Enabling modern life









GRI SUPPLEMENT 2019

Metso's Annual Report 2019

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 build trust.

Metso's Annual Report 2019 consists of four sections: Business Overview, Financial Review, Corporate Governance and GRI Supplement. All Annual Report sections are available in English and in Finnish. They are downloadable on our Annual Report website at www.metso.com/2019. In this Annual Report we apply integrated reporting elements.

More information

The following symbol guides you to more information on our website or in this report:



Metso's channels

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

Disclaimer

A plan to combine Metso's Minerals Business and Outotec is currently expected to be registered on June 30, 2020. The combined future Metso Outotec will be leading company in process technology, equipment and services serving the minerals, metals and aggregates industries.

As a result, Metso's Flow Control business will become the continuing business of the currently listed Metso, which will be subsequently renamed Neles, an independent listed company supplying flow control products and services.

Figures in this Annual Report are calculated based on the 2019 Metso Group structure unless otherwise stated. They

present Metso's operations before the partial demerger and planned combination with Outotec. In the Financial Statements, figures for continuing operations are also presented. They have been calculated presenting the future Neles as a single economic entity, using the same accounting principles and carrying amounts as in the Metso Group in accordance with the International Financial Reporting Standards ("IFRS") accounting and valuation principles as adopted by the EU. The future Neles figures presented here include some carve-out impacts that are not included in the reported figures of Metso's Flow Control segment.



Business Overview Strategy, value creation and sustainability



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



Corporate Governance Corporate Governance Statement including remuneration



GRI Supplement Externally assured sustainability information compliant with the GRI Standards

About this section

Metso's Annual Report 2019 consists of four report sections. This is the GRI Supplement, including the independent practitioner's assurance report.



Contents

- 2 Sustainability governance
- 3 Metso's stakeholders
- 4 Key performance indicators
- 13 GRI Content Index
- 19 Independent assurance report



About this GRI Supplement

Metso publishes its sustainability data annually. The quantitative data for the 2019 calendar year contained in this supplement has been prepared in accordance with the GRI Standards: Core option. Metso has reported its sustainability principles, targets and progress since 2002.

The boundary of our reporting is Metso Corporation, unless otherwise stated. This scope of reporting excludes associated companies and joint ventures. Supplier-related information includes spending on local suppliers, supplier sustainability audits, the lost time incident frequency (LTIF) of contractors and supervised workers, and the CO₂ emissions of purchased goods and services. The sustainability data is presented at the corporation level, unless otherwise stated.

Metso's Annual Report 2019 consists of the Business Overview, Financial Review, Corporate Governance, and the GRI Supplement. The GRI reporting principles for defining report content and report quality and the GRI 101 Foundation Standard have been taken into consideration in producing the sustainability-related content.

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

DNV GL Business Assurance Finland Oy/Ab has provided limited assurance on the sustainability information disclosed in Metso's Annual Report 2019, as an independent third party. The scope of the assured information is indicated in the independent assurance report on page 19–20 of this report.

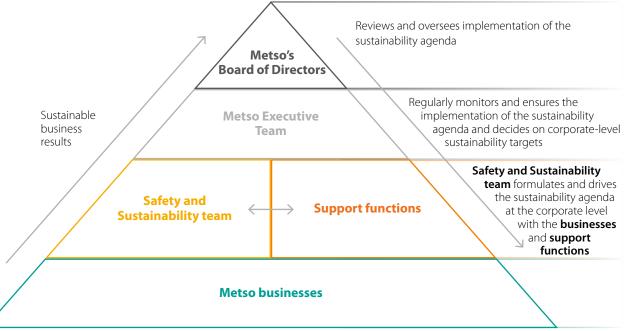
Sustainability governance

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's 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 Safety and Sustainability team drives the sustainability agenda at the corporate level in cooperation with the businesses and corporate support functions. The Safety and 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 by stakeholder needs.

Customers

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

Employees

People are a high strategic priority. We emphasize safety in all our operations. 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.

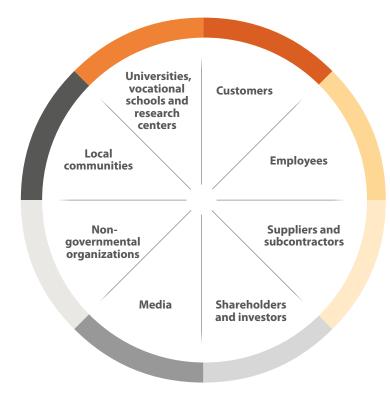
More about employees is available in the Business Overview and in the non-financial information.

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 transparency in our 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 in 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 our investor dialogue in 2019 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 a 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, internships and dissertation positions.

Key performance indicators

Location of operations (102-4)

20 largest countries by personnel

	2017	2018	2019
Chile	1,011	1,100	2,525
Finland	1,685	1,838	1,897
United States	1,281	1,384	1,548
India	859	1,268	1,386
Brazil	1,166	1,185	1,310
China	1,030	1,114	1,226
Sweden	721	784	790
Australia	667	690	694
Canada	282	290	681
South Africa	733	733	553
United Kingdom	84	103	482
France	417	410	407
Mexico	297	341	390
Germany	339	366	383
Czech Republic	267	272	280
Peru	248	277	265
Russia	134	137	145
Denmark	91	89	96
Republic of Korea	94	91	88
Indonesia	40	46	65

Information on employees and other workers (102-8)

2019	Female	Male	Total
By employment contract			
Permanent	2,235	10,914	13,149
Temporary	370	2,302	2,672
By employment type			
Full-time	2,467	13,065	15,532
Part-time	138	151	289
Total	2,605	13,216	15,821

2019	Permanent	Temporary	Total
By region			
Europe	4,644	230	4,874
North America	2,191	38	2,229
South and Central America	2,991	1,502	4,493
Asia-Pacific	2,723	833	3,556
Africa and Middle East	600	69	669
Total	13,149	2,672	15,821

External initiatives (102-12)

Metso joined 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.

Collective bargaining agreements (102-41)

Metso supports freedom of association and the right to collective bargaining for all our employees. 37% of Metso employees were covered by bargaining agreements in 2019. The percentage varied widely between regions; it was highest in Europe 76% and lowest in North America 2%.

GRI 201: ECONOMIC PERFORMANCE

Direct economic value generated and distributed (201-1)

EUR million	2017	2018	2019
Customers: Sales and other income	2,699	3,173	3,634
Suppliers: Operating costs	1,630	1,859	2,053
Employees: Wages and benefits	650	683	734
Public sector: Taxes	82	92	91
Creditors: Interest	35	30	38
Communities: Sponsorships and donations	1.15	0.55	0.59
Shareholders: Payments to providers of capital	157	157	180
Economic value retained	144	351	538

The figures for the years 2017–2018 have been restated and pension expenses moved from economic value retained to employees category.

Income taxes^{*}, largest countries

EUR million	2017	2018	2019
United States	20	19	26
Finland	8	11	10
Brazil	7	6	9
India	8	9	8
Sweden	2	13	7
China	5	5	7
Chile	8	6	7
Canada	1	1	4
France	-1	9	3
Russia	0	2	3

*presented on an accrual basis

GRI 204: PROCUREMENT PRACTICES

Proportion of spending on local suppliers (204-1)

	2017	2018	2019
United States	61%	48%	59%
Finland	55%	55%	54%
Sweden	50%	43%	45%
France	59%	54%	55%
China	92%	92%	100%
Brazil	89%	91%	90%
India	87%	87%	89%

Definition 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.

Internal Audits were conducted in 23 Metso's units in 2019 covering approximately 44% of Metso's annual sales in 2019.

GRI 302: ENERGY

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

	2017	2018	2019
Direct energy consumption by fuel			
Natural gas	572	567	592
Coal	0	0	0
Heavy fuel oil (HFO)	0	0	0
Diesel	18	21	28
Liquefied petroleum gas (LPG)	28	36	22
Indirect energy consumption			
Electricity	756	775	666
District heat	62	75	74
Steam	47	47	48
Total energy consumption	1,482	1,521	1,431

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 2019.

GRI 302: ENERGY

Reduction of energy consumption (302-4), TJ

2017	2018	2019
247	276	305

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

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

2019	Reduced fuel/ energy consumption	Unit	CO ₂ emissions avoided (tonnes)
Lokotrack	36,404,000	liters of diesel oil	97,563
Grinding machines: Vertimill, HRC, SMI	D 1,504,640	MWh	807,991

In addition to reductions in energy consumption, there are also reduced steel media consumption and liner consumption rates that amounted to 195,834 CO₂ emissions avoided (tonnes) in 2019.

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. Avoided emissions in 2019 also increased due to bigger installed base.

CO₂-emission factor: 2.69 kg CO₂-e/liter diesel CO₂-emission factor source: www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2016

Grinding machines: Vertimill, HRC, SMD:

Reductions in energy consumption for Vertimill are measured in energy savings (MWh) due to higher efficiency of operation, reduced steel media consumption and liner consumption rates. Comparisons are versus horizontal ball mills.

Similar reductions in energy consumption are calculated for SMDs due to higher efficiency of operation, media consumption and liner consumption rates. CO_2 / kg steel and rubber were applied based on lining material and media.

HRC reductions in energy consumption are due to more energy efficient circuit operation (crusher, HPGR and ball mill) compared to conventional circuits using crushers, SAG mills and ball mills.

Purchased electricity:

• CO₂ emission factor: 0.537 kg CO₂/kWh

• CO₂ emission factor source:

WWF international CO₂ factor, IEA Highlights 2013 SMD ceramic media:

• CO₂ emission factor: 4.0 kg CO₂ / kg

• CO₂ emission factor source:

www.qualicer.org/recopilatorio/ponencias/pdfs/2010239.pdf

Steel:

- CO₂ emission factor: 1.83 Kg CO₂ / Kg steel
 CO₂ emission factor source:
- www.worldsteel.org/publications/position-papers/steel-scontribution-to-a-low-carbon-future.html
- Rubber
- CO₂ emission factor: 3.18 Kg CO₂ / Kg rubber
- CO₂ emission factor source: www.winnipeg.ca/finance/findata/matmgt/ documents/2012/682-2012/Appendix_H-WSTP_South_End_ Plant_Process_Selection_Report/Appendix%207.pdf

GRI 303: WATER

Water withdrawal by source (303-1), 1,000 m³

	2017	2018	2019
Surface water	950	1,010	925
Groundwater	64	60	62
Rainwater	0	0	0
Municipal water or other utilities	304	331	314
Total	1,319	1,401	1,301

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), tCO₂

	2017	2018	2019
Scope 1 emissions	35,161	35,639	36,720

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 CO₂ emissions.

We use standard conversion factors (SI).

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

Energy indirect (Scope 2) greenhouse gas emissions (305-2), tCO₂

	2017	2018	2019
Scope 2 emissions	96,557	101,559	91,559

Greenhouse gas emissions reporting covers only CO₂.

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 CO₂ emissions.

We use standard conversion factors (SI).

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

GRI 305: EMISSIONS

Other indirect (Scope 3) greenhouse gas emissions (305-3), tCO₂

	2017	2018	2019
Purchased goods and services	571,530	655,732	699,634
Fuel- and energy-related emissions	19,309	19,417	18,947
Upstream transportation	139,327	161,629	197,794
Business travel	12,937	22,256	22,651
Downstream transportation	67,083	77,821	95,234

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 CO₂. Metso does not have any biogenic CO₂ 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 76% 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), tCO₂

	2017	2018	2019
Reduction of emissions	20,522	23,353	25,324

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 CO₂. Metso does not have any biogenic CO₂ 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 CO₂ emissions.

We use standard conversion factors (SI). Source for emission factors is IEA "CO₂ Emissions from Fuel Combustion" 2016 edition. The figure for the year 2018 has been restated based on our internal data validation review.

GRI 306: EFFLUENTS AND WASTE

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

	2017	2018	2019
Hazardous			
Recycling	994	796	641
Recovery	110	779	148
Incineration	626	547	590
Landfill	7,067	7,063	3,593
On-site storage	3	28	237
Total	8,800	9,214	5,210
Non-hazardous			
Recycling	37,487	43,320	37,960
Composting	202	263	232
Recovery	6,664	5,534	3,137
Incineration	1,073	114	541
Landfill	20,140	21,302	19,978
On-site storage	0	12	36
Total	65,566	70,545	61,884

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 2017–2018 have been restated based on our internal data validation review.

Significant spills (306-3)

	2017	2018	2019
Spills	0	0	0

GRI 401: EMPLOYMENT

New employee hires and employee turnover (401-1)

Employment 2019

Category	Indicator	Number of new hires	% of total no. of new hires	New hire rate %
New hires by age group	<30	828	30%	35%
	30–50	1,702	62%	17%
	>50	234	8%	7%
New hires by gender	Female	417	15%	16%
	Male	2,347	85%	18%
New hires by region	Europe	510	19%	10%
	North America	226	8%	10%
	South and Central America	1,309	47%	29%
	Asia-Pacific	642	23%	18%
	Africa and Middle East	77	3%	12%
Total new hires	Total	2,764	100%	17%

Category	Indicator	Number of leavers	% of total no. of leavers	Turnover rate %
Leavers by age group	<30	320	20%	13%
	30–50	953	60%	9%
	>50	306	20%	9%
Leavers by gender	Female	253	16%	10%
	Male	1,326	84%	10%
Leavers by region	Europe	363	23%	7%
	North America	179	11%	8%
	South and Central America	632	40%	14%
	Asia-Pacific	355	23%	10%
	Africa and Middle East	50	3%	7%
Total leavers	Total	1,579	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

Work-related injuries (403-9)

OWN EMPLOYEES

		2017	2018	2019
Fatalities	Number of fatalities	0	1	0
		2017	2018	2019
High-consequence injury rate				
By region	Europe	0.1	0.1	0.1
	South and Central America	0.0	0.4	0.0
	North America	0.3	0.3	0.3
	Asia-Pacific	0.2	0.2	0.5
	Africa and Middle East	0.0	0.6	0.0
	Total	0.1	0.3	0.2

High-consequence injury rate reflects the number of high-consequence injuries per million hours worked. High-consequence injuries exclude fatalities but include injuries from which the worker cannot recover, or does not or is not expected to recover fully to pre-injury health status within 6 months.

Based on the history of high-consequence injuries, hazards that pose risk of high-consequence injury include contact with moving machinery, handling of heavy objects, fall from height, exposure to hot material, and road travel.

Actions taken to minimize related risks include observing installing guarding on machinery, designing improved lifting tools, installing railings on working platforms, improved vehicle safety, and training employees on safe work methods.

		2017	2018	2019
Lost time incident frequency				
By region	Europe	3.2	3.3	2.3
	South and Central America	2.1	2.4	1.4
	North America	1.0	2.6	1.4
	Asia-Pacific	3.0	2.3	1.1
	Africa and Middle East	2.5	4.9	2.7
	Total	2.6	2.9	1.7
		2017	2018	2019
Lost time incident frequency				
By business line	Flow Control	3.4	2.0	1.5
	Minerals	2.4	3.1	1.7
	Total	2.6	2.9	1.7

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

		2017	2018	2019
Recordable injury rate		·		
By region	Europe	9.7	9.4	5.9
	South and Central America	5.0	3.9	3.8
	North America	5.4	7.7	3.5
	Asia-Pacific	7.1	5.1	5.3
	Africa and Middle East	6.2	9.2	12.3
	Total	7.3	6.9	5.3

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

		2017	2018	2019
Injury rate				
By region	Europe	29.6	31.8	24.5
	South and Central America	11.8	7.8	6.6
	North America	16.4	16.4	13.3
	Asia-Pacific	14.6	15.2	24.2
	Africa and Middle East	17.2	27.0	42.9
	Total	19.7	20.1	19.6

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

Actions taken minimize risks from hazards related to other than high-consequence injuries include introduction of safer tools, work methods, additional training, and improved personal protective equipment.

		2017	2018	2019
Types of Injury	Superficial injuries and open wounds	58%	62%	63%
	Dislocations, sprains and strains	8%	8%	10%
	Burns, corrosions, scalds and frostbite	5%	6%	7%
	Fractures	4%	7%	3%
	Concussion and internal injuries	2%	2%	3%
	Traumatic amputations	0%	0%	0%
	Acute poisonings and infections	3%	2%	1%
	Other specified types of injury	1%	1%	3%
	Unspecified	19%	11%	10%
	Total	100%	100%	100%

According to ILO classification, % of total injuries.

		2017	2018	2019
Risk observation frequency				
By region	Europe	718	792	1,194
	South and Central America	1,360	1,328	1,813
	North America	461	744	1,010
	Asia-Pacific	1,088	1,173	1,732
	Africa and Middle East	852	941	1,478
	Total	915	1,008	1,469

Includes risk observations

NON-METSO EMPLOYEES - CONTRACTORS AND SUPERVISED WORKERS

		2017	2018	2019
Fatalities	Number of fatalities	0	0	0
		2017	2018	2019
High consequence injury rate				
By region	Europe	0.0	0.0	0.0
	South and Central America	0.0	0.0	0.0
	North America	6.0	0.0	0.0
	Asia-Pacific	0.6	0.0	0.0
	Africa and Middle East	0.0	0.0	0.0
	Total	0.6	0.0	0.0

High-consequence injury rate reflects the number of high-consequence injuries per million hours worked. High-consequence injuries exclude fatalities but include injuries from which the worker cannot recover, or does not or is not expected to recover fully to pre-injury health status within 6 months.

		2017	2018	2019
Lost time incident frequency				
By region	Europe	22.8	12.4	2.0
	South and Central America	3.8	2.0	4.4
	North America	11.9	0.0	0.0
	Asia-Pacific	3.7	2.2	1.8
	Africa and Middle East	0.0	0.0	0.0
	Total	6.7	3.3	2.4

Lost time incident frequency (LTIF) reflects the number of injuries resulting in an absence of at least one workday per million hours worked. Figures for South and Central America 2017-18 have been restated based on our internal data validation review.

		2017	2018	2019
Recordable injur rate	у			
By region	Europe	35.2	24.7	11.9
	South and Central America	5.6	8.9	8.8
	North America	35.7	13.9	0.0
	Asia-Pacific	6.7	2.7	3.2
	Africa and Middle East	0.0	8.8	26.4
	Total	11.7	8.1	6.4

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

		2017	2018	2019
Injury rate				
By region	Europe	78.7	82.3	37.7
	South and Central America	12.2	16.7	12.3
	North America	47.6	20.9	21.8
	Asia-Pacific	17.1	17.0	10.0
	Africa and Middle East	26.1	26.5	79.1
	Total	26.0	26.2	16.4

Includes lost time, restricted work, medical treatment and first aid incidents. Figures for South and Central America 2017–18 and North America 2018 have been restated based on our internal data validation review.

		2017	2018	2019
Types of Injury	Superficial injuries and open wounds	51%	64%	74%
	Dislocations, sprains and strains	3%	6%	1%
	Burns, corrosions, scalds and frostbite	5%	5%	3%
	Fractures	11%	8%	7%
	Concussion and internal injuries	7%	2%	4%
	Traumatic amputations	0%	0%	0%
	Acute poisonings and infections	1%	0%	1%
	Other specified types of injury	5%	0%	1%
	Unspecified	18%	15%	8%
	Total	100%	100%	100%

According to ILO classification, % of total injuries.

Data is collected from all worldwide locations and it covers all Metso operations including employees and other workers whose work or workplace is controlled by Metso.

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

Rates for employees have been calculated based on estimated hours worked.

Rates for non-employee workers has been calculated based on monitored hours worked.

Rates have been calculated per million hours worked.

Some health and safety figures for the years 2017–2018 have been restated based on our internal data validation review.

Omissions: Number of injuries is not reported where rate is used. Hours are not reported.

GRI 404: TRAINING AND EDUCATION

Training and Education (404-3)

Percentage of employees receiving regular performance and career development reviews: **96%** Completion rate includes employees that are expected to complete performance and career development reviews.

GRI 405: DIVERSITY AND EQUAL OPPORTUNITY

Diversity of governance bodies and employees (405-1)

Diversity of governance bodies

	Indicator	2017	2018	2019
Board of Directors	By gender			
	Female	29%	25%	14%
	Male	71%	75%	86%
	By age group			
	<30	0%	0%	0%
	30–50	14%	12%	14%
	>50	86%	88%	86%
Executive Team	By gender			
	Female	29%	20%	20%
	Male	71%	80%	80%
	By age group			
	<30	0%	0%	0%
	30–50	29%	40%	40%
	>50	71%	60%	60%

Diversity of employees

	Indicator	2019	
Employee category		White-collar	Blue-collar
	By gender		
	Female	15%	2%
	Male	42%	41%
	By age group		
	<30	8%	7%
	30–50	37%	27%
	>50	13%	8%
	Total	57%	43%

GRI 406: NON-DISCRIMINATION

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

There were no incidents of discrimination reported in 2019.

GRI 412: HUMAN RIGHTS ASSESSMENT

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

	2017	2018	2019
Total number of hours devoted to training on human rights			
policies or procedures	11,152	410	12,418

Metso has a biennial Code of Conduct training that is mandatory for all employees. Human rights is and important part of the training. In In 2019, 99.2 percent of Metso employees have taken the Code of Conduct training.

Biennial Code of Conduct training was organized in 2017 and 2019.

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

METSO INDICATORS

Metso indicator: Supplier sustainability audits

	2017	2018	2019
Number of supplier sustainability audits	58	99	123

In addition to third-party supplier sustainability audits (17), Metso also conducted 106 internal supplier sustainability audits in 2019.

Metso indicator: Sustainability targets set in R&D projects

	2017	2018	2019
R&D projects with sustainability targets	84%	86%	91%

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 2017–2019 are included.

Metso indicator: Community engagement

	2019
Support for non-profit organizations (EUR)	590,193
Science, research and education	51.0%
Environmental protection and conservation	4.5%
Health and social programs	38.8%
Universities or foundations	5.0%
Natural disasters	0.2%
Other	0.5%

2010

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
102-1	Name of the organization		Metso Corporation	
102-2	Activities, brands, products, and services	Our year 2019, BO, p. 3		
102-3	Location of headquarters		Helsinki, Finland	
102-4	Location of operations	Sustainability BO, p. 25 FR, p. 89 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 2019, BO, p. 3 Value creation, BO, p. 13–15		
102-7	Scale of the organization	Our year 2019, BO, p. 3 Value creation, BO, p. 10, 13–14 Sustainability BO, p. 25		
102-8	Information on employees and other workers	Key performance indicators section, GRI, p. 4		UNGC Principle 6 SDG 8
102-9	Supply chain	Value creation, BO, p. 10 Responsible Procurement, BO, p. 26		
102-10	Significant changes to the organization and its supply chain	Highlights of 2019, BO, p. 6		
102-11	Precautionary Principle or approach	Risk mangagement, CG, p. 10–11		
102-12	External initiatives	External initiatives, GRI, p. 4		
102-13	Membership of associations	Membership in associations, GRI, p. 4		
2. Strategy				
Disale and south and	Dial data	De ser server la co	A diditation of the Common Atlant	

Disclosure number	Disclosure title	Page number	Additional information	
102-14	Statement from senior decision-maker	CEO on sustainability, BO, p. 4–5		
102-15	Key impacts, risks, and opportunities	Megatrends, BO, p. 8 Value creation, BO, p. 10 Non-financial statement, FR, p. 12, 14		

3. Ethics and inte	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. 25–27		UNGC Principle 10 SDG 16	
102-17	Mechanisms for advice and concerns about ethics	CG, p. 13–14		UNGC Principle 10 SDG 16	

4. Governance				
Disclosure number	Disclosure title	Page number	Additional information	
102-18	Governance structure	CG, p. 14 Sustainability governance, GRI, p. 2		

5. Stakeholder engagement				
Disclosure number	Disclosure title	Page number	Additional information	
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	Sustainability, BO, p. 20, 23 Stakeholder engagement, GRI, p. 3		
102-43	Approach to stakeholder engagement	Sustainability, BO, p. 20, 23 Stakeholder engagement, GRI, p. 3		
102-44	Key topics and concerns raised	Sustainability, BO, p. 20, 23 Stakeholder engagement, GRI, p. 3		

6. Reporting practice			
Disclosure number	Disclosure title	Page number	Additional information
102-45	Entities included in the consolidated financial statements	FR, p. 89	All Group companies are included in the reporting.
102-46	Defining report content and topic boundaries	About this GRI Supplement, GRI,p. 1	
102-47	List of material topics	Our approach to sustainability, BO, p. 20 Management Approach Disclosures, GRI, p. 17–18	
102-48	Restatements of information		Some HSE figures for the years 2017-2018 have been restated based on our internal data validation review.
102-49	Changes in reporting		No changes.
102-50	Reporting period		January 1, 2019 - December 31, 2019
102-51	Date of most recent report		Metso's GRI Supplement 2018 was published in March 2019.
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 GRI Supplement, GRI, p. 1	This report has been prepared in accordance with the GRI Standards: Core option.
102-55	GRI Content Index	GRI Content Index, GRI, p. 13–16	
102-56	External assurance	About this GRI Supplement, GRI, p. 1 Assurance Statement, GRI, p. 19–20	This report has been externally assured by DNV GL.

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	Key performance indicators, GRI, p. 5		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	Sustainability BO, p. 21-22, p. 27 Key performance indicators, GRI, p. 5		UNGC Principle 7 SDG 7, 8, 12, 13
	302-4	Reduction of energy consumption	Sustainability BO, p. 21–22, p. 27 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	Bringing sustainable productivity to our customers BO, p. 23–24 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 and Effluents 2018	303-3	Water withdrawal by source	Sustainability BO, p. 21–22, p. 27 Key performance indicators, GRI, p. 6		UNGC Principles 7, 9 SDG 6
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Sustainability BO, p. 21–22, p. 27 Key performance indicators, GRI, p. 6		UNGC Principle 7 SDG 3, 12, 13, 14, 15
	305-2	Energy indirect (Scope 2) GHG emissions	Sustainability BO, p. 21–22, p. 27 Key performance indicators, GRI, p. 6		UNGC Principle 7 SDG 3, 12, 13, 14, 15
	305-3	Other indirect (Scope 3) GHG emissions	Sustainability BO, p. 21–22 Key performance indicators, GRI, p. 7		UNGC Principle 7 SDG 3, 12, 13, 14, 15
	305-5	Reduction of GHG emissions	Sustainability BO, p. 21–22, p. 27 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	Sustainability BO, p. 21–22, p. 27 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 2019 reporting period.	UNGC Principle 7 SDG 3, 6, 12, 14, 15

GRI 400: Social Standard Series					
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 2018	403-9	Work-related injuries	Continuous improvement towards zero harm, BO, p. 26 Key performance indicators, GRI, p. 9–11		UNGC Principle 6 SDG 3, 8
GRI 404: Training and Education 2016	404-3	Percentage of employees receiving regular performance and career development reviews	Key performance indicators, GRI, p. 11	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. 12		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. 12		UNGC Principles 1, 2 , 6 SDG 5, 16
GRI 412: Human Rights Assessment	412-2	Employee training on human rights policies or procedures	Code of Conduct and human rights, BO, p. 27 Key performance indicators, GRI, p. 12		UNGC Principle 1
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	Bringing sustainable productivity to our customers, BO, p. 23 Key performance indicators, GRI, p. 12		

Metso topics			
Material Topic	Disclosure title	Page number	
Metso topic: Sustainability targets set in R&D projects	Percentage of R&D projects that include a sustainability target	Key performance indicators, GRI, p. 12	
Metso topic: Sustainability supplier audits	Number of supplier sustainability audits	Key performance indicators, GRI, p. 12	
Metso topic: Community engagement	Support for non-profit organization (EUR)	Key performance indicators, GRI, p. 12	

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	Safety and sustainability targets, BO, p. 21; Responsible procurement, BO, p. 26
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	Safety and sustainability targets, BO, p. 21 Bringing sustainable productivity to our customers, BO, p. 23–24 Responsible procurement, BO, p. 26 Stakeholder engagement, GRI, p. 3
Disclosures	201-1, 204-1, 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.

-		
FUN	ronmental	
	- on the second	

	Description/Reference
GRI Material Topic	GRI 302: Energy 2016, GRI 303: Water and Effluents 2018, GRI 305: Emissions 2016, GRI 306: Effluents and Waste 2016
Key topics for our management approach	Environmental efficiency of Metso's operations
Targets	Sustainability, BO, p. 21–22
Policies, processes, management model	Sustainability, BO, p. 21–22, 26–27
Monitoring the effectiveness of our approach - Specific actions and results	Sustainability, BO, p. 21–22 Bringing sustainable productivity to our customers, BO, p. 23–24
Disclosures	302-1, 302-4, 302-5, 303-3, 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 2018, 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	Being a responsible and trusted partner, BO, p. 25–27
Policies, processes, management model	Code of Conduct and human rights, BO, p. 27; Non-financial statement, FR, p. 12-15; Metso Code of Conduct, HSE Policy, HSE Management, Metso Supplier Code of Conduct
Monitoring the effectiveness of our approach - Specific actions and results	Learning and development, BO, p. 25 and key performance indicators, GRI, p. 8–12
Disclosures	401-1, 402-1, 403-9, 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

Society

	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	Being a responsible and trusted partner, BO, p. 26-27
Policies, processes, management model	Code of Conduct and human rights, BO, p. 27; Non-financial statement, FR, p. 12-15, Metso Supplier Code of Conduct
Monitoring the effectiveness of our approach - Specific actions and results	Key performance indicators, GRI, p. 12
Disclosures	412-2
Topic boundary	Internal impacts within our operations Relevant external entities: suppliers, contractors, communities, government and NGOs.

Description/Reference GRI Material Topic GRI 205: Anti-corruption 2016 Key topics for our management approach Metso Code of Conduct, Anti-corruption Targets Sustainability, BO, p. 21 Code of Conduct and human rights, BO, p. 27 Code of Conduct, Anti-corruption Policy, Metso Code of Conduct Policies, processes, management model Monitoring the effectiveness of our approach - Specific actions and results Key performance indicators, GRI, p. 5 Disclosures 205-1, Metso indicator: Supplier sustainability audits Internal impacts within our operations Relevant external entities: communities, employees and government. Topic boundary

Sustainable productivity	
	Description/Reference
GRI Material Topic	GRI 416: Customer Health and Safety 2016
Key topics for our management approach	Bringing sustainable productivity to our customers, BO, p. 23–24
Targets	Sustainability, BO, p. 21–22 Bringing sustainable productivity to our customers, BO, p. 23–24
Policies, processes, management model	Code of Conduct, BO p. 27; 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	416-1, Metso indicator: Sustainability targets set in R&D projects
Topic boundary	External impacts within our value chain. Relevant external entities: customers, suppliers.

Independent Limited Assurance Report to the Management of Metso Corporation

Scope of Engagement

Metso Corporation ("Metso") commissioned **DNV GL Business Assurance Finland OY/AB** ("DNV GL") to conduct a limited assurance engagement over selected sustainability disclosures

presented in the Business Overview and GRI Supplement of Metso Annual Report ("Report") for the period 1st January to 31st December 2019.

Selected Information

The scope and boundary of our work is restricted to the General and Topic-specific GRI disclosures (the "Selected Information"). The location of Selected Information in the Report is specified in the "GRI Content Index".

To assess the Selected Information, which includes an assessment of the risk of material misstatement in the Report, we have used Global Reporting Initiative's GRI Standards (2016, 2018) and Metso's internal reporting instructions (the "Criteria").

We have not performed any work, and do not express any conclusion, on any other information that may be published in the Report or on Metso's website for the current reporting period.

Our conclusions

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 the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria. We believe that the Report is in line with the "Core" requirements of the GRI Standards.

This conclusion relates only to the Selected Information and is to be read in the context of this Assurance Report, in particular with the inherent limitations explained below.

Standard and level of assurance

We performed a limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 revised – 'Assurance Engagements Other than Audits and Reviews of Historical Financial Information' (revised), issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and that we plan and perform the assurance engagement to obtain limited assurance.

DNV GL applies its own management standards and compliance policies for quality control, in accordance with ISO/IEC 17021:2011 – Conformity Assessment Requirements for bodies providing audit and certification of management systems, 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.

The procedures performed in a limited assurance engagement vary in nature and timing, and are less detailed than those undertaken during a reasonable assurance engagement, so the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so the risk of this conclusion being in error is reduced, but not completely eliminated.

Basis of our conclusion

We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information. Our work included, but was not restricted to:

- Assessing the appropriateness of the Criteria for the Selected Information;
- Conducting interviews with Metso's responsible persons to obtain an understanding of the data management systems and processes used to generate, aggregate and report the Selected Information;
- Conducting two physical site visits and one remote site audit to review processes and systems for preparing site-level data consolidated at Head Office. The physical site visits were conducted at:
 - Metso Alwar, India, and
 - Metso Tampere, Finland
 - and a remote site audit at:
 - Metso North Bay, Canada
 - DNV GL was free to choose the sites on the basis of materiality;
- Reviewing data at source and following this through to consolidated Group data;
- Reviewing whether the evidence, measurements, and scope of the Selected Information is prepared in accordance with the Criteria;
- Reviewing the Report and narrative accompanying the Selected Information in the Report with regard to the Criteria;
- Evaluation of the disclosed information in the Report against the requirements for "in accordance with the GRI Standards: Core option".

Inherent limitations

Our assurance relies on the premise that the data and information provided to us by Metso as part of our review procedures have been provided in good faith. Because of the selective nature (sampling) and other inherent limitations of both procedures and systems of internal control, there remains the unavoidable risk that errors or irregularities may not have been detected. Energy use data utilized in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for determining such data. Finally, the selection of different but acceptable measurement techniques may result in materially different measurements.

DNV GL expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Assurance Report.

Our competence, independence and quality control

DNV GL's established policies and procedures are designed to ensure that DNV GL, its personnel and – where applicable – others subject to independence requirements (including personnel of other entities of DNV GL) maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals; the members of that team have not been involved in the development of any of the Criteria. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.

Responsibilities of the Management of Metso and DNV GL

The Management of Metso has sole responsibility for:

- Preparing and presenting the Selected Information in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the Selected Information that is free from material misstatements;
- Measuring and reporting the Selected Information based on their established Criteria; and
- Contents and statements contained within the Report and the Criteria.

Our responsibility is to plan and perform our work to obtain limited assurance about whether the Selected Information has been prepared in accordance with the Criteria and to report to Metso in the form of an independent limited assurance conclusion, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the Report.

For and on behalf of DNV GL Business Assurance Finland OY/AB Espoo, Finland

5th February 2020

Mikael Niskala

Lead Auditor DNV GL – Business Assurance

Souvik Kumar Ghosh

Principal Consultant and Reviewer DNV GL – Business Assurance

DNV GL Business Assurance Finland OY/AB is part of DNV GL – Business Assurance, a global provider of certification, verification, assessment and training services, helping customers to build sustainable business performance. www.dnvgl.com

Metso Corporation

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

About this report Concept, design and production: KREAB