

# GRI SUPPLEMENT 2018 Enabling modern life

# Metso's Annual Report 2018

#### Information about Metso's Annual Report 2018

Metso enables modern life. Business opportunities arise when we collaborate closely with our customers in developing sustainable solutions for their business challenges. By growing and improving profitability we create value for all our stakeholders. By demanding sustainability from ourselves and our partners alike, we contribute to the building of trust.

Metso's Annual Report 2018 consists of four report sections: Business Overview, Financial Review, Corporate Governance and GRI Supplement. In this Annual Report we apply integrated reporting elements.

#### Metso's channels

#### > metso.com

> twitter.com/metsogroup
> facebook.com/metsoworld
> youtube.com/metsoworld
> instagram.com/metsoworld

# Enabling modern life Demoto

1. Business Overview Strategy, value creation, sustainability and risk management



2. Financial Review Board of Directors' Report, Financial Statements and investor information



3. Corporate Governance Corporate Governance Statement including remuneration



4. GRI Supplement Externally assured sustainability information compliant with the GRI Standards

## About this GRI Supplement

Metso publishes its sustainability data annually. This supplement contains quantitative data for the 2018 calendar year and has been prepared in accordance with the GRI Standards: Core option. Metso has reported its sustainability principles, targets and 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 proportion of spending on local suppliers, supplier sustainability audits, the lost time incident frequency (LTIF) of contractors and supervised workers, and the CO<sub>2</sub> emissions of purchased goods and services. The sustainability data is presented at the corporation level, unless otherwise stated.

Metso's Annual Report 2018 consists of the Business Overview, Financial Review, Corporate Governance, and the GRI Supplement. The GRI reporting principles for defining report content have been taken into consideration while producing the sustainability related contents.

The sustainability data is presented in various sections of this report, and the key figures are summarised in conjunction with the "GRI content index" and "Key performance indicators".

PricewaterhouseCoopers Oy has provided limited assurance on the sustainability information disclosed in Metso's Annual Report 2018 as an independent third party. The scope of the assured information is indicated in the independent practitioner's assurance report on page 18 of this report.

All Annual Report sections are available in English and in Finnish. They are downloadable on our Annual Report website at www.metso.com/2018.

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About this section / Metso's Annual Report 2018 consists of four report sections. This is the GRI Supplement, including the independent practitioner's assurance report.

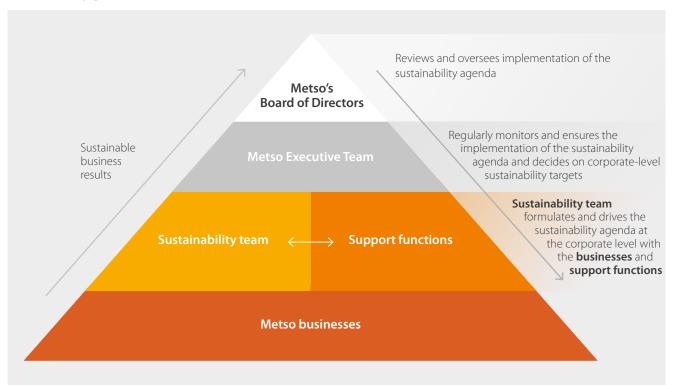
# Sustainability governance

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

Metso's Board of Directors oversees the effectiveness of Metso sustainability governance and the impact of the sustainability agenda. The Metso Executive Team acts as 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 drives the sustainability agenda at the corporate level in cooperation with the businesses and corporate support functions. The sustainability team manages Metso's material sustainability issues, and cooperates in the development of sustainability practices and sustainability communications, and in the implementation of corporate policies. The team gives key input to sustainability-related training, risk management and external reporting in cooperation with different corporate functions and is also responsible for proactive management of key stakeholders' expectations.

#### Sustainability governance



# Metso's stakeholders

Continuous 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. The focus areas and the channels of communication vary according to the stakeholders' needs.

#### **Metso's stakeholders**

#### **Customers**

Our customer relationships are built on continuous interaction, extensive know-how and long-term commitment. Our ambition is to create mutual business success, be the best choice and a preferred partner in all that we do. More about customer engagement is available in the Business Overview and the non-financial information.

#### **Employees**

People are a high strategic priority. We consider our people and their knowledge, expertise and skills as one of our competitive advantages. We continuously develop our managers' leadership capabilities and promote the competence development of our employees.

More about employees is available in the Business Overview and the non-financial information.

#### **Suppliers and subcontractors**

We work closely with many of our suppliers and subcontractors. The cooperation is based on solid partnership and long-term collaboration. We have transparent supplier requirements and we encourage safe working practices. We conduct internal supplier sustainability audits and third-party supplier audits for higher risk suppliers. More about suppliers is available in the Business Overview and the non-financial information.

#### Shareholders and investors

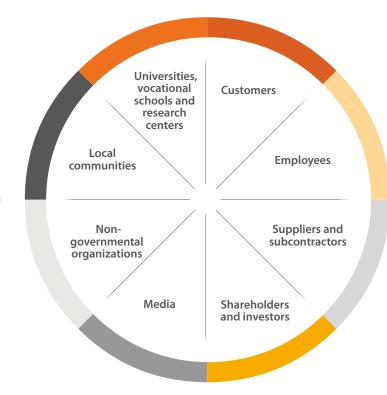
Metso is committed to long-term value creation for its shareholders. We have continued the development of sustainability communications for investors in different channels. We actively engage with our investors and shareholders at events, in meetings, calls and digital channels. More about investor dialogue in 2018 is available in the Financial Review.

#### Media

We provide clear and accurate information about Metso. We proactively and responsively communicate in many channels.

#### **Non-governmental organizations**

We have good cooperation with non-governmental organizations (NGOs). Our cooperation partners include e.g. John Nurminen Foundation, Plan India and SOS Children's Villages International.



#### **Local communities**

We are responsible corporate citizen and we work closely with the local communities around our operating sites. We create value by providing employment opportunities, and we support corporate social responsibility projects in our local communities.

#### Universities, vocational schools and research centers

We consider cooperation with universities and research institutes important and a crucial element in innovations. We arrange cooperation projects, school visits, apprenticeship training and internships and dissertation positions.

# Key performance indicators

### Location of operations (102-4)

#### 20 largest countries by personnel

	2016	2017	2018
Finland	1,603	1,685	1,838
United States	1,338	1,281	1,384
India	777	859	1,268
Brazil	1,214	1,166	1,185
China	1,031	1,030	1,114
Chile	694	1,011	1,100
Sweden	729	721	784
South Africa	757	733	733
Australia	497	667	690
France	451	417	410
Germany	367	339	366
Mexico	260	297	341
Canada	271	282	290
Peru	249	248	277
Czech Republic	244	267	272
Russia	147	134	137
Spain	127	133	136
United Kingdom	94	84	103
South Korea	93	94	91
Denmark	90	91	89

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

2018	Female	Male	Total
By employment contract			
Permanent	2,037	9,358	11,395
Temporary	301	1,454	1,755
By employment type			
Full-time	2,210	10,706	12,916
Part-time	128	106	234
Total	2,338	10,812	13,150

2018	Permanent	Temporary	Total
By region			
Europe	4,204	208	4,412
South and Central America	2,261	645	2,906
North America	1,647	27	1,674
Asia Pacific	2,472	846	3,318
Africa and Middle East	811	29	840
Total	11,395	1,755	13,150

#### **External initiatives (102-12)**

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.

#### Membership in associations (102-13)

Metso is involved with various industry, trade and expert organizations.

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
- 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.
- Finnish-Swedish Chamber of Commerce, Sweden

#### **Collective bargaining agreements (102-41)**

Metso supports freedom of association and the right to collective bargaining for all our employees. 44% of Metso employees were covered by bargaining agreements in 2018. The percentage varied widely between regions; it was highest in Europe 84% and lowest in North America 2%.

#### GRI 201: ECONOMIC PERFORMANCE

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

EUR million	2016	2017	2018
Customers: Sales and other income	2,586	2,699	3,173
Suppliers: Operating costs	1,430	1,630	1,859
Employees: Wages and benefits	610	606	638
Public sector: Taxes	58	82	92
Creditors: Interest	39	35	30
Communities: Sponsorships and donations	0.79	1.15	0.55
Shareholders: Payments to providers of capital	157	157	157
Economic value retained	292	188	396

#### Income taxes\*, largest countries

EUR million	2016	2017	2018
United States	18	20	19
Sweden	2	2	13
Finland	6	8	11
France	0	-1	9
India	0	8	9
Brazil	7	7	6
Chile	7	8	6
China	6	5	5
Peru	5	3	5
Mexico	4	2	3

\*presented on an accrual basis

#### GRI 204: PROCUREMENT PRACTICES

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

	2016	2017	2018
United States	60%	61%	48%
Finland	57%	55%	55%
Sweden	50%	50%	43%
France	57%	59%	54%
China	92%	92%	92%
Brazil	90%	89%	91%
India	82%	87%	87%

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

Definition of '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 business transactions.

Risk management audits were conducted in six units in 2018, covering about 20% of the 25 units included in the program. This covers more than 80% of Metso's sales during the five-year period.

#### GRI 302: ENERGY

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

	2016	2017	2018
Direct energy consumption by fuel			
Natural gas	525	572	567
Coal	0	0	0
Heavy fuel oil (HFO)	0	0	0
Diesel	19	18	21
Liquefied petroleum gas (LPG)	26	28	36
Indirect energy consumption			
Electricity	729	756	775
District heat	75	62	75
Steam	52	47	47
Total energy consumption	1,426	1,482	1,521

Cooling consumed and sold is included in electricity. The consumption figures are calculated based on invoicing. Standard conversion factors (SI) are used in the calculations. No fuel consumption from renewable sources in 2018. The figures for the years 2016-2017 have been restated based on our internal data validation review.

#### GRI 302: ENERGY

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

2016	2017	2018
226	247	276

Reduction in energy consumption as a direct result of conservation and efficiency initiatives. Reduction in energy consumption includes electricity, heating, cooling, steam and fuel since baseline year 2010 The figures for the years 2016-2017 have been restated based on our internal data validation review.

#### GRI 303: WATER

#### Water withdrawal by source (303-1), 1,000 m<sup>3</sup>

	2016	2017	2018
Surface water	950	950	1,010
Groundwater	60	64	60
Rainwater	0	0	0
Municipal water or other utilities	313	304	331
Total	1,323	1,319	1,401

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 were also used.

#### GRI 305: EMISSIONS

#### Direct (Scope 1) greenhouse gas emissions (305-1), tCO<sub>2</sub>

	2016	2017	2018
Scope 1 emissions	32,533	35,161	35,639

Greenhouse gas emissions reporting covers only  $CO_2$ . Metso does not have any biogenic  $CO_2$  emissions in its operations.

Energy savings: Baseline year 2010 has been used to calculate the reduction in energy consumption.

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

We use standard conversion factors (SI).

Source for emission factors is IEA "CO2 Emissions from Fuel Combustion" 2016 edition.

The figures for the years 2016-2017 have been restated based on our internal data validation review.

#### Energy indirect (Scope 2) greenhouse gas emissions (305-2), tCO<sub>2</sub>

	2016	2017	2018
Scope 2 emissions	94,064	96,557	101,559

Greenhouse gas emissions reporting covers only CO<sub>2</sub>.

Energy savings: Baseline year 2010 has been used to calculate the reduction in energy consumption.

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

We use standard conversion factors (SI).

Source for emission factors is IEA "CO<sub>2</sub> Emissions from Fuel Combustion" 2016 edition.

The figures for the years 2016-2017 have been restated based on our internal data validation review.

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

2018	Reduced fuel/energy consumption	CO <sub>2</sub> Unit	emissions avoided (tonnes)
Lokotrack	30,506,000	liters of diesel oil	81,700
Vertimill	1,482,000	MWh	652,000

#### Lokotrack:

Reductions in energy consumption for Lokotrack are measured in diesel fuel savings.

The fuel savings in new Lokotrack models were calculated by comparing fuel consumption to predecessor models. The fuel savings are achieved by engineered actions to reduce fuel consumption.

CO<sub>2</sub>-emission factor: 2.68 kg CO<sub>2</sub>-e/liter diesel

 $\label{eq:constraint} CO_2\mbox{-}emission factor source: www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016}$ 

#### Vertimill:

Reductions in energy consumption for Vertimill are measured in energy savings (MWh).

Metso Vertimill energy savings were calculated by comparing it to the traditional ball mill.

CO<sub>2</sub>-emission factor: 0,5925 kg CO<sub>2</sub>/kWh

CO<sub>2</sub>-emission factor source: carbonfund.org/how-we-calculate

#### GRI 305: EMISSIONS

#### Other indirect (Scope 3) greenhouse gas emissions (305-3), tCO<sub>2</sub>

	2016	2017	2018
Purchased goods and services	439,777	571,530	655,732
Fuel- and energy-related emissions	18,502	19,309	19,417
Upstream transportation	100,390	139,327	161,629
Business travel	10,200	12,937	22,256
Downstream transportation	48,336	67,083	77,821

Metso has conducted an analysis of all its 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 the sixth 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  $CO_2$ . Metso does not have any biogenic  $CO_2$  emissions in its operations.

The Scope 3 emissions of purchased goods and services cover direct spend accounts for approximately 70% of the total spend. The analysis is based on the monetary value of purchased goods and services by supplier type and on the 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 emissions (production of purchased fuels and energy: diesel, LPG, natural gas, electricity, steam, district heating). Coverage is 100%. The emission factor source is:

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 on the 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, Australia, Brazil, India and China; these areas account for 83% of Metso's workforce.

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

#### Reduction of greenhouse gas emissions (305-5), tCO<sub>2</sub>

	2016	2017	2018
Reduction of emissions	18,997	20,522	23,344

The emissions reduction is calculated on the basis of the reduction in energy consumption since baseline year 2010, based on invoicing and conversion to  $CO_2$  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: Baseline year 2010 has been used to calculate the reduction in energy consumption. The reported emissions are based on invoicing and are converted from MWh to CO<sub>2</sub> emissions. We use standard conversion factors (SI). Source for emission factors is IEA "CO<sub>2</sub> Emissions from Fuel Combustion" 2016 edition. The figures for the years 2016-2017 have been restated based on our internal data validation review.

#### GRI 306: EFFLUENTS AND WASTE

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

	2016	2017	2018
Hazardous			
Recycling	731	994	796
Recovery	121	110	779
Incineration	347	626	547
Landfill	6,759	7,067	7,063
On-site storage	3	3	28
Total	7,961	8,800	9,214
Non-hazardous			
Recycling	15,432	37,487	43,197
Composting	178	202	263
Recovery	5,283	6,664	5,534
Incineration	588	1,073	114
Landfill	32,065	20,140	21,302
Total	53,546	65,566	70,410

The waste disposal method is determined based on information provided by the waste disposal contractor.

Reuse is not significant in Metso's operations. The hazardous landfill waste includes sand from the foundries. It is handled appropriately at the landfill sites.

The figures for the years 2016-2017 have been restated based on our internal data validation review.

#### Significant spills (306-3)



#### GRI 401: EMPLOYMENT

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

#### Employment 2018

Category	Indicator	Number of new hires	% of total no. of new hires	New hire rate %
New hires by age group	<30	836	32%	46%
	30–50	1,535	60%	18%
	> 50	198	8%	7%
New hires by gender	Female	416	16%	18%
	Male	2,153	84%	20%
New hires by region	Europe	586	23%	13%
	South and Central America	949	37%	33%
	North America	275	11%	16%
	Asia Pacific	669	26%	20%
	Africa and Middle East	90	3%	11%
Total new hires	Total	2,569	100%	20%

Category	Indicator	Number of leavers	% of total no. of leavers	Turnover rate %
Leavers by age group	<30	285	21%	16%
	30–50	836	63%	10%
	> 50	219	16%	7%
Leavers by gender	Female	188	14%	8%
	Male	1,152	86%	11%
Leavers by region	Europe	326	24%	7%
	South and Central America	432	32%	15%
	North America	146	11%	9%
	Asia Pacific	382	29%	12%
	Africa and Middle East	54	4%	6%
Total leavers	Total	1,340	100%	10%

Total number and rate of new employee hires during the reporting period, by age group, gender and region. Total number and rate of employee turnover during the reporting period, by age group, gender and region.

#### 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 varies 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

		2016	2017	2018
Types of injury	Superficial injuries and open wounds	56%	58%	62%
	Dislocations, sprains and strains	6%	8%	8%
	Burns, corrosions, scalds and frostbite	8%	5%	6%
	Fractures	5%	4%	7%
	Concussions and internal injuries	1%	2%	2%
	Traumatic amputations	1%	0%	0%
	Acute poisonings and infections	3%	3%	2%
	Other specified types of injury	2%	1%	1%
	Unspecified	18%	19%	11%
	Total	100%	100%	100%

		2016	2017	2018
Lost time incident frequency				
By region	Europe	3.1	3.3	3.2
	South and Central America	3.4	2.1	2.2
	North America	2.1	1.0	2.3
	Asia Pacific	1.2	3.0	2.4
	Africa and Middle East	1.6	2.3	4.9
	Total	2.5	2.6	2.8

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 seen as not significant.

		2016	2017	2018
Risk observation frequency	-		700	
By region	Europe	428	728	787
	South and Central America	1,609	1,356	1,320
	North America	200	462	728
	Asia Pacific	639	1,084	1,156
	Africa and Middle East	558	805	942
	Total	696	914	998

Includes risk observations

		2016	2017	2018
Lost day rate				
By region	Europe	0.12%	0.23%	0.12%
	South and Central America	0.05%	0.09%	0.17%
	North America	0.07%	0.15%	0.03%
	Asia Pacific	0.12%	0.21%	0.18%
	Africa and Middle East	0.03%	0.02%	0.15%
	Total	0.09%	0.17%	0.14%

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 measured as absence from work. It is calculated by comparing the total number of lost days to the total number of hours scheduled to be worked by the workforce in the reporting period.

Some health and safety figures for the years 2016-2017 have been restated based on our internal data validation review.

According to ILO classification, % of total injuries.

		2016	2017	2018
Injury rate				
By region	Europe	27.2	29.8	31.6
	South and Central America	10.5	11.7	7.6
	North America	18.8	16.7	15.8
	Asia Pacific	10.9	14.5	15.0
	Africa and Middle East	7.1	16.3	27.0
	Total	17.3	19.6	19.9

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

		2016	2017	2018
Total recordable incident frequency				
By region	Europe	7.4	9.9	9.5
	South and Central America	6.7	5.0	3.9
	North America	7.9	5.4	7.1
	Asia Pacific	4.3	7.1	5.1
	Africa and Middle East	3.8	5.8	8.6
	Total	6.4	7.3	6.8

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

#### Non-metso employees - contractors and supervised workers

		2016	2017	2018
Absentee rate				
By region	Europe	3.9%	4.1%	3.8%
	South and Central America	1.6%	2.0%	2.1%
	North America	1.4%	1.6%	1.3%
	Asia Pacific	1.1%	1.2%	1.4%
	Africa and Middle East	2.5%	1.7%	1.2%
	Total	2.3%	2.5%	2.3%

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

Includes absences arising from all types of inability to work, not just as the result of a work-related injury or disease. Excludes permitted absences, such as holidays, study, maternity or paternity leave, and compassionate leave.

Refers to actual absentee days lost expressed as a percentage of total number of days scheduled to be worked by the workforce for the same period.

	2016	2017	2018
Fatalities	0	0	1

		2010	2017	2010
Types of injury	Superficial injuries and open wounds	57%	50%	64%
	Dislocations, sprains and strains	3%	3%	6%
	Burns, corrosions, scalds and frostbite	6%	5%	5%
	Fractures	3%	12%	8%
	Concussions and internal injuries	2%	7%	2%
	Traumatic amputations	0%	0%	0%
	Acute poisonings and infections	2%	1%	0%
	Other specified types of injury	2%	5%	0%
	Unspecified	26%	18%	14%
	Total	100%	100%	100%
According to ILO cla	assification, % of total injuries.			
		2016	2017	2018
Injury rate				
By region	Europe	79.0	78.7	82.3
	South and Central America	6.3	9.4	26.7
	North America	16.8	47.6	13.9
	Asia Pacific	18.4	17.1	17.0
	Africa and Middle East	37.0	26.1	17.6
	Total	21.9	25.1	28.7

2016

2017

2018

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

		2016	2017	2018
Lost time incident frequency	-			
By region	Europe	12.2	22.8	12.4
	South and Central America	1.0	2.8	4.7
	North America	0.0	11.9	0.0
	Asia Pacific	2.3	3.7	2.2
	Africa and Middle East	0.0	0.0	0.0
	Total	2.8	6.4	4.1

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

	2016	2017	2018
Fatalities	0	0	0

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

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

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

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

These frequencies are calculated per million hours worked.

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Some health and safety figures for the years 2016-2017 have been restated based on our internal data validation review.

#### GRI 405: DIVERSITY AND EQUAL OPPORTUNITY

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

#### Diversity of governance bodies

	Indicator	2016	2017	2018
Board of Directors	By gender			
	Female	25%	29%	25%
	Male	75%	71%	75%
	By age group			
	<30	0%	0%	0%
	30-50	12%	14%	12%
	> 50	88%	86%	88%
Executive Team	By gender			
	Female	22%	29%	20%
	Male	78%	71%	80%
	By age group			
	<30	0%	0%	0%
	30-50	44%	29%	40%
	> 50	56%	71%	60%

#### Diversity of employees

	Indicator	2018	
Employee category		White-collar	Blue-collar
	By gender		
	Female	16%	2%
	Male	46%	36%
	By age group		
	<30	8%	6%
	30–50	40%	24%
	> 50	14%	8%
	Total	62%	38%

#### GRI 406: NON-DISCRIMINATION

#### Incidents of discrimination and corrective actions taken (406-1)

There were no incidents of discrimination reported in 2018.

#### GRI 412: HUMAN RIGHTS ASSESSMENT

#### Employee training on human rights policies or procedures (412-2)

	2016	2017	2018
Total number of hours devoted to training on human rights policies or procedures	n/a	11,152	410
	6 H H		

Metso has a biennial Code of Conduct training that is mandatory for all employees. Human rights is and important part of the training. In 2017, 99.8 percent of Metso employees have taken the Code of Conduct training.

The next biennial Code of Conduct training will be organized in 2019.

In addtion, all new employees are requested to take the Code of Conduct training.

#### METSO INDICATORS

#### Metso indicator: Supplier sustainability audits

	2016	2017	2018
Number of supplier sustainability audits	15	58	99

In addition to third-party supplier sustainability audits (16), Metso also conducted 83 internal supplier sustainability audits in 2018.

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

	2016	2017	2018
R&D projects with sustainability targets	83%	84%	86%

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

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

All active projects and projects closed in 2016–2018 are included.

#### **Metso indicator: Community engagement**

	2018
Support for non-profit organizations (EUR)	547,469
Science, research and education	60.4%
Environmental protection and conservation	3.0%
Health and social programs	32.4%
Universities or foundations	1.4%
Natural disasters	0.5%
Other	2.2%

# **GRI** Content Index

### General Disclosures

#### 1. Organizational profile

#### Abbreviations

BO Business Overview FR Financial Review CG Corporate Governance GRI GRI Supplement

#### Abbreviations

**UNGC** United Nations Global Compact **SDG** Sustainable Development Goals **KPI** Key performance indicators section

Disclosure number	Disclosure title	Page number	Additional information	Cross-reference: UNGC SDG
		Page number		500
102-1	Name of the organization	0.0000.00.0.7	Metso Corporation.	
102-2	Activities, brands, products, and services	Our year 2018, BO, p. 3–7		
102-3	Location of headquarters		Helsinki, Finland.	
102-4	Location of operations	Our year 2018, BO, p. 4 FR, p. 66 Key performance indicators, GRI, p. 4		
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	Our year 2018, BO, p. 3–4 Metso strategy, BO, p. 20–21		
102-7	Scale of the organization	Our year 2018, BO, p. 3–4 Value creation, BO, p. 14 Metso strategy, BO, 20–21		
102-8	Information on employees and other workers	Key performance indicators section, GRI, p. 4	The share of the organization's activities performed by workers who are not Metso employees is not significant. 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.	UNGC Principle 6 SDG 8
102-9	Supply chain	Value creation, BO, p. 14 Responsible Procurement, BO, p. 32		
102-10	Significant changes to the organization and its supply chain	Highlights of 2018, BO, p. 7		
102-11	Precautionary principle or approach	Risk and risk mangagement, BO, p. 41–44		
102-12	External initiatives	External initiatives, GRI, p. 4		
102-13	Membership in associations	Membership in associations, GRI, p. 4		
2. Strategy				
Disclosure number	Disclosure title		Additional information	Cross-reference: UNGC SDG
		Page number		טענ
102-14	Statement from senior decision-maker	CEO on sustainability, BO, p. 5–6		
102-15	Key impacts, risks, and opportunities	Value creation, BO, p. 14 Megatrends, BO, p. 15–16 Non-financial statement, FR, p.10		

3. Ethics and integ	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	Responsible and trusted partner, Code of Conduct, BO, p. 28	8	UNGC Principle 10 SDG 16		
102-17	Mechanisms for advice and concerns about ethics	CG, p. 11		UNGC Principle 10 SDG 16		

#### 4. Governance

Disclosure number	Disclosure title	Page number	Additional information	Cross-reference: UNGC SDG
102-18	Governance structure	CG, p. 3		

#### 5. Stakeholder engagement

Disclosure number	Disclosure title	Page number	Additional information	Cross-reference: UNGC SDG
102-40	List of stakeholder groups	Metso's stakeholders, GRI, p. 3		
102-41	Collective bargaining agreements	Key performance indicators section, GRI, p. 4		
102-42	Identifying and selecting stakeholders	Aligning sustainability with business strategy, BO, p. 13 Stakeholder engagement, GRI, p. 3		
102-43	Approach to stakeholder engagement	Aligning sustainability with business strategy, BO, p. 13 Stakeholder engagement, GRI, p. 3		
102-44	Key topics and concerns raised	Aligning sustainability with business strategy, BO, p. 13 Stakeholder engagement, GRI, p. 3		

#### 6. Reporting practice

				Cross-reference: UNGC
Disclosure number	Disclosure title	Page number	Additional information	SDG
102-45	Entities included in the consolidated financial statements	FR, p. 66	All Group companies are included in the reporting.	
102-46	Defining report content and topic boundaries	About this GRI Supplement, GRI, p. ii		
102-47	List of material topics	Aligning sustainability with business strategy, BO, p. 13		
102-48	Restatements of information		Some HSE figures for the years 2016-2017 have been restated based on our internal data validation review.	
102-49	Changes in reporting		No changes.	
102-50	Reporting period		January 1, 2018 – December 31, 2018	
102-51	Date of most recent report		Metso's Sustainability Supplement 2017 was published in March 2018.	
102-52	Reporting cycle		Annual.	
102-53	Contact point for questions regarding the report		kaisa.jungman@metso.com harald.huppe@metso.com tanja.makinen@metso.com	
102-54	Claims of reporting in accordance with the GRI Standards	About this GRI Supplement, GRI, p. ii	This report has been prepared in accordance with the GRI Standards: Core option.	
102-55	GRI Content Index	GRI Content Index, GRI, p. 12		
102-56	External assurance	About this GRI Supplement, GRI, p. ii Assurance Statement, GRI, p. 18	This report has been externally assured by PwC.	

## Topic-specific Disclosures

#### **GRI 200: Economic Standard Series**

GRI Material Topic	Disclosure number	Disclosure title	Page number	Omission/Additional information	Cross-reference: UNGC SDG
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed			SDG 2, 5, 7, 8, 9
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	Key performance indicators, GRI, p. 5		SDG 12
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Key performance indicators, GRI, p. 5		UNGC Principle 10 SDG 16

#### **GRI 300 Environmental Standard Series**

GRI Material Topic	Disclosure number	Disclosure title	Page number	Omission/Additional information	Cross-reference: UNGC SDG
GRI 302: Energy 2016	302-1	Energy consumption within the organization	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 5	Metso does not collect cooling data separately. Cooling is included in the electricity consumption figures.	UNGC Principle 7 SDG 7, 8, 12, 13
	302-4	Reduction of energy consumption	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 6		UNGC Principles 7, 9 SDG 7, 8, 12, 13
	302-5	Reductions in energy requirements of products and services	Sustainable productivity for customer success, BO, p. 35–40 Lokotrack, Vertimill, GRI, p. 6	Metso reports improvements in fuel and energy consumption compared to previous models for two product lines.	UNGC Principles 7, 9 SDG 8, 12, 13
GRI 303: Water 2016	303-1	Water withdrawal by source	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 6		UNGC Principles 7, 9 SDG 6
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 6		UNGC Principle 7 SDG 3, 12, 13, 14, 15
	305-2	Energy indirect (Scope 2) GHG emissions	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 6		UNGC Principle 7 SDG 3, 12, 13, 14, 15
	305-3	Other indirect (Scope 3) GHG emissions	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 7		UNGC Principle 7 SDG 3, 12, 13, 14, 15
	305-5	Reduction of GHG emissions	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 7		UNGC Principles 7, 9 SDG 13, 14, 15
GRI 306: Effluents and Waste 2016	306-2	Waste by type and disposal method	Responsible and trusted partner, Environmental efficiency of our own operations, BO, p. 30–31 Key performance indicators, GRI, p. 7		UNGC Principle 7 SDG 3, 6, 12
	306-3	Significant spills	Key performance indicators, GRI, p. 7	No significant spills during the 2018 reporting period.	UNGC Principle 7 SDG 3, 6, 12, 14, 15

GRI Material Topic	Disclosure number	Disclosure title	Page number	Omission/Additional information	Cross-reference: UNGC SDG
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	Key performance indicators, GRI, p. 8		UNGC Principles 3, 6 SDG 5, 8
GRI 402: Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	Key performance indicators, GRI, p. 8		UNGC 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	Responsible and trusted partner: Safe working environment, BO, p. 29–30 Key performance indicators, GRI, p. 9–10	Not reported by gender because it is not seen as significant. ODR not reported for Metso employees.	UNGC Principle 6 SDG 3, 8
GRI 404: Training and Education 2016	404-3	Percentage of employees receiving regular performance and career development reviews	Responsible and trusted partner: Leadership, BO, p 33–34	Not reported by gender or employee category.	UNGC Principle 6 SDG 5, 8
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	Key performance indicators, GRI, p. 11		UNGC Principle 6 SDG 5, 8
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	Key performance indicators, GRI, p. 11		UNGC Principles 1, 2 , 6 SDG 5, 16
GRI 412: Human Rights Assessment	412-2	Employee training on human rights policies or procedures	Responsible and trusted partner: Human rights along the value chain, BO, p. 28–29 Key performance indicators, GRI, p. 11		UNGC Principle 1

Metso topics			
Material Topic	Disclosure title	Page number	Cross-reference: UNGC SDG
Metso topic: Sustainability targets set in R&D projects	Percentage of R&D projects that include a sustainability target	Key performance indicators, GRI, p. 11	
Metso topic: Supplier sustainability audits	Number of supplier sustainability audits	Key performance indicators, GRI, p. 11	
Metso topic: Community engagement	Support for non-profit organization (EUR)	Key performance indicators, GRI, p. 11	

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### Management Approach Disclosures

#### **Management Approach Disclosure**

Economic	
	Description/Reference
GRI Material Topic	GRI 201: Economic performance 2016, GRI 204: Procurement Practices 2016, GRI 205: Anti-corruption 2016
Key topics for our management approach	Value creation, Sustainable productivity, R&D, innovation, Customer engagement, Responsible business practices, Responsible procurement
Targets	Responsible procurement, BO, p. 32
Policies, processes, management model	Metso Code of Conduct, Sustainability criteria for suppliers, Anti-corruption Policy, Misconduct Policy, Intellectual Property Policy, Brand Policy
Monitoring the effectiveness of our approach – Specific actions and results	Responsible procurement, BO, p. 32 Stakeholder engagement, GRI, p. 3 Sustainable productivity, BO, p. 35–40
Disclosures	201-1, 204-2, Metso indicator: Supplier sustainability 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 NGOs.

Environmental	
	Description/Reference
GRI Material Topic	GRI 302: Energy 2016, GRI 303: Water 2016, GRI 305: Emissions 2016, GRI 306: Effluents and Waste 2016
Key topics for our management approach	Environmental efficiency of Metso's operations
Targets	Energy savings and CO <sub>2</sub> emission reductions; reductions in water use; reductions in amount of waste to landfill. Environmental efficiency of Metso's operations, BO, p. 30–31
Policies, processes, management model	HSE Management, HSE Policy, Environmental efficiency of Metso's operations, BO, p. 30–31
Monitoring the effectiveness of our approach – Specific actions and results	Environmental efficiency of Metso's operations, BO, p. 30–31 Sustainable productivity, BO, p. 35–40
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	GRI 401: Employment 2016, GRI 402: Labor/Management Relations 2016, GRI 403: Occupational Health and Safety 2016, GRI 404: Training and Education 2016, GRI 405: Diversity and Equal Opportunity 2016, GRI 412: Human Rights Assessment 2016
Key topics for our management approach	Metso Code of Conduct, Human Rights in the value chain, Safe working environment, Responsible procurement
Targets	Safe working environment, BO, p. 29–30; Leadership, BO, p. 33–34; Responsible procurement, BO, p. 32
Policies, processes, management model	Code of Conduct, BO, p. 28; Human Rights in the value chain, BO, p. 28–29; Non-financial statement, p. 9; Metso Code of Conduct, HSE Policy, HSE Management, Sustainability criteria for suppliers
Monitoring the effectiveness of our approach – Specific actions and results	Leadership, BO, p. 33–34 and key performance indicators, GRI, p. 8–11
Disclosures	401-1, 402-1, 403-2, 404-3, 405-1, 412-2, Metso indicator: Supplier sustainability audits
Topic boundary	Internal impacts Relevant external entities: suppliers, contractors, communities, government, NGOs and customers.

#### Human rights

	Description/Reference
GRI Material Topic	GRI 406: Non-discrimination 2016, GRI 412: Human Rights Assessment 2016
Key topics for our management approach	Metso Code of Conduct, Human rights in the value chain, Responsible procurement
Targets	Human rights in the value chain, BO, p. 28–29; Responsible procurement, BO, p. 32
Policies, processes, management model	Code of Conduct, BO, p. 28; Human Rights in the value chain, BO, p. 28–29; Non-financial statement, FR, p. 9, Sustainability criteria for suppliers
Monitoring the effectiveness of our approach – Specific actions and results	GRI content index, GRI, p. 11 (406-1)
Disclosures	412-2
Topic boundary	Internal impacts within our operations Relevant external entities: suppliers, contractors, communities, government and NGOs.

#### Society

	Description/Reference
GRI Material Topic	GRI 205: Anti-corruption 2016
Key topics for our management approach	Metso Code of Conduct, Anti-corruption
Targets	Code of Conduct, BO, p. 28; Human rights in the value chain, BO, p. 28–29; Leadership, BO, p. 33–34
Policies, processes, management model	Code of Conduct, Anti-corruption Policy, Metso Code of Conduct
Monitoring the effectiveness of our approach – Specific actions and results	Key performance indicators, GRI, p. 5 (205-1)
Disclosures	205-1, Metso indicator: Supplier sustainability audits
Topic boundary	Internal impacts within our operations
	Relevant external entities: communities, employees and government.

Sustainable productivity	
Reference	Description/Reference
GRI Material Topic	Marketing and Labeling
Key topics for our management approach	Sustainable productivity, BO, p. 35–40; Customer engagement, BO, p. 35
Targets	Sustainable productivity, BO, p. 35–40, Customer engagement, BO, p. 35
Policies, processes, management model	Code of Conduct, BO p. 28; Metso Code of Conduct, HSE Policy, HSE Management
Monitoring the effectiveness of our approach – Specific actions and results	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	External impacts within our value chain. 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 2018, disclosed in the "Business Overview" and "GRI Supplement" sections of Metso's Annual Report 2018. In terms of the Company's GRI Standards reporting and GRI Standards Content Index, the scope of the assurance has covered economic, social and 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 else, except to 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.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other disclosures in the Sustainability 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 Finland and Sweden.
- Conducting one video interview with one site in China.
- 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 2018 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, 1 March 2019

#### PricewaterhouseCoopers Oy

Sirpa JuutinenJussi NokPartnerDirectorSustainability & Climate ChangeSustainability

Jussi Nokkala Director Sustainability & Climate Change

**Metso Corporation** Töölönlahdenkatu 2 PO Box 1220, FI-00100 Helsinki, Finland Tel: +358 20 484 100 metso.com

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