



# Sustainability Supplement 2017

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## About this Supplement

Metso publishes its sustainability data annually, and this Sustainability Supplement contains quantitative data for the 2017 calendar year. This report has been prepared in accordance with the GRI Standards: Core option. Metso has reported its sustainability principles, targets and achieved progress since 2002.

The scope of our reporting is Metso Corporation, unless otherwise stated. This scope of reporting excludes associated companies and joint ventures. Supplier information is provided related to the spending on local suppliers, sustainability supplier auditing, the lost time incident frequency (LTIF) of contractors and supervised workers, and the CO<sub>2</sub> emissions of purchased goods and services. We present the sustainability data at the corporation level. Any other division of the reported data is noted separately.

The GRI reporting principles for defining report content have been taken into consideration while producing the sustainability related contents.

Metso's annual reporting consists of the Sustainability Supplement, Annual Review, Financial Statements, and Corporate Governance Statement. The GRI and sustainability data are presented in separate sections of this Supplement: "GRI content index" and "Key performance indicators".

PricewaterhouseCoopers Oy has provided assurance on the sustainability information disclosed in Metso's Sustainability Supplement 2017 as an independent third party. The scope of the assured information is indicated in the independent practitioner's assurance report on page 40 of this Supplement.

## How to read Metso's reports for 2017

Metso has published four reports that together form the Annual Report for 2017. This Sustainability Supplement has been published as a PDF-file in English. The "Read more" section contains additional sources and information about the topics presented.

To read all of the four reports, the Annual Review, the Financial Statements, the Corporate Governance Statement and the Sustainability Supplement, please visit our website [www.metso.com/2017](http://www.metso.com/2017). On the website, you can read our Annual Review, Financial Statements and Corporate Governance Statement for 2017 as a PDF file in either English or Finnish. This Sustainability Supplement has been externally assured.

## SUSTAINABILITY

The sustainability icon marks sustainability content in our Annual Report.



**Read more**

- > [metso.com](http://metso.com)
- > [metso.com/2017](http://metso.com/2017)
- > [twitter.com/metsogroup](https://twitter.com/metsogroup)
- > [facebook.com/metsoworld](https://facebook.com/metsoworld)
- > [youtube.com/metsoworld](https://youtube.com/metsoworld)



# Sustainability highlights 2017

## 19,895

risk observations were made by Metso people in 2017. Metso strongly encourages active risk observation reporting, as we believe the level of commitment correlates to the number of risk observations.



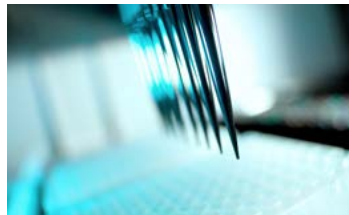
99.8 percent of Metso employees took the revised Code of Conduct training.



58 sustainability supplier audits were conducted in 2017.

## 84 percent

of Metso research and development projects had sustainability targets for projects in 2017. 74 percent of projects had environmental targets and 49 percent had safety targets.



Metso launched a chemical substitution project and a new chemical management system with the first two piloted units.



Metso rolled out a global Net Promoter Score-based initiative for customer experience management.



Photo: Mikko Raskinen

EUR 1 million donation in Finland to Tampere University of Technology, Aalto University and the University of Oulu.



Already 8,000 school children have benefited from Metso's cooperation with Plan International in India.

# Sustainability agenda

We follow and measure the sustainability of our own and our suppliers' operations and have set measurable targets to 2018 and 2020. We have categorized our sustainability work into four focus areas that we consistently follow.

The United Nations set Sustainable Development Goals (SDGs) in 2015. They are part of the wider United Nations' 2030 Agenda for sustainable development, which has been built on the UN's Millennium Development Goals set back in the year 2000. The aim of the goals is to define global priorities to combat economic, environmental and social challenges on a global scale. We support these goals, and many parts of our operations relate to them.

In our sustainability work, we focus on:



## Responsible supply chain

We want to ensure sustainable business operations throughout our supply chain by developing sustainability management practices in Metso and with our suppliers. We closely follow and comply with the legislation on restricted materials.



## Building customer success

We offer environmentally efficient and safe products, solutions and services to achieve customer success. We focus on customer value creation through close partnership and cooperation.



## Contributing to the environment

We constantly work towards reducing the environmental load generated in our operations. We reduce water and energy consumption, emissions and waste in our production.



## Performing together

We provide a healthy and safe working environment in a culture that supports good performance and competence and follows our ethical principles. We work together with local communities to create social value.



© Plan International

### CASE

## SDG4: Ensure inclusive and quality education for all and promote lifelong learning



We sponsor and cooperate with universities and vocational schools globally. In 2017

Metso donated in Finland total of EUR 1 million to Tampere University of Technology, Aalto University and the University of Oulu. Through the donation, Metso wishes to support Finnish scientific research and its application in practice. Metso gave also other donations to support education, e.g. in China and in Australia.

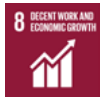
### Already 8,000 Indian school children have benefited from Metso cooperation project with Plan International

We have been cooperating with Plan International, an independent development and humanitarian organization that advances children's rights and equality for girls, for several years. Our current contribution with Plan India helps to develop education in local schools in Alwar, Rajasthan state. Already 8,000 children have benefited from the project.

The project has enhanced school teaching and sanitary facilities, and provided modern learning aids in the form of e.g. math and science labs, computers and library books. The project also includes further development of the teachers' pedagogical skills and disciplinary methods. Some pupils have received training on children's rights. As an outcome, the enrolment in school has improved, and children enjoy coming to school as the teaching methods have been modernized.

CASE

**Goal 8: Promote inclusive and sustainable economic growth, employment and decent work for all**



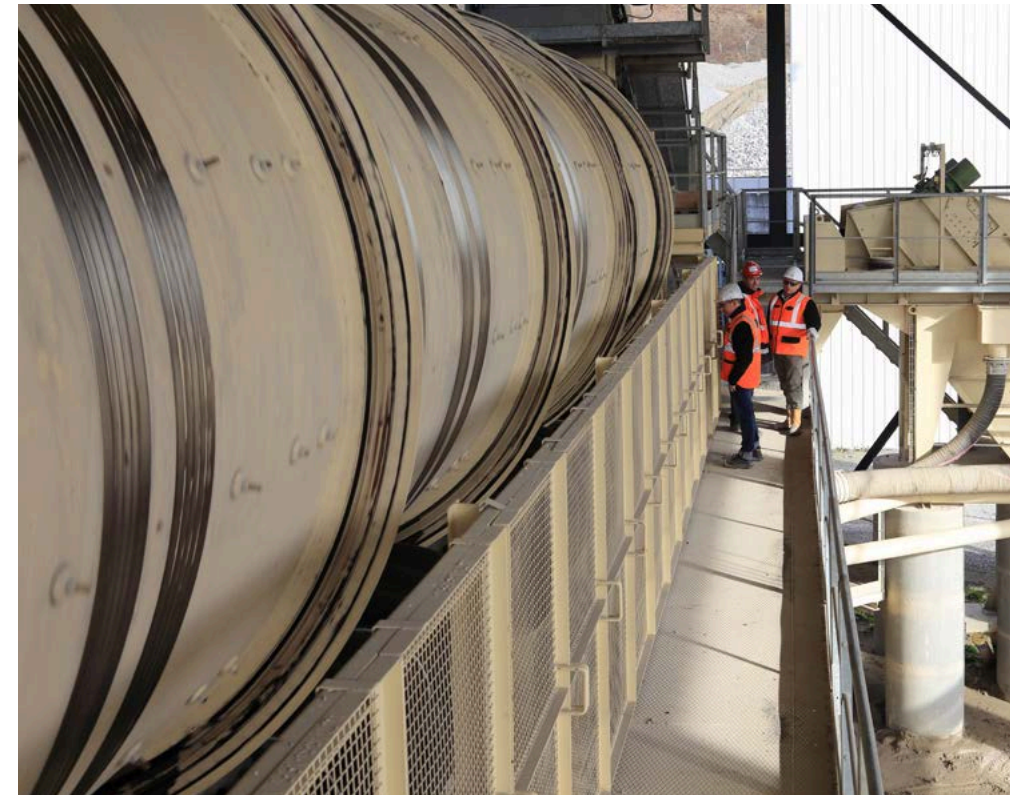
Metso employs over 12,000 people globally. We create employment

throughout our supply chain, and we promote sustainable business in local communities by partnering with and supporting local suppliers. We ensure fair labor practices and promote responsible production and cooperation with local partners in our units globally.

**58 sustainability supplier audits conducted in 2017**

Metso's Code of Conduct and sustainable development criteria for suppliers set the standards that we expect our suppliers to follow, and they are the starting point for any new or existing business relationship. To make sure that our suppliers meet our sustainability criteria, we conduct sustainability supplier audits and visit suppliers' sites to check their sustainability

practices and performance. We audit our suppliers related to health and safety, the environment, human and labor rights, and compliance with laws and regulations. After each supplier sustainability audit, we agree corrective action plans together with the supplier, and Metso makes sure that the suppliers take the necessary action to correct the shortcomings.



CASE

**Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation**



Metso's products and services are designed to help our customers operate safely,

with higher productivity and profitability, while reducing their resource intensity. For example, water and energy savings are cost-effective for our customers. Environmental efficiency and safety are part of our product development targets. Environmental

efficiency includes reduced energy and water consumption; reductions of emissions, noise, dust and waste; and materials efficiency. Safety includes safer designs, ease of access, operation and maintenance, including special service tools.

**Vertimill – energy savings of 924,000 MWh and 547,000 tons of CO<sub>2</sub>-emissions avoided in 2017**

Our Vertimill® grinding mills are globally recognized for

their energy efficiency. Vertimills have been proven to grind more efficiently than the mining industry's traditional ball mills. In addition to higher grinding efficiency Metso Vertimill offers reduced media consumption, lower installation cost and high availability, resulting in a lower total cost of ownership.

CASE

**Goal 12: Ensure sustainable consumption and production patterns**



We have environmental targets for our own operations concerning energy savings, CO<sub>2</sub> reductions, water use and waste going to landfill. In our own production, we want to minimize the use of natural resources, and reuse and recycle water and raw materials to increase the eco-efficiency of our own operations.

For instance, we implemented a closed loop solution for use of water in our rubber plant in Alwar, Rajasthan, India. As a result of this, we save 2.4 million liters of freshwater annually.





Focus area	Sustainability targets and action plan 2016–2018	Progress in 2017
<p><b>Building customer success</b></p>	<ul style="list-style-type: none"> <li>All new R&amp;D* projects have to set environmental efficiency and product safety innovation targets (if applicable) as of 2016 and to verify the results when the project is completed. Solid verification development.</li> <li>More focused customer engagement and Metso responsiveness on sustainability development.</li> <li>Brand awareness: Metso is well-known for its sustainability performance and capabilities.</li> </ul>	<ul style="list-style-type: none"> <li>84% of R&amp;D projects have set environmental efficiency and/or product safety innovation targets.</li> <li>Metso rolled out a global initiative on customer experience management.</li> <li>Metso ranked at Leadership level in CDP's Climate Change evaluation and was selected once more by Forum Ethibel as a constituent of the Ethibel Sustainability Index (ESI) Excellence Europe.</li> <li>Metso continued to be included in FTSE4Good Index, a global responsible investment index.</li> <li>Our systematic work to build Metso brand awareness continued. Metso was recognized as the most outstanding international mining supplier in Chile for a sixth consecutive year, and also for our contribution to safety.</li> <li>In the U.S., Metso was named the American Metal Market's Scrap Equipment Provider of the Year.</li> </ul>
<p><b>Performing together</b></p>	<ul style="list-style-type: none"> <li>Long-term LTIF** target: LTIF&lt;1.</li> <li>Human rights impact assessment conducted, action plans for corrective actions made, and Metso employees and relevant partners trained.</li> <li>Code of Conduct updated, all employees trained and all the relevant partners informed.</li> <li>More focused stakeholder engagement and responsiveness.</li> <li>Employee engagement surveys done regularly and related actions done in teams.</li> <li>KPIs*** to track social benefits for the major sponsorship projects.</li> </ul>	<ul style="list-style-type: none"> <li>LTIF in 2017 was 2.6 (2016: 2.5).</li> <li>We continued to assess our human rights impacts and did various improvement actions, e.g., Metso's grievance channel was opened for all Code of Conduct-related topics, including human rights. All Metso employees have the ability to file a confidential, anonymous report via either telephone or the Internet.</li> <li>Renewed Code of Conduct published in spring 2017, and 99.8% of Metso employees completed the Code of Conduct training within a given 3-month timeline.</li> <li>According to a study we conducted in 2017, our non-Finnish institutional investors regard sustainability-related topics as important drivers behind their investment decisions.</li> <li>A comprehensive, global-level Safety Excellence training program for Metso managers responsible for service and production employees was started.</li> <li>We have set KPIs in place for the major sponsorship projects.</li> </ul>
<p><b>Contributing to the environment</b></p>	<ul style="list-style-type: none"> <li>Water reduction target for each unit in 2016 and 15% in total by 2020.</li> <li>Waste going to landfill reduced by 15% by 2020 from 2014 level, including yearly targets.</li> <li>Energy saving and CO<sub>2</sub>-emission reduction targets for each unit in 2016 and 20% in total by 2020.</li> <li>All production units have to conduct environmental audits with Metso audit tools.</li> <li>Zero environmental accidents.</li> <li>All employees receive environmental training.</li> <li>Externally assured CO<sub>2</sub> levels of procurement, logistics and business travel.</li> </ul>	<ul style="list-style-type: none"> <li>Water consumption was reduced by 3.4%.</li> <li>We decreased the amount of landfill waste, leaving the share at 36% of total waste.</li> <li>A total of 51,833 MWh (12.6%) of energy has been saved since 2010. These actions have reduced CO<sub>2</sub> emissions by 16,908 tCO<sub>2</sub>.</li> <li>HSE audits were carried out at 20 locations.</li> <li>No significant spills or any other environmental accidents.</li> <li>Majority of locations have had environmental training.</li> <li>CO<sub>2</sub> emissions (Scope 3) externally assured: procurement, logistics, business travel, and fuel- and energy-related emissions (not included in Scope 1 and Scope 2).</li> </ul>
<p><b>Responsible supply chain</b></p>	<ul style="list-style-type: none"> <li>Third-party sustainability audits for higher- and medium-risk supplier base; minimum 15 per year.</li> <li>Established sustainability follow-up tools and processes:                             <ul style="list-style-type: none"> <li>100% of new suppliers in high-risk areas screened on sustainability issues.</li> <li>Existing high- and medium-risk supplier base screened on sustainability issues.</li> </ul> </li> <li>Procurement personnel trained on sustainability.</li> <li>Compliance with chemical legislation and restricted materials through systematic qualification process.</li> </ul>	<ul style="list-style-type: none"> <li>More systematic sustainability screening of new and existing suppliers started in higher-risk areas.</li> <li>15 third-party sustainability supplier audits conducted in China, India, Turkey and Brazil.</li> <li>43 internal sustainability supplier audits conducted in China, India and Turkey.</li> <li>Improvements in the tracking of completed corrective actions.</li> <li>Sustainability training organized for procurement and supplier quality personnel in China, Finland, Sweden, Turkey, Russia, Brazil and South Africa.</li> <li>Internal program on restricted materials ongoing.</li> </ul>

\*R&D=Research and Development \*\*LTIF=Lost Time Incident Frequency \*\*\*KPI=Key Performance Indicator

# Material topics and themes

Metso's new President and CEO Nico Delvaux started in his position on August 1, 2017, and there were changes in the Metso Executive Team. However, in December Delvaux decided to resign and assume a CEO position outside Metso; Eeva Sipilä was appointed as Metso's Interim President and CEO as of February 3, 2018.

Innovations and utilization of the opportunities digitalization offers us are in the management agenda. Our sustainability work will also be developed according to the management agenda development.

Also, international treaties and agreements shape our operating environment and the way we conduct our business. United Nations set Sustainable Development Goals (SDGs) in 2015. They are a part of United Nations' wider, 2030 Agenda for sustainable development, which has been built on the UN's Millennium Development Goals set back in the year 2000. The aim of the goals is to define global priorities to combat economic, environmental and social challenges on a global scale. We support these goals and many parts of our operations relate to them. Read more details on pages 4-5 our approach on SDGs.

Regarding other recent international agreements and treaties, Metso considers the

global climate agreement signed at the Paris Climate Change Conference (COP21) in 2016 still significant and we want strongly to contribute to it. We think Metso's role in combating climate change is to provide energy-efficient, sustainable technology and solutions to our customers.

## Active dialogue with our stakeholders

We regularly meet investors and analysts globally to present our strategy, operations and company as a sustainable investment option. In 2017, Metso conducted a study among our non-Finnish institutional investors to find out about their expectations related to sustainability-related topics in our business.

The results of the study indicate that our non-Finnish institutional investors regard sustainability related topics as important drivers behind their investment decisions. They are interested in finding out how climate change effects Metso's business, and whether it provides any new business opportunities for Metso.

Safeguarding human rights throughout our supply chain is considered important by our institutional investors. Also, they want to understand how our global supply chain



functions, what we consider the biggest risks, and how these risks are monitored. Information about the environmental effects and load of our own operations is considered important, and even more important are the safety and environmental efficiency of our products, solutions and services.

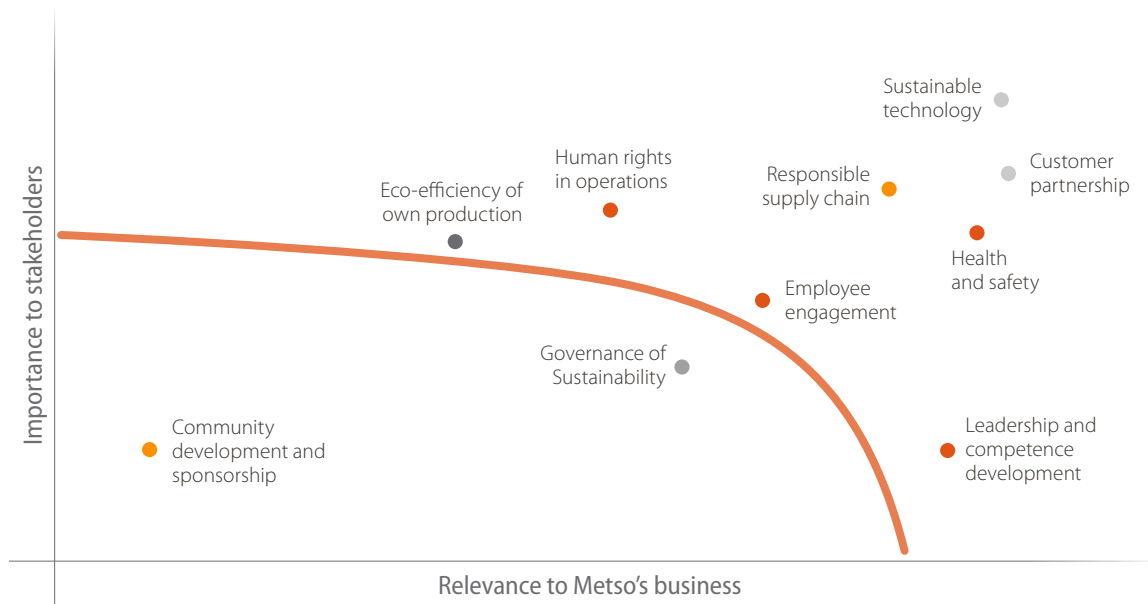
## Our customers consider us a sustainable partner

We continued the launch of a Metso-wide customer experience management initiative to systematically listen to our customers worldwide. During 2017, we executed the program globally for the first time. Action planning and implementation will continue in 2018.

During 2017, sixteen of our largest mining customers were interviewed regarding our sustainability performance and asked to compare Metso against our peers. All those interviewed considered sustainability important criteria when selecting a supplier. The energy efficiency of products was a key reason behind their choices of products and solutions. Metso was considered especially good in taking care of safety in operations and services.

We were also considered a high-integrity operator, with the company's values reflected positively in our everyday interaction with our customers. These results gave valuable input for our materiality matrix update.

# Materiality matrix



**Description:** The matrix displays Metso's most material topics from the point of view of our stakeholders and business. The horizontal axis represents the topic's relevance to Metso's business. The vertical axis represents the topic's importance for stakeholders. Topics that are located on the right side of the curve are the most material topics chosen for this reporting period. The topics in the matrix have been coded to correspond to the sectors of our sustainability agenda.

## Top Metso topics 2017

## GRI material topics

Customer partnership

Marketing and labeling

Health and safety

Occupational health and safety

Human rights in operations

Non-discrimination, anti-corruption

Sustainable technology

Customer health and safety

Responsible supply chain

Economic performance

Eco-efficiency of own production

Energy, water, emissions, effluents and waste

Employee engagement

Employment, labor/management relations, diversity and equal opportunity

Leadership and competence development

Training and education



> Read more about Sustainability agenda on p. 4



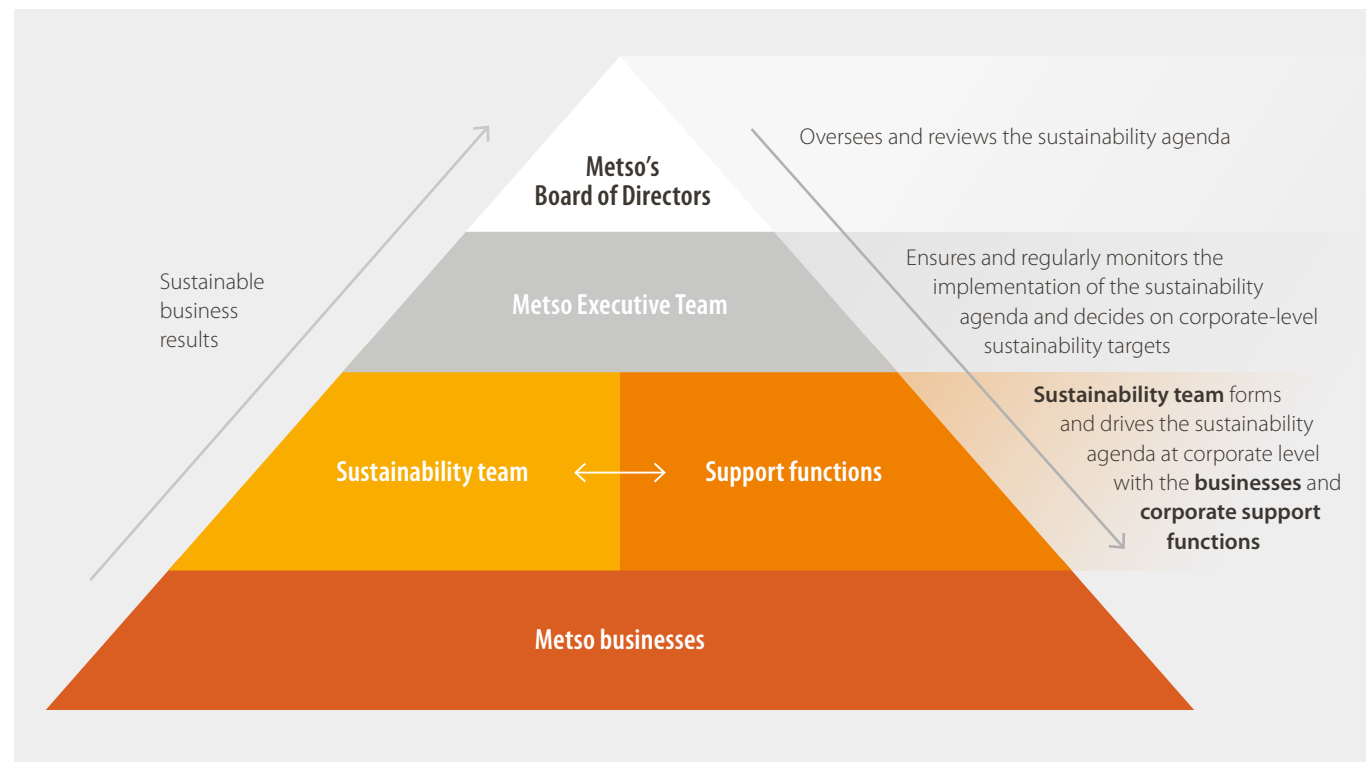
# Sustainability governance

Sustainability is fundamental to our business and everyday work at all levels of the organizations.

Metso's Board of Directors oversees the effectiveness and impact of Metso sustainability governance. Metso executive team acts a sustainability committee that regularly follows and ensures the implementation of the sustainability agenda and makes decisions on corporate-level sustainability targets.

The sustainability team forms and drives the sustainability agenda at the corporate level in cooperation with the businesses and corporate support functions. The team manages material issues related to company, and cooperates on developing sustainability practices, sustainability communication and implementation of corporate policies. The sustainability team gives key input to sustainability-related corporate development training, risk management and external reporting in cooperation with different corporate functions. The sustainability team is also responsible for including proactive management of key stakeholders' expectations and monitoring the preparation of legislative proposals and treaties relevant to the sustainability of Metso's businesses.

## Sustainability governance



# Metso's stakeholders

Active interaction with our stakeholders is a key aspect of Metso's approach to sustainability. Metso's stakeholders are entities or individuals that have an impact on our business, or are affected by our activities, products and services, and are presenting us with both risks and opportunities. The focus areas and the channels of communication vary according to the stakeholders' needs.

## Customers

Our customer relationships are built on continuous interaction, extensive know-how and long-term commitment. Our ambition is to create mutual business success, and to be the best choice and a preferred partner in all that we do. In 2017, we continued the implementation of our customer experience management initiative to systematically listen to our customers worldwide, measure their satisfaction and develop our ways of working based on the feedback.

## Employees

Metso's people are a high priority in our strategy. We consider our people and their knowledge, expertise and skills as one of our competitive advantages. We continuously develop our managers' leadership capabilities and enhance the competence development of our employees.

In 2017, we updated our leadership principles, developed our annual review process, and focused on excellence in sales capabilities. We foster open dialogue and feedback.

## Suppliers and subcontractors

We work closely with our many suppliers and subcontractors. The cooperation is based on solid partnership and long-term collaboration. We have transparent supplier requirements, and we foster safe working practices. We conduct internal sustainability audits and third-party supplier audits for higher risk countries. In 2017, we conducted 58 supplier audits altogether.

## Shareholders and investors

Metso is committed to long-term value creation for its shareholders. We have continued to develop our sustainability for investors channels and actively engage with our investors and shareholders in events and meetings. In 2017, we conducted a study focusing on investors and shareholders interests in sustainability to be able to better respond to their demands and needs related to sustainability.

## Media

We provide clear and accurate disclosure about Metso. We proactively and responsibly communicate in many media channels.

## Non-governmental organizations

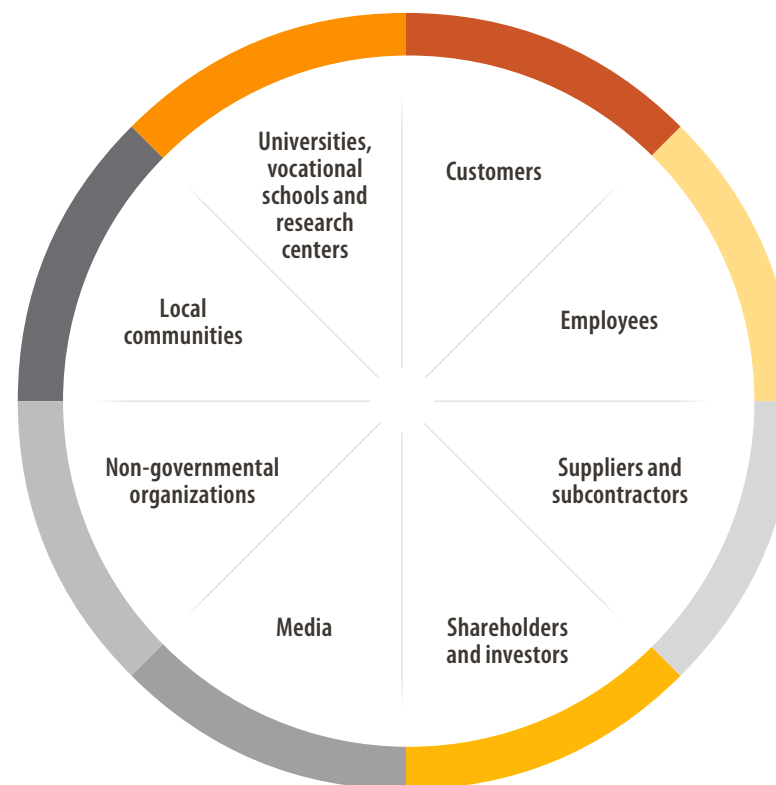
In 2017, we had good cooperation with non-governmental organizations (NGOs). We cooperated with e.g. WWF Finland, Plan India, John Nurminen Foundation and SOS Children's Villages International.

## Local communities

We act as a responsible corporate citizen and work closely with the communities surrounding our operations. We create value by providing employment opportunities, and we support corporate social responsibility initiatives in the communities around our businesses.

## Universities, vocational schools and research centers

We find cooperation with universities and research institutes important, and a crucial element to foster innovation. In 2017, we donated a total of EUR 1 million to three Finnish universities. To honor Finland's 100 years of independence, Metso wished to support Finnish scientific research and its application in practice. We have cooperation projects, school visits, apprenticeship contracts and traineeship and dissertation positions.







# Building customer success



We operate close to our customers globally, to always serve them locally.



SUSTAINABILITY



# Customer partnership

We want to work side-by-side with our customers and offer superior service in all channels to ensure that our customers succeed. Our service centers' experts in more than 50 countries guarantee a comprehensive understanding of our customers' needs, which allows us to provide efficient solutions to customers' challenges. We have established a Digital Office to work with customers and distributors to fully embrace the possibilities of digital solutions to our customers' businesses. To strengthen our commitment to our customers, we have established a continuous program for measuring and developing customer satisfaction.



Photo: Jean-Marie Liot

## Continuous improvement for superior customer satisfaction

All our activities aim at one goal – the success of our customers. Our program utilizes well-proven Net Promoter Score® (NPS)\* methodology. We gather and document our customers' feedback carefully, and analyze it both locally and globally for improvement actions and best practices. We communicate the agreed actions.

During 2017, we executed the program globally for the first time, and are very pleased that more than 4,600 customers gave us feedback. We were pleased to notice that our customers highly appreciated our technical expertise and the quality of our products and services – these are areas we want to take good

care of to excel also in the future. Going forward, customers expect us to be more agile in our way of working. Quotes as well as critical products and services should be available faster than they are today.

All feedback we have received will be carefully reviewed in early 2018 and we will start to implement the necessary improvement actions.

## Digital analytics and maintenance around the globe

One of the key digital initiatives took a big leap in 2017, as we selected Rockwell Automation to deliver a global industrial Internet of Things (IoT) platform that connects, monitors, and performs analytics for Metso's



Over 4,600 customers trusted us with their feedback. They highly appreciate our products and expertise.

equipment and services, resulting in improved efficiency and profitability for our customers.

"For our mining and aggregates customers, access to real-time data enables higher uptime, faster and safer shutdowns, and ultimately more tonnage processed at lower cost. Enabled by this solution, Metso can deliver analyzed equipment data into the hands of its customers for advanced decision making," says **Jani Purooranta**, Chief Digital Officer at Metso.

## Global distribution network provides easy access to Metso wears and spares

Metso's global distribution network was also heavily

strengthened during 2017.

We want to provide our customers with easy access to our spare and wear parts also in locations where Metso does not have a service center yet.

For example, our Flow Control business signed four distribution agreements in India and four in Brazil to further strengthen our presence in these growing markets. Also, we have strengthened our presence towards mining and aggregates customers with several new distribution agreements in Europe and new distributor cooperation in the United States and in Qatar.

\*Net Promoter, Net Promoter System, Net Promoter Score, NPS and the NPS-related emoticons are registered trademarks of Bain & Company, Inc., Fred Reichheld and Satmetrix Systems, Inc."





# Performing together



The best and most motivated team bringing the best results.



SUSTAINABILITY



# Metso professionals

## Performing together – a global team of Metso professionals working closely together

Metso is a global company of highly competent and committed industry professionals in more than 50 countries. Our over 12,000 employees around the world form a diverse and engaged network of colleagues from various nationalities and cultures.

Metso's customer promise, "Expect results", means that we are result-driven, focused and deliver what we promise. Metso's success is strongly built on the knowledge, expertise and skills of our employees performing together. Key areas in Metso's strategy are people and leadership, with a focus on developing leadership, organization, employees and their competencies – with Metso's vision and values as our foundation. The overall target of these strategic people priorities is to enhance profitable business growth by enabling engagement and performance of our people.



### Leadership and competence development

We believe that the best way to develop ourselves and our ways of working is to make learning an integral part of daily work. All our white-collar employees are covered by our performance review and development discussions, and we also offer local team level discussions to our blue-collar employees. We emphasize on-the-job learning and learning together with others. We also offer a global leadership development portfolio with locally delivered solutions. Our professional competence development

supports our key strategic initiatives.

When recruiting new leaders, we emphasize leadership that helps us to be successful both now and in the future, and the mindset to drive growth and renewal. This we ensure by following our leadership principles (updated in 2017) systematically in recruitment and development.

### Engaging our current and future employees

We believe that engaged employees are the key to our business success. Our people feel strongly engaged in their

own work and with Metso as an employer (based on our latest engagement survey). We want to attract and recruit the right people to work with us. To further enhance our visibility and attractiveness, we tell our future employees what it's like to work in Metso by sharing our people's own career stories on multiple channels, with e.g. our Young Visionaries blog and the #MetsoLife theme on social media. Aligned with this, in 2017, we also revised the Metso Career pages at metso.com, and were recognized as the best in Finland by Europe's leading corporate webpage evaluation.

### SUSTAINABILITY

> Read more in our Annual review, section Metso people on page 34.



Read more

> Read more about leadership and competence development at [metso.com/careers](https://metso.com/careers)



# Human rights in our operations

Respecting human rights in our operations not only contributes to positive human rights impacts, it also allows us to operate, and improve our operational risk management through improved working conditions. Additionally, we build and maintain transparent stakeholder relations and a culture of sustainability.

Metso's policies and commitment create the foundation for our approach in respecting the rights of the people that are employed in our value chain and in the communities around our businesses. Metso respects and supports the protection of internationally proclaimed human rights, such as those described in the United Nations Guiding Principles on Business and Human Rights, the International Labor Organization's Declaration of Fundamental Principles and Rights at Work, and the Ten Principles of the United Nations Global Compact in the areas of human rights, labor, environment and anti-corruption.

We had already integrated human rights into Metso's values, assessments, processes and procedures to some extent, but in 2015, we initiated a human rights impact assessment against the UN Guiding Principles on Business and Human Rights in order to understand if all the salient human rights topics throughout our value chain are covered comprehensively enough. In 2016 and 2017, we continued the assessment with various practices.

## Compliance with human rights

Managing human right issues is incorporated into our employment practices and processes in all Metso countries.

Examples of human rights topics that we continuously review:

- Occupational health and safety: Our Health, Safety and Environment Policy defines our commitment to responsible management of HSE in our own operations and in stakeholder collaboration. Metso has clearly defined its HSE minimum safety standards. HSE instructions and procedures are available, and in addition, HSE audits, safety conversations, risk observations are used to improve our HSE performance.
- Avoidance of forced labor: All Metso employees have signed employment contracts including agreements about salaries and other terms of employment.
- Wages: to ensure appropriate salary levels for Metso employees, Metso regularly reviews external salary benchmarks to create salary range references in all Metso countries.
- Working hours and overtime: In Metso, time cards and attendance records are used for tracking working hours and overtime.
- Grievance channels and remediation mechanism: in 2017, we reinforced our communications related to the Whistleblower channel covering all Code of Conduct related misconduct in addition to financial misconduct.



In 2016, we conducted a labor assessment in six countries that were confirmed by an external partner to be the riskiest in terms of human rights. The objective of this assessment was to prioritize our actions and to raise awareness of human rights among Metso's personnel, and to initiate a structured approach to assess the status and development areas within labor rights at Metso.

We continue to train our Human Resources teams on labor rights, (e.g. wages and benefits, contracts, working hours, leave and rest periods, discrimination, and employee grievance channels). As part of the renewal of our Code of Conduct in 2017, Metso employees were trained on sustainability matters, including human rights. In addition, the procurement and quality assurance personnel had training on human and labor rights.

### Metso's Code of Conduct

Metso's Code of Conduct defines our company values and practices. Our values and the Code of Conduct are the basis of training our employees to ensure we always operate with high integrity, every day and everywhere. We respect and support human rights: all our employees are entitled to be treated with respect, and neither discrimination, harassment, nor illegal threats are tolerated.

Metso's renewed Code of Conduct was published in June 2017 to provide us with an updated framework that guides our behavior. Some 99.8 percent of Metso employees have taken the Code of Conduct training in a given timeline. Human rights are an important element of the Code of Conduct and the Code of Conduct

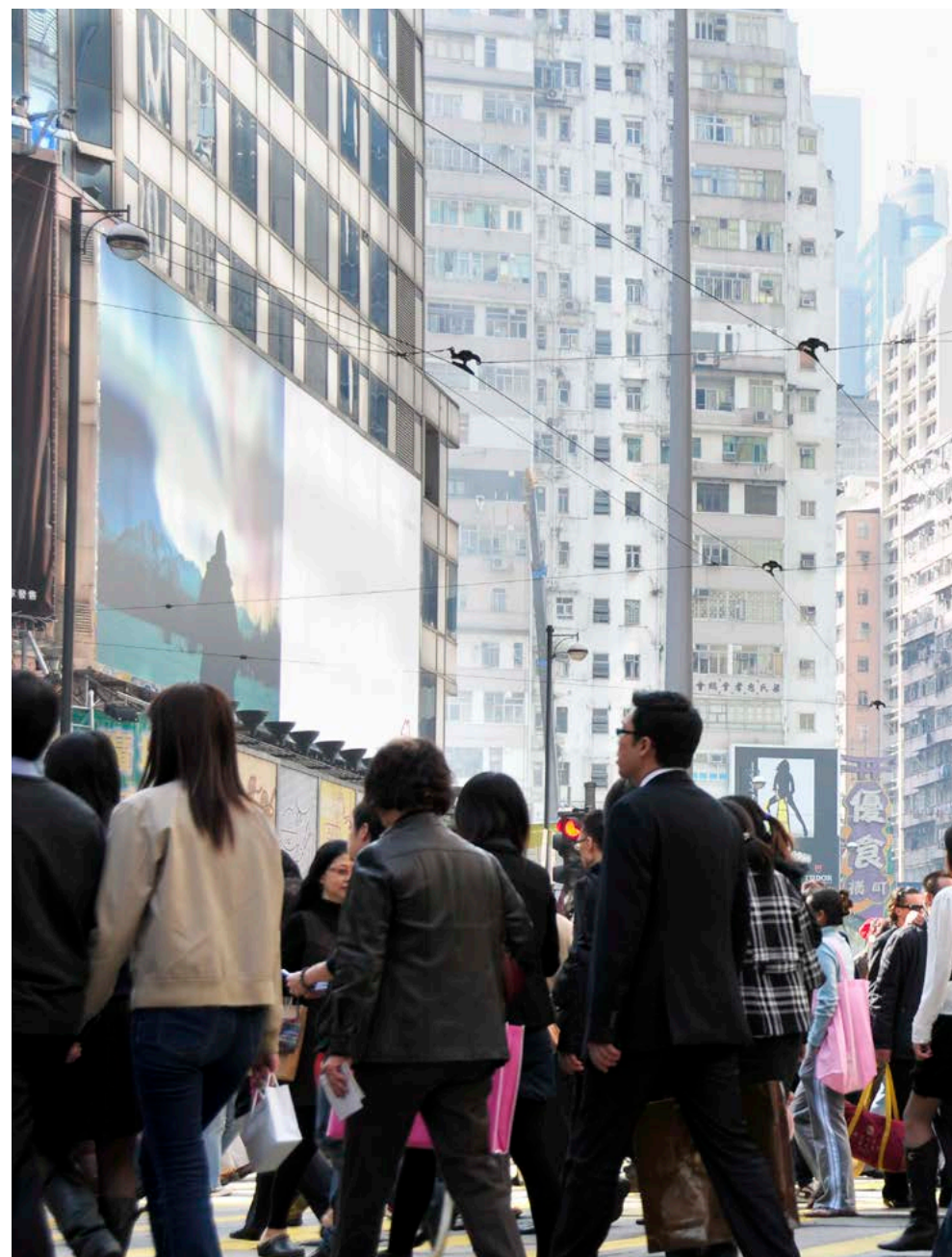
training is also compulsory for all new Metso employees.

Our anonymous Whistleblower channel is primarily intended for reporting financial misconduct cases, but in practice, it is also available for other types of misconduct. In 2017, in conjunction with Metso's Code of Conduct update, Metso's Whistleblower channel was opened for reporting all Code of Conduct-related misconduct. All Metso employees have the ability to file a confidential, anonymous report via either telephone or the internet.

### Human rights in our supply chain

Respecting human rights is a requirement that we expect all our suppliers to follow. Metso has a vast global network of suppliers, and we strive to make sure that they commit to the same high standards that we have set for ourselves. For this purpose, we have established processes and tools to assess suppliers on how they ensure that all human rights are respected in their operations.

Human rights topics are covered by Metso's third-party supplier audits. Our annual target in 2017 was to conduct 58 sustainability audits for our higher-risk suppliers in 2017, and we developed a more systematic tracking of corrective actions. We have also included human rights issues in our internal supplier audits and self-assessment for all suppliers. In 2016, we started giving sustainability training, including human rights issues, for our procurement and quality assurance personnel in India. In 2017, the training continued in other countries such as Brazil, China, Finland, Russia, Sweden, South Africa, and Turkey.



# Examples of sponsorship and donations in 2017



Donation in Finland to Tampere University of Technology, Aalto University and the University of Oulu to support scientific research and its practical application.



© Mervi Kunnasranta / WWF

Donation to WWF Finland's Saimaa ringed seal conservation work.



© John Nurminen Foundation / Jenna Halonen

Support for John Nurminen Foundation's projects intended to improve the state of the Baltic Sea.

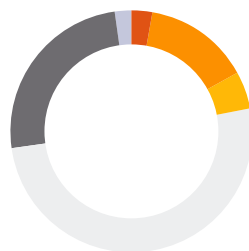
Cooperation with Plan India to develop education in local schools in Alwar, Rajasthan state.  
Contribution to SOS Children's Village in Gurgaon, India to support their child welfare work.

Donation to United Way, Massachusetts, USA, to advance the common good of the community by focusing on education, income and health.

Sponsorship of theater, classical music and local Brazilian music through the Metso Cultural project in Brazil.

Sponsorship of Queensland University, Australia, scientific project.

Scholarships to Central South University, Hunan Province, China.



Support for non-profit organizations

- Youth activities 3% (8%)
- Culture and arts 14% (13%)
- Environmental protection and conservation 5% (3%)
- Science, research and education 51% (10%)
- Health and social 25% (37%)
- Others 2% (10%)





# Contributing to the environment



Sustainability for us means reducing energy consumption and emissions, using less raw ingredients and water while delivering the same or increased production output.





# Environment



Sustainable use of resources is our commitment and it underpins the long-term success of our business. The global operating environment opens up possibilities and risks that we need to recognize. When increasing our eco-efficiency, we are able to reduce our environmental footprint and achieve cost savings at the same time. We aspire to minimize our environmental footprint throughout the value chain. In our own operations, we concentrate especially on environmental hazards; water, waste and carbon emission reductions; and energy efficiency.

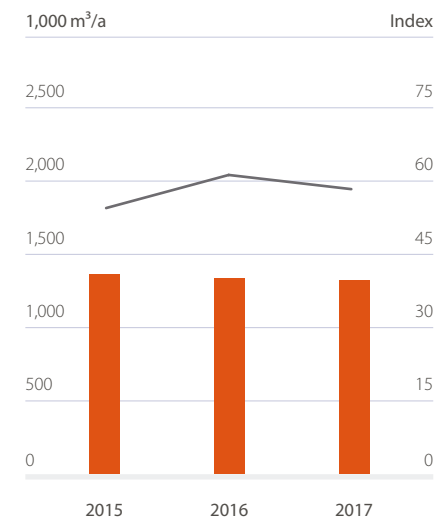
Developing our environmental efficiency is a continuous process. In 2017, we continued with many already ongoing development projects. Our internal HSE (health, safety & environment) audit function follows the development of HSE-related issues at Metso. During 2017, the internal HSE audit function was carried out at 20 locations, and the focus was on environmental issues where there is room for improvement. Based on these findings, the corrective actions have been launched and will be followed.

## Environmental hazards

Our target is zero environmental accidents. During 2017, we had no significant spills or any other environmental accidents.

Proactive actions such as risk observations are vital for being able to take corrective action in advance. We strongly encourage active HSE risk observation reporting, and it was included as an individual target for our employees. To avoid environmental accidents because of a lack of knowledge, a global environmental training program, which was originally created in 2015, was rolled out as an e-learning package in 2017. At the end of 2017, we also published a chemical handling e-learning course. In addition to training, we aim to raise environmental awareness with our internal annual environmental campaigns; e.g., Metso Environmental week.

## Water consumption



● Total water consumption, 1,000 m³

\*The index is proportioned to Metso's sales. For comparison, the reference year is 2014= 100 index value

Because chemicals are a major environmental risk, we started a chemical substitution project at the end of 2017. To improve our chemical management, we initiated the first two units of a new chemical management system.

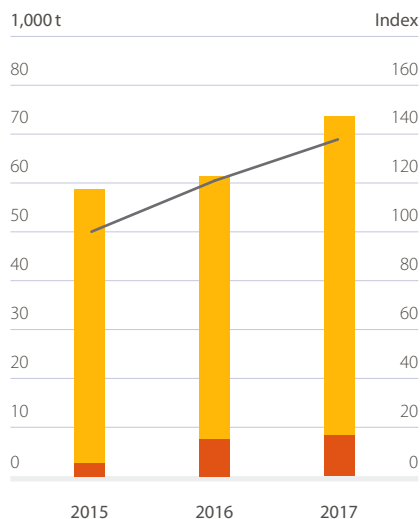
## Water

We have set a target of 15% for water usage efficiency in our own operations by 2020. We have identified our most water-intensive units and have set new unit specific targets. Plants included in the environmental reporting must complete actions to save water equivalent to 3% of water consumption. The target will continue to be 3% annually until 2020, with total of 15% saved by 2020.

We reduced our water consumption in 2017 with 3.4% compared to 2016. This is mostly thanks to actions such as changing and repairing old



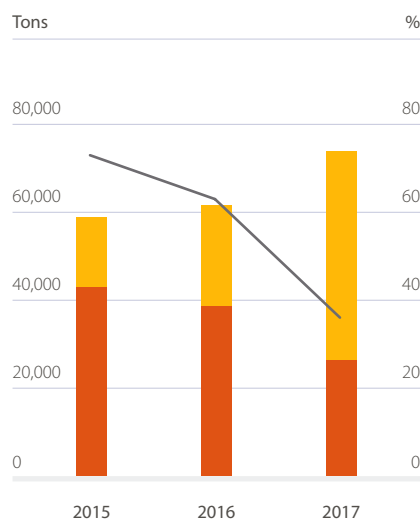
### Annual waste/sales



● Hazardous waste ● Non-hazardous waste  
— Waste per sales\*

\*The index is proportioned to Metso's sales. For comparison, the reference year is 2014 = 100 index value

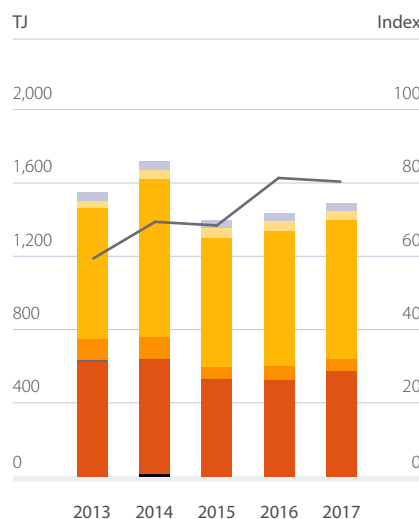
### Landfill waste



● Landfill ● Other waste\*  
— Landfill per total waste, %

\*Recovery, Incinerated, Recycled, Composted, On-site storage

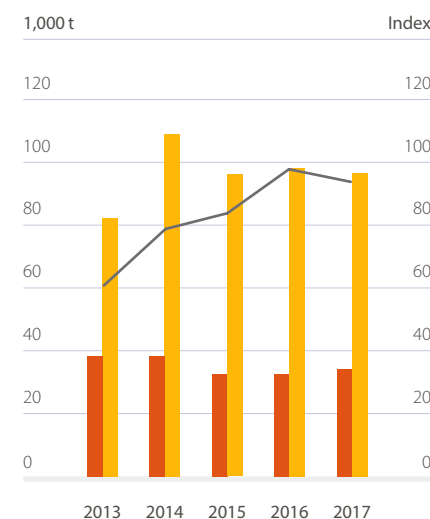
### Energy consumption



● Coal ● Natural gas ● Oil ● District heat  
● Electricity ● Steam ● Other — Index\*

\*The index is proportioned to Metso's sales. For comparison, the reference year is 2009 = 100 index value

### CO<sub>2</sub> emissions



● Direct emissions ● Indirect emissions  
— Index\*

\*The index is proportioned to Metso's sales. For comparison, the reference year is 2009 = 100 index value

bathroom appliances, taking water maintenance programs into use, better work method trainings and changes in water processes and storage.

### Waste

To find a better way to bring benefits to the environment, we set a new goal for waste in 2016. The target is to reduce the proportion of waste sent to landfill from total waste percentage by 15% by 2020 compared to 2014. Each unit included in environmental reporting has specific yearly targets based on our 2020 company target.

In 2017, we decreased the amount of landfill waste to 36% (67% in 2014) of total waste. This is thanks to actions such as improving recycling facilities, training in sorting waste, detecting and starting new recycling actions, and more effective depletion of materials.

### Carbon emissions and energy efficiency

Metso strives for continuous reductions in emissions to minimize our environmental footprint and reduce costs. We measure our energy usage and Scope 1 and 2 emissions for each of our business units and the whole group. Our group-wide energy savings and carbon dioxide emission targets for our own production were launched in 2009 to improve efficiency. The target is to improve efficiency by 20% by 2020. In 2010, we launched a group-wide energy efficiency program to find new opportunities to decrease energy consumption at our locations. Since the start of the program, a total of 51,833 MWh (12.6%) of energy has been saved through a wide range of actions around the world. These actions have reduced CO<sub>2</sub> emissions by 16,908 tCO<sub>2</sub>.

### Metso's operative carbon footprint



● Electricity 69% (69%)  
● District heating + steam 4% (6%)  
● Fuels 27% (25%)

Limited investment during the market decline has slowed down our energy efficiency actions, and we are lagging our original savings goals. We are revisiting our investment plans and will update our energy targets accordingly in 2018.



# Responsible supply chain



We want to ensure our sustainable business operations throughout our supply chain by developing our sustainability management practices.



# Supply chain management

Our suppliers deliver the parts, materials, services and contracted employees we need to support our business.

## Sustainable supply chain management

We want to ensure sustainable business operations throughout our supply chain by developing our sustainability management practices and by ensuring that our suppliers have best practices in place. We need to make sure that our suppliers commit to the same high standards that we set for ourselves. To ensure quality and sustainability in our supply chain, we have developed processes covering the whole network of suppliers.

Sustainable supply chain management necessitates that we follow our company values. Metso's Code of Conduct and sustainable development criteria for suppliers set the standards that we expect our suppliers to follow, and they are the starting point for any new or existing business relationship.

We have integrated sustainability aspects into our procurement processes. We consider sustainability aspects in supplier evaluations to minimize the risks and develop the opportunities related to quality, social aspects, such as human rights, and environmental aspects.

## Supplier assessment and audits

We carry out a risk mapping of sustainability-related risks within our existing suppliers. By defining the risk levels, we are able to focus on the suppliers with the highest potential risks in their operations.

For the risk mapping, we utilize a Human Rights Dataset to identify the risk countries related to the categories Human Security, Labor Rights and Protection, Civil and Political Rights, Access to Remedy and Development, and Environment. In addition, we also take into account the supplier type and spend. Based on these assessments, we decide if there is a need for third-party or internal sustainability supplier audits.

Screening new suppliers is included in Procurement's ongoing processes, and our target is to evaluate the majority of our new suppliers in higher-risk countries against our sustainability criteria.

Based on the sustainability risk assessment of the new supplier, Procurement decides on the need for an in-depth audit and further actions.



Annually, Metso conducts 15 third-party sustainability supplier audits together with external auditing partner in higher-risk countries (e.g. China, India, Turkey and Brazil). Metso's third-party audits cover many aspects of sustainability, including HSE, product safety, labor and other human rights, and risk management. We have also started to conduct internal sustainability supplier audits, where Metso Procurement and Quality Assurance make on-site visits and check the sustainability practices and performance of our suppliers.

To improve our suppliers' sustainability performance, after each sustainability supplier audit, we agree on corrective action plans together with the supplier. Suppliers are required to provide Metso with evidence of the corrective actions that have been implemented and are subjected to a re-audit, where necessary. The focus is to increase the sustainability knowledge of our procurement function so that it has the ability to control the potential corrective actions comprehensively.

### Contractors

Contractors work on behalf of Metso but are not our direct employees. We want to make sure that our contractors have the same uncompromising attitude towards our standards as our own employees. We are working to improve the preselection and performance evaluation process and training requirements of our contractors.

We require our contractors to be familiar and comply with our Health, Safety and Environment Policy. The same health and

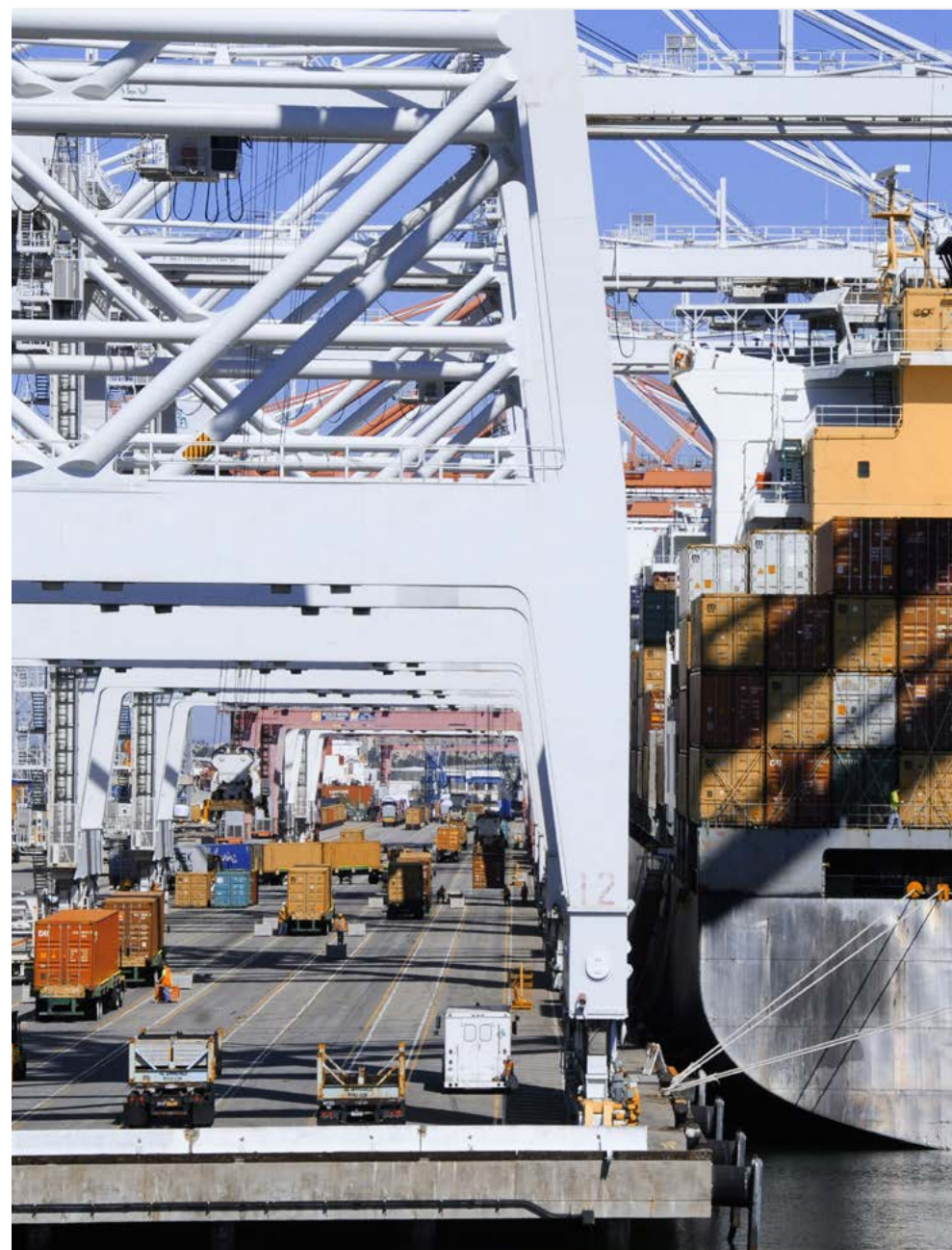
safety standards that Metso employees follow apply also to contractors. In order to promote safety effectively, we have created separate contractor HSE materials and evaluation forms. The LTIF of Metso's contractors working on behalf of us in our own or customers' sites in 2017 was 6.5.

### Future development

We have developed many processes to tackle the possible challenges in our supply chain, but we still have room for improvement. It is important that we continue the liaison between our sustainability resources and procurement function to provide them an in-depth sustainability grasp and know-how to be integrated into procurement's processes. The main targets are to develop integral processes at the group-level and to widen our internal knowledge of a sustainable supply chain in order to perform advanced internal audits.

We will continue with our internal and third-party sustainability audits for our higher-risk suppliers in 2018. In addition, we aim to further develop our processes in tracking the corrective actions.

The sustainability training that we initiated for our procurement and supplier quality assurance team in 2016 continued in 2017. Based on needs in different market areas, we aim to organize more in-depth training on sustainability supplier auditing. In addition, we are continuing to conduct sustainability supplier audits in higher-risk countries, like China, India and Turkey.







# Data and assurance



We continuously develop our ways to operate and our processes.



Read more

> Read more about sustainability in our Annual Review and in Non-financial information (part of Financial Statements)



# General operating principles

Our general operating principles serve our vision to be the best choice for sustainable processing and flow of natural resources. This means for us reducing energy consumption and emissions, using less raw ingredients and water and producing less and less waste while delivering the same or increased production output. Sustainability also means that we follow the highest health, safety and environmental standards and practices. In our efforts to fulfill this mission, we uphold our commitment to our Code of Conduct and to selected, globally acknowledged guidelines and principles.

## Code of Conduct

Metso's Code of Conduct creates a uniform foundation for all business transactions and work assignments. The Code of Conduct encompasses issues, responsibilities and practices supporting Metso's sustainability and success, and provides us and our stakeholders with commonly accepted guidelines and perspectives for future decisions. The Code of Conduct also describes our company culture, commonly accepted practices, and our commitment to compliance with laws and regulations. Metso's Code of Conduct is available on our website and is translated into 11 languages. Metso's renewed Code of Conduct was published in June 2017 to provide us with an updated framework that guides our behavior. 99.8 percent of Metso employees have taken the Code of Conduct training in a given timeline.

In addition to the Code of Conduct, Metso also has policies and guidelines to support our sustainable business practices. These include, for example, Metso's Anti-Corruption Policy to describe our zero-tolerance approach to bribery and corruption. Our Health, Safety and Environment (HSE) Policy defines our

commitment to responsible management of HSE in our own operations and in stakeholder collaboration. We want to provide equal opportunities and diversity at the workplace, as described in our Equal Opportunity and Diversity Policy.

Metso has a zero-tolerance approach towards all forms of corruption and bribery. We are committed to conducting our activities in accordance with applicable anticorruption laws and regulations. The Metso Global Anti-Corruption Policy provides more detailed instructions and guidelines in this respect.

Metso is training its employees in compliance matters, and anti-corruption training is provided regularly in connection with i.a. contract compliance training. In 2017, we have conducted face to face anti-corruption trainings and focused on having third parties either approved or rejected in a meaningful time frame.

All approved third parties are recorded in the compliance information tool and subject to continuous screening for sanctions, changes in corporate data and management, and adverse media.

Our anonymous Whistleblower channel has been primarily intended for reporting financial misconduct cases. In 2017, in conjunction with Metso's Code of Conduct update, Metso's Whistleblower channel was opened for reporting all Code of Conduct-related misconduct. All Metso employees can file a confidential, anonymous report via either telephone or the Internet.

In 2017, we received 3 reports of suspected financial misconduct via the Whistleblower channel. Additionally, Internal Audit received 8 direct contacts. A total of 11 cases were investigated. There were also cases of misconduct revealed in conjunction with internal audits.

The cases of misconduct were reviewed by the Audit Committee in line with our guidelines on reporting misconduct. The cases did not have a significant impact on our financial results.

## Responsible people management policies at Metso ensure compliance

The Metso HR management team creates policies, principles and guidelines for people management and is responsible for leading their implementation into the organization. The HR organizations are responsible for implementing the policies, principles and guidelines, and for supporting country-specific compliance.

## International principles and guidelines

Metso joined supporters of the UN Global Compact in 2006. As a supporter, we are committed to annually communicating on the UN Global Compact website how we have advanced in the development of our activities in the defined areas. We are committed to complying with the UN Declaration of Human Rights and

UN Guiding Principles on Human Rights. Metso also supports and operates according to the principles described in the OECD Guidelines for Multinational Enterprises and the International Labor Organization's (ILO) Declaration of Fundamental Principles and Rights at Work.

## Certificates

In our sustainability management, we comply with several international standards, such as quality management standard ISO 9001, environmental management standard ISO 14001 and health and safety management standard OHSAS 18001, and our business units have gained certification to these standards. 32% of all our operations are covered by ISO 14001 certification, 29% by OHSAS 18001 certification and 78% by ISO 9001 certification. The coverage is calculated by the number of employees working in certified facilities.

## Management policies and guidelines:

- Code of Conduct
- Health, Safety and Environment Policy
- Anti-drug Guidelines
- Metso Leadership Principles
- Metso Recruitment Policy
- International Assignment Guidelines
- Personnel Background Checking Guidelines
- Equal Opportunity and Diversity Policy
- Global Bonus Plan Guidelines
- Localization Guidelines for Expatriates
- Guidelines for Company Support and Funded Studies
- Performance and Rewards Principles



# Key performance indicators

## Location of operations (102-4)

20 Largest countries by personnel

	2015	2016	2017
Finland	1,735	1,603	<b>1,685</b>
USA	1,673	1,338	<b>1,281</b>
Brazil	1,330	1,214	<b>1,166</b>
China	1,189	1,031	<b>1,030</b>
Chile	771	694	<b>1,011</b>
India	761	777	<b>859</b>
South Africa	833	757	<b>733</b>
Sweden	751	729	<b>721</b>
Australia	518	497	<b>667</b>
France	497	451	<b>417</b>
Germany	400	367	<b>339</b>
Mexico	279	260	<b>297</b>
Canada	288	271	<b>282</b>
Czech Republic	244	244	<b>267</b>
Peru	240	249	<b>248</b>
Russia	166	147	<b>134</b>
Spain	131	127	<b>133</b>
South Korea	84	93	<b>94</b>
Denmark	88	90	<b>91</b>
United Kingdom	101	94	<b>84</b>

## Information on employees and other workers (102-8)

2017	Female	Male	Total
<b>By employment contract</b>			
Permanent	1,888	8,576	10,464
Temporary	240	1,333	1,573
<b>By employment type</b>			
Full-time	2,007	9,828	11,835
Part-time	121	81	202
<b>Total</b>	<b>2,128</b>	<b>9,909</b>	<b>12,037</b>

2017	Permanent	Temporary	Total
<b>By region</b>			
Europe	3,958	155	4,113
South and Central America	2,154	571	2,725
North America	1,540	23	1,563
Asia Pacific	1,986	809	2,795
Africa and Middle East	826	15	841
<b>Total</b>	<b>10,464</b>	<b>1,573</b>	<b>12,037</b>

## Collective bargaining agreements (102-41)

Metso supports freedom of association for all our employees and the right to collective bargaining. Fifty percent of Metso employees are covered by bargaining agreements in 2017. The percentage varies widely between regions; it is highest in Europe (87%) and lowest in North America (2%).

**GRI 201: ECONOMIC PERFORMANCE**

**Direct economic value generated and distributed (201-1)**

EUR million	2015	2016	2017
Customers: Sales and other income*	3,229	2,586	<b>2,706</b>
Suppliers: Operating costs	1,559	1,430	<b>1,630</b>
Employees: Wages and benefits	685	610	<b>606</b>
Public sector: Taxes	73	58	<b>82</b>
Creditors: Interest	39	39	<b>35</b>
Communities: Sponsorships and donations	0.87	0.79	<b>1.15</b>
Shareholders: Payments to providers of capital	217	157	<b>157</b>
Economic value retained	655	292	<b>195</b>

\* 2015 figures include the gain on the disposal of the Process Automation business.

**Income taxes\*, largest countries**

EUR million	2016	2017
USA	18	<b>20</b>
Finland	6	<b>8</b>
Brazil	7	<b>7</b>
India	0	<b>8</b>
Chile	7	<b>8</b>
China	6	<b>5</b>
Peru	5	<b>3</b>
Mexico	4	<b>2</b>
Australia	2	<b>2</b>
Sweden	2	<b>2</b>

\*presented at accrued basis

**GRI 204: PROCUREMENT PRACTICES**

**Proportion of spending on local suppliers (204-1)**

	2016	2017
United States	60%	<b>61%</b>
Finland	57%	<b>55%</b>
Sweden	50%	<b>50%</b>
France	57%	<b>59%</b>
China	92%	<b>92%</b>
Brazil	90%	<b>89%</b>
India	82%	<b>87%</b>

Definition of 'local supplier': sourced from the same country as the plant location

Definition 'significant location of operation': biggest countries for Metso procurement

**GRI 205: ANTI-CORRUPTION**

**Operations assessed for risks related to corruption (205-1)**

Fraud, misconduct and crime are relevant threats to Metso due to its global presence, various counterparties and high number of transactions.

Risk management audits conducted in 2017 covered six units, covering about 20% of the 25 units included in the program. This covers more than 80% of Metso's net sales during the five-year period.

**GRI 302: ENERGY**

**Energy consumption within the organization (302-1), TJ**

	2015	2016	2017
<b>Direct energy consumption by fuel</b>			
Natural gas	492	525	<b>572</b>
Coal	0	0	<b>0</b>
Heavy fuel oil (HFO)	4	0	<b>0</b>
Diesel	18	19	<b>18</b>
Liquefied petroleum gas (LPG)	27	26	<b>28</b>
<b>Indirect energy consumption</b>			
Electricity	697	729	<b>756</b>
District heat	70	75	<b>62</b>
Steam	52	52	<b>47</b>
<b>Total energy consumption</b>	<b>1,359</b>	<b>1,426</b>	<b>1,482</b>

Cooling consumed and sold is included in the electricity figures. The consumption figures are calculated based on invoicing. Standard conversion factors are used (SI). No fuel consumption from renewable sources in 2017.



**GRI 302: ENERGY**

**Reduction of energy consumption (302-4), TJ**

2015	2016	2017
181	184	187

Reduction in energy consumption as a direct result of conservation and efficiency initiatives  
 Reductions in energy consumption include electricity, heating, cooling, steam and fuel since baseline year 2010.

**Reductions in energy requirements of products and services (302-5)**

2017	Reduced fuel/energy consumption	Unit	CO <sub>2</sub> e emissions avoided (tonnes)
Lokotrack	24,664,000	litres, diesel oil	66,100
Vertimill	924,000	MWh	547,000

**Lokotrack:**

Reductions in energy consumption for Lokotrack are measured as fuel savings (diesel).  
 Metso Lokotrack's fuel savings were compared over the predecessor models i.e. fuel savings in the new Lokotrack models are due to engineering actions to reduce fuel consumption.  
 CO<sub>2</sub> emission factor: 2.68 kg CO<sub>2</sub>e per liter of diesel.  
 CO<sub>2</sub> emission factor source: [www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016](http://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016).

**Vertimill:**

Reductions in energy consumption for Vertimill are measured as energy savings (MWh).  
 Metso Vertimill's energy savings were compared over the traditional approach of a ball mill.  
 CO<sub>2</sub> emission factor: 0.5925 kg CO<sub>2</sub> per kWh.  
 CO<sub>2</sub> emission factor source: [carbonfund.org/how-we-calculate](http://carbonfund.org/how-we-calculate).

**GRI 303: WATER**

**Water withdrawal by source (303-1), 1,000 M3**

	2015	2016	2017
Surface water	969	950	950
Groundwater	56	60	64
Rainwater	0	0	0
Municipal water or other utilities	332	313	304
<b>Total</b>	<b>1,357</b>	<b>1,323</b>	<b>1,319</b>

Municipal water and other water utilities are reported by each unit based on invoicing.  
 Groundwater and rainwater are calculated by unit records and methodologies; some assumptions are also used.

**GRI 305: EMISSIONS**

**Direct (Scope 1) GHG emissions (305-1), TCO<sub>2</sub>**

	2015	2016	2017
Scope 1 emissions	30,896	32,519	35,147

All the emissions are reported in tCO<sub>2</sub>. 305-1 to 305-5 GHG emissions reporting covers only CO<sub>2</sub>.  
 GHG emissions reporting covers only CO<sub>2</sub>. Metso does not have any biogenic CO<sub>2</sub> emissions in its operations.  
 About energy savings: calculated on reduction in energy consumption since baseline year 2010.  
 The resulting emissions are based on invoicing and converted from MWh to CO<sub>2</sub> emissions.  
 We use standard conversion factors (SI).  
 Source for emission factors are IEA "CO<sub>2</sub> emissions from fuel combustion" 2016 edition.

**Energy indirect (Scope 2) GHG emissions (305-2), TCO<sub>2</sub>**

	2015	2016	2017
Scope 2 emissions	96,366	98,036	96,563

GHG emissions reporting covers only CO<sub>2</sub>. Metso does not have any biogenic CO<sub>2</sub> emissions in its operations.  
 About energy savings: calculated on reduction in energy consumption since baseline year 2010.  
 The resulting emissions are based on invoicing and converted from MWh to CO<sub>2</sub> emissions.  
 We use standard conversion factors (SI).  
 Source for emission factors are IEA "CO<sub>2</sub> emissions from fuel combustion" 2016 edition.

**GRI 305: EMISSIONS**

**Other indirect (Scope 3) GHG emissions (305-3), TCO<sub>2</sub>**

	2015	2016	2017
Purchased goods and services	418,256	439,777	<b>571,530</b>
Fuel and energy related emissions	18,055	18,502	<b>19,309</b>
Upstream transportation	129,069	100,390	<b>139,327</b>
Business travel	10,165	10,200	<b>12,937</b>
Downstream transportation	62,144	48,336	<b>67,083</b>

Metso conducted an analysis of all Scope 3 emission categories. Based on that analysis, six emission categories were identified: purchased goods and services, fuel- and energy-related emissions, upstream transportation, business travel, and downstream transportation. For one relevant category, use of sold products, no quantitative information is available.

Metso has assessed its indirect Scope 3 emissions based on the GHG Protocol's Corporate Value Chain Accounting and Reporting Standard. GHG emissions reporting covers only CO<sub>2</sub>. Metso does not have any biogenic CO<sub>2</sub> emissions in its operations.

Purchased goods and services Scope 3 emissions cover direct spend accounting for approx. 70% of total spend. The analysis is based on the monetary value of purchased goods and services by supplier type, and environmentally extended input-output matrices from EXIOBASE.

Fuel- and energy-related Scope 3 emissions include emissions that are not included in Scope 1 or Scope 2 (production of fuels and energy purchased: diesel, LPG, natural gas, electricity, steam, district heating). Coverage is 100% and emission factor source: [www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016](http://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016).

Upstream transportation emissions are based on the analysis of the monetary value of transportation services by transportation mode and country, and environmentally extended input-output matrices from EXIOBASE. Coverage is 100%.

Metso currently monitors and reports Scope 3 emissions stemming from business travel in Europe, North America, South Africa, India and China, which accounts for 67% of Metso's workforce.

Downstream transportation Scope 3 emissions are an estimate (estimate that the emission intensity is roughly the same as for upstream, i.e. downstream emissions were extrapolated based on upstream data).

**Reduction of GHG emissions (305-5), TCO<sub>2</sub>**

	2015	2016	2017
Reduction of emissions	16,270	16,364	<b>16,908</b>

The emissions reductions achieved are calculated on the basis of the reduction in energy consumption since baseline year 2010, based on invoicing and conversion to CO<sub>2</sub> emissions.

GHG emissions reporting covers only CO<sub>2</sub>. Metso does not have any biogenic CO<sub>2</sub> emissions in its operations.

About energy savings: calculated on reduction in energy consumption since baseline year 2010.

The resulting emissions are based on invoicing and converted from MWh to CO<sub>2</sub> emissions.

We use standard conversion factors (SI).

The source for emission factors is IEA "CO<sub>2</sub> emissions from fuel combustion" 2016 edition.

**GRI 306: EFFLUENTS AND WASTE**

**Waste by type and disposal method (306-2), T**

	2015	2016	2017
<b>Hazardous</b>			
Recycling	680	731	<b>960</b>
Recovery	108	121	<b>107</b>
Incineration	330	347	<b>626</b>
Landfill	1,686	6,759	<b>7,067</b>
On-site storage	3	3	<b>3</b>
<b>Total</b>	<b>2,807</b>	<b>7,961</b>	<b>8,763</b>
<b>Non-hazardous</b>			
Recycling	11,976	15,433	<b>37,489</b>
Composting	84	178	<b>202</b>
Recovery	1,474	5,283	<b>6,664</b>
Incineration	987	588	<b>1,073</b>
Landfill	41,194	32,065	<b>19,469</b>
<b>Total</b>	<b>55,715</b>	<b>53,547</b>	<b>64,897</b>

The waste disposal method has been determined based on information provided by the waste disposal contractor. Reuse is not significant in Metso's operations. Hazardous landfill waste includes sand from the foundries. It is handled appropriately at the landfill sites.

**Significant spills (306-3)**

	2015	2016	2017
Spills	0	0	<b>0</b>





**GRI 401: EMPLOYMENT**

**New employee hires and employee turnover (401-1)**

Employment		2017		
Issue	Indicator	Number of new hires	% of total no. of new hires	New hire rate, %
New hires by age group	<30	685	34%	43%
	30-50	1,187	58%	16%
	>50	154	8%	6%
New hires by gender	Female	289	14%	14%
	Male	1,737	86%	18%
New hires by region	Europe	378	19%	9%
	South and Central America	869	43%	32%
	North America	256	13%	16%
	Asia Pacific	452	22%	16%
	Africa and Middle East	71	3%	8%
<b>Total new hires</b>	<b>Total</b>	<b>2,026</b>	<b>100%</b>	<b>17%</b>

Issue	Indicator	Number of leavers	% of total no. of leavers	Turnover rate, %
Leavers by age group	<30	217	20%	14%
	30-50	627	58%	8%
	>50	234	22%	8%
Leavers by gender	Female	193	18%	9%
	Male	885	82%	9%
Leavers by region	Europe	348	32%	8%
	South and Central America	242	23%	9%
	North America	171	16%	11%
	Asia Pacific	261	24%	9%
	Africa and Middle East	56	5%	7%
<b>Total leavers</b>	<b>Total</b>	<b>1,078</b>	<b>100%</b>	<b>9%</b>

Seasonal/trainees are excluded from figures.

**GRI 402: LABOR/MANAGEMENT RELATIONS**

**Minimum notice periods regarding operational changes (402-1)**

Notice periods and the time period for the consultation process related to operational changes vary by country and region. Minimum notice periods are based on the local labor legislation of each country we operate in.

GRI 403: OCCUPATIONAL HEALTH AND SAFETY

**Types of injury and rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities (403-2)**

OWN EMPLOYEES

		2015	2016	2017
<b>Types of Injury</b>	Superficial injuries and open wounds	55%	55%	<b>58%</b>
	Dislocations, sprains and strains	8%	6%	<b>8%</b>
	Burns, corruptions, scalds and frostbite	6%	8%	<b>5%</b>
	Fractures	6%	5%	<b>4%</b>
	Concussion and internal injuries	3%	1%	<b>2%</b>
	Traumatic amputations	1%	1%	<b>0%</b>
	Acute poisonings and infections	1%	3%	<b>3%</b>
	Other specified types of injury	2%	2%	<b>1%</b>
	Unspecified	18%	19%	<b>18%</b>
	<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

According to ILO classification, % of total injuries.

		2015	2016	2017	
<b>Injury rate</b>	<b>By region</b>	Europe	18.2	27.2	<b>29.7</b>
		South and Central America	9.7	10.5	<b>11.7</b>
		North America	25.9	18.8	<b>16.7</b>
		Asia Pacific	11.6	10.9	<b>14.3</b>
		Africa and Middle East	14.1	6.5	<b>16.3</b>
		<b>Total</b>	<b>15.9</b>	<b>17.3</b>	<b>19.6</b>

Includes lost time, restricted work, medical treatment and first aid incidents.

		2015	2016	2017	
<b>Total recordable incident frequency</b>	<b>By region</b>	Europe	7.6	7.4	<b>9.7</b>
		South and Central America	5.9	6.7	<b>5.0</b>
		North America	10.9	7.9	<b>5.4</b>
		Asia Pacific	4.8	4.3	<b>6.7</b>
		Africa and Middle East	4.4	3.3	<b>4.7</b>
		<b>Total</b>	<b>6.9</b>	<b>6.3</b>	<b>7.0</b>

Includes lost time, restricted work, and medical treatment incidents.

		2015	2016	2017	
<b>Lost time incident frequency</b>	<b>By region</b>	Europe	3.7	3.1	<b>3.3</b>
		South and Central America	2.3	3.4	<b>2.1</b>
		North America	2.4	2.1	<b>1.0</b>
		Asia Pacific	1.8	1.2	<b>3.0</b>
		Africa and Middle East	2.4	1.6	<b>2.3</b>
		<b>Total</b>	<b>2.7</b>	<b>2.5</b>	<b>2.6</b>

Lost time incident frequency (LTIF) reflects the number of injuries resulting in an absence of at least one workday per million hours worked. LTIF is based on fatalities, lost time incidents resulting in absence of one to three calendar days, and lost time incidents resulting in absence of four or more calendar days absence. Not reported by gender because it is not seen as significant.

		2015	2016	2017	
<b>Risk observation frequency</b>	<b>By region</b>	Europe	403	428	<b>719</b>
		South and Central America	1,152	1,597	<b>1,346</b>
		North America	201	200	<b>454</b>
		Asia Pacific	488	632	<b>1,062</b>
		Africa and Middle East	452	559	<b>806</b>
		<b>Total</b>	<b>549</b>	<b>691</b>	<b>903</b>

Includes risk observations

		2015	2016	2017	
<b>Lost day rate</b>	<b>By region</b>	Europe	0.09%	0.12%	<b>0.23%</b>
		South and Central America	0.01%	0.05%	<b>0.09%</b>
		North America	0.15%	0.07%	<b>0.15%</b>
		Asia Pacific	0.21%	0.12%	<b>0.21%</b>
		Africa and Middle East	0.04%	0.03%	<b>0.02%</b>
		<b>Total</b>	<b>0.11%</b>	<b>0.09%</b>	<b>0.17%</b>

Days lost due to injuries as a percentage of total days scheduled to be worked by the workforce. The impact of occupational accidents and diseases as reflected in time off work by the affected workers. It is expressed by comparing the total lost days to the total number of hours scheduled to be worked by the workforce in the reporting period.



	2015	2016	2017
<b>Absentee rate</b>			
<b>By region</b>			
Europe	3.4%	3.9%	<b>4.1%</b>
South and Central America	1.1%	1.6%	<b>2.0%</b>
North America	1.4%	1.4%	<b>1.6%</b>
Asia Pacific	1.1%	1.1%	<b>1.2%</b>
Africa and Middle East	2.1%	2.5%	<b>1.7%</b>
<b>Total</b>	2.0%	2.3%	<b>2.5%</b>

Absentee days lost as a percentage of total days scheduled to be worked by the workforce.

An employee absent from work because of incapacity of any kind, not just as the result of a work-related injury or disease. Permitted absences, such as holidays, study, maternity or paternity leave, and compassionate leave, are excluded. Refers to a measure of actual absentee days lost expressed as a percentage of total days scheduled to be worked by the workforce for the same period.

	2015	2016	2017
<b>Fatalities</b>	0	0	<b>0</b>

#### NON-METSO EMPLOYEES – CONTRACTORS AND SUPERVISED WORKERS

	2015	2016	2017
<b>Types of Injury</b>			
Superficial injuries and open wounds	46%	58%	<b>49%</b>
Dislocations, sprains and strains	4%	3%	<b>3%</b>
Burns, corruptions, scalds and frostbite	10%	6%	<b>5%</b>
Fractures	8%	3%	<b>12%</b>
Concussion and internal injuries	1%	2%	<b>7%</b>
Traumatic amputations	1%	0%	<b>0%</b>
Acute poisonings and infections	0%	2%	<b>1%</b>
Other specified types of injury	8%	2%	<b>5%</b>
Unspecified	23%	26%	<b>19%</b>
<b>Total</b>	100%	100%	<b>100%</b>

According to ILO classification, % of total injuries.

	2015	2016	2017
<b>Injury rate</b>			
<b>By region</b>			
Europe	50.4	79.0	<b>77.1</b>
South and Central America	10.6	6.3	<b>9.7</b>
North America	0.0	16.8	<b>47.7</b>
Asia Pacific	19.1	18.4	<b>17.7</b>
Africa and Middle East	29.1	37.0	<b>26.7</b>
<b>Total</b>	17.9	21.9	<b>25.4</b>

Includes lost time, restricted work, medical treatment and first aid incidents.

	2015	2016	2017
<b>Lost time incident frequency</b>			
<b>By region</b>			
Europe	29.2	12.2	<b>22.9</b>
South and Central America	4.1	1.0	<b>2.9</b>
North America	0.0	0.0	<b>11.9</b>
Asia Pacific	2.2	2.3	<b>3.7</b>
Africa and Middle East	7.3	0.0	<b>0.0</b>
<b>Total</b>	5.9	2.8	<b>6.5</b>

Lost time incident frequency (LTIF) reflects the number of injuries resulting in an absence of at least one workday per million hours worked.

	2015	2016	2017
<b>Fatalities</b>	0	0	<b>0</b>

Metso's safety data is collected from all worldwide locations and it covers all Metso operations.

Newly acquired operations are integrated into Metso's reporting within a year of the date acquired.

Injury rate, TRIF, LTIF and ROF for Metso employees have been calculated based on estimated hours worked.

LTIF for non-Metso employees has been calculated based on monitored hours worked.

These frequencies have been calculated per million hours worked.

**GRI 405: DIVERSITY AND EQUAL OPPORTUNITY**

**Diversity of governance bodies and employees (405-1)**

Diversity of governance bodies

	Indicator	2015	2016	2017
<b>Board of Directors</b>	<b>By gender</b>			
	Female	29%	25%	<b>29%</b>
	Male	71%	75%	<b>71%</b>
	<b>By age group</b>			
	<30	0%	0%	<b>0%</b>
	30-50	14%	12%	<b>14%</b>
	>50	86%	88%	<b>86%</b>
<b>Executive Team</b>	<b>By gender</b>			
	Female	14%	22%	<b>29%</b>
	Male	86%	78%	<b>71%</b>
	<b>By age group</b>			
	<30	0%	0%	<b>0%</b>
	30-50	14%	44%	<b>29%</b>
	>50	86%	56%	<b>71%</b>

Diversity of employees

2017	Indicator		
<b>Employee category</b>		White-collar	Blue-collar
	<b>By gender</b>		
	Female	16%	2%
	Male	45%	37%
	<b>By age group</b>		
	<30	7%	6%
	30-50	40%	24%
	>50	14%	9%
	<b>Total</b>	<b>61%</b>	<b>39%</b>

**Membership of associations**

Metso is involved with various industry, trade and expert organizations in our area of business. On the national level in Finland, Metso is a member of the Federation of Finnish Technology Industries and the Confederation of Finnish Industries, and participates in issue-specific working groups related to energy, competitiveness, training and logistics.

Metso participates in the work of the International Chamber of Commerce (ICC) and is represented in its bodies and working groups focused on environment and energy. Metso's memberships in industrial organizations, associations and lobby organizations include:

- Federation of Finnish Technology Industries
- European Powder Metallurgy Association
- Finnish Business & Society Association
- Global Compact Network Nordic Council
- Finpro

**METSO INDICATORS**

**Metso indicator: Sustainability targets set in R&D projects**

	2016	2017
R&D projects with sustainability targets	83%	<b>84%</b>

Metso has a R&D sustainability metrics for R&D projects.

Metso's research and development (R&D) projects set sustainability targets, concerning environmental efficiency and/or product safety innovation.

All active projects and project closed in 2016 and 2017 are included.

**Metso indicator: Sustainability supplier audits**

	2015	2016	2017
Number of sustainability audits in supply chain	8	15	<b>58</b>

In addition to third-party sustainability supplier audits (15), Metso also conducted 43 internal sustainability supplier audits in 2017.

**Community Engagement, EUR**

	2015	2016	2017
<b>Support for non-profit organizations (EUR)</b>	870,000	791,000	<b>1,152,675</b>
Youth activities	18%	8%	<b>3%</b>
Culture and arts	36%	13%	<b>14%</b>
Science, research, education	5%	10%	<b>51%</b>
Environmental protection	2%	3%	<b>5%</b>
Health and social	37%	56%	<b>25%</b>
Other	2%	10%	<b>2%</b>

- East Office of Finnish Industries
- International Chamber of Commerce
- Automobile and Touring Club of Finland
- Executives' Global Network Finland
- Confederation of Norwegian Enterprise (NHO)
- European Management Assistants
- Association of Finnish Safety Managers
- Federation of European Mineral Programs
- The Finnish Mining Association
- EIT Raw Materials
- The Finnish Quality Association
- Worldatwork – Human Resources Association, U.S.
- Finsk-Svenska handelskammarens, Sweden



# GRI Content Index

## Abbreviations

**UNGC** United Nations Global Compact

**SDG** Sustainable Development Goals

**GRI** Global Reporting Initiative

**KPI** Key performance indicators section

## General Disclosures

### 1. ORGANIZATIONAL PROFILE

Disclosure number	Disclosure title	Page number	Additional information	Cross-Reference: UNGC SDG
102-1	Name of the organization	Metso Corporation		
102-2	Activities, brands, products, and services	Metso's Business, Annual Review, p. 4, 26-27		
102-3	Location of headquarters	Helsinki, Finland		
102-4	Location of operations	Global Presence, Annual Review, p. 5 Key performance indicators, p. 24		
102-5	Ownership and legal form	Metso Corporation is a public company and its shares are listed on the Nasdaq Helsinki		
102-6	Markets served	This is Metso, Annual Review, p. 4 Global Presence, Annual Review, p. 5		
102-7	Scale of the organization	This is Metso, Annual Review, p. 4 Global Presence, Annual Review, p. 5		
102-8	Information on employees and other workers	Key performance indicators section, p. 24	A significant portion of the organization's activities are not performed by workers who are not employees. Metso did not have any significant variations in employment numbers during the reporting period. Employee data has been compiled from Metso's global HR information system.	Principle 6 SDG 8
102-9	Supply chain	Creating value for Metso's stakeholders, Annual Review, p. 12-13, 16-17 Supply chain management, p. 22		
102-10	Significant changes to the organization and its supply chain	Key events in 2017, Annual Review, p. 6-7, 14-15		
102-11	Precautionary Principle or approach	Financial Statements, p. 80-81		
102-12	External initiatives	General Operating Principles, p. 25		
102-13	Membership of associations	Membership of associations, p. 33		

### 2. STRATEGY

Disclosure number	Disclosure title	Page number	Additional information	Cross-Reference: UNGC SDG
102-14	Statement from senior decision-maker	CEO on sustainability, Annual Review, p. 6-7		
102-15	Key impacts, risks, and opportunities	Annual Review, p. 10-11		





### 3. ETHICS AND INTEGRITY

Disclosure number	Disclosure title	Page number	Additional information	Cross-Reference: UNGC SDG
102-16	Values, principles, standards, and norms of behaviour	General Operating Principles, p. 25		Principle 10 SDG 16
102-17	Mechanisms for advice and concerns about ethics	General Operating Principles, p. 25		Principle 10 SDG 16

### 4. GOVERNANCE

Disclosure number	Disclosure title	Page number	Additional information	Cross-Reference: UNGC SDG
102-18	Governance structure	Governance Statement > metso.com/2017		

### 5. STAKEHOLDER ENGAGEMENT

Disclosure number	Disclosure title	Page number	Additional information	Cross-Reference: UNGC SDG
102-40	List of stakeholder groups	Metso's stakeholders, p. 10		
102-41	Collective bargaining agreements	Key performance indicators section, p. 26		
102-42	Identifying and selecting stakeholders	Materiality analysis, p. 8 Stakeholder engagement, p. 10		
102-43	Approach to stakeholder engagement	Metso's stakeholders p. 10 Material topics and themes, p. 8		
102-44	Key topics and concerns raised	Material topics and themes, p. 8		

### 6. REPORTING PRACTICE

Disclosure number	Disclosure title	Page number	Additional information	Cross-Reference: UNGC SDG
102-45	Entities included in the consolidated financial statements	Financial statements > metso.com/2017	All Group companies are included in the reporting.	
102-46	Defining report content and topic boundaries	About this Supplement, p. 2		
102-47	List of material topics	Materiality analysis, p. 8		
102-48	Restatements of information	No restatements.		
102-49	Changes in reporting	Change of reporting guidelines: switch from G4 to the GRI Standards.		
102-50	Reporting period	January 1, 2017 - December 31, 2017		
102-51	Date of most recent report	Metso's Sustainability Report 2016 was published in March 2017.		
102-52	Reporting cycle	Annual		
102-53	Contact point for questions regarding the report	kaisa.jungman@metso.com harald.huppe@metso.com		
102-54	Claims of reporting in accordance with the GRI Standards	About this Supplement, p. 2	This report has been prepared in accordance with the GRI Standards: Core option.	
102-55	GRI Content Index	GRI Content Index, p. 34		
102-56	External assurance	About this Supplement, p. 2 Assurance Statement, p. 40	This report has been externally assured by PwC.	



## Topic-specific Disclosures

GRI 200: Economic Standard Series					
GRI Material Topic	Disclosure number	Disclosure title	Disclosure Cross-Reference	Omission/Additional information	Cross reference: UNGC SDG
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	Key performance indicators, p. 27		SDG 2, 5, 7, 8, 9
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	Key performance indicators, p. 27		SDG 12
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Key performance indicators, p. 27		Principle 10 SDG 16
Responsible Supply Chain	Metso indicator: Sustainability supplier audits	Number of sustainability audits in supply chain	Responsible supply chain, p. 33		
GRI 300: Environmental Standard Series					
GRI Material Topic	Disclosure number	Disclosure title	Disclosure Cross-Reference	Omission/Additional information	Cross reference: UNGC SDG
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Environment, p. 20 Key performance indicators, p. 27	Metso does not collect cooling data separately. Cooling has been included in the electricity figure.	Principle 7 SDG 7, 8, 12, 13
	302-4	Reduction of energy consumption	Environment, p. 20 Key performance indicators, p. 28		Principles 7, 9 SDG 7, 8, 12, 13
	302-5	Reductions in energy requirements of products and services	Lokotrack, Sustainability Supplement, p. 28 Vertimill, Sustainability Supplement, p. 28	Metso reports improvements in fuel and energy consumption for two product lines.	Principles 7, 9 SDG 8, 12, 13
GRI 303: Water 2016	303-1	Water withdrawal by source	Environment, p. 19 Key performance indicators, p. 28		Principles 7, 9 SDG 6
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Environment, p. 20 Key performance indicators, p. 28		Principle 7 SDG 3, 12, 13, 14, 15
	305-2	Energy indirect (Scope 2) GHG emissions	Environment, p. 20 Key performance indicators, p. 28		Principle 7 SDG 3, 12, 13, 14, 15
	305-3	Other indirect (Scope 3) GHG emissions	Key performance indicators, p. 29		Principle 7 SDG 3, 12, 13, 14, 15
	305-5	Reduction of GHG emissions	Environment, p. 20 Key performance indicators, p. 29		Principles 7, 9 SDG 13, 14, 15
GRI 306: Effluents and Waste 2016	306-2	Waste by type and disposal method	Environment, p. 20 Key performance indicators, p. 29		Principle 7 SDG 3, 6, 12
	306-3	Significant spills	No significant spills during the reporting period 2017.		Principle 7 SDG 3, 6, 12, 14, 15
Sustainable technologies	Metso indicator: Sustainability targets set in R&D projects	Percentage of R&D projects that include a sustainability target	Annual review, p. 16 Key performance indicators, p. 33		



GRI 400: Social Standard Series

GRI Material Topic	Disclosure number	Disclosure title	Disclosure Cross-Reference	Omission/Additional information	Cross reference: UNGC SDG
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Metso as an employer, Annual Review, p. 37 Key performance indicators, p. 30		Principles 3, 6 SDG 5, 8
GRI 402: Labor/Management Relations 2016	402-1	Minimum notice periods regarding operational changes	Key performance indicators, p. 30		Principles 3, 6 SDG 8
GRI 403: Occupational Health and Safety 2016	403-2	Types of injury and rates of injury, occupational diseases, lost days and absenteeism, and number of work-related fatalities	Health and Safety, Annual Review, p. 35-36 Key performance indicators, p. 31-32	Not reported by gender because it is not seen as significant. ODR not reported for Metso employees.	Principle 6 SDG 3, 8
GRI 404: Training and Education 2016	404-3	Percentage of employees receiving regular performance and career development reviews	Performing together, p. 13-17	Not reported by gender or employee category.	Principle 6 SDG 5, 8
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Key performance indicators, p. 33		Principle 6 SDG 5, 8
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	GRI Content Index, p. 37	There were no incidents of discrimination reported in 2017.	Principles 1, 2, 6 SDG 5, 16





# Management Approach Disclosures

## Management Approach Disclosure

ECONOMIC	
	Description/Reference
GRI Material Topic	Economic performance
Key topics for our management approach	Value creation R&D, innovation Customer relationship Responsible business practices Responsible supply chain
Targets	Supply chain management, p. 21-23
Policies, processes, management model	Metso Code of Conduct, Sustainability criteria for the suppliers, Anti-corruption Policy, Misconduct Policy, Intellectual Property Policy, Brand Policy
Monitoring the effectiveness of our approach - Specific actions and results	Supply chain management, p. 21-23 Stakeholder engagement, p. 10
Disclosures	201-1, 204-2, Metso indicator: sustainability supplier audits, Metso indicator: sustainability targets set in R&D projects
Topic boundary	External impacts within our value chain, Metso indicator. Internal and external impacts within our value chain. Relevant entities: customers, communities, authorities, suppliers and NGO's.
ENVIRONMENTAL	
	Description/Reference
GRI Material Topic	Energy, Water, Emissions, Effluents and Waste
Key topics for our management approach	Eco-efficiency of our own production
Targets	Energy savings and CO <sub>2</sub> emission reductions; reductions in water use; reduced amount of waste to landfill Environmental efficiency of our own production, p. 18-20
Policies, processes, management model	HSE Management, HSE Policy, Environmental efficiency of our own production p. 18-20
Monitoring the effectiveness of our approach - Specific actions and results	Environmental efficiency of our own production, p. 18-20 Sustainable technologies, p. 28
Disclosures	302-1, 302-4, 302-5, 303-1, 305-1, 305-2, 305-3, 305-5, 306-2, 306-3
Topic boundary	Internal impacts in our own operations. 302-5, 305-3, external impacts within our value chain. Relevant entities customers, communities, authorities, suppliers and NGOs
LABOR PRACTICES AND DECENT WORK	
	Description/Reference
GRI Material Topic	Employment, Labor/Management Relations, Occupational Health & Safety, Training and Education, Diversity and Equal Opportunities
Key topics for our management approach	Human rights in operations Health & safety Responsible supply chain
Targets	Health & safety, Annual Review, p. 35-36, Leadership and competence development, p. 14, Supply chain management, p. 21-23
Policies, processes, management model	General operating principles, p. 25, Metso Code of Conduct, HSE Policy, HSE Management, Sustainability criteria for the suppliers
Monitoring the effectiveness of our approach - Specific actions and results	Leadership and competence development, p. 14 and key performance indicators, p. 26, 30, 33
Disclosures	401-1, 402-1, 403-2, 404-3, 405-1, Metso indicator: sustainability supplier audits
Topic boundary	Internal impacts Relevant external entities: suppliers, contractors, communities, government, NGOs and customers.



**HUMAN RIGHTS**

	Description/Reference
GRI Material Topic	Non-discrimination
Key topics for our management approach	Human rights in operations, Responsible supply chain
Targets	Human rights in our operations, p. 15-16, Supply chain management, p. 21-23
Policies, processes, management model	Code of Conduct, general operating principles, sustainability criteria for the suppliers
Monitoring the effectiveness of our approach - Specific actions and results	GRI Content Index, p. 37 (406-1)
Disclosures	
Topic boundary	Internal impacts within our operations Relevant external entities: suppliers, contractors, communities, government and NGOs.

**SOCIETY**

	Description/Reference
GRI Material Topic	Anti-corruption
Key topics for our management approach	Anti-corruption
Targets	Human rights, p. 15-16, Sustainability principles, General operating principles, p. 25
Policies, processes, management model	General operating principles, p. 25, Anti-corruption Policy, Metso Code of Conduct
Monitoring the effectiveness of our approach - Specific actions and results	Key performance indicators, p. 27 (205-1)
Disclosures	205-1, Metso indicator: sustainability supplier audits
Topic boundary	Relevant external entities: communities, employees and government.

**PRODUCT RESPONSIBILITY**

Reference	Description/Reference
GRI Material Topic	Customer Health and Safety, Product and Service Labeling
Key topics for our management approach	Sustainable technologies, p. 28, 33, Customer partnership, p. 11-12
Targets	Sustainable technology, p. 28, 33, Customer partnership, p. 11-12
Policies, processes, management model	General operating principles, p. 25, Metso Code of Conduct, HSE Policy, HSE Management
Monitoring the effectiveness of our approach - Specific actions and results	As of 2016, all new R&D projects have to set environmental efficiency and product safety innovation targets (if applicable).
Disclosures	Metso indicator: Sustainability targets set in R&D projects
Topic boundary	Relevant external entities: customers, suppliers.

# Independent practitioner's assurance report

*To the Management of Metso Corporation*

We have been engaged by the Management of Metso Corporation (hereinafter also the Company) to perform a limited assurance engagement on selected sustainability disclosures for the reporting period 1 January to 31 December 2017, disclosed in Metso Corporation's Sustainability Supplement 2017. In terms of the Company's GRI Standards reporting and GRI Standards Content Index, the scope of the assurance has covered economic, social, environmental sustainability disclosures listed within the Topic-Specific Disclosures as well as General Disclosures 102-8 and 102-41 (hereinafter Sustainability Information).

## Management's responsibility

The Management of Metso Corporation is responsible for preparing the Sustainability Information in accordance with the Reporting criteria as set out in the Company's reporting instructions and the GRI Sustainability Reporting Standards of the Global Reporting Initiative. The Management of Metso Corporation is also responsible for such internal control as the management determines is necessary to enable the preparation of the Sustainability Information that is free from material misstatement, whether due to fraud or error.

## Practitioner's independence and quality control

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

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

## Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Sustainability Information based on the procedures we have performed and the evidence we have obtained. Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone other than Metso Corporation for our work, for this report, or for the conclusions that we have reached.

We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of

Historical Financial Information". That standard requires that we plan and perform the engagement to obtain limited assurance about whether the Sustainability Information is free from material misstatement.

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

Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of the Company.
- Visiting the Company's Head Office as well as two sites in Brazil and China.
- Conducting one video interview with one site in the United States of America.
- Interviewing employees responsible for collecting and reporting the Sustainability Information at the Group level and at the site level where our site visits and video interview were conducted.
- Assessing how Group employees apply the Company's reporting instructions and procedures.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.
- Testing the consolidation of information and performing recalculations on a sample basis.

## Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Metso Corporation's Sustainability Information for the reporting period ended 31 December 2017 is not properly prepared, in all material respects, in accordance with the Reporting criteria.

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

Helsinki, 16 February 2018

## PricewaterhouseCoopers Oy

Sirpa Juutinen  
Partner  
Sustainability & Climate Change