

The background of the entire page is composed of several large, overlapping fingerprints. The top half of the image features fingerprints in a vibrant green color, while the bottom half features fingerprints in a bright blue color. The fingerprints are of various sizes and orientations, creating a textured, organic pattern.

MAXIMIZING OUR HANDPRINT

SUSTAINABILITY REPORT 2014

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MAXIMIZING OUR HANDPRINT

Outotec provides industry benchmark technologies and life-cycle solutions to customers all over the world, making a significant positive handprint in the sustainable use of natural resources. We work hard to maximize this transformative potential, helping our customers reduce the ecological footprint of their operations. As leaders in the field, we strive to ensure that sustainability is demonstrated in everything we do.

Outotec's core competences lie across the minerals and metals processing value chains gained by over 100 years of continuous business operation. We have further expanded our handprint by developing innovative applications for renewable energy and industrial water treatment. In this report we showcase some of the ways in which our technology has made a difference for our customers and the communities they operate in.

This handprint is a sign of positive impacts on this planet. It means lifting businesses and societies while reducing the environmental impact of processing resources.



IN THE BUSINESS OF MAXIMIZING OUR HANDPRINT

As a child, I watched every film of Jacques Cousteau's adventures in the oceans of this planet. I admired this man, who was meticulously revealing the secrets of the underwater world and conducted research to better understand our planet. An innovator with the mind of an engineer, he made me appreciate water. Eventually I became an engineer and a diver myself, driven by the desire to help solve planetary problems.

I am concerned about how we as humankind are treating our planet. We are using natural resources with a speed that exceeds our planet's capability to regenerate them. Climate change is not slowing down. I am not suggesting, however, that we turn our backs on development and economic growth. At Outotec, our mission – the sustainable use of Earth's natural resources – obliges us to continuously seek solutions to decouple economic growth from its negative impact on the environment. We want to be involved in solving this problem.

Our customers face increasing demands regarding environmental

performance. Regulations are getting tighter in health and safety and many other issues; and industrial companies need to be able to meet new standards. They need to gain and maintain their social license to operate within the surrounding society. We want to be the kind of partner that understands the challenges our customers face and that can provide them with safe and future-proof solutions. Together with them, we can solve planetary problems.

To support our commitment to the United Nations Global Compact initiative and principles on human rights, environment, labor, and anti-corruption, we continue developing our governance. We recognize that we need to continuously improve our performance to minimize our own footprint. Our focus should then be on maximizing our handprint – in other words – the positive impact we make on our planet through what we do to improve resource efficiency and to enhance the recovery of valuable materials, raise efficiency in energy and water use, and minimize emissions.



In this report, we focus on the ways in which we are maximizing our handprint – our technologies and what we can achieve together with our customers. To do this we need our innovative experts, who have the ability to think ahead and the desire to be part of our mission.

Looking back, I have to admit that the year 2014 was a difficult one for our company from a financial perspective. The uncertainty in the world economy and weakened metal prices kept mining and metal companies' investments on a low level. We were able to grow our service business, but not enough to compensate for the sluggishness of the capital expenditure on new plants and equipment.

“Outotec was 3rd most sustainable company in 2014 in Corporate Knights' Global 100 index.”

Pertti Korhonen
President & CEO, Outotec



We took measures to improve our efficiency and profitability, which unfortunately included personnel reductions. In the long term, the global megatrends provide us with more opportunities than threats, and I believe that with our focus on sustainability we will be able to capture value for all our stakeholders as well as for the society around us.

Despite the challenges, we continued advancing our sustainability agenda. For the first time, we reached our long-term target for 90 percent of our order intake to come from environmental goods and services. Our customers generated 5.9 million tonnes less CO₂-e emissions through their use of our technologies instead of other technologies on the market. We conducted a materiality analysis, which revealed that while a sustainable offering is very fundamental to Outotec, safety has become more important for our key stakeholders particularly from the impact perspective. We started a long-term cooperation with WWF Finland to promote green economy and increase awareness of the sustainability imperative. We established a

Sustainability Advisory Council, which comprises highly qualified individuals representing our customers, investors, suppliers, civil society and academia. We continued our share savings program, and by the end of 2014, 27 percent of our employees had placed their trust in Outotec's future by becoming our shareholders. In addition, we were included in the Dow Jones Sustainability Index once again, and were ranked as the third most sustainable company in the world by Corporate Knights.

The global megatrends pose great opportunities for Outotec. I believe very strongly that when we act with integrity and think about the longer term, taking sustainability into account, we are able to deliver better business performance as a consequence. Let us continue to work together to keep solving the planet's problems. To this endeavor, I raise a glass of fresh water!

Pertti Korhonen
President & CEO



THIS IS OUTOTEC

Outotec designs and delivers tailored solutions for minerals and metals processing, water treatment, and producing energy from biomass and wastes. Outotec's unique position at the forefront of these industries is founded on a century of scientific and operational knowledge and a wide range of applications for virtually all types of ores and minerals. Outotec has a strong market position across the entire value chain from ore to metals.

With a mission of 'Sustainable use of Earth's natural resources', Outotec works to guarantee the best return on the customer's investment with minimal ecological impact. The benefits of this approach include conferring the license to operate, maximizing recovery, and reducing emissions as well as energy and water consumption.

Outotec's customers are investing in new sustainable production plants or modernizing their existing plants to increase the profitability of their operations, improve resource efficiency or reduce emissions as well as energy and fresh water consumption. Innovative research at in-house R&D centers and continuous development work with our customers have made us the leading developer of technology in the minerals processing and metallurgical industry.

Outotec, headquartered in Finland, operates globally, has offices or operative units in 30 countries and sells products and services to over 80 countries. Our operations are clustered into

three regions: the Americas, EMEA (Europe, the Middle East and Africa), and APAC (Asia Pacific), providing full support for the customers' businesses - both in running their ongoing operations and in making new investments. The two business areas, Minerals Processing and Metals, Energy & Water are dedicated to developing sustainable technology solutions and life-cycle services for customers.

In 2014, Outotec acquired the business of Republic Alternative Technologies, a premium coated titanium anode company based in the USA, as well as the assets of KALOGEO Anlagenbau, a company specialized in biomass, sludge and waste water treatment in Austria. In addition, new offices were opened in the USA, the Philippines, Turkey, Morocco and New Caledonia. Approximately 40 percent of Outotec's sales were generated in emerging markets.

Outotec has been listed on the NASDAQ OMX Helsinki since 2006. There was no major change in the size or ownership of the company in 2014.

Read about Outotec's financial performance, legal entities and shareholders in Financial Statements 2014 at www.outotec.com/investors.

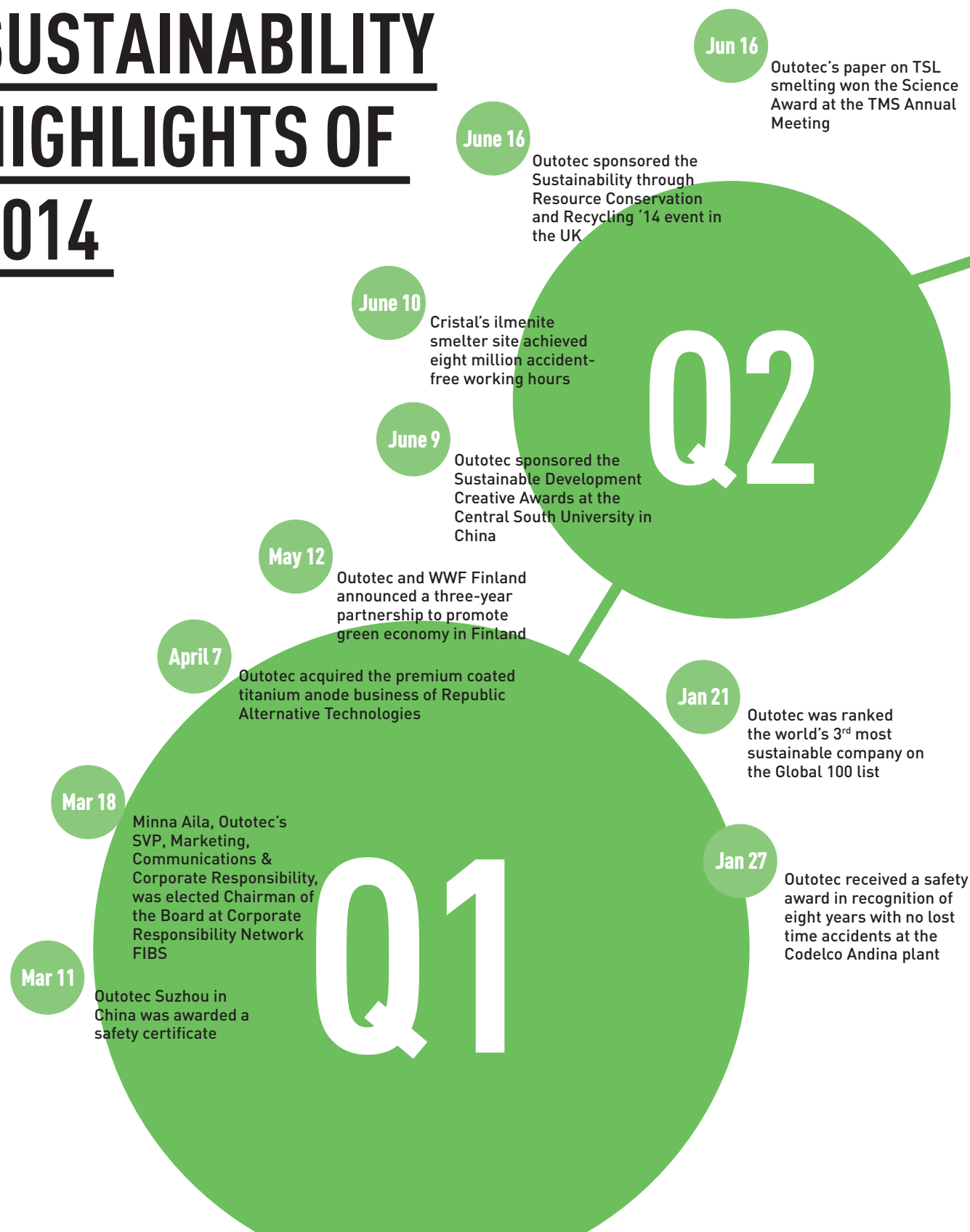
**90% OF OUR ORDER
INTAKE WAS
ENVIRONMENTAL
GOODS AND
SERVICES**

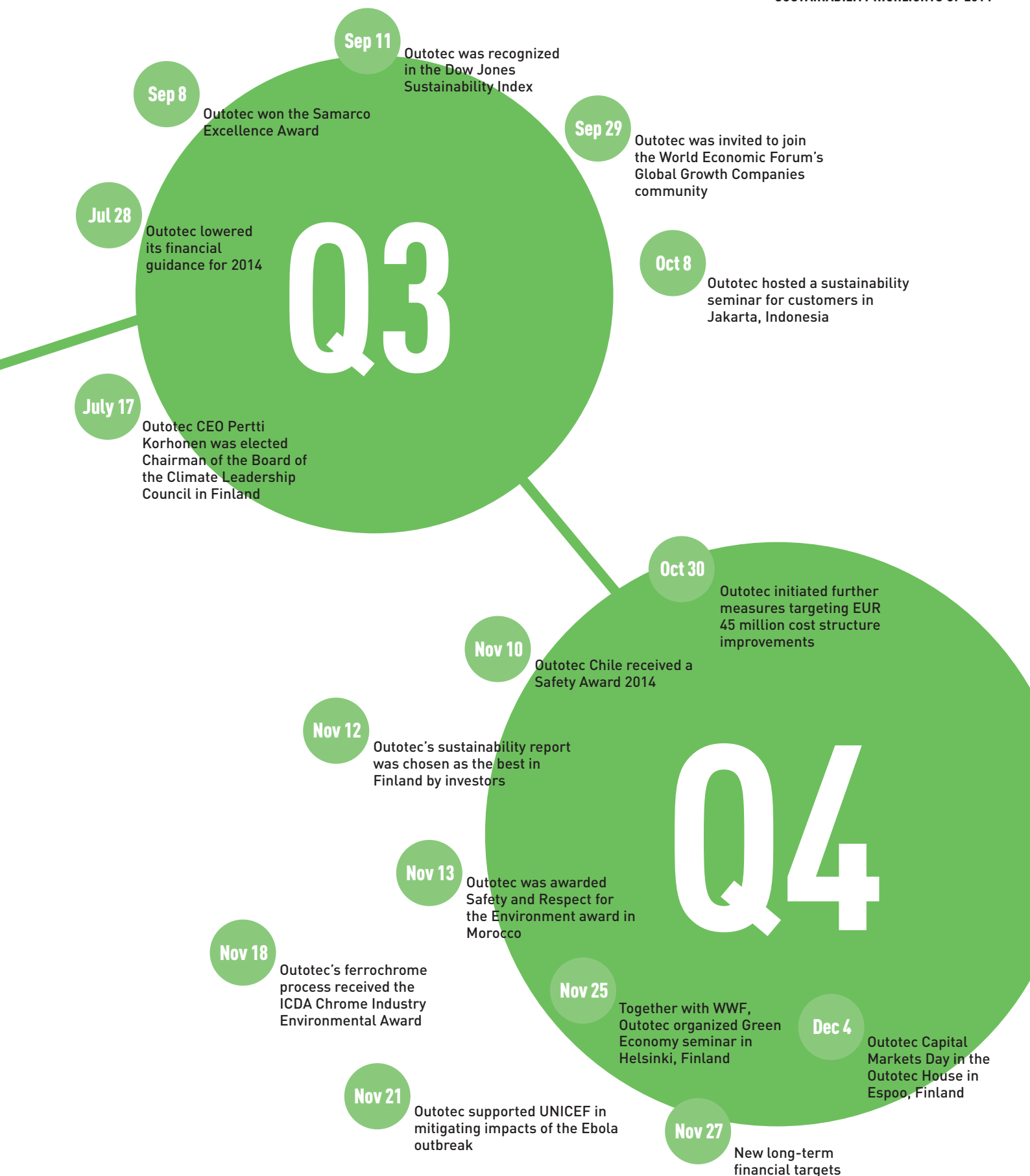
MEMBER OF
**Dow Jones
Sustainability Indices**
In Collaboration with RobecoSAM

Summary of key figures	2014	2013	2012
Sales, EUR million	1,402.6	1,911.5	2,087.4
Reported operating profit, EUR million	10.4	141.9	184.3
Research and development expenses, EUR million	37.3	48.7	41.6
Priority applications, pcs	62	101	70
Number of employees on average	4,845	4,927	4,456
Employee engagement index, %	-	69	-
Wages and salaries, EUR million	362.8	385.8	362.6
Environmental Goods and Services in order intake, %	90	87	89
Greenhouse gas emissions avoided through the use of Outotec technologies, thousand tonnes of CO ₂ -e	5,900	5,400	4,600
Lost time injury rate (LTIR) (number/1 million working hours)	1.5	1.9	1.9
Total greenhouse gas emissions, tonnes of CO ₂ /EUR 1 million sales	24.8	23.7	15.2 ^{*)}
Total energy consumption, TJ	152.9	156.8	164.9

^{*)} not comparable due to different calculation method

SUSTAINABILITY HIGHLIGHTS OF 2014





OUR STRATEGY

Outotec's strategy is focused on enabling the sustainable use of Earth's natural resources. This mission defines the purpose of our company along with our core value – commitment to sustainability. These are the two vital elements that drive sustainability in everything we do and lay the foundation for our strategy. While providing the best return on customers' investments through industry-leading sustainable process technology solutions and services, we aim to create shared value and return for our shareholders. Our target is to grow faster than the market and generate a healthy operating profit margin each year.



ACQUISITIONS
SUPPORT OUR
LONG-TERM
GROWTH
STRATEGY

Outotec's strategy is to transform from an equipment and projects supplier to a life-cycle solutions partner for our customers. Our offering is based on five earnings layers. Based on our cutting-edge proprietary technologies and process equipment, we provide our customers performance-guaranteed process solutions including process control, digitalization, and integration of third-party technologies. And we deliver our turnkey solutions and services on time and on budget, helping our customers to de-risk their investment. Through life-cycle services, we help the customers to get the best return on their investment with minimized ecological impact. For us, services improve profitability and decrease volatility.

In the area of mineral and metal processing, Outotec has been an industry

leader, developing innovative technologies for nearly a century. We are continuously strengthening our technology portfolio for the entire value chain, from ore to metals, through in-house research and development as well as through acquisitions. In 2014, we strengthened Outotec's technology leadership with several product launches and two acquisitions.

In addition, water is an increasingly scarce resource and its efficient use, along with recycling and purification processes, is a goal of steadily mounting importance. The energy and industrial water treatment industries offer significant growth opportunities for Outotec while presenting high synergy potential and manageable risks.

In 2014, we developed our operating model, particularly in Delivery, Sales and Services, and launched a new 45-million-euro efficiency-improvement program to improve our cost structure. We also renewed Outotec's brand concept and visual identity in 2014 to ensure a strong brand and customer experience through a coherent way of working.

We also introduced five strategic programs as focus areas for 2015. The first program is customer-focused sales. The second program aims to enhance growth and profitability of the service business to capture more value with Outotec's

unique technologies over the life cycle. The third program, product competitiveness, is designed to ensure Outotec's technology leadership, and the fourth aims to ensure delivery excellence. The fifth program focuses on further developing the operating model and common business processes and tools with the "One Outotec" approach.

This reinforced strategy, together with the materiality analysis, provides the direction for our sustainability work.

SUSTAINABILITY CAREFULLY CONSIDERED IN MERGERS AND ACQUISITIONS

Acquisitions support Outotec's long-term growth strategy. We take environmental, economic and social aspects into consideration when assessing potential acquisition targets. We also carry out environmental due diligence if there are environmental considerations relating to the acquisition. Sustainability issues are carefully considered when deciding upon business integration and future business plans.

In 2014, Outotec made two acquisitions, namely, Republic Alternative Technologies and KALOGEO Anlagenbau. Republic Alternative Technologies complements Outotec's offerings for sustainable electrowinning plants and KALOGEO strengthens Outotec's expertise in biomass, sludge and waste water treatment.

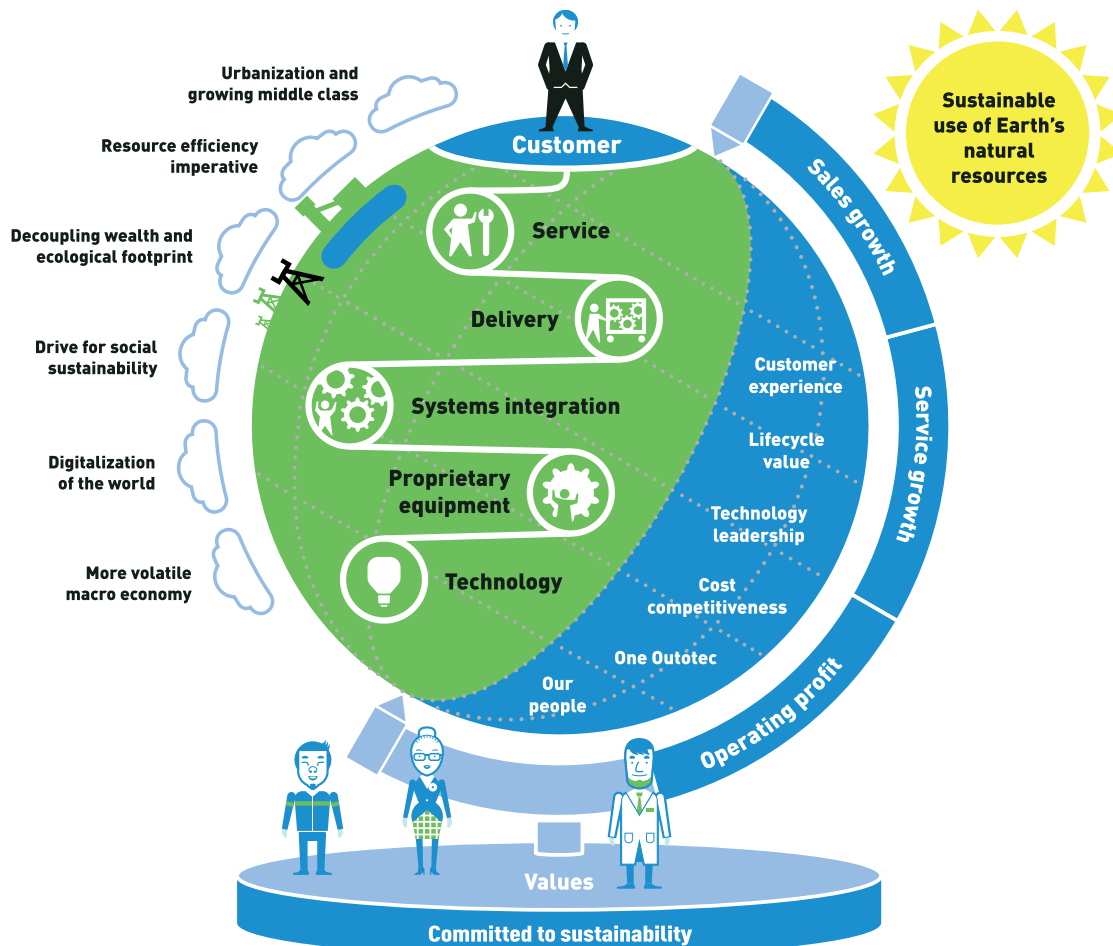
The environmental benefits of the products were a decisive factor in the acquisition of Republic Alternative Technologies. Thanks to low cell voltage, these coated titanium anodes consume 7 to 15 percent less energy than conventional lead anodes in copper refining. The method can also be used for other metals.

The acquisition of the KALOGEO business was also based on sustainability reasons. There is a growing demand worldwide for phosphates recycling and sustainable solutions for sewage sludge

treatment. Outotec has experience designing and building large sewage sludge thermal treatment plants, for example for the city of Zürich in Switzerland. With the KALOGEO technology and references we can expand Outotec's offering to small and medium-size sludge incineration plants. The KALOGEO technology also complements Outotec's ASH DEC used to extract phosphorus fertilizer from ash produced in sludge incineration.

Outotec has acquired 15 companies or businesses since 2010. The integra-

tion of acquired companies is carried out according to defined processes, templates and tools. An integration team is nominated for each case involving members of both companies and the work is coordinated by Outotec's Strategy and M&A function. As Outotec operates according to the "One company" principle the businesses are normally integrated into Outotec's operating model and brand.



GLOBAL FORCES **DRIVE OUR** **BUSINESS**



At the moment, mankind is overusing natural resources at the rate of 1.5 times what the planet can sustain. Three billion new middle-class consumers in the coming decades will need vital resources such as metals and water. This makes resource efficiency imperative. More production capacity and more resource-efficient technologies will be needed in the future, despite short-term imbalances in the market. Better and less polluting processing technology, increased energy and material efficiency, as well as more recycling and re-processing of tailings and wastes are absolute musts to decouple economic growth and the ecological footprint.






Outotec's management has defined six megatrends that have the greatest impact on Outotec's businesses: urbanization and the growing middle class; resource efficiency imperative; decoupling wealth and ecological footprint; drive for social sustainability; digitalization of the world; and more volatile macro economy. Three of these megatrends relate to excessive resource use causing some of the world's most pertinent problems such as climate change. Because our core business is developing and delivering technologies and services for the sustainable use of Earth's natural resources, the most important megatrends for

Outotec are related to the growing demand for metals and minerals and resource efficiency.

Global megatrends impacting Outotec's business with related risks and opportunities are evaluated annually by the management as the basis for strategic plans. Sustainability related risks and opportunities are addressed in Outotec's normal risk management processes. Overall, the megatrends defined by Outotec's management appear to bring more opportunities than risks. These megatrends are described in the following table together with opportunities, risks and mitigation actions.

MEGATRENDS POSE GREAT OPPORTUNITIES AND SOME RISKS

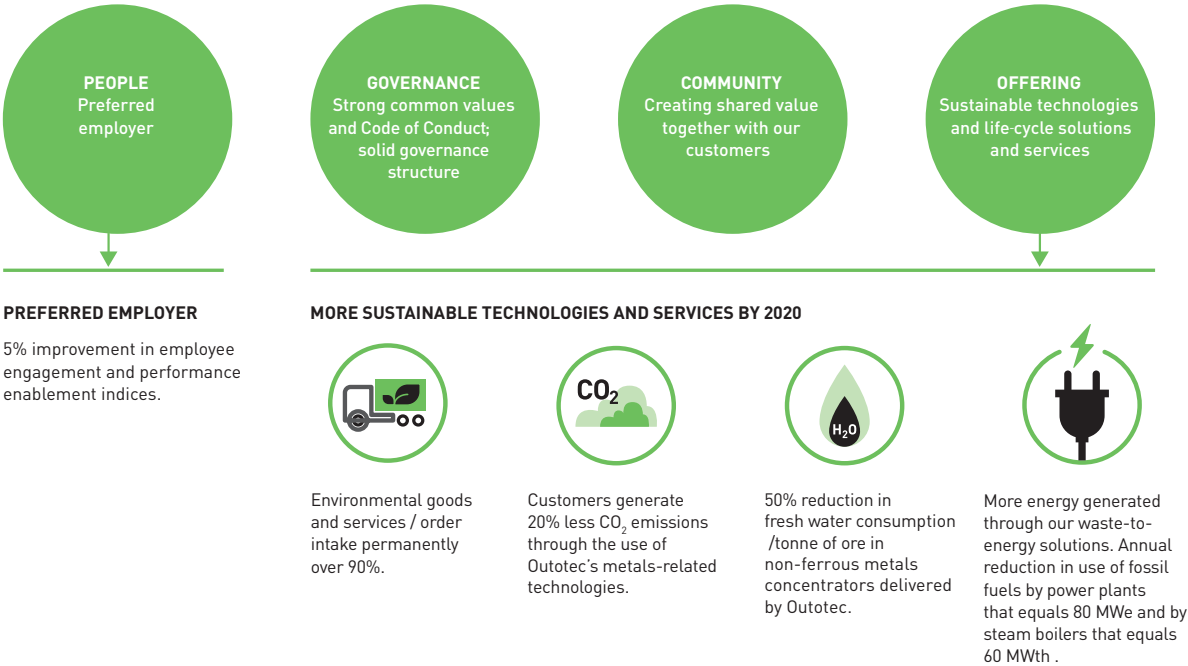
Opportunity for Outotec	Risk for Outotec	Mitigation
URBANIZATION AND THE GROWING MIDDLE CLASS		
 <p>Growing demand for minerals and metals to satisfy the needs of the new middle class requires more processing capacity and resource efficient methods.</p> <p>Emerging countries often have rich mineral resources and want to develop their domestic processing industries. Outotec's technologies enable efficient and sustainable ore processing and high yield.</p>	<p>Approximately 40% of Outotec's sales is generated in emerging countries. Significant changes in currency rates or in the availability of financing may lead customers to postpone orders or cancel projects unexpectedly.</p> <p>Outotec's cost structure may be too high for some emerging countries.</p> <p>If Outotec fails to keep its portfolio competitive, it may lose market share.</p>	<p>Outotec's technologies enable efficient ore processing and higher yield thanks to advanced process control.</p> <p>Outotec is developing modular product concepts to increase the cost-competitiveness of its products.</p> <p>In engineering and delivery operations Outotec is increasing the use of local suppliers and best-cost-country sourcing.</p>
RESOURCE EFFICIENCY IMPERATIVE		
 <p>Mankind is overusing natural resources at a rate that is 1.5 times what the planet can sustain. Higher recovery of valuable metals and minerals, recycling and processing of tailings and waste are required for the efficient use of resources.</p> <p>Outotec can sell more solutions for the production of metals from secondary materials, such as electronic waste, metallic scrap, cabling, and battery paste or scrap.</p> <p>Customers replace inefficient processes with new technologies and energy- and water-efficient solutions. These create business opportunities for Outotec.</p>	<p>Ore grades are declining and ores are becoming more complex and more difficult to process. If Outotec fails to develop new technologies or keep its portfolio competitive, it may lose market share.</p> <p>Customers' operations require sufficient amounts of water, fossil fuels, power and mineral resources. Any changes related to the availability or the price of these commodities has financial implications. The operating costs may become too high for customers and they may need to close down some operations, which could also reduce Outotec's business.</p> <p>Changes in consumer attitude and politics imply high financial risks for Outotec's customers and subsequently for Outotec.</p> <p>Tighter regulation can cause customers to lose their competitiveness and cease to operate.</p>	<p>Vast knowledge of mineralogy and process technologies together with comprehensive R&D facilities enable Outotec to test various raw materials and develop new process solutions for low-grade and complex ores.</p> <p>Outotec's technologies recycle process water, decrease water loss and lead to significant reduction in fresh water consumption.</p> <p>Several Outotec technologies, renowned for their energy efficiency and low CO₂ emissions, cushion customers against carbon taxes and improve their competitiveness.</p> <p>The company is also developing new applications for industrial water and effluent treatment.</p>
DECOUPLING WEALTH AND ECOLOGICAL FOOTPRINT		
 <p>The demand for resource efficient solutions, emission reduction, water treatment and recycling is growing in the mining and metals industry due to stricter regulation and increased awareness in local communities, which offers opportunities for Outotec's clean technologies.</p> <p>Along with the circular economy concept gaining ground, requirements for efficient use of biomass and waste are increasing, providing opportunities for Outotec's waste-to-energy solutions.</p>	<p>Stricter laws and regulation can result in unprofitable operations, and if the customer cannot meet these, it may lose its license to operate. This would reduce Outotec's opportunities to offer technologies and services to the plant in question.</p> <p>If environmental regulation tightens to the degree that new mining projects are not allowed, or are economically unfeasible, Outotec will lose business.</p> <p>If Outotec fails to design and provide competitive solutions for the customer, it may lose business.</p>	<p>Through modern technologies metals and materials can be produced sustainably. Outotec offers resource efficient solutions including sealed processes, gas cleaning, efficient sulfur capture and minimized energy consumption as well as effluent and water treatment to enable high yield and recycling, and supply the building blocks for a circular economy.</p> <p>Outotec's paste plants and tailings treatment solutions help mining companies to solve their environmental challenges.</p>

Opportunity for Outotec	Risk for Outotec	Mitigation
DRIVE FOR SOCIAL SUSTAINABILITY		
 <p>Customers are paying more attention to health, safety and social responsibility for employees and the local community. They need a social license to operate.</p> <p>Outotec's strong track record as a responsible partner and as a sustainability leader, its inclusion in the Dow Jones Sustainability Index and other recognitions help customers to get financing and social acceptance for their projects. The World Bank, for example, is setting environmental standards for investments into mining operations.</p>	<p>If not gaining social acceptance or complying with regulations, customers may be forced to close down their operations, which may reduce Outotec's business.</p> <p>Annually, the metals industry emits millions of tonnes of SO₂, which has a significant local impact. Fine particulate matter emissions to air cause health problems. Heavy metals in hazardous dusts and fumes can cause occupational exposure. Eco-toxic substances from metallurgical operations impact air quality, water, and soil. Outotec products, if not appropriately used or maintained, have the potential to harm employees, customers' employees or third parties.</p>	<p>Outotec has set long-term objectives and is continuously developing its sustainability performance, governance and sustainable offering.</p> <p>Our advanced and environmentally sound technologies and services fulfill financier's criteria and ensure social license to operate for customers.</p> <p>Outotec has a globally integrated quality, environment, health and safety (QEHS) management system and an excellent track record for its safety performance in ensuring a safe process or plant for the customers.</p> <p>Outotec seeks to collaborate with its customers and suppliers in developing countries to contribute to the well-being of the local community.</p>
DIGITALIZATION OF THE WORLD		
 <p>Digitalization, automation and systems integration offer new possibilities to capture value with Outotec's unique process technologies and enables low-cost, flexible and highly responsive interactive partnership models.</p> <p>Full automation of the product life cycle opens up new opportunities for developing sustainable products, systems and services.</p> <p>Advanced ICT systems offer business benefits and cost efficiency for Outotec.</p>	<p>If Outotec's own development of advanced software, remote monitoring, diagnostics or automation systems is not fast enough, Outotec may lose market share to competitors.</p> <p>The business is highly dependent on a working ICT infrastructure. Any disturbances in it may cause loss of business.</p>	<p>Outotec is further developing its software, remote monitoring and diagnostics as well as process design modeling, simulation and control.</p> <p>Digitalization is part of product development in all Outotec's product lines.</p> <p>Through advanced master data management and ICT infrastructure Outotec ensures data quality, consistency across all business applications and applicability in global operations.</p> <p>Outotec has invested in state-of-the-art ICT systems and infrastructure and has a worldwide network of experts to ensure 100% availability.</p>
MORE VOLATILE MACRO ECONOMY		
 <p>82% of Outotec's business comes from the cyclical mining and metals industry. Overall investment activity, global GDP growth, consumption of metals, the balance, or imbalance, of metals supply and demand, the capacity utilization rate, and metal prices have a great influence on Outotec's business.</p> <p>The business opportunities increase substantially in uptrend.</p> <p>Changes in the global economy may boost Outotec's businesses in some parts of the world and increase the demand of certain technologies or refurbishing/ modernization and other services.</p>	<p>In a downtrend, customers minimize their investments in new processing capacity, which reduces the need for Outotec's solutions.</p> <p>The lack of large customer projects can significantly reduce Outotec's sales and financial result in one year or quarter.</p> <p>A volatile macroeconomy weakens predictability and resource planning.</p> <p>Customers' operations require sufficient amounts of water, coal and other fossil fuels, power and mineral resources. Any changes related to the availability or the price of these commodities has financial implications and may reduce Outotec's business.</p>	<p>Global operations and offering for virtually all types of minerals and metals reduce Outotec's dependence on one commodity or geographical market.</p> <p>Outotec is further diversifying its business portfolio, growing the share of service business in its sales through acquisitions and pursuing opportunities to sell technologies to other process industries such as energy and water treatment.</p> <p>Outotec is developing its scalable and adaptive operating model and uses contract workers in engineering and project implementation to increase flexibility.</p>

MAKING A DIFFERENCE IN THE LONG RUN

Our largest impact on sustainability is created downstream, in our customers’ operations. This impact, our handprint, is where we can make a difference with our innovative technologies and solutions. This is also how we set our long-term targets and measure the success of our sustainability work over time.

SUSTAINABILITY AGENDA 2020



Our Sustainability Agenda is based on our materiality assessment, which was conducted in 2011, upon which we have defined long-term goals. This agenda comprises four areas: our offering, our people, our community engagement and our governance. We conducted a new materiality assessment at the end of 2014 based on the Global Reporting Initiative (GRI)'s G4 guidelines. The results imply the need for the further development of our Sustainability Agenda, and we will be working on some new long-term targets and roadmaps during 2015.

OUR AGENDA 2020

As a technology company, our technologies and R&D take a central role in our operations, and represent the key means of reducing the environmental impact of our customers' operations. For this reason, our technologies are also at the core of our sustainability work. We promise our customers that we will provide them with even more sustainable technologies and services by 2020. They can thus reduce their ecological footprint through our positive contribution.

Technology is not born. It must be created. We are dependent on our people, our experts thinking ahead. We want to make Outotec the most desired place to work in our industry and keep great talent with us. This means, among other things, that we need to offer opportunities for continuous professional growth through job and task rotation. The key driver for many experts today is the feeling of fulfillment. Therefore, we strive for a working culture that empowers our people. All employees should have a sense of engagement and enablement.

Our own operations take place mainly in offices around the world. Interacting with local communities is usually relatively uncomplicated. The objectives of our community agenda are two-fold: first, we aim to engage in strategic partnerships with NGOs or donate to charita-

ble projects that aim to improve sustainable development and/or quality of life.

In 2014, we started a long-term collaboration with WWF Finland to promote green economy and to engage in a dialogue about planetary boundaries and the role of businesses. We also continued our long-term co-operation with the Baltic Sea Action Group, in which we can be an active contributor through our technologies. During the year, we donated funds to UNICEF to mitigate the impacts of the Ebola outbreak on children in the affected African countries. We raised awareness of Ebola among our personnel, and provided a channel for them to contribute to the cause.

Secondly, we want to support local initiatives in connection with major solution deliveries to our customers. These community projects are based on the needs of the local community in question, and they are defined in dialogues with the local community. We aim at completing these community projects jointly with our customers and suppliers, with joint financing. The projects are also selected taking Outotec's know-how into account in order for us to integrate voluntary work into the projects – both during and outside working hours. All community projects must bring measurable long-term benefits to the local community. In 2014, we started a project in Tsumeb, Namibia, with our customer Dundee Precious Metals to build a kitchen and a combined community and dining hall for the local school.

WHAT GETS MEASURED, GETS MANAGED

To drive our sustainability work, we have defined clear and transparent targets for ourselves, both long-term targets and annual targets based on our short-term priorities. In 2013 we set our first long-term targets in the area, in which we can have the largest impact: our technologies. We aim to develop even more sus-

tainable technologies and services by 2020 as described in the graph on page 14.

The base line year for these long-term technology-related targets is 2012.

The second long-term target was formulated at the end of 2013, and relates to our People Agenda, which is one of the areas that is most material to our business. As an enabling and engaging culture is a key differentiating factor for Outotec, we aim at a five percent improvement in employee engagement and performance enablement indices by 2020 in employee surveys compared with the 2013 results. In the base year 2013, Outotec's employee engagement index was 69 percent and the performance enablement index 67 percent.

We consider engagement to be a combination of perceptions that have a positive impact on behavior, such as satisfaction, commitment, pride, loyalty, a strong sense of personal responsibility, and a willingness to be an advocate for the organization. Another key element is performance enablement, which focuses on customer service and quality, involvement, training and teamwork. It predicts customer satisfaction and business performance in the form of sales growth, market share, productivity, and profitability for example. These elements are measured at least every second year in our employee survey.

LONG-TERM TARGETS FOR 2020

● Achieved
 ◐ Partially achieved
 ○ Not achieved

	Long-term target		Performance in 2014	GRI indicator
Economic and governance	<ul style="list-style-type: none"> Sales growing faster than the market Annual average service sales growth 10-20% EBITA margin (excluding one-time costs) 10% in 3-5 years time Dividends on average 40% of annual net income Gearing at maximum 50% 	○	<ul style="list-style-type: none"> Sales decreased by 27% from 2013. Service sales grew by 3% from 2013. Operating profit margin from business operations was 4% (2013: 8.5%). 	G4-EC1
Environmental	Share of Environmental Goods and Services (EGS) in Outotec's order intake permanently over 90%.	◐	The share of EGS in order intake was 90% for the first time (2013: 87%).	G4-EN27
	Customers generate 20% less CO ₂ emissions, compared to industry average, through the use of Outotec's five metals-related technologies.	●	5.9 million tonnes of CO ₂ emissions avoided. This is equal to 20% reduction in CO ₂ emissions.	G4-EN27
	Generate more energy through our waste-to-energy solutions. The targeted annual reduction in the use of fossil fuels is comparable (on average) to 80 MWe power plants and 60 MWth steam boilers.	◐	The annual reduction in the use of fossile fuels comparable to 60 MWth was achieved.	G4-EN27
	50% reduction in fresh water consumption per 1 tonne of ore, compared to the base line, in non-ferrous metals concentrators delivered by Outotec.	○	Mine and concentrator waste water management research projects are ongoing, targeting total mine water management and reduction in the mine site.	G4-EN27
Social	Improve employee engagement and performance enablement indices by 5% compared with 2013 by 2020. Engagement index was 69% and performance enablement index 67% in 2013.	○	Based on the 2013 survey results, several improvement initiatives related to collaboration and customer centricity were taken. The next survey will be in 2015.	G4-26

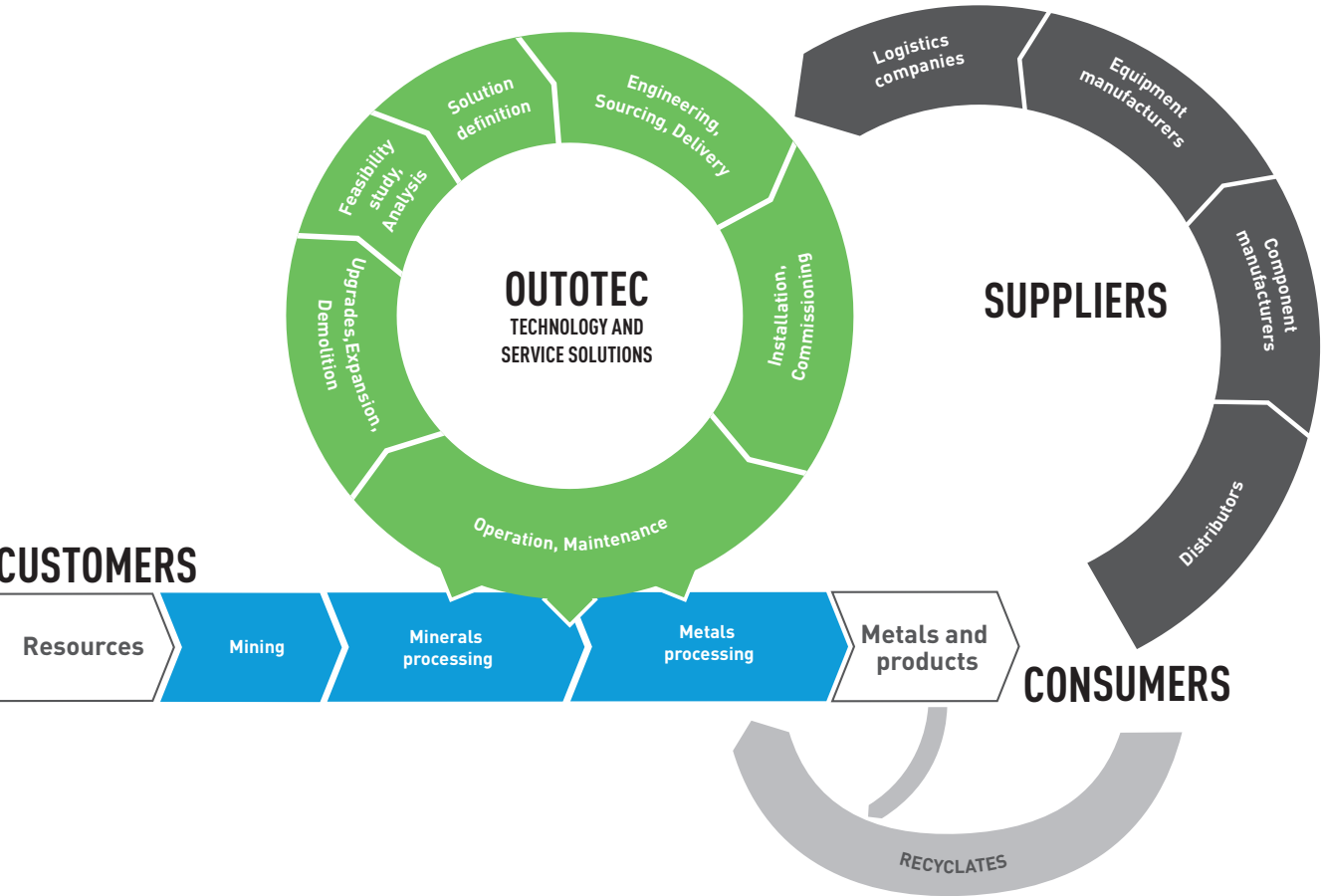
ANNUAL TARGETS

● Achieved ● Partially achieved ○ Not achieved

	Annual target for 2014		Performance in 2014	Annual target for 2015	GRI indicator
Economic and governance	Code of Conduct implementation: 80% of personnel trained. All those unable to take the e-learning should receive class-room training instead.	●	60% of personnel were trained by the end of 2014.	Continues.	G4-SO4
	Suppliers: 95% of major suppliers committed to Outotec's Supplier Policy.	●	Approximately 99% of major direct suppliers committed to our Supplier Policy.	Continues.	G4-EC9 G4-HR10
Environmental	Environment: Waste sorting best practices to be extended to 20 locations.	●	Waste sorting best practices were extended to 22 locations. Actions included among others the replacement of paper and plastic cups with ceramic coffee mugs and the implementation of centralized waste recycling stations.	New environmental target in 2015 (see below).	G4-EN23
				Environment (NEW): Execution of energy audits at five locations with the highest energy consumption and identification of energy saving opportunities.	G4-EN6
	Reduction in CO₂ emissions in traveling: A 5% decrease in tonnes of CO ₂ flight emissions per million EUR sales annually through increases in virtual ways of working.	●	Emissions per million EUR sales decreased by 8% due to a new Travel Policy that led to a decrease in business class trips (economy class flights produce less CO ₂ emissions compared to business class travel).	Continues.	G4-EN19
Social	Building reach and engagement in social media: Joining new local social media channels in China.	●	Social media accounts established in Weibo and YouKu and used for postings in Chinese. Outotec has over 6,900 followers in Weibo.	Continues as normal business.	G4-26
			In 2013 the engagement index was 69% and performance enablement index 67%.	Employee engagement (NEW): 1% improvement in employee engagement and performance enablement indices compared with 2013.	G4-26
				Employee engagement (NEW): Outotec Experience program delivered in all market areas during 2015.	G4-26
	Improving life balance and sustainable leadership: Global guidelines for remote working and flexible working time will be published.	●	Global guidelines were not published, but the guidelines made for Finland, Australia and North America are available for other locations, and decision how to use or adapt those is made locally.	Continues as normal business.	G4-EN19
			Value-based performance evaluation was included in the performance dialogue tool. Outotec leadership profile was introduced.	Performance culture (NEW): Value-based performance targets set for 75% of employees. 100% of employees conduct.	G4-LA10
	Technology and Plant Safety Management (TPSM): TPSM is included in all major new technology and plant delivery contracts globally.	○	TPSM (renamed to Product Compliance) was included in 58% of major new orders.	Product Compliance (NEW): Harmonized product compliance management procedures in use globally.	G4-PR1
	Health and safety: Lost time injuries and serious incidents will be investigated, and 80% of the agreed actions will be executed within two months.	●	82% of actions executed within two months [33 cases in total, six of which did not fulfill the criteria].	Health and safety (NEW): 4,000 completed EHS e-learning courses in 2015.	G4-LA6

CREATING VALUE FROM THE GROUND UP

METALS VALUE CHAIN



Outotec helps solve our customers' challenges by providing innovative technologies and services across complex mineral and metal processing value chains. The indirect environmental and social impacts of Outotec's activities differ in each project, depending on the customer's raw materials, the technologies and services included in the delivery, local legislation and circumstances, and how the customer makes use of and maintains the technology delivered by Outotec.

There are three main agents in Outotec's operating environment, each having a different value chain, impact and life cycle. First, Outotec develops products and services and delivers solutions to its customers; secondly customers use these products and services; and thirdly suppliers provide materials, equipment and services for Outotec. These value chains are strongly interlinked. In addition, consumers, that are not Outotec's direct business partners, play an important role using the products and recycling them, and returning materials to secondary processing. In this sustainability report, Outotec has set its limits such that, in addition to the company's own operations, the impact of products and services in our customers' operations and the supply chain are partly covered.

The most significant ecological impact of the solutions provided by Outotec is made in the customer's operation phase. The most relevant aspects for Outotec in terms of sustainability according to the materiality assessment, conducted by the management in 2014, are Safety; Sustainable offering for customers; Responsible business practices; Sustainable supply chain; and Development of our people. All these aspects are also essential elements in the three value chains described above.

The majority (82%) of Outotec's business relates to minerals and metals

processing, and the rest to chemical processing, renewable energy and industrial water treatment. The value chain in chemical processing and energy production is different from those of minerals and metals processing. For this reason, the overall value chain graph describes Outotec's activities in minerals and metals processing.

Customers

Outotec's customers are major global mining companies, small and medium-sized or local mining companies and metallurgical companies. Other customers include fertilizer producers, companies in the chemical industry and companies that utilize renewable or alternative energy sources.

Major global mining companies typically operate numerous mines and metallurgical plants and produce multiple metals. Small and medium-sized mining and metallurgical companies are usually focused on a particular metal. The value chain of Outotec's customers starts from natural resources and typically includes analyzing the mineral resources, mining, comminution, concentrate production through flotation and dewatering, metallurgical processing and production of refined metal or metal semi-products and products. Our customers may also produce metals from secondary raw materials, in which case the value chain

is much shorter. We carry out mineralogical studies and feasibility studies for customers, but are not, however, involved in the mining phase or the downstream phase of our customers' value chain in which semi-products and metal products are produced.

To a certain extent, the ecological footprint of our customers operations from natural resources to refined metals and materials is publicly available in their own sustainability reports. However, the data is immense and complex, and is seldom comparable. There is no defined method for calculating the footprint of an entire processing plant or setting the boundaries for such a calculation. For instance, if product use is included, the life cycle of a car, for example, will include everything from the mining of metal ores and the energy used to process that into steel, all the way to the crushing of the car and smelting the materials back into

useful scrap metal. Outotec is involved in the Operational Environmental Footprint Sectoral Rules pilot project of the European Union to define a methodology for estimating the footprint of copper cathode production operations.

Suppliers

Outotec's supply chain includes approximately 3,500 direct and active suppliers globally. These represent, but are not limited to, distributors, component manufacturers, equipment manufacturers, logistics companies, engineering companies, construction companies and other service providers. Set-ups and combinations vary project by project. The majority of our suppliers are either component manufacturers or equipment manufacturers. The value chain of an equipment supplier typically includes raw material extraction, often metals processing, distribution, engineering, procurement,

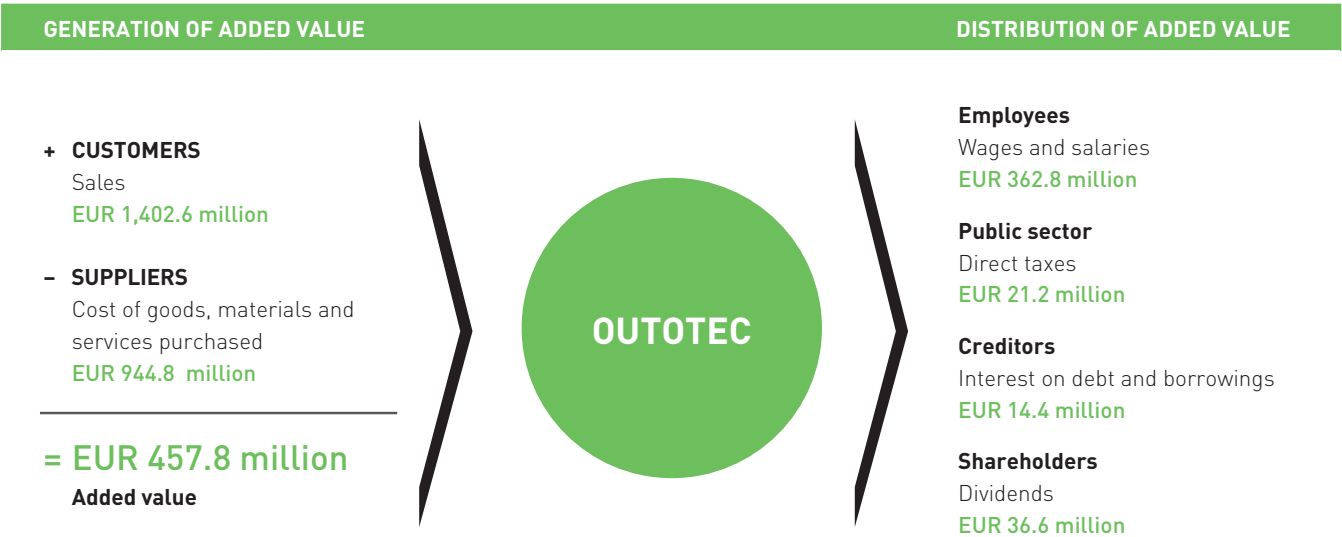
manufacturing, assembly, transportation and installation at Outotec's customer's site.

ADDED VALUE FOR STAKEHOLDERS

Outotec's most significant added value for its stakeholders is created in the development and delivery of sustainable products and services to customers, which ensures robust business, good return on investment for shareholders and shared value for the society at large.

Through delivering sustainable solutions to hundreds of customers, we have made a significant global impact by creating new revenue streams, reducing our customers' environmental footprints, and increasing well-being in local communities. Ninety percent (2013: 87, 2012: 89) of Outotec's order intake in 2014 can be regarded as environmental goods and services (EGS). For customers, it means profitable and environmentally sound operations and a license to operate.

DIRECT ECONOMIC VALUE CREATED FOR STAKEHOLDERS



As a buyer of goods and services we play an important role in supporting local businesses, which provides employment and drives socio-economic development in local communities.

Outotec's approach to economic sustainability is demonstrated by the long-term financial targets involving continuous growth and profitability. Robust business allows us to pay dividends to our shareholders, salaries to our employees and taxes to governments.

Due to subdued market activity, the year 2014 was a challenging one for Outotec. Uncertainty in the world economy, geopolitical conflicts and sharply weakened metal prices resulted in the drop of our order intake. Due to this reduction, our sales contracted and profitability weakened further. We launched a second efficiency program in October 2014 to reduce our fixed operational costs by EUR 45 million by the end of 2015, to follow the previous EUR 50 million efficiency improvement program, which had achieved the targeted savings and was completed.

At the end of 2014, Outotec's market capitalization was EUR 803 (Dec 31, 2013: 1,394; Dec 31, 2012: 1,940) million. The total wealth created by Outotec in 2014 was EUR 458 (2013: 574; 2012: 572) million, a decrease of 20 percent from 2013. Our total procurement spend was EUR 945 (2013: 1,338; 2012: 1,516) million, a 29 percent decrease compared to 2013, mostly due to a smaller number of large projects in our order backlog.

Outotec's long-term financial targets are shown on page 16.

Read more about Outotec's financial performance in Financial Statements 2014 at www.outotec.com/investors.



AN ACTIVE DIALOGUE

Stakeholder dialogue rose as one of the nine material themes in our materiality analysis. Our key stakeholders as defined in the process of analyzing material themes are Customers, Employees, Investors and financiers, Suppliers, Media as well as NGOs and local communities. In continuous dialogue with our key stakeholders we aim to enhance transparency. We also consider our planet and the generations to come as our stakeholders when evaluating whether our offering and operations are future-proof.

We measure our success with the percentage of operations with local community engagement initiatives.

SUSTAINABILITY ADVISORY COUNCIL

In 2014 Outotec decided to start more intense stakeholder dialogue by establishing a Sustainability Advisory Council. The Council will provide advice to Outotec regarding sustainability trends, strategies, products, services and reporting, and offer input on stakeholders' views on the economic, social and environmental impacts of our decisions. The members in the Council represent important stakeholders but, for example, employees, authorities, media and scientific community are not represented in the Council during its first period.

January 15, 2015 marked the inauguration of the new Council, which initially consists of six members, representing different stakeholder groups with diverse interests and expectations regarding Outotec's sustainability work. Kellie A. McElhaney, faculty director of the Center for Responsible Business at the University of California at Berkeley's Haas School of Business, chairs the Council.

The Council is not part of Outotec's formal governance, and it is not a decision-making body. However, it plays a key role in defining materiality and consulting on sustainability strategy. The Council members' terms will be two years in duration, and may be renewed twice.

INCREASING CUSTOMER CENTRICITY

Outotec continued developing ways to increase customer centricity, customer satisfaction and loyalty.

Based on the results from several pilot customer surveys carried out during 2013 and 2014, we continued adjusting the process and methods we use to measure and manage customer satisfaction and loyalty in a harmonized and transparent manner. The main objectives of this work during 2014 were to better understand customers' views of Outotec, to improve customer relationships and secure successful deliveries. Furthermore, we harmonized customer feedback measurement and management through flexible data collection with a common database and report structure. Global implementation will take place in 2015.

In 2014, Outotec introduced technology webinars for customers in the mining and metals industry and hosted a webinar series that focused on different topics with insight into deep process knowledge of metals, minerals, water and energy. The free-of-charge interactive webinars are an important channel for dialogue throughout the whole customer life cycle. Approximately 500 participants attended the webinars.



Members of the Sustainability Advisory Council from the left: Antti Savilaakso, Director of Responsible Investment & Governance at Nordea Bank; Caitlin Glynn-Morris, Corporate Manager, Community Relations and Development at First Quantum Minerals; John Hasyn, Director, Corporate Social Responsibility at Dundee Precious Metals; Liisa Rohweder, Secretary General of WWF Finland; Adam Roscoe, Group Senior Vice President and Head of Sustainability Affairs at ABB; and Kellie A. McElhaney, Faculty Director of the Center for Responsible Business at the University of California at Berkeley's Haas School of Business.

STAKEHOLDER EXPECTATIONS AND OUR ENGAGEMENT



Outotec hosted a sustainability seminar in Jakarta, Indonesia in October. The Indonesian market offers great potential for Outotec because the country is extremely rich in mineral resources. The seminar succeeded the previous seminars in Indonesia in 2012 and 2013 to further build relationships with ministries, customers, partners and academics. It was organized jointly with the prominent mining publication, *Majalah Tambang*, with the assistance of key ministries in Indonesia, and support from the Indonesian industry associations AMMI and PERHAPI.

Authorities from Baotou city and representatives from the Mintal Group from China visited Outotec in Espoo, Finland, in August to discuss Mintal's ferrochrome and ferromanganese projects in Baotou, and the companies agreed on strategic collaboration. The visitors also received an introduction to Espoo City's measures for environmental protection.

ENGAGING EMPLOYEES

Since 2010, Outotec has been harmonizing the operating model and the way of working within the company, which, when completed, will be a significant enabler for business growth and profitability. It has required significant efforts in change management and training. At the end of 2014, the new way of working with common business processes, applications and tools covered two thirds of Outotec's business, and it will start to bear fruit in 2015.

As employee engagement and performance enablement are our priority drivers and are seen as a key differentiating factor, we will continue to challenge ourselves in the longer term with the key targets which are linked to our O'People employee survey results (read more about our targets on page 14). Based on the results of the 2013 survey, Outotec's employee engagement index was 69 percent, which is on par with the international standard, and the performance en-

ablement index was 67 percent, slightly below the standard (73 percent). A new survey will be conducted in mid-2015.

The year 2014 continued to be challenging for Outotec people. The subdued market activity further weakened our order intake, sales and profitability. Outotec launched a new efficiency improvement program, which also resulted in restructuring and personnel reduction through redundancies, retirements and discontinuing of fixed-term contracts. In addition, employees were temporarily laid off in Finland. Since September 2013, Outotec has reduced 749 persons in total as a result of the two cost-efficiency programs. At the same time, 342 persons were recruited, mainly to service business, resulting in a total headcount decrease of 407.

The cooperation negotiations with employee representatives were carried out in a spirit of mutual trust. Outotec offered monetary support, depending on the length of the employment, as well as training programs and coaching to support re-employment and entrepreneurship for those persons made redundant.

A unified company culture, shared values, established business processes, as well as the understanding of strategy and business environment are of utmost importance for a globally operating company such as Outotec. To deliver these messages efficiently across the organization, a two-day Outotec Experience program was put together and introduced in 2014 for the purpose. The program is intended for all Outotec personnel, and will gradually be rolled out globally. At the end of 2014, 182 people had participated in the Outotec Experience in Espoo, Burlington, San Luis Potosi, Shanghai and Kolkata where the first events took place.

Outotec's top management has also been actively promoting other initiatives aiming to facilitate an open dialogue within the organization. They have arranged several breakfast meetings with the Young Professionals network to share

career stories and topical issues to gain mutual understanding.

In daily work, Outotec continued the practice of having live internal webcasts where the CEO presents financial results as well as our strategy quarterly. The same system provides the possibility to ask questions, and it is available worldwide. Live webcasts and recorded video clips as well as blogs and video meetings are increasingly used for internal communications for creating a dialogue within the organization. Our global interactive intranet serves as a platform for day-to-day information sharing.

The Outotec Round Table was held twice in 2014. Topics discussed included strategy, acquisitions, rewarding, organizational change, and internal development programs. Twenty-three personnel representatives participated in the meetings.

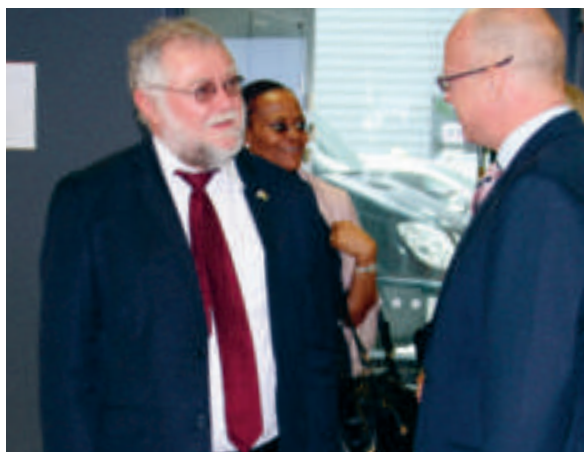
Many of Outotec's employees are also owners of the company. Our employee share savings plan, the O'Share program, was launched in 2013. It was born from the recognition that competent and motivated personnel are central to the company's success. O'Share is a reward system that motivates our people, rewards employees in particular for their long-term commitment to the company, and for persisting with the team through thick and thin. Twenty-seven percent of employees participated in the program in 2014.

BUILDING LONG-TERM PARTNERSHIPS WITH SELECTED SUPPLIERS

Outotec is determined to develop long-term relationships with selected suppliers. We have established common global procedures for supplier qualification, quality assurance, continuous monitoring and the joint improvement of processes and practices.

Outotec has two policies serving as the basis for collaboration with suppliers. Our Supply Policy defines how supply activities in the company shall be steered, how supply quality shall be built, and guidelines

WE SEE
PLANET EARTH
AS OUR
STAKEHOLDER



CEO Pertti Korhonen hosted the Namibian delegation headed by Calle Schlettwein, Minister of Trade and Industry of Namibia in Espoo in June 2014. The delegation consisted of representatives from different industry sectors, such as mining, energy, agriculture and logistics.

for all individuals who are involved in supply-related activities. Outotec's Supplier Policy defines the high-level requirements for Outotec's suppliers and sets principles on ethical conduct, compliance with laws and regulations, the environment, health and safety, labor, intellectual property and improper benefits. We expect our suppliers to comply with this policy in their dealings with Outotec, their own employees, suppliers, and with other third parties. Furthermore, our suppliers are expected to identify deviations, manage corrective actions, provide transparency of these actions and communicate in a systematic manner.

Outotec has screened 800 suppliers in 2014 prior to selecting new suppliers with a documented process that applies a set of performance criteria as one of the factors in determining whether to proceed with a relationship with a supplier. All of the companies that were screened were approved as suppliers.

Read also Sustainable supply chain on page 50 and supplier data on page 63.

REGULAR DIALOGUE WITH INVESTORS AND FINANCIERS

Outotec's approach to investor relations and communicating with the financial markets is based on Finnish law, EU directives, Outotec's corporate

governance and disclosure policy, as well as stock exchange rules and regulations.

At the end of 2014, Outotec had 32,408 (2013: 29,231; 2012: 15,312) shareholders. Shares held in 11 nominee registers accounted for 28 (Dec 2013: 34; Dec 2012: 46) percent and Finnish households held 19 (2013: 16; 2012: 11) percent of all Outotec shares. Sixteen analysts conducted research on Outotec. The annual Capital Markets Day was organized in the new Outotec House in Espoo in December. All the presentations by the Outotec management were webcast live, two of them remotely from Sydney, Australia and from Belo Horizonte, Brazil. The presentations focused on company strategy, business operations, and long-term plans, as well as newly introduced technologies and customer deliveries.

In addition to interim reports and annual financial statements, the CEO's Q&A sessions continued to be an important channel to maintain a dialogue in between interim reviews and to comply with fair disclosure. These audio casts aim to give further clarity on information made public earlier. In order to serve the capital market efficiently, to ensure equal access to company-related information, and to comply with disclosure requirements, the audio casts are recorded and available on demand for future reference.

Outotec also published a quarterly bulletin on investor relations highlights,

which compiles information on published orders, news and events during the quarter.

We also received acknowledgements: in September we were included in the Dow Jones Sustainability Europe Index for the second consecutive year, and as one of the 28 companies from Europe, Eurasia and the Middle East to join the World Economic Forum's Global Growth Companies community. In November Outotec was included in the Ethibel EXCELLENCE Investment Register. The register consists of companies which are above the average in most domains of their industry in terms of corporate social responsibility.

Read more about Outotec as an investment target at www.outotec.com/investors.

MEDIA

We interact with the media representatives both locally and globally to share our sustainability work. Quarterly webcasts by the CEO provide basic information about Outotec's performance. We organize briefings and interviews for the journalists to discuss our goals, new products and newsworthy events. We also publish stories and blog postings on our website for the media. During field trips to Outotec's R&D centers or our reference plants at



customers' sites we show concrete examples of our work to journalists. Our experts meet the representatives of trade press at exhibitions and conferences and share the latest product news with them.

In 2014, we took the visitors to the new showroom built in the Outotec House in Espoo, Finland. It is an experimental and engaging space demonstrating Outotec's mission: Sustainable use of Earth's natural resources. The showroom provides a great introduction to Outotec and things that matter to us. The guests are invited to follow the stages of the Outotec stripe from the Earth's core to the outer reaches of its atmosphere. Each stage stands for a key part of the Outotec story, positioning us within our own ecosystem, and within the world at large. In our new showroom we used the latest technologies to bring our story alive and present our unique expertise in an unforgettable manner.

NGOS AND LOCAL COMMUNITIES

Outotec contributes to community well-being by paying taxes, providing jobs directly and indirectly, and cooperating with educational institutions. We also participate in local initiatives to increase welfare in the countries where we operate. We measure our progress with

the percentage of operations with implemented local community engagement.

Outotec's Community Agenda aims at supporting local projects in connection with major deliveries to our customers. These community projects are based on the needs of the local community in question and they are defined in a dialogue with the local community. We aim at completing the community projects jointly with our customer, with joint financing. The projects are also selected by taking Outotec's own know-how into account and utilizing it to the furthest possible extent. Furthermore, we aim to integrate voluntary work into community projects - both during and outside of working hours. All Community Agenda projects must bring measurable benefits to the local community.

In 2014, Outotec's head of Corporate Responsibility assessed the impacts of potential community programs during her on-site visit to Namibia. As a result, we started a community project in Tsumeb, Northern Namibia, together with our customer Dundee Precious Metals and some suppliers to build a kitchen and combined community and dining hall for a local school.

In May 2014 Outotec and WWF Finland announced their three-year partnership,

H.M. King Carl XVI Gustaf of Sweden and representatives from the Royal Swedish Academy of Engineering Sciences (IVA) visited Outotec House in Espoo in November 2014.

which focuses on promoting green economy and sustainable use of natural resources. This cooperation concerns Finland in particular, although Outotec addresses the same issues globally. Outotec considers the planet Earth as one of its stakeholders and, as an organization, WWF can represent the voice of the Earth exceptionally well.

As a part of the partnership, Outotec and WWF organized a national seminar on green economy in November 2014 in Helsinki. The topic attracted 150 participants and high-level panelists to discuss concrete proposals for the implementation of a green economy.

According to our Donations Policy, Outotec can provide donations to global charitable projects that aim to improve sustainable development and/or quality of life. Outotec does not give donations to individuals, political parties or pressure groups, religious organizations or any organizations showing or encouraging any type of prejudice, including for example prejudice based on race, sex or religion.

In 2014, Outotec donated a total of



Outotec and WWF Finland agreed on a three-year partnership to promote green economy and sustainable use of natural resources. Liisa Rohweder, CEO at WWF Finland and Minna Aila, SVP, Marketing, Communications & CR signed the contract in May 2014.

EUR 100,000 to various charitable causes. The biggest donation was EUR 50,000 to WWF Finland. We supported UNICEF's work to fight the Ebola outbreak in Africa by donating EUR 20,000 and arranging an internal fund raising campaign.

Outotec also continued to support the Baltic Sea Action Group's initiatives for the rehabilitation of the Baltic Sea and its sponsorship of the Millennium Technology Prize.

In general, Outotec employees are active in raising funds for important local causes besides the global corporate actions. For example, some Australian personnel participate in the annual Movember campaign, and in the U.S. money was raised for MS disease treatment. In Finland, local UNICEF volunteers visited the Outotec House to sell handmade dolls to raise money for UNICEF's vaccination programs. The initiative was a great success, and also raised awareness and brought joy to the office environment.

Outotec CEO Pertti Korhonen was elected Chairman of the Board of the Climate Leadership Council in Finland in July. Outotec is one of the founding members of Climate Leadership Council. The Council aims to boost the competitiveness of Finland's business sector and research organizations, helping them prepare for the threats posed by climate change and dwindling natural resources, while priming them to benefit from the related business opportunities.

In many countries we have close co-operation and organize various events with local universities and students to ensure future employees.

In 2014, 37 percent of our operations implemented local community engagement programs.

PLANET EARTH AND FUTURE GENERATIONS

In addition to the key stakeholders described above, Outotec also considers the planet Earth and future generations as its stakeholders.

Besides the cooperation with WWF Finland, Outotec joined the Finnish sustainable development commitment, "Commitment 2050" to promote the importance of engineering design, innovation and creativity to sustainable development. Outotec and Aalto University's students started jointly two projects which aim to envision responsible and resource-efficient mining, minerals and metals processing and recycling in the future and define prerequisites for it. The participants come from diverse academic backgrounds, ranging from engineering and metallurgy to business and the arts. One project aims to identify possible future scenarios for Outotec in the year 2040, and the other, investigates Outotec's role in the circular economy. Outotec is making the commitment with future generations in mind, and is examining how today's students see the future of our industry and how they would solve the world's resource scarcity challenges based on different scenarios.

Outotec has established several sustainability prizes to encourage students to apply theories to practice and innovation in a sustainable way. At Central South University in China, Outotec awarded the ten best projects promoting

sustainable design. The annual Outotec Sustainability Prize was given also at University of Melbourne, Australia to promote the importance of engineering design, innovation and creativity to sustainability. Outotec also awarded the best oral presentation at the South African Institute of Mining and Metallurgy's Mineral Processing Symposium. Outotec has sponsored the event as well as the sustainability award since 2012.

SOCIAL MEDIA ACTIVELY USED IN STAKEHOLDER ENGAGEMENT

Outotec has built its social media presence over the last few years. The use of social media has an official status at Outotec and is considered to be a part of all communications, marketing, employer branding and recruiting efforts. In 2014, we were building more reach and engagement in social media and established local social media accounts in China in Weibo and YouKu to reach out to the Chinese audience in their local language. Outotec had over 6,900 followers in Weibo in the end of 2014. Sustainability is one important theme in the social media channels.

During 2014, Outotec followers in Facebook grew from 2,700+ to 3,200+. The number of Twitter followers grew from 1,300+ to nearly 2,000 followers. More than 27,000 users follow Outotec's LinkedIn company page, making it a considerable pool of potential employees and a large audience for company-related information sharing.

DEFINING THE TOPICS THAT MATTER

The definition of the sustainability topics that matter for Outotec is based on ongoing dialogues with our stakeholders and the economic, environmental, and social impacts of our operations. Material topics for Outotec are important either from a risk management or value creation point of view.

During the materiality assessment in 2011, Outotec had defined its sustainability priorities, key performance indicators, and persons responsible for developing performance. In 2014 Outotec reviewed its material sustainability topics. Potential material sustainability topics were identified with an external partner based on the materiality assessment in 2011 as well as management interviews,

sustainability trends impacting the industry, and stakeholder feedback. The identification was conducted by mapping relevant economic, environmental, and social impacts that can influence assessments by stakeholders. The identified aspects were initially prioritized in a workshop with the Sustainability Working Group and validated in Outotec Leaders' Forum, where about 100 of

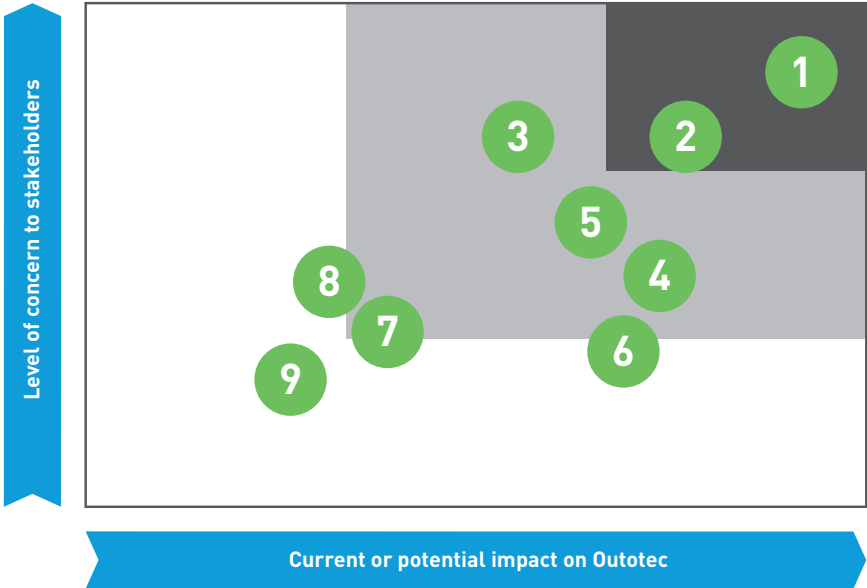
Outotec's leaders shared their views on the relevant topics. Finally, the results of the materiality assessment were reviewed and verified by external advisors representing stakeholders in Outotec's Sustainability Advisory Council.

The scope and aspect boundaries for the material topics were evaluated and relevant GRI indicators were chosen by Outotec's sustainability specialists.

The results of the materiality assessment were validated by Outotec's Executive Board in January 2015.

Based on the materiality assessment, the topics that matter most for Outotec are:

MATERIALITY MATRIX



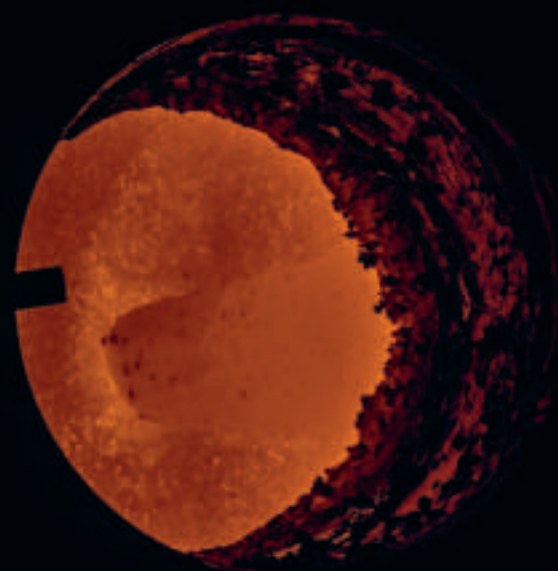
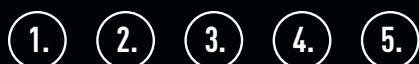
- 1. Safety
- 2. Sustainable offering for customers
- 3. Responsible business practices
- 4. Sustainable supply chain
- 5. Development of our people
- 6. Equal opportunities and diversity
- 7. Stakeholder dialogue
- 8. Community involvement
- 9. Minimizing our own environmental impact

The first five of the nine material themes and eleven aspects identified as material were chosen as the most significant for Outotec's business and are presented in more detail in this report.

Material theme	G4 material aspect	Aspect boundary
1. Safety	Occupational health and safety, Customer health and safety, Training and education	Outotec's employees Subcontractors at project sites
2. Sustainable offering for customers	Energy, Emissions, Customer health and safety, Compliance	Customers' operations Outotec's operations
3. Responsible business practices	Compliance, Environmental grievance mechanisms, Occupational health and safety, Customer health and safety, Grievance mechanisms for impact on society, Non-discrimination, Anti corruption, Local communities	Outotec's operations and products Suppliers
4. Sustainable supply chain	Environmental grievance mechanisms, Occupational health and safety, Grievance mechanisms for impact on society, Anti corruption, Emissions	Subcontractors at project sites Suppliers
5. Development of our people	Training and education	Outotec's employees Subcontractors at project sites
6. Equal opportunities and diversity	Non-discrimination, Compliance	Outotec's employees Suppliers
7. Stakeholder dialogue	Local communities	Outotec's key stakeholders
8. Community involvement	Local communities, Grievance mechanisms for impact on society	Outotec's local offices and project sites
9. Minimizing our own environmental impact	Energy, Emissions, Environmental grievance mechanisms	Outotec's operations

MATERIAL THEMES

The five most material themes are presented more in detail on the following pages. Equal opportunities and diversity are described in the section of Development of our people. Stakeholder dialogue and community involvement are reported in the About Outotec section. Minimizing our own environmental impact is reported in Environmental performance in the GRI and data section.



1. SAFETY

At Outotec, safety covers both product safety and the occupational health and safety of employees and subcontractors.



SAFETY COMES FIRST

Outotec has a Product Compliance Management process (previously called Technology and Plant Safety Management) that is mandatory in all Outotec entities to ensure that all products engineered and delivered by the company meet the applied safety standards during each phase of their life cycle. By following the process, including HAZOP and SIL methods - internationally known methods to analyze risks for personnel and environment within process plants - we ensure that we deliver a safe product. We measure our performance with the percentage of products and services assessed for which health and safety impacts are assessed for improvement.

The company enables all employees and subcontractors working under our responsibility to work safely and provides the relevant procedures, instructions and training. Outotec's managers and leaders demonstrate clear commitment to the continuous development of our safety performance. Outotec's occupational health and safety principles are defined in the Code of Conduct and QEHS policy.

Since 2010, our personnel have been working persistently to develop and implement a harmonized QEHS management system. In 2013, we received global multi-site matrix certification for a total of 27 locations. At the end of 2014, Outotec certification covered 34 locations. This QEHS management system defines procedures, work instructions and form templates to be used in global business processes during our daily work. The main aspects of the management system relate to compliance with legislation, ISO 9001, ISO 14001 and BS:OHSAS 18001, identifying and minimizing health and safety risks, preventing incidents, record-

ing and investigating occurred incidents, personnel training, and the continuous improvement of quality, environment and occupational health and safety performance.

Safety rose as the most material theme in the 2014 materiality analysis, partly as a result of deeper stakeholder dialogue and analysis, and partly because the top management saw the need to improve our safety performance and culture. Outotec will develop a new long-term target and a roadmap for safety during 2015. There is also an obvious need for people to change their safety behavior, act according to global procedures, and use the Outotec health and safety templates.

The training of employees is in focus in 2015, and our target is to increase the awareness of Outotec Health and Safety Management System and processes. The progress is to be measured by the number of completed EHS e-learning courses. In order to monitor our safety performance, we also measure the Lost Time Injury Rate.

IMPROVING PRODUCT SAFETY AND COMPLIANCE

Compliance with legal requirements for the safety of products is the main aspect in Outotec's product compliance management. In 2014, Outotec put a new database into use to gain a better visibility into product compliance procedures and documents during the business processes, e.g. product development as well as selling and delivery of products and services.

A product at Outotec may be in the form of equipment, a process, plant or service. Equipment delivered by Outotec fulfills safety-related industrial standards such as ISO 12100, IEC 62061 for the safety of machinery and all required European directives

such as 1997/23/EG, 2009/105/EG, 2006/42/EG, 94/9/EG (ATEX), 2004/108/EG, 2006/95/EG, and IEC 61508, IEC 61511 for process plants. Detection of hazards such as explosion, fire, and lighting followed by examination of HAZOP according to IEC 61882 and SIL-Allocation Assessments are mandatory at Outotec. There were no fines for non-compliance with laws and regulations regarding the use of Outotec products in 2014.

We provide information to our customers about the impact of our products and services including their energy consumption, emissions, metal recovery, and water usage, as well as safety information according to industry standards. In industrial processes, safety is an integrated part of our operational manuals. Outotec manuals cover the entire life cycle of the delivery, follow the IEC 82079-1 standard, and contain information on transport, installation, operation, maintenance and decommissioning. In addition, we offer maintenance as a service package to our customers.

During 2014, the training and implementation program, started in 2013, was continued. By the end of 2014, more than 90 percent of Outotec's managers were involved in the program. We also provided training services to our customers, including safety training. The usage of our safety software improved at all locations with engineering activities and project implementation.

SAFETY OF OUR EMPLOYEES AND CONTRACTORS

Safety is an important aspect of Outotec's field operations at customer sites. Outotec's project manager is responsible for the company's and its sub-contractors' site activities and the management of environmental issues, safety, systematic practices, and cleanliness. All Outotec's project and service specialists follow the customer's safety regulations on site. From the occupational safety standpoint, the greatest risks are associated with work assignments in countries that have little awareness of safety issues and a weak occupational safety culture. In these countries, Outotec employees are instructed to follow the company's own occupational safety principles.

In 2014, our Lost Time Injury Rate was 1.5 per one million hours worked, which was lower than the previous year's level (2013: 1.9). The accidents were caused by a number of different reasons, both in project sites with subcontractors and in Outotec's own manufacturing facilities in all geographical regions. There were four lost time injuries with absence from work exceeding 30 days. The manufacturing units in Lappeenranta, Turku, Turula, and Suzhou improved their safety performance significantly. Local health and safety procedures were harmonized with the global procedures in Canada, Finland, Germany, Russia and Sweden. Sixteen EHS e-learning courses were developed to enable easy delivery of EHS training in our QEHS Management System.

Employees whose work involves installation, commissioning, maintenance, or general site operations related to plants, equipment, or services delivered by Outotec to its customers, are trained regularly in health and safety matters including the use of protective equipment. The objective of the training is to induct employees in hazard identification, risk assessment and required control actions to prevent any harm and to improve practical col-

laboration between the customer and supplier organizations on shared sites.

Outotec has a medical and security services agreement with the global service provider International SOS to ensure the security and well being of its employees. This 24/7 service covers all Outotec employees and service providers for emergencies that occur during business trips. Through its Medical Alerts and Travel Security Online service, our employees are also informed about diseases and other health, safety and security issues.

Improvement in health and safety reporting

To improve health and safety reporting, a global EHS dashboard was created in 2014 using Outotec's enterprise resource planning system for reporting. This dashboard enables the follow-up of incidents, safety training, near misses and lost time injury rates at Outotec locations and large projects. A new database was also created to follow-up incident reporting and incident investigations. All lost time injuries were investigated and actions completed. In 82 percent of the cases actions were completed within two months of the incident. In addition, eleven large projects were followed up monthly, with a separate reporting for each project.

Our South East Asia Pacific (SEAP) market area achieved 12 lost time incident free months in 2014. The achievement reflects the efforts that all employees and contractors have undertaken to ensure safety at work.

Read also our health and safety performance data on page 63.

AWARDS IN CUSTOMER WORK

We received several safety recognitions from our customers in 2014. Outotec's QEHS performance sends a strong message to the customers and the resources industry about our commitment to developing safety performance and culture.

The most extensive safety achievement in 2014 was the milestone of eight million accident-free working hours at the Cristal ilmenite smelter site in Saudi Arabia.

We were also awarded the Samarco Excellence Award for the work in the Samarco pelletizing plant project in Brazil. The evaluation criteria for the award were: punctuality, cost, environmental and social responsibility, quality of service and safety.

Codelco's Andina division in Chile recognized Outotec with the award for Safety Management 2014 as a recognition of our commitment and achievements in controlling hazards and preventing accidents.

This was the third consecutive year Outotec received the award. Outotec was also recognized for eight years with no lost time accidents at the Codelco Andina plant.

The largest phosphate supplier in the world OCP awarded Outotec for the second consecutive year for health, safety and environmental work at the Safi Chemical, Jorf Lasfar and Imacid sites in Morocco.



② SUSTAINABLE OFFERING FOR CUSTOMERS

Outotec has a strong portfolio of world-class technologies for the entire value chain of processing ore to refined metals. We develop and deliver solutions which utilize resources efficiently, reduce energy and water consumption, produce less waste and emissions, and minimize the plant's life-time ecological impact and operating costs. Through our vast experience and in-house research centers, we have the ability to test and scale up processes for varied and increasingly complex raw materials, as well as develop new processes and tailor solutions for their processing.

RESOURCE-EFFICIENT SOLUTIONS BASED ON DEEP TECHNOLOGICAL KNOW-HOW

Our most significant contribution to abating climate change and the world's environmental challenges is made through our products and services, enabling our customers to run environmentally sound, profitable and socially acceptable businesses. It means that our handprint – or our positive effect in terms of sustainability – is bigger than

our footprint. In other words, the impact of our own operations on the environment is small compared to what we can achieve by providing innovative solutions to our customers.

Our long-term target relates closely to our handprint – we must be able to offer more sustainable technologies and services to our customers with less harmful impacts on the environment.

We measure our success on the basis of the emissions avoided through

the use of five Outotec technologies, aiming at 20 percent less CO₂ emissions compared to the industry average.

We also aim to keep the share of environmental goods and services (EGS under OECD definitions) in our order intake permanently above 90 percent. This means that we always seek to sell our latest and best available technology to customers. According to our self assessment, as much as 90 (2013: 87; 2012: 89) percent of our order intake qualified as



EGS in 2014. The assessment method has been verified by a third party. These products and services measure, prevent, limit, minimize or correct environmental damage to water, air and soil, as well as problems related to waste, noise and eco-systems. EGS represent, in Outotec's case, cleaner technologies that reduce environmental risk and minimize pollution and resource usage. For example, Outotec's sulfuric acid plant, when used to produce acid from a smelter, is clearly EGS technology. However, an acid plant burning elemental sulfur is defined as 'maybe EGS' and the final category depends on the latest features of acid production technology that are used in the particular project.

Reducing CO₂ emissions in metals processing

In metallurgical processing, energy is the most significant cost item and the main reason for CO₂ emissions. Outotec designs sealed processes that utilize the

energy contained within the raw materials. The annual emissions avoided by the metallurgical industry through the use of five Outotec technologies amounted to 5.9 (2013: 5.4; 2012: 4.6) million tonnes of CO₂ equivalency (CO₂-e). These technologies are ferrochrome process, copper flash smelting, alumina calcination, ceramic filters, and co-generation of electricity in the ferrochrome process. Outotec's CO filter enables the use of process gas in direct electricity generation. In addition, the figure includes a small amount CO₂ avoided by the use of coated titanium anodes from the Republic Alternative Technologies business that Outotec acquired in 2014.

In 2014, the Outotec ferrochrome process received the ICDA Chrome Industry Environmental Award for its energy efficiency.

Improving water management in the mining industry

The way in which water is perceived in the mining industry has changed from considering it only in terms of "water treatment" to seeing it as a valuable resource that needs proper management. The management of this resource needs to involve the optimization of water usage in the entire mine including concentrator site, minimizing fresh water consumption and waste generated by water treatment as well as implementing water reuse and recycling practices.

In many mining regions such as Chile and Australia, the quantity and quality of water pose problems, as companies' water demands can result in conflicts with local communities that depend on the same resources. Waters in the mining industry are very complex and always site specific, as the composition of impurities is related to the ore itself and to the processing of the ore. Typical impurities in wastewaters are metals, arsenic, sulfate and chloride. Due to the complexity of the waste waters and the high concentration of sometimes toxic impurities, expertise is

needed not only in water treatment technologies but also in mineral processing technologies when developing water management solutions. Firstly, the treated water should be of high enough quality so that it can be recycled back to the mineral processing and therefore reduce fresh water consumption. Secondly, the selected water treatment process should be efficient and reliable so that the mining company can securely meet the requirements of environmental permits.

Outotec has developed several solutions for managing the aforementioned challenges in the metals and mining industry. They consist of patented processes and equipment for reactors and dewatering. These elements together with high-quality engineering and automation systems enable reliable and safe water treatment processes.

Outotec's offering combines mineral processing know-how built up over several decades with water treatment expertise to develop optimized and tailor-made solutions for customers. However, the proportion of these solutions in our sales is still relatively small. Our long-term target is to achieve 50 percent reduction in fresh make-up water consumption per tonne of ore in non-ferrous metals concentrators through Outotec technologies and solutions.

Outotec offers paste plant technology for mineral concentrators and effluent treatment solutions, for example. In addition, we have developed a process for managing sulfate, which is a common and growing challenge in the industry. The Outotec Ettringite process precipitates sulfate and calcium, thereby lowering the scaling potential and total dissolved solids (TDS) content in the treated water while also removing many other impurities, such as metals within the two to three step process. Companies that struggle with sulfate within their processes or in their environmental discharge streams are able to flexibly control the sulfate content with this new process and thereby affect the TDS content in their waters.

More energy from wastes

To abate climate change, substituting fossil energy sources with renewables is crucial. Outotec's long-term target is to achieve an annual reduction in use of fossil fuels by power plants that is equal to 80 MWe and by steam boilers that is equal to 60 MWth.

Sewage sludge, when adequately processed, presents another important source of phosphorus and energy. We offer waste-to-energy systems that can treat over 200 different biomass fuels - from waste wood to lignin sludge from bio-ethanol production.

In addition, we have developed an efficient solution to exploit the energy and nutrient potential of a certain part of farmyard waste and sewage sludge. The solution combines Outotec's fluidized-bed-based biomass incineration technology and the ASH DEC process, which cleans the ash from biomass/sludge incineration and converts the phosphate into a bio-available fertilizer compound.

For example, in the St. Petersburg region in Russia alone, more than twenty million chickens, pigs and cattle annually produce over 600,000 tonnes of nutrient-rich litter and manure. This waste biomass is a source of energy and nutrients if appropriately managed. Nutrient run-off from large-scale animal farms has become among the main threats of pollution for the sea and for groundwater reservoirs. In addition, harmful atmospheric emissions are derived from improperly managed manure.

MITIGATING NEGATIVE IMPACTS OF THE MINERALS AND METALS INDUSTRY

Although metals and minerals, once extracted, have a very long usage life cycle and are close to 100 percent recyclable, their production is often linked to negative impacts on the environment. As a provider of technologies and services for these industries, we see our role as an essential contributor to positive change. As part of the varied solutions we offer,

we aim to address the main sustainability challenges facing our customers.

Outotec's technological developments have the potential to reduce the environmental impact of a large number of industrial operations worldwide. However, even if customers use Outotec's best available technologies in mineral and metal processing, they may have improper operational practices or less sustainable technologies in use at the same time. Therefore Outotec may indirectly be involved in environmental damage, contamination of soil or water, or public health effects through its customers' operations. Because industry investments have a lifetime of decades, Outotec also provides machinery, spare parts and services to old industrial plants that may, despite modernization initiatives, have a significant negative impact on the environment and human health.

To reduce the industry's negative impact, Outotec offers solutions for modernization, as well as long-term operation and maintenance services. A significant impact on a plant's sustainability can be achieved through life-cycle services and technological improvements. Outotec can operate and maintain a plant on the customer's behalf, guaranteeing that it will run smoothly, safely, and efficiently at all times. For example, Outotec's tailings management solutions and mine backfilling help customers to rehabilitate mine sites.

Read about emissions avoided through the use of five Outotec technologies on page 53.

R&D AND INNOVATION

Outotec's success is based on a strong portfolio of world-class technologies, robust expertise and innovative personnel. In R&D, Outotec focuses on technology development to increase resource efficiency, for example, by reducing energy and water consumption and the environmental impact of the company's products and services. Key areas of ex-

pertise are physical separation, metallurgy of solid-state materials, chemistry including pyro- and hydrometallurgy, as well as gas-handling technologies. Outotec has 749 patent families and over 6,769 national patents and applications. Outotec's competence centers and in-house research centers, state-of-the-art laboratories, and test facilities have enabled dozens of Outotec technologies to become industry standards and benchmarks in sustainability. The company also has extensive knowledge of material technology, plant and equipment engineering, equipment and process automation, and the implementation of large international projects.

Outotec continuously improves and develops its proprietary technologies and complements its in-house R&D with acquisitions and partnerships. Furthermore, the company actively strives to explore new applications for its existing technologies. Among other sectors, energy and industrial water treatment, in particular, offer significant and attractive growth opportunities. Both of these sectors require solutions for utilizing raw materials in a resource efficient and environmentally sound way.

Cooperating with universities, research institutes and authorities

Outotec was very actively involved in preparation for the European Institute of Innovation and Technology (EIT)'s call for Raw Materials Knowledge and Innovation Community proposals. The proposal for the consortium with more than 100 partners was granted by EIT in December. One of six Co-location Centers of the EIT Raw Materials KIC will be on the Otaniemi campus in Espoo, Finland.

As an expert in the European Union's (EU) technical working group and in an environmental working group of the Federation of Finnish Technology Industries, Outotec representatives participated in finalizing the BREF documents on non-ferrous metals. BREF is a best available technique reference document cre-

ated for decision makers involved in the implementation of the Industrial Emissions Directive of the EU, which deals with pollution prevention and control.

Outotec was also involved with the work of the International Copper Association's Health, Environment and Sustainable Development Steering Committee, and the European Technology Platform – Sustainable Minerals Resources High Level Group, among other organizations listed on www.outotec.com/sustainability.

Outotec is also one of the founding members in the European Sustainable Phosphorus Platform – ESPP.

Our experts are active presenters and keynote speakers in the field. To expand the audience we started two blogs on our website www.outotec.com and gave the arena for the world-class experts to share their ideas how the megatrends affect our business and technologies and what is bubbling in our field of business and in cleantech in general. The blogs have been focused on resource efficiency and circular economy.

Read about our commitment to external initiatives at www.outotec.com/sustainability

LIFE-CYCLE ASSESSMENT OF PRODUCTS

The life cycle of Outotec's products and services is illustrated in the value chain graph on page 18. Starting from in-house R&D and studies, then on to engineering, sourcing and delivery of the products and services. Outotec's activities continue at the customer's site with installation, operation support and maintenance, before proceeding with upgrades and expansion, and finally to the demolition of the plant.

Outotec has conducted a life-cycle assessment (LCA) screening study of the environmental impacts caused by the construction materials of two Outotec products: a sulfuric acid plant and a non-ferrous mine mill circuit. The min-



ing processes and metal refining are two important stages in the analyzed systems. Processes associated with the mining and power industry were identified as the most significant contributors to the overall impacts of our products. In particular, the disposal of mine tailings from metal extraction and energy generation for metal refining were the most significant processes.

Life-cycle assessments, where we evaluate potential environmental impacts of our products, include obtaining of raw materials, production, use and disposal of the product/process/plant in question. The LCA covers both direct and indirect impacts. We use Outotec HSC Sim 8 connected to LCA tools to estimate a simulation based footprint of any metal production route. It allows rigorous comparison of different process designs and technologies with each other on a similar basis and mitigates the risky comparison to data in general environmental databases for which the boundary conditions for mining, crushing, location, energy mix and other aspect are not always precisely defined.

We have calculated the carbon footprint of five of our technologies, all of which are industry benchmarks in terms of energy efficiency and low CO₂ emis-

sions. However, CO₂ is only one element when calculating the environmental footprint of the customer's operations.

In 2014, we calculated the footprint of a copper plant using Outotec technologies. The LCAs show that in such a copper plant, with a capacity of 400,000 tonnes per year, the Global Warming Potential (CO₂ equivalent) and Eutrophication Potential (PO₄ equivalent) are far higher in the concentrating phase than in other process phases, and that the Acidification Potential (SO₂ equivalent) and Photochemical Ozone Creation Potential are almost equally high in the concentrating phase and the smelting and converting phases of the process and very small in other process phases of copper production. We can calculate the actual footprint for the customers using their own raw materials and process parameters.

A HERITAGE R&D PROJECT PRODUCES A BREAKTHROUGH

Outotec direct current (DC) smelting is a cost-efficient, small-footprint, and environmentally sustainable solution for ferroalloy processing. Suitable for a wide range of applications, it can be used for direct smelting of fine ores with no pretreatment and also offers a cost-efficient method for recycling challenging by-products such as dust from steel production. The capabilities and competencies of the Outotec Research Center have played a critical role in continuously developing and improving this technology.



The future potential of DC smelting lies in recycling. The technology can be used to recover value from fine materials such as the dust resulting from metals processing.



CASE





Outotec's history with DC smelting stretches back to the 1980s, when it was first researched by Outokumpu. The process was revisited in 2011 when it was decided that the required technology was sufficiently advanced to make the process commercially viable, and construction of a pilot-scale DC furnace at the Outotec Research Center in Pori, Finland began.

"Developing our handprint by offering customers new sustainable technologies and services is a key driver of our R&D process, and DC smelting is a perfect example of this," says Lauri Närhi, Outotec's Technology Director, Ferroalloys Technology.

Typical applications include ferrochrome, ferronickel, ilmenite, and dust recycling in steel production, especially stainless steel. Highly flexible, DC smelting can be used for processing feed ores with very fine particle sizes, or those with highly variable chemical or mineralogical compositions. This flexibility opens up opportunities for making sustainable use of reserves that would not previously have been considered viable using conventional smelting technology.

In DC smelting, the feed material is gravity-fed into the furnace, together with the reductant, via charging tubes. A continuous direct electrical current is supplied by a transformer and rectifier, with a central graphite electrode forming the negative cathode and the bottom of the furnace the positive anode. The smelting energy is supplied by an open plasma arc, which can be likened to a giant welding torch. The alloy sinks to bottom and

the slag floats at the top, while the off-gas produced is extracted and cleaned. The gas can be used as a combustible fuel elsewhere in the plant, helping to improve energy efficiency.

CUTTING EMISSIONS

As regulations governing carbon emissions become ever stricter and the price of high-grade reductants such as coke continues to rise, producers are increasingly searching for more sustainable and economically viable alternatives. "DC smelting offers a significant advantage over traditional methods in this regard," says Närhi. "As well as cheaper, lower-grade reductants such as anthracite or coal, it can also make use of carbon-neutral bioreductants produced from renewable sources like agricultural waste. Using these types of bioreductants can help producers to reduce the carbon footprint of their operations and reduce their reliance on increasingly scarce fossil-fuel resources."

IMPROVING EXISTING OPERATIONS

One of the biggest potential sustainability benefits of DC smelting technology lies in recycling. It can be used to process and recover value from fine materials such as the dust that results from the production of steel and other metals. A steel plant can produce tens of thousands of tons of fine dust every year, and this material is very difficult to treat, often ending up in landfill sites.

“Developing our handprint by offering customers new sustainable technologies and services is a key driver of our R&D work, and DC smelting is a perfect example of this,”

Lauri Närhi

Technology Director, Ferroalloys Technology

Complementing existing smelting operations with a DC furnace significantly reduces waste volumes by enabling these fine materials to be recycled with no need for complex and expensive agglomeration or pelletizing equipment. Furthermore, the dust resulting from steel production, for example, contains valuable materials such as iron and zinc, which can be extracted using the DC process. For smaller-scale operations, Outotec DC smelting is a viable alternative to traditional smelting – the simpler layout and smaller furnace mean that the plant footprint is significantly smaller.

In the future it is hoped that the technology will play an important role in supporting zero-waste production. “Zero waste is becoming an increasingly important goal, particularly in Europe,” Närhi points out. “This is where 100 percent of the materials entering the plant either leave as finished product or end up being reused, recycled, or converted into energy – with none going to landfill. The ability to recycle and recover valuable metals from previously dumped material offers huge environmental and economic benefits for producers.”

THE FUTURE OF SUSTAINABLE SMELTING

The demonstration plant at the Outotec Research Center in Pori has played an essential role in developing the DC smelting process by allowing testing of a wide range of raw materials and reductants. The center’s unique capabilities cover the entire concept and product development chain, from mineralogical

analysis of feed material to the scaled-up process and operating parameters. One key goal for future development will be to further improve the energy efficiency of the process, for example through pre-reduction of the feed material prior to smelting, which reduces the electricity consumption of the furnace.

“Without the ability to test different feeds and reductants in a pilot-scale DC furnace, the technology would not have moved on nearly as quickly. The Outotec Research Center is helping us realize this and many other sustainable processes for our customers within a much shorter timeframe,” concludes Närhi.

MAXIMIZING OUR HANDPRINT

- Reserves not viable using conventional smelting can be processed, reducing waste
- Off-gas produced can be used elsewhere in the plant, improving energy efficiency
- Can employ carbon-neutral bioreductants to help producers reduce their carbon footprint
- Brings customers closer to lean zero-waste production

FLOTATION'S SUSTAINABLE FUTURE



Declining ore grade quality and increasing pressure to improve the energy efficiency of operations has led to significant advances in flotation technology in recent years. As the global market leader in flotation, Outotec focuses its R&D activities on developing sustainable solutions that help producers reduce their power consumption and carbon footprint while ensuring the long-term economic viability of their operations.



Although flotation technology has been around for over a century, today it is advancing more rapidly than ever, largely due to the physical capacity and energy efficiency of flotation cells.

In basic terms, flotation involves mixing ground ore with water to form slurry, which is then fed into flotation cells that are aerated to produce bubbles. The particles in the slurry attach themselves to the air bubbles, which rise to the surface, forming froth, which is then removed from the cell as concentrate. The heart of the cell is the mixing mechanism that creates the bubble-particle interactions. It consists of a rotor attached to a shaft driven by an electric motor. As the rotor operates, it sucks the slurry from the bottom of the cell and disperses it to the stator blades and out toward the edges of the cell.

HIGHER-VOLUME CELLS MEAN GREATER EFFICIENCY

"As ore grades continue to decline, producers have to process greater volumes of ores to achieve the same returns. At the same time, increasing pressure to reduce their carbon footprint has led them to seek out ways to improve the energy efficiency of their flotation processes and the sustainability of their overall operations," says Jarmo Lohilahti, Technology Manager, Flotation.

"Larger-volume flotation cells bring the benefit of lower energy consumption per cubic meter of material processed, and allow for a simpler plant layout with a smaller overall physical footprint. Using fewer, larger units also means substantial savings in construction costs, auxiliary equipment, and maintenance," he continues.

A large flotation plant can have a total operating power of several megawatts, and the direct investment cost of a large flotation cell is approximately only one tenth of its energy costs over a typical lifecycle of 25 years. Cell size is also important: the energy consumption of a 100-m³ cell compared to a 300-m³ cell is approximately 20–30 percent higher. From these figures it is easy to see that scaling up the size of equipment and improving its energy efficiency can have a significant impact on both sustainability and profitability.

Outotec's R&D efforts focus on improving the sustainability of the flotation process both by developing cells with increasingly larger volumes and on optimizing the electricity consumption of the mixing mechanisms that power them.

After launching what was the world's largest flotation cell in 2007, the TankCell® e300, with an effective volume of over 300m³, Outotec introduced the TankCell e500 in 2012 and commissioned it in 2014 at First Quantum Min-

erals' Kevitsa mine in Finland. It is designed for projects with high material throughputs, such as large copper and gold operations. The metallurgical evaluation of e500 was done in different process conditions and varying the operational parameters. Based on the test campaign, the e500 consumes 20-25 percent less specific energy (kW/hm³) than TankCell® e300 would do in similar conditions. In 2014, we introduced the groundbreaking e630, which with an effective volume of 630 m³ is once again the world's largest flotation cell.

REDUCING ENERGY CONSUMPTION

The Outotec FloatForce® mixing mechanism enables more efficient pumping of slurry inside the flotation tank. This improved pumping performance means that the rotation speed of the mechanism can be reduced without affecting performance, which in turn reduces power consumption and component wear.

By replacing the existing mixing mechanism with FloatForce, producers can improve both the sustainability and the metallurgical performance of their flotation process: reduced power consumption translates into a smaller carbon footprint, while more efficient pumping, improved air dispersion, and the improved recovery of coarse particles enables better recovery. Existing cells can be retrofitted with a custom-designed mechanism that has a smaller rotor diameter or a lower tip speed to improve energy efficiency.

"Supporting customers with existing installations is a very important part of our handprint, helping them achieve their sustainability and productivity targets," Lohilahti points out. "Flotation is a very demanding process in terms of energy consumption, so even small gains in efficiency can make a big difference to the sustainability of an operation," he concludes.

MAXIMIZING OUR HANDPRINT

- Larger-volume flotation cells consume less energy per cubic meter of material processed
- They also allow for a simpler plant layout with a smaller overall physical footprint
- Outotec FloatForce®'s slower rotation speed reduces power consumption and carbon footprint while enabling better recovery levels

DEVELOPMENT CONTINUES FAR BEYOND THE FIRST SOLUTION

A global forerunner in nickel processing technology, Outotec is constantly developing more sustainable and economically viable methods. Our innovative nickel matte chloride leaching process requires significantly less chemical reagent and minimizes waste and by-product output, all while maintaining good overall metal recovery and a safe working environment.





Our pioneering leaching process allows for a simpler and safer set-up than traditional pressure leaching, with a smaller physical footprint.

Outotec's history in chloride hydrometallurgy began in the 1980s, when the technique was originally developed for copper recovery. It has since been extended to nickel, zinc, and gold processing. The process can easily be modified for treating different concentrates and intermediates.

Intended as an alternative to traditional pressure leaching, Outotec nickel matte chloride leaching enables the regeneration of chemicals used in the process – ammonia and hydrochloric acid – which in turn decreases operational expenses while maintaining excellent metal recovery. As a closed process, it also minimizes environmental impact by reducing emissions, waste, and by-products. The process can be used for treating a wide variety of raw material feeds.

"Outotec's handprint here means that the customer can be sure they are getting a process where emission controls and other environmental considerations are taken into account right from the R&D and engineering stages," says Kaarlo Haavanlammi, Technology Manager, Nickel Hydrometallurgy. "As environmental legislation continues to become stricter, our process will help customers comply with regulations and achieve their sustainability goals while maintaining profitability."

SIMPLER, SAFER, AND MORE EFFICIENT

The feed material can be in two forms: matte is a mixture of a metal with its sulfides, produced by smelting the sulfide, and concentrate is where the ore has been processed using methods such as crushing, grinding, and flotation to remove impurities. This material is then dissolved in atmospheric leaching reactors at a temperature of about 100 degrees Celsius. This process takes some hours, and results in a nickel chloride solution, which is then purified using solvent extraction technologies. If there is a significant amount of copper with the nickel, then this is removed first, followed by cobalt, and finally nickel.

"Our process allows for a simpler setup than traditional pressure leaching, with a smaller physical footprint. As well as being more cost efficient, it is also safer than pressure leaching," Haavanlammi points out. "Just as with all Outotec processes, ventilation gases are collected from reactors, filters, and solvent extraction and thoroughly cleaned. This means a safer, more hygienic working environment for plant personnel and significantly lower emissions to the surrounding environment," he continues.

Outotec nickel matte chloride leaching can achieve very high recovery of nickel, at least 98 percent. Chloride leaching is more efficient than sulfide leaching, meaning producers can get more value from the same volumes of ore. The process can also make use of much lower-grade ore than is possible with smelting, enabling more sustainable use of resource deposits not previously deemed viable.

Chloride leaching also consumes less electricity because there is no grinding stage, which brings with it its own large, complex equipment and power requirements. Power consumption is further

"Outotec's handprint here means that the customer can be sure they are getting a process where emission controls and other environmental considerations are taken into account right from the R&D and engineering stages,"

Kaarlo Haavanlammi
Technology Manager, Nickel Hydrometallurgy

reduced with the use of titanium anodes in the electrowinning stage. Electrowinning involves passing an electrical current between a positive cathode and negative anode to reduce the metals in the process solution to the cathode as metal plates. Titanium anodes operate with lower current density than traditional lead anodes, which cuts electricity consumption while maintaining the same level of metal recovery.

REDUCING CHEMICAL AND WATER USAGE

The heart of the process is the regeneration – or recycling – of the ammonia used to control pH levels in the solvent extraction stage. After solvent extraction the process solution is distilled,

Center in Pori, Finland. The pilot plant built at the center was used to develop the copper leaching process, while Outotec has also carried out batch-scale research into the application of the process to nickel production. Research has encompassed desktop studies, piloting, laboratory-scale studies, and detail and basic engineering. These have all contributed to minimizing the atmospheric emissions of the process and maximizing the regeneration of the chemicals it uses. “Our pilot plant acts like a Lego system in many ways,” says Haavanlammi. “We can set up the process by using Outotec’s sub-processes like building blocks, and then perfect and fine-tune it as we go. It plays an invaluable role in advancing the sustainability of our solutions.”



using a process similar to the fractional distillation process used in an oil refinery, to produce ammonia water that can be reused. In this way, the Outotec process both reduces the demand for chemicals and their transportation, and enables more cost-efficient production.

“Because these reagents are recycled rather than ending up in residues from the process, which have to be taken away for further processing and then stockpiled, our process is significantly more sustainable, with a lower environmental impact than traditional methods,” Haavanlammi highlights. In addition to reagent recycling, the water that is generated during the process is reused at several different stages, sometimes two or three times, leading to much lower water demand than in traditional leaching. This is a particularly important benefit in regions where water resources are limited.

THE BUILDING BLOCKS OF SUSTAINABILITY

The nickel matte chloride leaching process has been developed continuously using the capabilities of the Outotec Research

MAXIMIZING OUR HANDPRINT

- Outotec’s innovative nickel matte chloride leaching process decreases operational expenses while maintaining excellent metal recovery
- Reduces emissions, waste, and by-products
- Emission controls and other environmental considerations are taken into account from the R&D and engineering stages
- Safer and more cost efficient than pressure leaching
- Enables use of resource deposits not previously deemed viable
- Water reused at several different stages, leading to much lower water demand

3. RESPONSIBLE BUSINESS PRACTICES

In this section we focus on common values and business practices, compliance, sustainability governance and risk management. Our approach to economic responsibility is described in connection with value creation (page 18); environmental responsibility under 'Sustainable offering for customers' (page 32) and 'Environmental performance' (page 64); and social responsibility under 'Safety' (page 30), 'Development of our people' (page 54) and 'An active dialogue' (page 22). The company's corporate governance is described in more detail in our Corporate Governance Statement at www.outotec.com/cg.

Outotec has a Chief Compliance Officer (CCO) and a compliance helpline for anyone to raise any concerns or seek advice regarding ethical behavior or compliance. All compliance concerns raised at Outotec are reviewed in accordance with an established process. In matters related to compliance, the Chief Compliance Officer reports directly to the Board of Directors' Audit and Risk Committee. We follow our performance by the number of filed, addressed and resolved grievances about possible labor practices or impacts on society.

DEVELOPING INTERACTIVE GOVERNANCE

We have been developing a solid governance structure to ensure that our operations are guided by good governance, effective risk management, adequate controls and the internal audit principles supporting them. Possible conflicts of interest are avoided by following the most recent Finnish Corporate Governance Code for listed companies issued by the Securities Market Association.

Governance is often considered to be a matter of mere compliance. However, we believe that the way how sustainability is managed and governed makes a big difference. We have a clear hierarchy of ethics guidance and decision making on sustainability issues.

With responsible business practices we mean ethical behavior in all our relationships, compliance with regulations and laws, solid governance model and practices, as well as managing sustainability and risks. We aim to take economic, environmental and social responsibility into account in all our activities and relationships.



Everything we do is first and foremost based on our mission and values. Our everyday work is guided by our Code of Conduct and detailed policies. We are currently developing our governance to make it a more interactive process.

Outotec endorses ethical business practices and complies with national and international laws and regulations. Outotec did not encounter any competition-law or corruption-related suspicions in 2014 did not have to pay any fines and was not exposed to any non-monetary sanctions for non-compliance with these laws and regulations or any environmental laws. Nor did any issues emerge concerning the rights of indigenous people.

Outotec has not identified any significant negative impact of its operations or products to employees' or suppliers' health and safety or labor practices, neither to the local communities. In an internal workshop focusing on the supply chain we have identified three countries, China, India and Mexico, with potential risks amongst suppliers regarding child labor, hazardous work, or rights to exercise freedom of association or collective bargaining. Because Outotec has started to develop supply hubs in these countries, the follow-up of human rights issues will be a development area in 2015.

Outotec has a Product Compliance Management process (previously called Technology and Plant Safety Management) to ensure that the plants and products engineered and delivered by the company worldwide are reliable and meet all applied safety standards during all phases of the product life cycle. We follow the negative impacts and incidents through our QEHS management system and product compliance management system. However, if Outotec is no longer working with the customer, the information of the indirect negative impacts may be limited.

Read more about safety and product compliance on page 30.
Read more about local supply on page 51.

BOARD WORK

The Board of Directors of Outotec consists of eight members, seven of whom are independent. Eija Ailasmaa, who is Vice Chairman of the board of Outotec's largest shareholder Solidium Oy, is specified as dependent of the owner and independent of the company. Two of the board members are female. One of the board members is Swedish citizen and the other members are Finnish.

The duties, composition and committees of the board as well as the board work are described in our Corporate Governance Statement 2014. The Board of Directors con-

ducts an annual evaluation of its operations and working methods.

In 2014, the Board of Directors' special focus was on Outotec's long-term strategy, organizational structure and scalability, as well as challenges on the global macroeconomic environment. The Audit and Risk Committee of the Board focused on project-related risk reviews as well as on Outotec's internal risk management systems and internal controls.

The remuneration of board members is described in Outotec's Corporate Governance Statement on page 9. There is no linkage between the compensation for board members and Outotec's social or environmental performance.

OUR APPROACH TO RISK MANAGEMENT

Outotec has defined a risk as anything that might have a negative impact on the company's business activities. Risks can be threats, uncertainties, or lost opportunities but also possibilities. Outotec's strategic and operational risks have been described on www.outotec.com/investors and the company's risk management policy, responsibilities and processes in Corporate Governance Statement 2014.

The management evaluates strategic enterprise risks in the annual strategy process and makes mitigation plans once a year.

Outotec's internal audit system safeguards that the company's operations are efficiently managed and profitable, risk management and internal controls are at a sufficient level and that the information provided for external and internal purposes is accurate. The internal audit function reports administratively to the CFO and, in matters related to the internal audit reports, directly to the Board's Audit and Risk Committee and the CEO.

Outotec's internal and external audit processes take into account any corruption suspicions and fraudulent acts that may occur. Legal seminars and virtual training sessions are held on a regular basis to train employees in anti-corruption policies and procedures for the purpose of preventing misconduct and crimes.

In 2014, specific audits were conducted in the India market area, in the corporate ERP system and the purchasing office in Finland as well as in the management reporting process. Furthermore, several control audits were carried out in the Finance & Control function.

Read more about the board work, internal control and auditing in our Corporate Governance Statement at www.outotec.com/cg.

SUSTAINABILITY GOVERNANCE

At Outotec, the Executive Board is responsible for our sustainability agenda. The Executive Board approves the sustainability strategy, targets and reporting. Our Head of Marketing, Communications & Corporate Responsibility, a member of the Executive Board, has overall responsibility for coordination and development. The responsibility for sustainable products and services lies with the Technology and Product Board chaired by the CTO. Decisions made, actions, and commitments are reported to the Board of Directors. Sustainability is integrated into all relevant organizational functions, such as human resources, supply, legal, health and safety. In addition, there is a sustainability working group that meets several times a year.

The Sustainability Advisory Council, established in 2014, provides advice to Outotec regarding sustainability trends, strategies, products, services and reporting and gives input on how stakeholders view the economic, social and environmental impacts of our decisions. The Council is not part of Outotec's formal governance.

Personal targets are set in the annual bonus plans of employees working with sustainability and environmental issues. This mainly pertains to environmental and sustainability managers, but also includes several Executive Board members. Inventors working with new, patentable solutions also receive monetary rewards for their inventions. Furthermore, Outotec rewards all employees for making proposals that improve the sustainability of the company's internal processes.

COMMITMENT TO COMMON VALUES AND ETHICAL GUIDANCE

At the core of Outotec's values is our commitment to sustainability. For us, sustainability means that social, economic and environmental responsibility all contribute towards a common goal. We want to behave in a responsible manner in all our relationships, whether internal or external. As we are growing more multicultural as an organization, we must ensure that we do not only rely on manuals and policies, but on a strong ethical culture built on our common values. We want to encourage everyone at Outotec to consider their actions through one simple question: "Is this sustainable?"

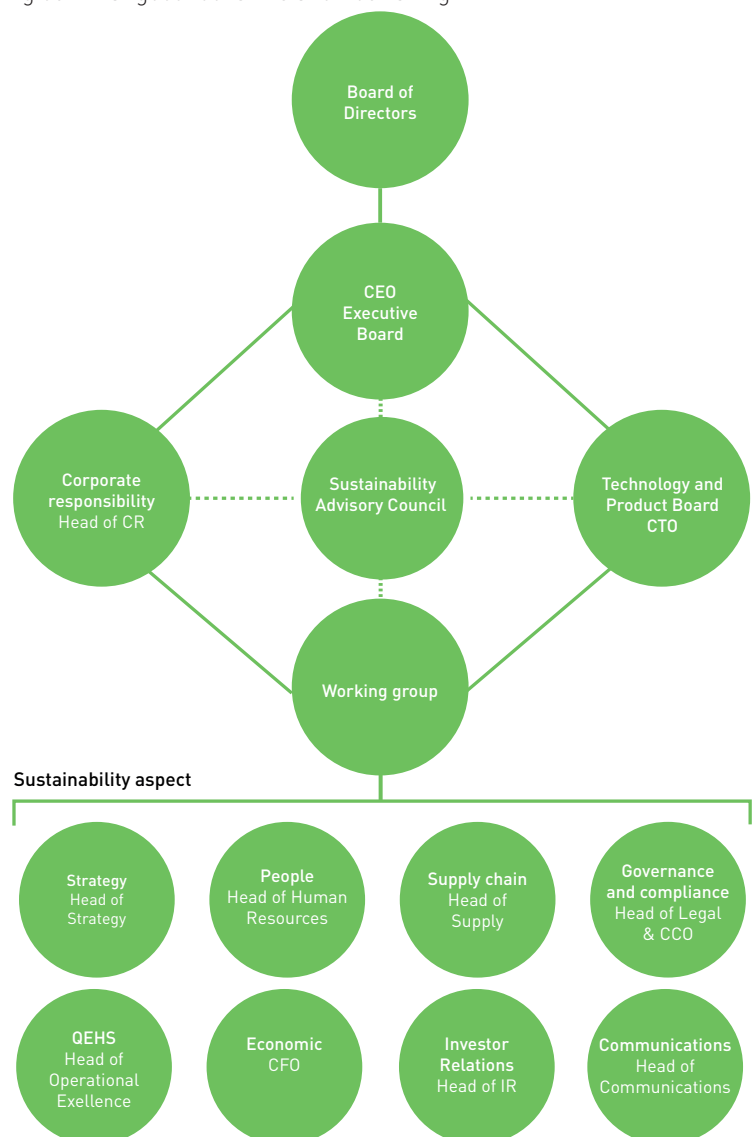
In addition to our core value of commitment to sustainability, we have three value statements:

Creating Leading Technologies. This means creat-

ing technology breakthroughs and leading the way, seeing change and complexity as opportunity, leveraging our expertise, encouraging innovation and re-thinking as well as leading in sustainable technology.

Building Success Together. This means pursuing our mission, building long-term customer and supplier relationships, trust and respect, celebrating success together, taking care of life balance, leveraging diversity, and acting with courage.

Aspiring for Excellence. This means continuous improvement every day, setting the bar high, challenging the status quo, growing and renewing ourselves as individuals, staying humble and adaptive to learn, finding out what good looks like and flourishing in



what we do.

Our Code of Conduct, built on our values in 2012, gives our people ethical guidance on many issues. The Code of Conduct has been approved by the Board of Directors and communicated to the employees through e-learning in 2013 and 2014.

In 2014, Outotec organized virtual training for the employees on anti-corruption, competition law and intellectual property rights. Approximately 64 percent of the employees have completed these trainings by the end of 2014, with 2,963 employees receiving training on anti-corruption; 2,875 on competition law and 2,834 on intellectual property rights.

Read our Code of Conduct at www.outotec.com/sustainability.

FIRST YEAR WITH COMPLIANCE HELPLINE

The year 2014 was the first time Outotec had an internal compliance helpline in place. Activities slowed down after the helpline's lively introduction. This is probably a symptom of two circumstances. First, people dare to contact and talk to the Chief Compliance Officer (CCO) directly and don't need to do it anonymously. Second, some people may still have doubts as to the confidentiality and efficiency of the helpline system, and, for example, in the Nordic region many people seem to consider it remote. We have still encountered challenges in implementing the compliance helpline in Germany, and discussions are pending with the works council about the justification of the helpline.

During compliance class-room training sessions, employees have been ex-

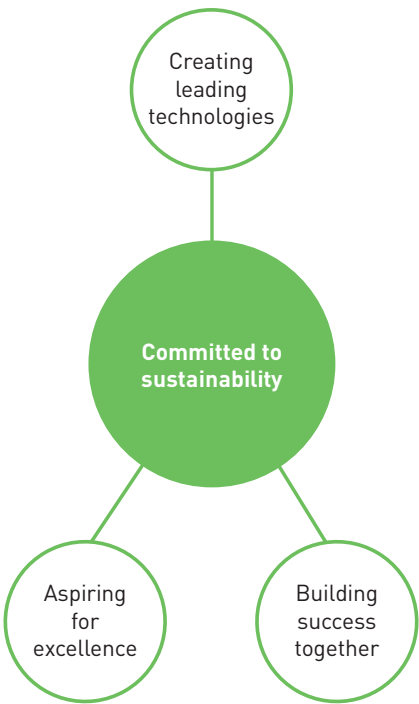
pressly encouraged to contact the CCO directly and to have privileged discussions. Some employees have sent direct messages and requests for advice from Russia, for example, a country where traditionally the general trust in whistleblowers' immunity is restricted. Some persons have decided to approach the CCO through anonymous messages on paper. Experience has shown that building trust in compliance issues worldwide provides for personal discussions and meetings with people.

Our external stakeholders do not seem to be familiar with our compliance helpline on Outotec's website yet. The decision has been made to promote this more actively during 2015.

Altogether 21 registered cases were brought to the attention of the CCO directly or through the compliance helpline. The majority of the contacts consisted of different queries by employees and to a lesser extent, hints of fraud or of wrong doing. We have had one serious forensic case, which led to imprisonment and termination of employment. In addition, a couple of minor disciplinary measures have been taken. All cases handled during the year can be put into three categories; namely, employee and management related issues, company distortion issues, and third-party related issues such as anti-money laundering measures and suspected human rights abuses.

With the exception of Finland, where the largest number of Outotec employees is located, one cannot show any geographical areas with the greatest frequency of cases or sources of requests and hints. The CCO has recorded nine requests for exceptions regarding hospitality, gifts and entertainment.

Read about equal opportunities and diversity on page 57.



FAIR AND NON-DISCRIMINATORY TAX POLICY

As a globally operating company, Outotec faces a variety of tax laws and regulations. It is not always an easy environment to navigate, but the principle is clear: we want to pay the right taxes in the right places. We aim to be transparent and non-discriminatory in our tax practices. Our Board of Directors has decided on an approach in which no aggressive tax planning is done, nor will Outotec have legal entities in the so-called tax havens unless a justified business reason arises. Currently there are none.

In 2014, Outotec paid a total of EUR 30.3 (2013: 63.1; 2012: 64.6) million in taxes. Our effective tax rate was 28.7 (2013: 30.4; 2012: 28.9) percent. The decreased tax rate from 2013 was due to different geographical distribution of sales, which tends to vary somewhat depending on the product mix and location of customer projects. The chart describes the tax rates in the countries where Outotec operated in 2014.

There has been public discussion about total tax transparency on the basis of country. Outotec often delivers big projects, and there may be only one project ongoing in a single country. Revealing country-specific financial information could breach our commitments concerning access to project-specific confidential information. Also, the destination of our sales typically do not correspond with the places in which the work and activities connected to the sales are performed, where value is created and where the income must be reported and paid based on globally applied tax principles.

As explained above, we do not believe that country-specific tax information always gives a comprehensive picture of the fairness of the tax distribution.

Country	Effective income tax, %
Australia	30.0
Brazil	33.8
Bulgaria	10.0
Canada	25.8
Chile	35.0
China	25.0
Finland	20.0
Germany	29.2
Ghana	25.0
India	32.4
Indonesia	25.0
Kazakhstan	20.0
Mexico	30.0
Mongolia	10.0
Morocco	30.0
Namibia	33.0
Netherlands	25.0
New Caledonia	30.0
Norway	27.0
Peru	30.0
Poland	19.0
Russia	20.0
Saudi Arabia	20.0
South Africa	28.0
Spain	30.0
Sweden	22.0
Turkey	20.0
United Arab Emirates	0
United Kingdom	21.0
United States	37.9
Zambia	35.0

Outotec in sustainability indices www.outotec.com/sustainability

④ **SUSTAINABLE SUPPLY CHAIN**

A sustainable supply chain is highly material to Outotec's business. Global supply chain management has been defined as a key strategic pillar for Outotec, and supply has been a prioritized development area for the company since 2010.

Outotec's supply chain management covers both Outotec's own operations and those of our suppliers. The Supply function manages the supplier base through sourcing category management as well as leads and develops sourcing activities for customer deliveries, executed by locally-based purchasing. Some 85 percent of Outotec's manufacturing is sourced from external suppliers. Therefore supplier selection is of key importance in Outotec's business. Outotec gives performance guarantees for the plants and processes we deliver to our customers. Natural-

ly, Outotec is responsible for the equipment and materials supplied as well as engineering, construction and service work provided by our suppliers and subcontractors.

Outotec has two policies serving as the basis for collaboration with suppliers. Our Supply Policy defines how supply activities in the company shall be steered, how supply quality shall be built, and guidelines for all people involved in supply-related activities. Outotec's Supplier Policy defines the high-level requirements for Outotec suppliers and sets principles on ethical conduct, compliance with laws and regulations, the environment, health and safety, labor, intellectual property and improper benefits. We expect our suppliers to comply with this policy in their dealings with Outotec, their own employees, suppliers, and with other third parties. Furthermore, they are expected to ensure compliance with Outotec policy, identify deviations, manage corrective actions, ensure the transparency of these actions and communicate in a systematic manner.

We measure our performance with the percentage of suppliers that were screened using labor practices criteria.



SUPPLY CHAIN AND SUPPLIERS VARY PROJECT BY PROJECT

Outotec had approximately 3,500 direct and active suppliers in 2014. These represent but are not limited to distributors, component manufacturers, equipment manufacturers, logistics companies, engineering companies, construction companies and other service providers. Because Outotec delivers large tailored solutions, the company's suppliers, set-ups and combinations vary a great deal from one year to the next, which makes it difficult to run joint long-term development programs with them. The majority of suppliers are either component manufacturers or equipment manufacturers. In addition, thousands of suppliers' own suppliers are part of Outotec's supply chain.

The majority of suppliers were based in Germany, Australia, Finland and Sweden. Outotec has also developed best-cost-country sourcing in China, India, Eastern Europe and Mexico and negotiated new agreements and prices with European suppliers. A major investment has been made to strengthen the capabilities to handle quality control, expediting and logistics in China and India.

In late 2014, Outotec started developing three of its existing purchasing offices into global supply hubs. In 2015, these supply hubs, located in China, India and Mexico, will be ramped up and the bulk of supply will be gradually shifted to these countries.

During 2014, significant changes were made to Outotec's operating model and organization to create a standard way of working globally, increase scalability and use of best-cost-coun-

try resources as well as to work more closely with customers. For the supply operations we established plant delivery hubs as well as global and regional equipment delivery centers. These changes have an impact on our internal responsibilities and workflows, but do not change the supply chains as such.

Cost-competitive supply base is one of Outotec's strategic programs launched in late 2013 and it continues in 2015. Several development projects were initiated to contribute to improved cost efficiency without compromising product quality, safety and sustainability. This program is expected to result in new suppliers as well as a consolidated supply base. The allocation of more business to fewer suppliers enables better management and development activities with them, enhancing delivery excellence and cost competitiveness.

Close to 50% spent on local suppliers

In this report the "Local supplier" is a supplier that is not managed globally and is located in a country other than Finland and Germany, which is where Outotec's two global plant delivery hubs operate. The spend allocated to local suppliers positively contributes to local employment and the region's welfare. Outotec's supply chains are characterized by logistic complexity, especially in those used in global project deliveries and that utilize local suppliers.

The spending on local suppliers in 2014 was approximately EUR 390 million, which is equal to nearly 50 percent of the total supply. The largest amounts – EUR 10 to 70 million each – were spent on local suppliers in Sweden, Chile, Australia, USA, Brazil, Canada, China, United Arab Emirates, Turkey, Serbia, UK and Austria. The remaining local spend was distributed to 54 countries.

Outotec screened 800 suppliers in 2014, which is equal to 23 percent of the active and direct suppliers, through a documented process that applies a set of performance criteria as factors in determining whether to proceed with a supplier relationship.

We estimate that approximately 15 (2013: 10; 2012: 10) percent of Outotec's manufacturing and assembly took place in the company's two manufacturing workshops, a ceramic plate production plant in Finland and in assembly shops located in Brazil, China, USA and Canada. The share of own manufacturing has increased from previous years mostly due to reduced order backlog in a weak market situation. Outotec's manufacturing facilities are moderately sized. All have local quality, health, and safety systems in place, and manage proper sorting and further handling of their wastes. No considerable risks related to the use of child, forced, or compulsory labor have been identified.

New tools for mitigating risks in the supply chain

In 2012, we assessed the general sustainability risks in Outotec's supply chain in internal workshops. The main risks identified were bribery and kickbacks, occupational safety, pro-



tecting information and reporting misconduct. With regard to environmental issues, material toxicity and chemicals ranked as the greatest risks. In addition, in 2014, Outotec identified three countries in its supply chain that have potential risks regarding child labor, hazardous work, or rights to exercise freedom of association or collective bargaining. These countries are China, India and Mexico. Our personnel have been instructed to implement the Supplier Assessment and Approval Process carefully in these countries and to make observations during audits and other visits.

We have defined a new process and tools in 2014 for identifying and mitigating risks related to our supply chain. The target is to shift the focus from risk provision calculation to risk assessment and mitigation. This requires the early identification of potential risks, making qualified decisions on the best ways to mitigate the risks, and ensuring that the agreed mitigation actions are accomplished.

The tools have already been used in larger sales cases. The feedback from the project managers and teams has mostly been positive and risk assessments have provided the management with important information about the major risks and planned mitigation actions. In 2015, we plan to train super users and facilitators as well as organize local training for the end users.

THE CARBON FOOTPRINT OF OUR SUPPLY CHAIN

In 2014, we continued to analyze the footprint of our supply chain in terms of greenhouse gas emissions. The footprint was calculated based on money spent by Outotec and using the supply chain emission factors as defined by the Department for Environment, Food and Rural Affairs of the UK (DEFRA).

The analysis showed that the biggest sources of CO₂ emissions in Outotec's supply chain were components, which represents 32 percent of the total, and metal products, which made up 30 percent of the total. The carbon footprint of our supply chain in 2014, 386,000 (2013: 623,000) tonnes of CO₂ in total, was considerably larger than the footprint of Outotec's operations during the year, which amounted to 34,787 (2013: 45,305) tonnes of CO₂.

View also the supplier data on page 63.

OUR POSITIVE IMPACT IS GREATER THAN THE EMISSIONS OF OUR OPERATIONS AND SUPPLY CHAIN

34,787
TONNES CO₂-e

GREENHOUSE
GAS EMISSIONS
FROM OUTOTEC'S
OPERATIONS

386,000
TONNES CO₂-e

GREENHOUSE GAS EMISSIONS
OF OUR SUPPLY CHAIN



EMISSIONS AVOIDED

5,900,000
TONNES CO₂-e

through the use of five Outotec technologies:

- Ferrochrome process
- Copper flash smelting
- Alumina calcination
- Ceramic filters
- Co-generation of electricity

5. DEVELOPMENT OF OUR PEOPLE

We are both a technology and a people business. Our success depends on competent and motivated employees, and our business is founded on their know-how in the technologies that we provide.

ENABLING EMPLOYEES TO REACH THEIR FULL POTENTIAL

Our goal in developing Outotec's people is to enable our employees to reach their full potential. Our focus is on driving continuous learning and leadership development to ensure professional growth. Competence development is also identified as an important area in many of Outotec's strategic programs and we take active measures in building development curricula for key roles.

Employee engagement and performance enablement are our priority drivers and seen as a key differentiating factor. Therefore, we will continue to challenge ourselves over the long term with key targets that are linked to our employee engagement survey O'People's results. Read about our targets on page 16.

Based on the results of the 2013 survey, Outotec's employee engagement index was 69 percent, which is at the same level as the international standard. The performance enablement index was 67 percent, slightly below the standard, which is 73 percent. Two global themes were identified for further development; namely, collaboration and customer centricity. The next survey will take place in 2015.

We also measure the percentage of employees who receive regular performance and career development reviews.

Performance management

More than 95 percent of Outotec employees have engaged in performance development dialogues (PDD). In 2014, we developed our performance management practices further. A new component, Outotec value based behaviors, was embedded into PDD in order to enhance Outotec's value-based culture. Extensive

training and communications facilitate the implementation of performance reviews.

Outotec values are the foundation of our strategy and we want to ensure that all employees know our values and demonstrate the value-based behavior in everyday life. From 2015 onwards employees will be assessed annually on achieving targets, overall performance and value-based behaviors. Outotec is committed to continuous improvement in performance and pay for value-based behavior, and performance reviews are one concrete tool for managers to set development targets and give structured feedback, and they also support employee rewarding.

CONTINUOUS LEARNING

Outotec Learning Point is the platform for our employees to access learning. Learning Point continues to offer product and technology training and is expanding to host all other learning programs as well. During 2014 several e-learning modules were developed to support learning globally. We already have more than 60 e-learning modules that are available globally on various topics including compliance, Outotec's Code of Conduct, health and safety, technology, global processes and sales. All of these modules are available on Learning Point. New courses are being developed constantly.

Classroom or virtual classroom training was offered on several areas such as sales, product and technology, leadership and global Outotec processes. Outotec offers several levels of product and technology training, from introductory e-learning to advanced training on specific products, product groups or technologies. Safety training is organized locally as classroom training.



Outotec 35 years in Mexico and Central America. The milestone was celebrated with personnel in the San Luis Potosi office in September 2014.

ing and additionally 16 global e-learning modules were published in 2014 to support local training.

Global Future Leaders and Sales Master Class programs also continued in 2014. Both programs have been running for three consecutive years. In 2014 altogether 50 persons around the world participated in five Sales Master Class development workshops. Active coaching for the Executive Board and senior leaders continued on individual and team levels all over the world.

A significant part of development activities took place locally in Outotec's market areas. Local training and development activities focus on, for example, induction, leadership, language, ICT and project management training. In addition, Outotec's global mentoring concept has been developed and local rollout has started. In 2014, a mentoring program was organized in Finland with 15 mentor-mentee pairs. A cross-company mentoring program with KONE Corporation was kicked-off in October 2014 and will continue until 2015. Altogether 14 participants from Outotec take part in this program either as mentors or mentees.

In addition to classroom training and virtual learning Outotec also continues to focus on on-the-job learning. Job rotation opportunities are actively promoted within Outotec. During 2014 Outotec had approximately 300 persons on international project assignments, with an average length of three months. There were over 60 expatriates in 16 countries; an important indication of Outotec's investment in on-the-job learning and knowledge sharing around the globe.

The main development initiatives were the implementation of performance reviews, talent management, and the launches of Outotec Experience program and Outotec leadership pro-

file. Furthermore, follow-up on the action plans based on the O'People employee engagement survey conducted in 2013 continued. Employee workshops were organized in different locations.

Outotec Experience

Outotec Experience is a two-day experiential and interactive workshop providing insight for employees on the company's strategy, business, customers, values and processes. The program aims to enhance collaboration by engaging employees from different parts of the organization. The discussions focus on how we can operate and work together in order to add value for Outotec's customers. The program is developed in-house and all presenters in the program are Outotec leaders.

Outotec Experience will be rolled-out globally. The first programs in 2014 were organized in Finland, Canada, Mexico, China and India. Altogether nearly 200 participants attended one of the sessions. Learning impact has been measured with a questionnaire in each of the events. Results show remarkable improvement especially in the scores describing understanding of strategy, business process and matrix organization. Plans are already in place for several program deliveries in 2015.

Outotec leadership profile

Leadership development is one of the key focus areas at Outotec. The third round of the global Future Leaders program was completed in October 2014 and the program received very good feedback. The program brought together an international group of 46 top leaders to develop their leadership capabilities.



Pieces of our strategy, colleagues in the Kolkata office put together a puzzle in the Outotec Experience event in November 2014.

A new Outotec leadership profile, a competence framework that captures the essence of Outotec leadership, was introduced in October at Outotec Leaders' Forum. The profile is based on Outotec values and it has four key dimensions: provides direction, drives high performance, inspires people to collaborate and drives change. This new profile will aid in communicating expectations to our leaders, and all Outotec leadership development activities will support it. The first profile-based leadership development tool is the Outotec 360° assessment, which was introduced in November and is now in use in management teams.

Talent management

Talent management is at the core of our people management efforts to attract, engage, develop and retain talent. Talent Review, including succession planning, is our annual process for getting to know our people. It also provides a structure for talent management.

We look at our talent management maturity from three perspectives: Talent culture & collaboration, Talent strategy & content, and Processes & tools.

In 2014, we raised the level of maturity of all these aspects – above all, by ensuring more time for the quality dialogues, by broadening their scope and including the adjacent management layers in the process, and by launching a new online tool. Business area, region and global function management teams, business line and market area management teams as well as other selected positions, especially from sales, services and delivery, almost 800 employees in total, were included in the talent review.

The focus going forward will be on improving talent experience and communication, supporting our strategic programs and strengthening talent management as an ongoing practice demonstrating added value.

FAIR COMPENSATION

For a technology company like Outotec, it is very important to be able to recruit and retain world-class professionals, as they are key assets that help create the company's intellectual property.

Fair and motivating compensation is achieved through pay that is in line with the requirements of the job and the performance and competences of the employee.

According to Outotec's compensation policy, total compensation should align closely with the interests of Outotec, its shareholders and all employees. A significant proportion of total compensation should be based on the company's performance in the short and long term, as well as on each employee's individual performance. In order to attract and retain highly competent professionals, the total compensation package of employees with key competences and a high level of individual performance should be competitive compared to relevant labor market compensation.

All Outotec employees are covered by an annual bonus system to encourage performance and personal development. The bonus is only paid to those employees who have been employed by the company for at least six months during the accounting period. If a person was hired during the accounting period, the minimum employment time required for them to qualify for the bonus is four months. In addition, the employee needs to be employed by Outotec at the time of bonus payment.

Incentive bonuses are determined on the basis of the attainment of the company's financial targets, as well as on meeting targets set for the employees or departments concerned. As a general rule, the total bonus percentage ranges from 10 to 60 percent of the employee's annual salary, depending on the position of the employee. The incentive bonus program covers almost all Outotec personnel. In addition, the Board may decide to set other project-related bonuses. The Board of Directors decided that due to weak order intake and profitability, a maximum of 80 percent of the bonuses will be paid for 2014.

Read more about our labor practices and compensation on pages 59-62.

EQUAL OPPORTUNITIES AND DIVERSITY

Outotec has signed the United Nations Global Compact and is committed to its principles of human rights, environment, labor,

and anti-corruption. By joining the Global Compact initiative Outotec has expressed its intent to further advance sustainability and social responsibility in its business practices.

We recognize the UN's Guiding Principles on Business and Human Rights and will be working on an approach on that basis. We support the realization of basic human rights globally and not knowingly provide any goods or services that will be used to carry out human rights abuses. We will not use any form of compulsory, forced or child labor and we expect the same from our agents, suppliers, contractors and other business partners. We work towards effective abolition of the use of compulsory, forced or child labor globally and respect the rights of indigenous people. There were no direct incidents reported in 2014 regarding human rights abuses. One customer suspect, however, was reported to the Audit and Risk Committee. The matter is being followed and is under investigation by authorities, but Outotec is not an investigation target.

We value diversity at the workplace, and follow the principle of equal opportunities. Employees are selected and treated on the basis of their abilities and merits. Every individual is equally entitled to enjoy fair treatment, respect and common courtesy without discrimination and regardless of their ethnic origin, nationality, religion, political views, sex, sexual orientation or age. We do not tolerate any form of harassment or behavior that can be considered offensive, intimidating, discriminating or insulting. We follow the diversity and equal opportunities by the composition of governance bodies and breakdown of employees by employee category, gender, age group and other indicators.

We are committed to promoting a working environment where there is mutual trust and respect, and where everyone feels responsible for Outotec's performance and good reputation. Outotec respects the freedom of association and the right to collective bargaining.

Outotec's South African subsidiary received a 'Level 6 contributor' rating in Broad-Based Black Economic Empowerment (BBBEE) in 2014, which means that Outotec customers can recognize 60 (2013: 80) percent of their expenditures on Outotec products as BBBEE Preferential Procurement. The lower rating for the year was mainly due to not achieving local procurement for our projects from Black South African owned companies. The program has been initiated by the South African government to distribute wealth across the society.

Read about stakeholder expectations and engagement on page 23.



GRI AND DATA

ABOUT THIS REPORT

Outotec reports its sustainability performance and targets annually. This report covers the company's sustainability performance for the 2014 calendar year and is prepared according to the Global Reporting Initiative (GRI) G4 guidelines and the UN Global Compact principles.

In 2014, Outotec reviewed its material sustainability topics. Based on the materiality assessment in 2011, management interviews, sustainability trends impacting the industry, and stakeholder feedback, Outotec identified its potentially material sustainability topics with an external partner. The identification was conducted by mapping relevant economic, environmental, and social impacts that can have an influence on the assessment of stakeholders. The identified aspects were initially prioritized in a workshop with Outotec's Sustainability Working Group and then validated in Outotec Leaders' Forum, where about 100 of Outotec's leaders shared their views on the topics that are relevant for the company. Finally, the results of the materiality assessment were reviewed and verified by external advisors representing stakeholders in Outotec's Sustainability Advisory Council. The scope and aspect boundaries for the material topics were evaluated, and relevant GRI indicators were chosen by Outotec's sustainability specialists. The results of the materiality assessment were validated by Outotec's Executive Board in January 2015.

The identified material aspects are most relevant to the company and our stakeholders and are the basis for our sustainability management and reporting. We have identified our customers, employees, investors and financiers, suppliers, media, as well as NGOs and local communities as the main users of this report.

We fully report on our own operations and partly include information

on our delivery projects, the use of Outotec's technology, and our supply chain. The report boundary includes all our major operations. Our aim is to expand information collection and include site operations, construction, and commissioning work carried out at our customers' sites. Since 2013, we have calculated the CO₂ emissions from Outotec's supply chain.

In 2014, Outotec acquired two new businesses, Republic Alternative Technologies and KALOGEO Anlagenbau, which are included in the data reported.

DATA COLLECTION

Financial data is based on data collection through our ERP and management reporting systems. The figures used in Outotec's consolidated financial statements have been prepared according to the International Financial Reporting Standard. In addition, some data has been collected manually from Microsoft Excel spreadsheets.

For the collection of social performance data, a global master data system based on SAP Human Capital Management was applied. It includes accurate data on Outotec employees globally and covers all business units and the basic information of all employees.

Since 2013 we have received more accurate numbers about training, as several virtual training programs were included in our performance dialogue tool. In addition, Outotec has a global health and safety reporting system for data collection as well as for setting and monitoring common health and safety targets in all Outotec operations. It also provides qualified metrics and covers subcontractors on construction sites.

Outotec introduced its environmental data reporting system in 2009. The data is based on Outotec's financial reporting system, 'Hyperion Financial Management' (HFM), where each business unit reports its environmental figures. After

data collection, the reported figures were retrieved from the HFM system and Microsoft Excel was deployed to carry out calculations. We have a validation check in the reporting tool that highlights changes of over 20 percent compared to the previous year and requires verification by the data controller.

Performance data on environmental aspects have been collected from major business units for electricity, heating, owned or leased company cars, flight emissions, water, paper, recycled waste, and landfill waste. In addition, the combustion of fuels in company-owned combustion sources (scope 1 emissions) and hazardous waste occurring in our research centers, manufacturing workshops, and ceramic plate production plant are included in the report. The sources of owned fuel combustion are identified through separate annual environmental data reports. When required, e-mail correspondence was used to collect the information from the business units.

Environmental data was available for Outotec's most important and largest business units. The smallest offices were not able to report environmental data, because they are located in larger office premises together with other companies. They pay a monthly lump sum to the office providers, and therefore it is not possible to identify electricity, heat, or water consumption. For this group, an average number was calculated based on the available data.

HR DATA AND LABOR PRACTICES

At the end of 2014, Outotec had a total of 4,571 (2013: 4,855; 2012: 4,805) employees. The number decreased by 284 from the previous year due to restructuring and cost saving programs. Temporary personnel accounted for about eight

percent of this total. In addition, Outotec had 454 full-time equivalent contracted persons working in project execution and services. Outotec has employees on all continents; nearly half of them are based in Europe.

Personnel by region	Dec 31, 2014	Dec 31, 2013	Dec 31, 2012
EMEA (including CIS)	2,627	2,891	2,642
Americas	1,214	1,144	1,400
APAC	730	820	763
Total	4,571	4,855	4,805

Employees, key data	2014	2013	2012	GRI indicator
Employees at year end	4,571	4,855	4,805	G4-10
Employees on average	4,776	4,927	4,456	G4-10
Temporary, % of the total number	8	8	9	G4-10
Full-time equivalent contracted persons	454	495	660	G4-10
Share of women in employees, % ^{*)}	18.8	19.6	19.2	G4-LA12
Share of women in management, % ^{**)}	13.1	12.1	15.7	G4-LA12 G4-LA13
Wages and salaries paid, EUR million	362.8	385.8	362.6	G4-EC1
Average age of employees	41.0	40.9	40.7	G4-LA12

^{*)} n = 4,571, coverage 100%

^{**)} n = 1,258 employees in management based on Outotec grading

The low share of women may reflect the typically high share of men in the mining and metallurgical industry historically. There were no reported incidents of any type of discrimination in 2014.

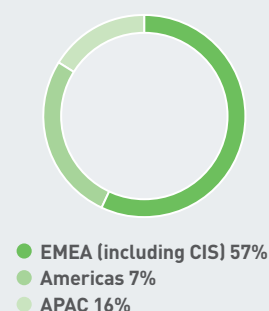
Outotec is committed to close cooperation with local employee representatives, unions and works council based on local practices and regulation.

The Outotec Round Table is a discussion forum for personnel representatives and management on matters concerning the whole company. It is based on the European Works Council directive 94/95 EU, Article 6, and covers all employees in the EU countries as well as Norway and Switzerland. The Outotec Round Table was held twice in 2014. Topics discussed included strategy, acquisitions, rewarding, organizational change, and internal development programs. 23 personnel representatives participated in the meetings.

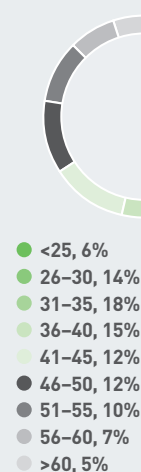
In addition to these meetings, Outotec Council, a sub-committee of Outotec Round Table, had meetings regularly once per quarter and whenever necessary. Outotec Council is the operative body to ensure the smooth administration of the Outotec Round Table. It consists of personnel and management representatives. This forum was used as an additional discussion and information-sharing channel with employee representatives.

51 (2013: 51; 2012: 54) percent of employees are covered by collective bargaining agreements. Binding collective agreements are followed in each country where they are applicable to Outotec employees. The minimum notice periods regarding significant operational changes

PERSONNEL BY REGION



PERSONNEL BY AGE RANGE



n = 4,562, coverage 100%

depend on locations and national legislation, and therefore differ significantly. Notice periods range from 2 to 8 weeks up to one year.

Health and safety topics are not covered in formal agreements with trade unions. Health and safety issues are covered by statutory regulations in different laws, and there is therefore no need for separate agreements.

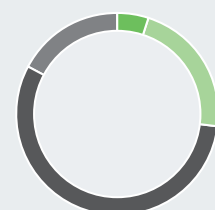
When Outotec starts a new operation in a country, normally an expatriate is sent to integrate the new operation to Outotec. The target is, however, that senior management is hired locally. In 2014, 70 (2013: 77; 2012: 78) percent of our market areas had a local manager.

Employee turnover rate	2014	2014	2013	2013	2012	2012	GRI indicator
	#	%	#	%	#	%	
by age group							G4-LA1
<25	66	24	71	29	22	8	
26-30	104	16	112	18	54	9	
31-35	118	14	106	12	62	10	
36-40	92	13	106	15	50	9	
41-45	76	13	69	11	44	9	
46-50	67	13	47	8	24	6	
51-55	41	9	40	8	38	12	
56-60	33	10	30	8	23	8	
>60	71	31	73	21	47	21	
Total*1	668	15	654	13	364	10	
by gender							G4-LA1
Women	127	15	114	12	102	11	
Men	543	15	558	14	310	8	
by region							G4-LA1
Finland	120	9	65	4	69	5	
Germany	42	8	28	5	32	6	
Rest of Europe	133	35	29	7	28	10	
The Americas	216	18	414	36	174	12	
Australia	70	15	77	14	46	9	
Rest of the world	89	14	55	9	63	11	

*1The reason for the difference in the total number in the category 'employee turnover rate by age group' is missing age information of two persons.

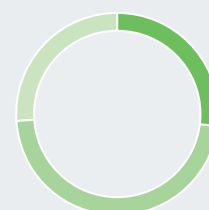
The higher employee turnover in 2014 compared to 2013 is partly a result of personnel reduction due to cost saving programs.

EMPLOYEES BY CATEGORY



- Senior management 5%
- Middle management 22%
- Specialists 56%
- Blue-collar workers 17%

EDUCATIONAL BACKGROUND



- Primary and lower secondary level 27%
- Upper secondary level and lower university degree 47%
- Higher university degree and postgraduate 26%

n = 2,679, coverage 59%

Training	2014	2013	2012	GRI indicator
All types of vocational training and instruction				G4-LA9
Number of employees	1,301	2,704	2,990	
Hours	27,521	67,750	60,184	
Paid educational leave provided by the reporting organization for its employees				G4-LA9
Number of employees	275	744	563	
Hours	2,150	33,162	21,506	
Training or education pursued externally and paid for in whole or in part by the reporting organization				G4-LA9
Number of employees	807	1,395	2,277	
Hours	6,877	40,200	28,187	
Training on specific topics such as health and safety				G4-LA9
Hours	200,979	124,695	49,700	
Training on human rights issues				G4-LA9
Number of employees	1,104	1,039	3,019	
Hours	3,139	1,168	1,509	

In 2014, we focused on safety training for our employees and subcontractors working on our projects, which increased our training hours. In recent years we have also held seminars about prevention of heart diseases and other occupational health issues for employees.

The figures related to vocational training and external training dropped mainly for three reasons: reduced headcount, cost saving programs, and because some big training events that were organized in 2013 were not organized any longer.

Employee categories, gender balance and age structure	2014	2013	2012	GRI indicator
Total number of employees in each employee category*				G4-LA12
Senior management	238	209	126	
Middle management	1,008	969	429	
Professionals	2,536	2,520	2,074	
Blue-collar workers	789	774	842	
Executive Board, %				G4-LA12
Women	29	29	8	
Men	71	71	92	
< 30 years old	0	0	0	
30-50 years	57	64	62	
> 50 years old	43	36	38	
Senior management, %**				G4-LA12
Women	14	13	10	
Men	86	87	90	
< 30 years old	0	0	0	
30-50 years	60	54	61	
> 50 years old	40	46	39	
Middle management, %**				G4-LA12
Women	13	12	19	
Men	87	88	81	
< 30 years old	2	1	4	
30-50 years	66	64	69	
> 50 years old	32	35	27	
Specialists, %**				G4-LA12
Women	27	27	24	
Men	73	73	76	
< 30 years old	19	19	15	
30-50 years	61	59	61	
> 50 years old	20	22	24	
Blue-collar workers, %**				G4-LA12
Women	3	3	3	
Men	97	97	97	
< 30 years old	33	31	31	
30-50 years	52	50	49	
> 50 years old	15	19	20	
Board of Directors, %				G4-LA12
Women	25	29	14	
Men	75	71	86	
< 30 years old	0	0	0	
30-50 years	0	29	29	
> 50 years old	100	71	71	

*| Grading of all employees not completed yet n = 4,472; coverage 92%

**| Data coverage 80% because of local restriction of data reporting

Compensation

Outotec's total compensation in 2014 consisted of:

1) Base salary

2) Short-term incentives

- Outotec's global annual bonus system, or project bonus

3) Long-term incentives

- Share-based Incentive Program for key employees
- Share Savings Plan for all employees

4) Rewards for innovation

5) Ad-hoc rewarding for extraordinary achievements

6) Pension and life insurance benefits

In addition, 169 (2013: 172, 2012: 146) key employees were part of the company's share-based incentive program in 2014.

Outotec has several pension plans in various countries. These plans are mainly classified as defined contribution pension plans. Other post-employment benefits relate to retirement medical arrangements in Germany.

Benefits provided by Outotec	Full-time employees covered, %	Temporary employees covered, %	GRI indicator
Life insurance	82	46	G4-LA2
Health care	80	53	G4-LA2
Disability/invalidity coverage	100	72	G4-LA2
Maternity/paternity leave	97	78	G4-LA2
Retirement provision	63	22	G4-LA2
n= 4,356, coverage 95%			

Read also about fair compensation on page 56 and Financial Statements 2014 on page 30.

R&D DATA

R&D and innovation	2014	2013	2012	GRI indicator
R&D expenditure, EUR million	37.3	48.7	41.6	G4-EN27
R&D expenditure, % of sales	2.7	2.6	2.0	G4-EN27
R&D grants, EUR million	2.3	2.6	1.8	G4-EC4
Amount of new patent applications filed	62	101	70	
New national or regional patents granted	370	419	286	
Amount of patent families	749	702	630	
Proportion of environmental goods and services in order intake, %	90	87	89	G4-EN27

HEALTH AND SAFETY PERFORMANCE

Outotec has one harmonized QEHS management system including QEHS policy, procedures, work instructions and training material aligned with the 'One Outotec' approach. The multi-site matrix certification includes ISO 9001 (Quality

management), ISO 14001 (Environmental management), BS:OHSAS 18001 (Occupational Health and Safety management) and Safety Construction Certificate (SCC) for all our main locations.

Health and safety	2014	2013	2012	GRI indicator
Non-fatal injury arising from or in the course of work	33	54	26	G4-LA6
Fatal injury arising from or in the course of work	0	2	0	G4-LA6
Lost time injury rate (LTIR) (number/1 million working hours)	1.5	1.9	1.9	G4-LA6
Occupational diseases	0	1	0	G4-LA6
Occupational disease rate (number/1 million working hours)	0	0.03	0	G4-LA6
Lost days because of an occupational accident or disease	173	307	285	G4-LA6
Lost day rate (number/1 million working hours)	7.6	10.6	21.8	G4-LA6
Absentee rate, %	0.9	0.8	1.3	G4-LA6
Total workforce represented in health and safety committees, %	98	NA	NA	G4-LA5

n = 9,789 including our own employees and subcontractors on project sites

We also collect data from near-miss cases and continue to further develop our Health and Safety Management System to prevent any accidents.

The health and safety committees monitor and collect feedback and discuss health and safety related issues. They typically operate on location and project level at Outotec.

SUPPLIER DATA

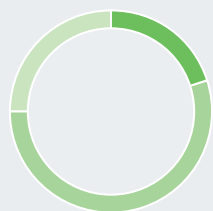
Outotec had approximately 3,500 direct and active suppliers in 2014. These represent but are not limited to distributors, component manufacturers, equipment manufacturers, logistics companies, engineering companies, construction companies and other service providers. Suppliers, set-ups and combinations vary project

by project. The majority of the suppliers are either component manufacturers or equipment manufacturers. In 2014, the majority of Outotec's suppliers were based in Germany, Australia, Finland and Sweden.

The total spend on customer-related purchasing in 2014 was approximately EUR 800

[2013: 980; 2012: 1,150] million. The amount was smaller than in the previous year because of decreased order intake and sales in a weak market situation. The majority of purchasing, approximately 73 percent, took place in the Europe, Middle East and Africa region (EMEA).

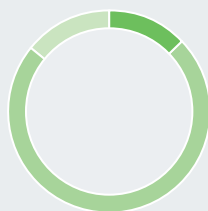
LOCATION OF SUPPLIERS



- Americas 20%
- EMEA 55%
- APAC 25%

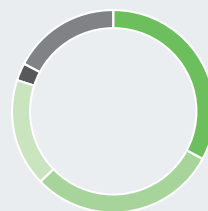
n = 3,500 direct and active suppliers

SUPPLY BY REGION



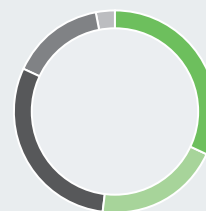
- Americas 13%
- EMEA 73%
- APAC 14%

SUPPLY SPEND BY CATEGORY



- Components and systems 33%
- Small parts, production support materials and services 30%
- Metal products and basic materials 17%
- Plastic and fiber products and linings 3%
- Indirect 17%

CO₂ EMISSIONS BY SUPPLY CATEGORY



- Components and systems 32%
- Small parts 20%
- Metal products 30%
- Plastics 15%
- Indirect 3%

ENVIRONMENTAL PERFORMANCE

The bulk of Outotec's operations involve engineering and business management in offices located in 27 countries. In addition, our operations include two research centers in Finland and Germany, two manufacturing workshops in Finland, assembly shops in Brazil, Canada, China, and the USA, a ceramic plate production plant in Finland, and several warehouses. However, the majority of Outotec's manufacturing is outsourced.

The environmental impact of the office work is relatively small and is managed through our QEHS management system.

Outotec adheres to the principles of sustainable development, pollution prevention and sound environmental management in its own operations. The management's commitment to continuous improvement of our environmental performance is visible in our target setting and results.

Our impact on the environment is monitored by identifying and evaluating the environmental aspects of offices, research centers, manufacturing workshops, construction sites and industrial plants. The aspects related to significant impacts are considered when we set our environmental objectives and annual targets. When selecting new office premises, the environmental criteria are taken into account. For example, the new Outotec facilities in Espoo, Finland, and Oberursel, Germany fulfill LEED® Gold requirements. Leadership in Energy and Environmental Design (LEED) is a globally recognized green building certification program.

We intend to operate with minimum input of energy and materials and therefore the consumption of electricity, heating and water are recorded annually. At the research centers electric power and natural gas consumption for test purposes is recorded monthly. All our Finnish manufacturing units and the Pori research center are committed to the Federation of Finnish Technology Industries' energy efficiency agreements for 2008-2016 and committed to save nine percent in energy consumption compared to the baseline year, 2006. We have set local or unit-specific targets for the energy efficiency of operations.

Our waste management system provides for the collection, sorting, storage and disposal of waste in our premises. Waste management improved in 2014 as a result of the replacement of paper and plastic cups by ceramic coffee mugs and the implementation of centralized waste recycling stations. Everyone working for Outotec is requested to separate waste for sorted collection. Where hazardous waste, such as radioactive, flammable, explosive, toxic, corrosive or bio-hazardous are being considered for disposal, the local legal requirements or customer's requirements at construction sites are considered together with the use of specialized contractors for the disposal.

From our manufacturing and R&D activities no significant spills were reported in 2014.

Read about our targets related to environmental performance on page 16 and 17.

Energy

Energy consumption, TJ	2014	2013	2012	GRI indicator
Direct energy consumption:	36.8	38.0	38.2	G4-EN3
Propane gas	7.9	11.4	15.7	
Light fuel oil	0.3	0.4	0.6	
Coal, coke, semi coke	0.2	4.1	2.0	
Natural gas	22.7	15.0	13.0	
Diesel and gasoline	5.7	7.1	6.9	
Indirect energy consumption:	116.1	118.8	126.7	G4-EN3
Electricity (incl. cooling)*1	71.8	70.1	72.9	
District heating	43.2	47.5	52.6	
Steam	1.1	1.2	1.2	
TOTAL energy consumption	152.9	156.8	164.9	G4-EN3
Energy intensity (energy, TJ/EUR 1 million sales)	0.11	0.08	0.08	G4-EN5

*1) MWh converted to TJ: 2014: 19,947 MWh (2013: 19,467 MWh; 2012: 20,244 MWh)

In 2014 Outotec's total energy consumption decreased by two percent compared to 2013.

Energy consumption and emissions in Finnish units	2014	2013	2012	GRI indicator
Pori research center and Turula works				
Energy consumption, TJ	38.5	43.1	44.7	G4-EN3
Energy saved due to efficiency improvements, TJ compared to base year	9.4	4.8	3.2	G4-EN6
Emissions, tonnes CO ₂ -e	2,585	2,900	3,010	G4-EN15 G4-EN16
Emissions avoided, tonnes CO ₂ -e	628	313	203	G4-EN19
Lappeenranta works				
Energy consumption, TJ	18.3	17.9	21.2	G4-EN3
Energy saved due to efficiency improvements, TJ compared to base year	1.8	2.2	-	G4-EN6
Emissions, tonnes CO ₂ -e	1,226	1,200	1,423	G4-EN16
Emissions avoided, tonnes CO ₂ -e	120	146	-	G4-EN19
Turku works				
Energy consumption, TJ	11.0	13.8	24.9	G4-EN3
Energy saved due to efficiency improvements, TJ compared to base year	5.8	3.0	-	G4-EN6
Emissions, tonnes CO ₂ -e	740	923	1,668	G4-EN16
Emissions avoided, tonnes CO ₂ -e	387	203	-	G4-EN19

Emissions

Greenhouse gas emissions, tonnes of CO ₂ -e	2014	2013	2012	GRI indicator
Scope 1 emissions (own fuel combustion, company cars)	3,774	3,910	4,190	G4-EN15
Scope 2 emissions (purchased heat and electricity)	8,746	9,160	9,409	G4-EN16
Scope 3 emissions (air travel and commuting)	22,267	32,235	18,156 ^{*)}	G4-EN17
Flight emissions, tonnes of CO ₂ /EUR 1 million sales	14.6	15.8	7.6 ^{*)}	G4-EN18
Total greenhouse gas emissions, tonnes of CO ₂ /EUR 1 million sales	24.8^{**)}	23.7	15.2 ^{*)}	G4-EN18
Total greenhouse gas emissions	34,768	45,305	31,755 ^{*)}	G4-EN15 G4-EN16 G4-EN17
Greenhouse gas emissions avoided through the use of five Outotec technologies	5,900,000	5,400,000	4,600,000	G4-EN19

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard¹ was used to calculate Scope 1 and Scope 2 emissions. Emission factors were retrieved from GHG Protocol's calculation tool 'GHG emissions from purchased electricity, heat of steam'.

The acquisition of Republic Alternative Technologies did not contribute to any changes in total scope 1 and 2 greenhouse gas (GHG) emissions. Natural gas consumption increased due to this acquisition.

GHG emissions from air travel are the biggest single source of Outotec's emissions. Our current video conferencing service was gradually upgraded across the company and training sessions were organized.

In 2014, the number of installed video conferencing systems increased to 56. In addition to video conferencing, Sametime, teleconferences and Skype are used for internal meetings. There are no user statistics on our use of Sametime and Skype. In 2014 emissions per flight kilometer decreased by 25 percent due to a new Travel Policy that led to a decrease in business class

trips. Economy class flights produce less CO₂ emissions compared to business class travel.

Flights to visit our customers are an integral part of Outotec's business activities, by which means we contribute indirectly to avoiding emissions through the use of our technology solutions and services. The positive impact of Outotec's business travels can be best illustrated by comparing our annual greenhouse gas emissions in 2014, 34,787 (2013: 45,305) tonnes CO₂-e with the emissions avoided through the use of our five technologies, 5,900,000 (2013: 5,400,000) tonnes CO₂-e.

Outotec has paid attention to the use of responsible air carriers and hotels. 90 percent of the flights used by our employees are operated by Finnair and Star Alliance members. Lufthansa and Finnair, for instance, use relatively new fleets, which generally produce less emissions. When Outotec makes agreements with hotels, hotels with a social responsibility policies and systems in place are preferred.

Company cars in Finland	2014	2013	2012	GRI indicator
Company car emissions, g CO ₂ -e/km	123	132	149	G4-EN15
Reduction from 2008, %	35	31	22	

According to Outotec's company car policy, employees are incentivized when they take a car with less than 120 g/km CO₂ emissions. This is one reason why g CO₂/km and the total emissions decreased in 2014. Out of 190 company cars in Finland in 2014, 118 consume less than 120 g CO₂/km.

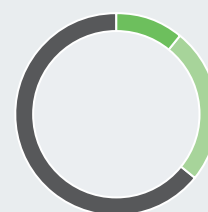
Volatile organic compounds (VOCs) emissions from paint shops	2014	2013	2012	GRI indicator
VOCs emissions, tonnes	15.6	15.6	10.3	G4-EN21

We calculate VOC emissions from our paint shops based on annual paint consumption.

^{*)}Due to the changes in the methodology of calculating flight emissions in 2013, the figures for 2012 are not comparable. The new CO₂-e calculations for flight emissions are based on the guidelines produced by DEFRA/DECC's GHG Conversion Factors.

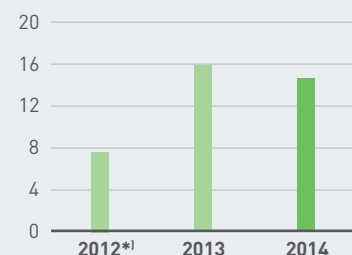
^{**)}Total greenhouse gas emissions in 2014, tonnes of CO₂ decreased by 23%, however, sales decreased by 27%.

SCOPE 1, 2 AND 3 EMISSIONS



- **Scope 1 emissions**
(own fuel combustion, company cars) 11%
- **Scope 2 emissions**
(purchased heat and electricity) 25%
- **Scope 3 emissions**
(air travel and commuting) 64%

FLIGHT EMISSIONS, TONNES OF CO₂/MILLION EURO SALES



^{*)} not comparable due to different calculation method

Materials

Data on steel consumption in Outotec workshops is included in our environmental data reporting since 2012. Energy Products of Idaho, which was acquired by Outotec at the end of 2011, is included in the steel consumption figures, which means that the 2012 figure was restated.

We manufacture high-tech ceramics in Turku, Finland, for use in Outotec filters. This unit used 113 tonnes of ceramics in 2014.

Outotec's Finnish workshops in Lappeenranta, Turula and Turku report the amount of packaging they use annually to the Environmental Register of Packaging PYR Ltd. In 2013, Pori research center was included in the reporting.

Materials used, tonnes	2014	2013	2012	GRI indicator
Paper	70.9	94.7	131.3	G4-EN1
Steel	6,200	9,300	6,946.9 New: 8,919	G4-EN1
Ceramics	113	121	300	G4-EN1
Cardboard packaging	13.8	11.4	9.9	G4-EN1
Plastic packaging	1.7	7.6	2.0	G4-EN1
Metal packaging	1.6	1.0	1.5	G4-EN1
Wood packaging	230.1	851.5	986.2	G4-EN1

Waste

The acquisition of Republic Alternative Technologies, a premium coated titanium anode engineering and fabrication company based in Cleveland, USA, contributed to an increase of landfill and incinerated waste.

A small amount of hazardous waste is formed in the final surface treatment of filter presses in the Lappeenranta works. In addition, oily waste from lubricants used in the Turula works is hazardous.

The hazardous waste is sent for treatment into local hazardous waste treatment facilities.

Waste, tonnes	2014	2013	2012	GRI indicator
Waste recycled	1,346.0	1,522.8	2,311.5	G4-EN23
Landfill waste and incinerated waste	1,481.9	1,250.7	1,682.4	G4-EN23
Hazardous waste	98.4	242.5 ^{*)}	28.6	G4-EN23
Total waste	2,926.3	3,016.0	4,022.5	G4-EN23
Paper recycled	151.3	146.0	164.4	G4-EN23

^{*)} Outotec is building a new dewatering technology center in Lappeenranta and found contaminated land from earlier operations of an old laundry at the site. This land had to be removed, which increased the volume of our hazardous waste.

Water

The total water usage decreased in 2014 due to a reduced amount of river water for our test work at the research center in Pori.

Water is purchased locally from municipal water suppliers, and wastewater is sent to municipal wastewater systems. Because our workshops are mainly assembly shops, no process water is discharged. Outotec's research center in Pori uses river water for cooling purposes in their test facilities. After use, the water is channeled back to the river. We also monitor the water consumption at our premises.

During 2013, leakage from a drainage well was discovered in our Lappeenranta works. The incident was investigated with Lappeenranta city's environmental authorities and the outcome of the investigation in 2014 was that Outotec was not prosecuted for any offense.

Water consumption, m3/year	2014	2013	2012	GRI indicator
Drinking water	53,506	53,945	69,300	G4-EN8
River water for cooling	9,548	49,949	20,727	G4-EN8
Total water usage	63,054	103,894	90,027	G4-EN8

GRI INDEX AND UN GLOBAL COMPACT

Based on its own assessment, Outotec has self-declared this report to be compliant with the GRI G4 guidelines in accordance with the core level. The compliance has been checked by a third party, Ecobio Ltd.

	GRI Content	Reference page	Reported	Global Compact principles
	General Standard Disclosure			
	Strategy and analysis			
G4-1	CEO's statement	CEO's message, p. 2	Fully	
G4-2	Key impacts, risks, and opportunities	Megatrends pose great opportunities, p. 10 Defining the topics that matter, p. 28 Making a difference in the long run, p. 14	Fully	
	Organizational profile			
G4-3	Name of the organization	This is Outotec, p. 5	Fully	
G4-4	Primary brands, products, and/or services	This is Outotec, p. 5	Fully	
	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	This is Outotec, p. 5	Fully	
G4-5	Location of organization's headquarters	This is Outotec, p. 5	Fully	
G4-6	Number of countries where the organization operates	This is Outotec, p. 5	Fully	
G4-7	Nature of ownership and legal form	This is Outotec, p. 5	Fully	
G4-8	Markets served	This is Outotec, p. 5	Fully	
G4-9	Scale of the reporting organisation	This is Outotec, p. 5	Fully	
G4-10	Breakdown of workforce	HR data and labor practices, p. 61	Fully	6
G4-11	Coverage of collective bargaining agreements	HR data and labor practices, p. 59	Fully	3
G4-12	Organisation's supply chain	Creating value from the ground up, p. 18 Sustainable supply chain, p. 50	Fully	
G4-13	Significant changes during the reporting period regarding size, structure, or ownership	This is Outotec, p. 5	Fully	
G4-14	Addressing the precautionary approach or principle	Our approach to risk management, p.46	Fully	
G4-15	Externally developed charters, principles, or other initiatives endorsed.	www.outotec.com/sustainability	Fully	
G4-16	Memberships in associations	www.outotec.com/sustainability	Fully	
	Identified material aspects and boundaries			
G4-17	Entities included in the organization's consolidated financial statements	Financial Statements 2014, p. 59 at www.outotec.com/investors	Fully	
G4-18	Process for defining report content	Defining the topics that matter, p. 28 An active dialogue, p. 22	Fully	
G4-19	Material aspects	Defining the topics that matter, p. 28	Fully	
G4-20	Aspect boundary within the organisation	About this report, p. 58 Defining the topics that matter, p. 29	Fully	
G4-21	Aspect boundary outside the organization	About this report, p. 58 Defining the topics that matter, p. 29 The carbon footprint of our supply chain, p. 52	Fully	
G4-22	Explanation of re-statements	This is Outotec, p. 5	Fully	
G4-23	Significant changes from previous reporting periods in the scope and aspect boundaries	This is Outotec, p. 5 About this report, p. 58	Fully	
	Stakeholder Engagement			
G4-24– G4-27	Stakeholder engagement	An active dialogue, p. 22	Fully	
	Report profile			
G4-28– G4-31	Report profile	About this report, p. 58 Contact information, p. 72	Fully	
G4-32	GRI content index	GRI Index and UN Global Compact, p. 67	Fully	
G4-33	External Assurance	Independent assurance, p. 71	Fully	

GRI Content		Reference page	Reported	Global Compact principles
Governance				
G4-34	Governance structure	Responsible business practices, p. 45	Fully	
G4-35	Delegating authority for sustainability topics	Sustainability governance, p. 47	Fully	
G4-36	Executive-level positions with responsibility for sustainability topics	Sustainability governance, p. 47	Fully	
G4-37	Consultation with stakeholders	Sustainability Advisory Council, p. 22	Fully	
G4-38	Composition of the Board of Directors	Corporate Governance Statement, p. 3	Fully	
G4-39	Position of the Chair of the Board	Corporate Governance Statement, p. 3	Fully	
G4-40	Selection of the Board	Corporate Governance Statement, p. 3	Fully	
G4-41	Avoiding conflicts of interest	Developing interactive governance, p. 45	Fully	
G4-42	Board's role in setting the organization's purpose, values and strategy	Corporate Governance Statement, p. 4	Fully	
G4-44	Board's performance evaluation	Corporate Governance Statement, p. 4	Fully	
G4-45	Board's role in the identification and management of risks	Corporate Governance Statement, p. 4	Fully	
G4-46	Reviewing the effectiveness of risk management	Corporate Governance Statement, p. 4	Fully	
G4-47	Frequency of risk reviews	Corporate Governance Statement, p. 4	Fully	
G4-48	Formal approval of the organization's sustainability report	Executive Board	Fully	
G4-49	Communicating critical concerns	Sustainability governance, p. 47	Fully	
G4-50	Nature and number of critical concerns communicated to the Board	Sustainability governance, p. 47 First year with compliance helpline, p. 48	Fully	
G4-51	Remuneration policies for the Board and senior executives	Corporate Governance Statement, p. 8	Fully	
G4-54	Ratio of the annual total compensation for the organization's highest-paid individual to the median annual total compensation	Corporate Governance Statement, p. 9	Partly	
Ethics and Integrity				
G4-56	Organization's values, principles and codes	Commitment to common values, p. 47	Fully	10
G4-57	Mechanisms for finding advice on ethical and lawful behavior	First year with compliance helpline, p. 48	Fully	10
G4-58	Reporting concerns about unethical or unlawful behaviour	First year with compliance helpline, p. 48	Fully	10
Specific standards disclosure				
ECONOMIC PERFORMANCE INDICATORS				
Management approach to economic responsibility		Added value to stakeholders, p. 20	Fully	
G4-EC1	Direct economic value generated and distributed	Added value to stakeholders p. 20	Fully	
G4-EC2	Fisks and opportunities due to climate change	Global forces drive our business, p. 10	Fully	7
G4-EC3	Employee benefit obligations	Compensation, p. 62 Fair compensation, p. 56	Partly	
G4-EC4	Financial assistance received from government	R&D data, p. 62	Fully	
G4-EC6	Proportion of senior management hired from the local community	HR data and labor practices, p. 59	Fully	6
G4-EC7	Development and impact of infrastructure investments and services supported	Commitment to external initiatives, www.outotec.com/sustainability	Fully	
G4-EC8	Significant indirect economic impacts	Added value for stakeholders, p. 20	Partly	
G4-EC9	Spending on local suppliers	Sustainable supply chain, p. 51	Fully	
ENVIRONMENTAL PERFORMANCE INDICATORS				
Management approach to environmental responsibility		Environmental performance, p. 64	Fully	
G4-EN1	Materials used	Environmental performance, p. 66	Fully	7,8
G4-EN3	Energy consumption within the organization	Environmental performance, p. 64	Fully	7,8
G4-EN4	Energy consumption outside the organization	Sustainable offering for customers, p. 32	Partly	8
G4-EN5	Energy intensity	Environmental performance, p. 64	Fully	8
G4-EN6	Reduction of energy consumption	Environmental performance, p. 64	Fully	8,9

	GRI Content	Reference page	Reported	Global Compact principles
G4-EN7	Reductions in energy requirements of products and services	Sustainable offering for customers, p. 32	Partly	8,9
G4-EN8	Water withdrawal	Environmental performance, p. 66	Fully	7,8
G4-EN15– G4-EN17	Greenhouse gas emissions [Scope 1, 2, 3]	Environmental performance, p. 65	Fully	7,8
G4-EN18	Greenhouse gas emissions intensity	Environmental performance, p. 65	Fully	8
G4-EN19	Reduction of greenhouse gas emissions	Environmental performance, p. 65 Making a difference in the long run, p. 14	Fully	8,9
G4-EN21	NOx, SOx, and other significant air emissions	Environmental performance, p. 65	Partly	7,8
G4-EN23	Waste by type and disposal method	Environmental performance, p. 66	Fully	8
G4-EN24	Total number and volume of significant spills	Environmental performance, p. 64	Partly	8
G4-EN25	Hazardous waste	Environmental performance, p. 66	Fully	8
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Making a difference in the long run, p. 14 Sustainable offering for customers, p. 32 R&D and innovation, p. 34 Improving product safety, p. 30	Partly	7,8,9
G4-EN29	Compliance with environmental laws	Responsible business practices, p. 45	Fully	8
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	Close to 50% spent on local suppliers, p. 51	Partly	8
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain	The carbon footprint of supply chain, p. 52	Fully	8
G4-EN34	Number of grievances about environmental impacts	Mitigating negative impacts of the industry, p. 34 Environmental performance, p. 64	Fully	8
SOCIAL PERFORMANCE INDICATORS				
Labor practices and decent work				
	Management approach to labor practices and decent work	Development of our people, p. 54 HR data and labor practices, p. 59	Fully	
G4-LA1	Total number and rate of employee turnover by age group, gender, and region	HR data and labor practices, p. 60	Partly	6
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	HR data and labor practices, p. 62	Partly	
G4-LA4	Minimum notice period(s) regarding significant operational changes	HR data and Labor practices, p. 59	Partly	3
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	Health and safety performance, p. 63	Fully	
G4-LA6	Rates of injury, occupational diseases, lost days and absenteeism, and total number of work-related fatalities by region	Health and safety performance, p. 63	Partly	
G4-LA8	Health and safety topics covered in formal agreements with trade unions	HR data and labor practices, p. 59	Fully	1
G4-LA9	Average hours of training per year per employee category	HR data and labor practices, p. 60	Partly	6
G4-LA10	Programs for skills management and lifelong learning	Development of our people, p. 54	Fully	
G4-LA11	Percentage of employees receiving regular performance and career development reviews	Development of our people, p. 54	Partly	6
G4-LA12	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	HR data and labor practices, p. 59	Fully	6
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	Close to 50% spent on local suppliers, p. 51	Partly	
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	Close to 50% spent on local suppliers, p. 51 Developing interactive governance, p. 46	Fully	
G4-LA16	Number of grievances about labor practices	First year with compliance helpline, p. 48	Fully	
Human rights				
	Management approach to human rights	Equal opportunities, p. 57 Safety, p. 30 Commitment to common values, p. 47	Fully	
G4-HR2	Employee training on policies and procedures concerning human rights relevant to operations	Commitment to common values, p. 47 HR data and labor practices, p. 59	Fully	1
G4-HR3	Total number of incidents of discrimination and actions taken	HR data and labor practices, p. 59	Fully	6

	GRI Content	Reference page	Reported	Global Compact principles
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be at significant risk	Developing interactive governance, p. 46 First year with compliance helpline, p. 48 New tools for mitigating risks in the supply chain, p. 52	Partly	3
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor	Developing interactive governance, p. 46 New tools for mitigating risks in supply chain, p. 52	Fully	5
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor	New tools for mitigating risks in supply chain, p. 52	Fully	4
G4-HR8	Total number of incidents of violations involving rights of indigenous people and actions taken	Developing interactive governance, p. 46	Fully	1
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	Sustainable supply chain, p. 51	Partly	2
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain	Sustainable supply chain, p. 52	Fully	2
G4-HR12	Number of grievances about human rights impacts	First year with compliance helpline, p. 48	Fully	1
	Society			
	Management approach to society	Our Agenda 2020, p. 15 An active dialogue, p. 22 NGOs and local communities, p. 26	Fully	
G4-S01	Local community engagement, impact assessments, and development programs	An active dialogue, p. 22 NGOs and local communities, p. 26	Fully	1
G4-S02	Operations with significant negative impacts on local communities	Developing interactive governance, p. 46	Fully	1
G4-S03	Total number and percentage of operations assessed for risks related to corruption	Developing interactive governance, p. 46	Partly	10
G4-S04	Communication and anti-corruption training	Commitment to common values and Code of Conduct, p. 48	Fully	10
G4-S05	Confirmed incidents of corruption and actions taken	Developing interactive governance, p. 46 First year with compliance helpline, p. 48	Fully	10
G4-S06	Total value of political contributions	NGOs and local communities, p. 26	Fully	10
G4-S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Responsible business practices, p. 46	Fully	
G4-S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Responsible business practices, p. 46	Fully	
G4-S09	Percentage of new suppliers that were screened using criteria for impacts on society	Close to 50% spent on local suppliers, p. 51	Partly	
G4-S010	Significant actual and potential negative impacts on society in the supply chain	The carbon footprint of our supply chain, p. 52	Fully	
G4-S011	Number of grievances about impacts on society	Responsible business practices, p. 46	Fully	
	Product responsibility			
	Management approach to product responsibility	Safety, p. 30 Sustainable offering for customers, p. 32	Fully	
G4-PR1	Health and safety impacts of products and services	Improving product safety, p. 30 Annual targets, p. 17	Fully	
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services	Responsible business practices, p. 46	Fully	
G4-PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information	Improving product safety, p. 30	Partly	
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling	Responsible business practices, p. 46	Fully	
G4-PR5	Results of surveys measuring customer satisfaction	An active dialogue, p. 22	Fully	
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	Responsible business practices, p. 46 Improving product safety, p. 31	Fully	

INDEPENDENT ASSURANCE REPORT – OUTOTEC SUSTAINABILITY REPORT 2014

TO THE MANAGEMENT OF OUTOTEC OYJ

Insinööritoimisto Ecobio Oy (hereafter Ecobio) has been commissioned by Outotec Oyj (hereafter Outotec) to perform a limited third-party assurance engagement regarding the content of Outotec's Sustainability Report for 2014.

OUTOTEC'S RESPONSIBILITY

Outotec was responsible for the collection, preparation and presentation of the information in the Sustainability Report (hereafter Sustainability Information) according to the Sustainability Reporting Guidelines (GRI G4) set up by the Global Reporting Initiative (GRI). Ecobio, as an independent assessor was not involved in the data gathering and preparation of the Sustainability Information, apart from the Independent Assurance. The Management of Outotec has approved the information provided in the Sustainability Report.

PRACTITIONER'S RESPONSIBILITY

Ecobio's responsibility was to present a conclusion on the Sustainability Information subject to the assurance performed by Ecobio.

The scope of work included assurance of completeness and correctness of information presented by Outotec in the Sustainability Report 2014. The assurance engagement was limited to the non-financial performance data disclosed in the Sustainability Report for the reporting period of January 1st, 2014 to December 31st, 2014.

The Sustainability Information assured covered the Standard Disclosures in accordance with the core-level option, including the reported Environmental and Social Performance Indicators. In addition, the level of the consistency of the Economic Performance Indicators reported was checked against the GRI G4 Sustainability Reporting Guidelines.

Ecobio disclaims any liability or responsibility for any third party decision based upon this assurance report.

METHODOLOGY

Ecobio based the assurance process on the following guidelines and standards: the Global Reporting Initiative Sustainability Reporting Guidelines GRI G4, the International Standard on Assurance Engagements 3000 (ISAE3000) and Outotec's internal reporting guidelines. The assurance process was performed utilizing Ecobio's internally developed GRI assurance tool, covering the principles, standard disclosures and indicators of the GRI G4 Guidelines. The Standard Disclosures were assessed based on a sampling plan composed by Ecobio.

Concerning limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained. This assurance engagement was conducted from January to March 2015. The assurance process included:

- Interviewing employees responsible for data collection and reporting at Outotec's group level.

- Evaluating procedures for gathering, analyzing, and aggregating quantitative data for the Sustainability Report 2014 as well as performing cross-checks on a sample basis concerning the reported sustainability data.
- Checking the internal guidelines of the data collection.
- Checking the sufficiency of the documentation of the data gathering process.
- Checking the consistency of the Sustainability Report 2014 compared to the GRI G4 Sustainability Reporting Guidelines.

CONCLUSIONS

Based on the work described in this report, nothing has come to our attention that would cause us to believe that the information presented in Outotec's Sustainability Report 2014 is not fairly stated, in all material respects, or that it would not comply with the Reporting Criteria stated before.

OBSERVATIONS AND RECOMMENDATIONS

Based on our limited assurance engagement we provide the following observations and recommendations related to GRI Sustainability Reporting principles. These observations and recommendations do not affect the conclusions presented earlier.

- In general, the report is comprehensive, well-structured and claims are reported in a reasonable fashion.
- The transition to the GRI G4 guidelines led to an updated view of material issues. The updated materiality assessment is comprehensive taking into account all the different dimensions of sustainability. The process for defining the report content could however be described more in detail.
- Stakeholder inclusiveness has been developed and improved substantially. We recommend keeping an active dialogue with identified stakeholders to maintain a high level on inclusivity in future reporting periods.
- Outotec has made further progress on including supplier performance and project execution within the reporting boundary, which is consistent with the work done during previous reporting periods.
- To improve consistency in data gathering and compilation, it is recommended to further elaborate the documentation of the work processes and the internal guidelines for data gathering to take into account all aspects of the report content. By improving the documentation the accuracy and completeness of future reports will be enhanced.

PRACTITIONER'S INDEPENDENCE AND QUALIFICATIONS

Ecobio is an independent consulting company that specializes in environmental, health and

safety management with over 25 years of history. Ecobio provides corporate sustainability and environmental consultancy services, combined with training, modelling, research and planning, for companies in the infrastructure, industry and service sectors. Ecobio's assessors are skilled and experienced within non-financial assurance and has good knowledge of industry related sustainability issues.

As an independent consultancy, Ecobio has no financial dependencies on Outotec beyond the scope of this engagement. Ecobio has conducted this assurance independently, and there has been no conflict of interest.

Helsinki, 16th of March 2015
Insinööritoimisto Ecobio Oy



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FROM THE GROUND UP

Outotec's customers in the minerals and metals processing, renewable energy production and industrial water treatment industries need technologies that allow them to make the best possible use of increasingly limited raw materials.

By making prudent choices today, we can ensure the prosperous growth of businesses and societies worldwide, while preserving the planet for the benefit of future generations. This is our mission: sustainable use of Earth's natural resources.

This is where we see modern society. Let's not forget that Outotec's solutions make all this possible. Our technologies provide the backbone of our customers' operations, and the full life-cycle support we provide ensures the best return on their investments.

We are technology partner to the world's major resources companies. Their facilities are where you'll find our varied offering at work. They in turn supply the materials that underpin the infrastructure of our lives.

We all understand by now that natural resources of all kinds require more efficient, environmentally friendly treatment. We answer this challenge by developing breakthrough technologies which utilize natural resources and raw materials efficiently. They also recycle materials and reduce energy and water consumption, waste, and emissions, while optimizing a plant's lifetime operating costs.

All this is underpinned by decades of experience as well as constant innovation at our in-house R&D centers. Our people and their expertise, not to mention their commitment and drive, are what make all this possible.

The planet's inner layers are the source of the metals and minerals that represent Outotec's heritage. Our experts now look beyond the use phase of a variety of resources, also including water and biomass, to examine their entire life cycles. Deep process knowledge of these raw materials – the building blocks of our lives – is our most important asset.



For the whole story,
please visit our
YouTube channel.



Outotec provides leading technologies and services for the sustainable use of Earth's natural resources. As the global leader in minerals and metals processing technology, we have developed many breakthrough technologies over the decades for our customers in metals and mining industry. We also provide innovative solutions for industrial water treatment, the utilization of alternative energy sources and the chemical industry. Outotec shares are listed on NASDAQ OMX Helsinki. **www.outotec.com**