.

Risk management process

Outokumpu has defined risk as anything that could have an adverse impact on achieving the Group's objectives. Risks can therefore be threats, uncertainties or lost opportunities connected with current or future operations. Outokumpu's appetite for risk and risk tolerance are defined in relation to Group earnings, cash flows and capital structure. The risk management process is an integral part of overall management processes and is divided into four stages: risk identification, risk evaluation, risk prioritization and risk mitigation.

Within Outokumpu, the risk management process is monitored and controlled at different organizational levels in a systematic manner. Regular risk updates are performed to make sure that the process is operating in an uninterrupted manner. The monitoring and analysis of results and risk updates also ensure that accurate information is provided both internally – to Business Area management teams and members of the Leadership Team – and externally to parties such as shareholders and other stakeholders.



Focus areas 2012

Risk updates and reviews

In 2012, Outokumpu's risk management process was mainly carried out through quarterly risk updates and reviews by the Group Executive Committee and other senior management, but also through risk workshops at operational levels within Outokumpu production sites. The updates and reviews covered the subjects of risk identification, evaluation, prioritization and mitigation. In April 2012, the Group's risk management policy was updated, including risk tolerance and compliance with the ISO 31000 standard. Risk workshops held during 2012 focused mainly on departments and functions at the Group's Tornio site and continued a process initiated in 2011, providing guidance on identifying, evaluating and mitigating operational risks.

Inoxum transaction

The Inoxum transaction was announced in January 2012. Implementation of the transaction, integration planning for the combined entity and related tasks included risk management activities were important focus areas for risk management during 2012. Risks associated with different phases of the transaction were identified, assessed, mitigated and reported according to the Group's risk management policy.

Management of credit risks

All external sales contracted by Outokumpu must be covered by approved credit limits or secured payment terms. Most of the Group's current outstanding trade receivables have been secured by credit insurance which typically covers approximately 90% of an insured credit loss. Part of the credit risk which relates to trade receivables is managed through letters of credit, advance payments and bank guarantees. In 2012, because of changes in the centralized sales and marketing organization and related corporate resources, the Group's credit management was steered towards a decentralized model to gain more flexibility and also provide better support for local sales organizations.

Negative impacts on the outlook regarding increasing insolvency rates within Europe and credit limit availability from major credit risk insurers are likely if the European financial crisis continues. This would mean that Outokumpu will be exposed to increased credit risks as customers' liquidity and the credit limits available to them weaken. Country-specific actions by credit risk insurers may also expand in the future. This challenging situation, particularly in Europe, resulted in Group exposure to credit risks being closely monitored and analyzed in 2012.

Realized risks

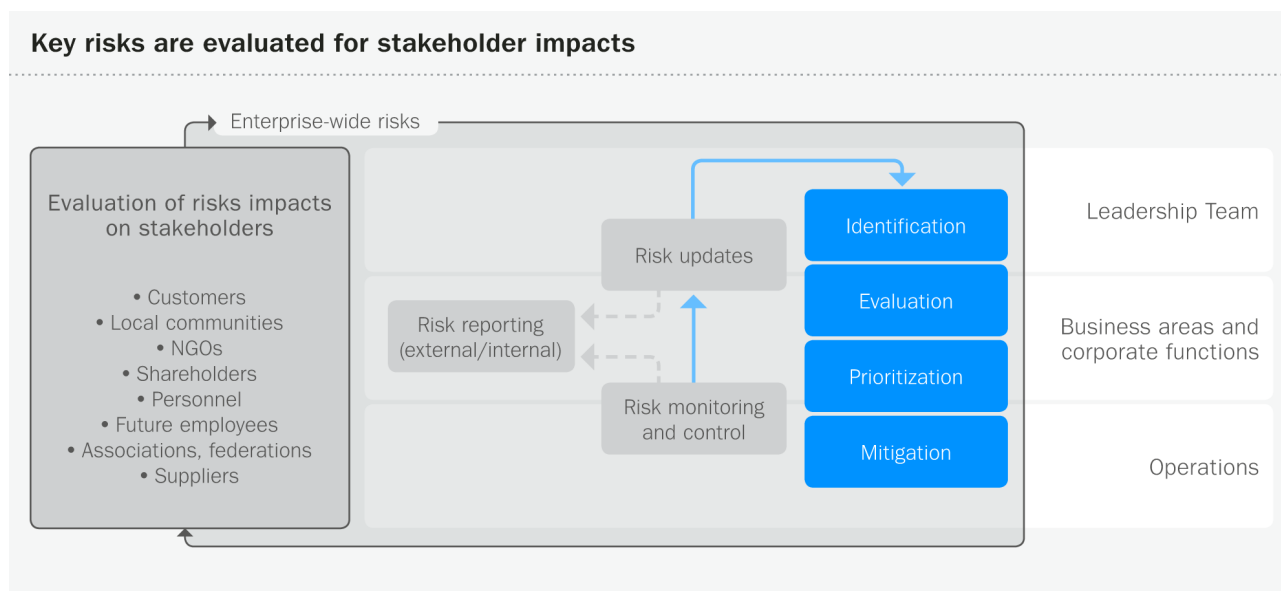
No material damage to Outokumpu's property or significant business interruptions occurred in 2012. The most significant risks to the Group's operations during the year were associated with overcapacity in stainless steel markets, the continuing negative influence of global economic uncertainty, and declining prices for nickel, molybdenum and the Talvivaara share. The deepening debt crisis in Europe continued to have a negative impact on demand for stainless steel with a resultant negative effect on Outokumpu's profitability and gearing.

Risks and stakeholders

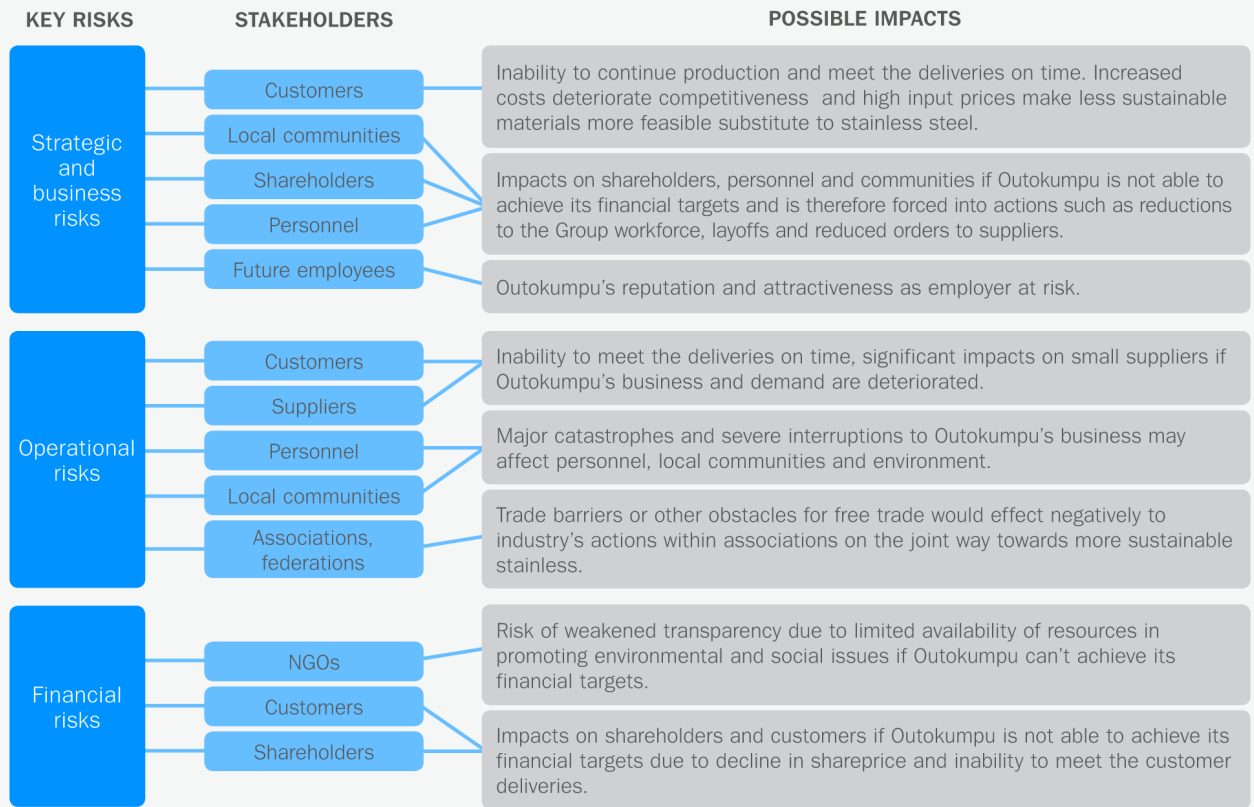
To expand appreciation of key risks within Outokumpu and to help in mitigating the effects of possible impacts on stakeholders, the Group also monitors potential risks from a corporate responsibility perspective.

Impacts on stakeholders are reviewed as part of Outokumpu's risk management process. The evaluation process covers enterprise-wide risks at all organizational levels and includes assessments of the impact of key risks on Group stakeholders.

The "Stakeholder perspective" diagram specifies key stakeholder groups and provides examples of the possible impact of different categories of risk on Outokumpu's operations.



Stakeholder perspective



Climate change risks

The risk of climate change induced by human activity and its possible consequences has attracted increasing attention within Outokumpu in recent years. Outokumpu has established long-term program, implementing serious actions as our response. The issue has been taken into consideration in the Group's long-term strategic planning also.

Outokumpu views the possible consequences of climate change as a matter of serious concern and wishes to make a contribution to global efforts aimed at mitigating associated effects. While preparations must be made for future commercial challenges that the Group may face in connection with implementing measures to reduce emissions of carbon dioxide, new situations which arise as a result of climate change may also present business opportunities.

Regulatory risks

The greatest uncertainty for Outokumpu in connection with emissions-related regulatory measures stems from the EU Emissions Trading Scheme (EU ETS) and related consequences affecting Outokumpu's business. One possible outcome is that the Group's European production units will be placed at a competitive disadvantage in relation to stainless steel and ferrochrome producers located outside Europe. As emissions allowances that remain unused can be traded on financial markets, the system is designed to create a financial incentive for companies to restrict their emissions of carbon dioxide. Conversely, if the level of a company's carbon dioxide emissions exceeds the rights it possesses, corresponding allowances must be purchased. Outokumpu's sites in Finland, Italy, Germany, Sweden and the UK fall within the scope of the EU ETS scheme.

Even though Outokumpu was granted emissions allowances at no cost in the (2008–2012) trading period, the EU ETS will become a more restrictive system in the third emissions trading period (2013–2020). 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 who currently operate inside the EU from moving to countries where emissions reduction targets are not in place, industry sectors which feature high levels of carbon leakage will continue to receive free emissions allowances. As the iron and 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 during the 2013–2020 period, with the amount being based on historical activity levels and efficiency-based benchmarks. All the Group sites affected submitted applications in the course of 2012 and fully comply with authority requirements. The delays in agreeing system definitions, international negotiations which remain unresolved and the clear risk of both extensive bureaucracy and emissions-related regulations continue to foster increased levels of uncertainty in carbon markets. Also, proposed alterations to ETS system, such as interfering the auctioning timetable and agreed total emission gap, decrease the trustworthiness of emission markets.

In the future, emissions reduction targets will become more stringent and Outokumpu continues preparations for conducting the Group's operations in a more restrictive environment in this connection. To manage related risks and prepare for expected developments connected with emissions trading, Outokumpu has an internal Emission Trading Network, in which are 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.

Cost-related risks

From a Group perspective, identifying and controlling the cost of compliance with emissions allowance schemes is crucial. Both forecast and realized emissions as well as the allowances granted are monitored by Outokumpu on a regular basis. The Group has also taken action to reduce the costs associated with emissions regulation compliance by entering into financial arrangements such as swapping EU emissions allowances for Certified Emissions Reductions (CERs) and investing in carbon funds.

As production of both stainless steel and ferrochrome are energy-intensive, Outokumpu's operations are sensitive to changes in the cost of electricity. Power companies transfer the costs associated with their own emissions allowances to the prices they charge for electricity, and marginal cost pricing means that all forms of electrical power production are therefore affected by these allowance-related costs. Even though much of the electricity purchased by Outokumpu is of the low-carbon variety, costs of this type have a negative impact on the Group's financial performance and these effects are not mitigated by no-cost allocations of emissions allowances. Risks connected with the future cost of emissions allowances also add an element of uncertainty to the planning of new investment projects and may affect future investment decisions.

Weather-related risks

Extreme weather conditions associated with the effects of climate change could have an indirect impact on Outokumpu's operations in the future since physical risks such as damage to property or the loss of production as a consequence of flooding or hurricanes may be exacerbated. Normal measures designed to mitigate such risks have however already been incorporated into the Group's risk management and related policies. Currently, one of Outokumpu's production facilities, a tube mill in Florida, is located in an area defined as a "regional hotspot". Group has general instructions and tools for implementing plans to ensure business continuity within production facilities.

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, 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.

To optimize the cost of compliance within the EU ETS, Outokumpu has invested in the Testing Ground Facility (TGF), a carbon fund managed by the Nordic Environmental Finance Corporation. The aims of the TGF fund include purchasing Emission Reduction Units (ERUs) on behalf of fund participants at financially-attractive terms from projects which achieve verified reductions in carbon dioxide emissions. The fund will be closing its operations during 2013 according to the original plan. Outokumpu still expects to receive ERUs, which can be used during 2014. Outokumpu uses ERUs for compliance instead of EUAs.

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