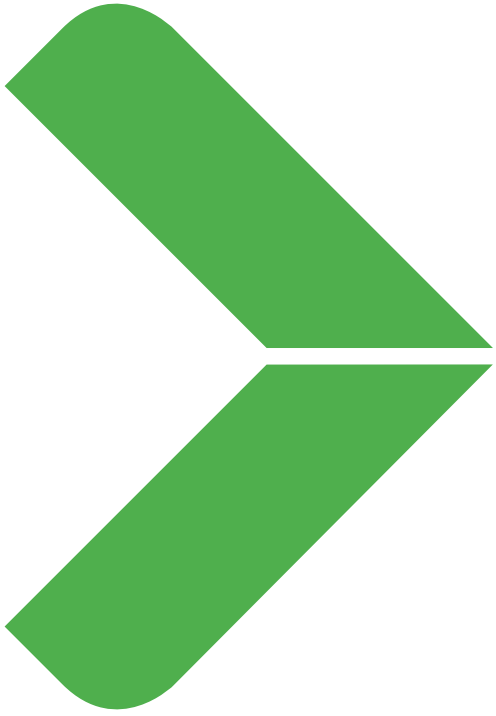
GRI Supplement 2018



Valmet

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Valmet's sustainability reporting in 2018

Valmet has been reporting its sustainability performance since 2002. The sustainability data is published annually.

Valmet's sustainability reporting in 2018 is in accordance with the Core option of the GRI Standards from the Global Reporting Initiative (GRI, 2016). Standard disclosures for 2018, with a reference to external assurance in the GRI contents index, have been externally assured by an independent third party.

Valmet's annual reporting in 2018 consists of the Annual Review, Financial Statements, GRI Supplement, Remuneration Statement and Corporate Governance Statement. The GRI Supplement defines the scope and principles of Valmet's GRI reporting, the selected topics and the topic boundaries. The GRI content index included in the GRI supplement specifies where the information for each indicator can be found and explains any omissions to the reported data.

Reporting principles

Our reporting covers the Valmet Group, unless otherwise stated. The group sustainability reporting excludes associated companies and joint ventures. Data on suppliers is provided to the extent required by the reported GRI indicators. In the GRI supplement Valmet reports three-year trend data for material indicators in respective columns. In some indicators, the 2017 numbers are shown in brackets after the 2018 numbers. Any other division of the data reported is noted separately.

Financial reporting

In our group financial reporting, we follow the International Financial Reporting Standards (IFRS). Figures describing economic responsibility are mainly based on the financial statements. The data on purchases by country has been collected separately from the reporting units, and the country division is determined on the basis of the supplier's domicile. The data on support for non-profit organizations is collected annually from the relevant Valmet units.

Health, safety and environmental data

Valmet's Health, Safety and Environment (HSE) organization is responsible for collecting and reporting HSE data. Harmonized global HSE reporting principles and a systematic data validation process form the basis for data quality for our HSE reporting. The 2017 HSE data has been restated based on improvements in data quality.

Incident data is reported continuously by all employees in a global incident management system. The data is consolidated and analyzed in accordance with the European Statistics on Accidents at Work (ESAW) methodology. This methodology is based on the code of practice of the International Labor Organization (ILO) "Recording and notification of occupational accidents and diseases".

Environmental data based on local invoice and consumption records is reported annually. We apply the financial control method outlined in the GHG Protocol "Corporate Accounting and Reporting Standard" of the World Business Council for Sustainable Development (WBCSD).

Valmet assesses its Scope 1 and 2 emissions based on the GHG Protocol's "A Corporate Accounting and Reporting Standard". Valmet assesses its Scope 3 emissions based on the GHG Protocol´s "Corporate Value Chain (Scope 3) Accounting and Reporting Standard". Valmet reports data on four selected relevant categories of Scope 3: category 1: purchased goods and services; category 4: upstream transportation and distribution; category 6: business travel and category 9: downstream transportation and distribution.

Personnel data

Valmet's Human Resources organization is responsible for collecting and reporting personnel data. The personnel and payroll data published in the financial statements is obtained in conjunction with financial reporting and is managed by Valmet's reporting specialists using a global HR system. Valmet's global HR system allows access to versatile and comparable HR data globally.

Harmonized global HR reporting principles and a systematic data validation process form the basis for data quality for our personnel related reporting. The employee data reported in our sustainability reporting for 2018 includes all active Valmet employees. The number of employees not included in the published data, namely all inactive employees on leave of absence (e.g. study leave, long-term sick leave, parental leave) is still minor and amounts to less than 2% of the total number of employees.

GRI content index

GENERAL STANDARD DISCLOSURES							
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	GENERAL DISCLOSURES	LOCATION	COMMENTS	OMISSIONS	ASSUR-ANCE
ORGANIZATIONAL							
GRI 102	102-1	Name of the organization	Name of the organization	See comments	Valmet Oyj		
GRI 102	102-2	Activities, brands, products, and services	Activities, primary brands, products and services	AR 14–15			
GRI 102	102-3	Location of headquarters	Location of headquarters	See comments	Keilasatama 5 / P.O. Box 11, 02150 Espoo, Finland		
GRI 102	102-4	Location of operations	Countries in which operations are located	AR 12			
GRI 102	102-5	Ownership and legal form	Nature of ownership and legal form	See comments	Valmet Oyj is a public company and its shares are listed on the Nasdaq Helsinki.		
GRI 102	102-6	Markets served	Markets served	AR 10–13			
GRI 102	102-7	Scale of the organization	Scale of organization	Personnel and net sales: AR 9. Total capitalization, FS 24–25: Consolidated Statement of Financial Position	The total number of locations is 154.		
GRI 102	102-8	Information on employees and other workers	Breakdown of employees by contract type, employment type, region and gender	GRI 9, FS 11		Valmet does not collect information in its global HR system about workers, who are not employees of the company. Valmet's business model has no significant seasonal variations.	x
GRI 102	102-9	Supply chain	Description of supply chain	AR 30–32, GR 13			
GRI 102	102-10	Significant changes to the organization and its supply chain	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	See comments	No significant changes in 2018.		
GRI 102	102-11	Precautionary Principle or approach	Addressing the precautionary approach or principle	www.valmet.com/riskmanagement	Valmet has in place a comprehensive risk management process that enables Valmet to efficiently manage risks in order to avoid any harm to the environment and to ensure the continuity of its operations.		
GRI 102	102-12	External initiatives	External charters, principles or initiatives endorsed	AR 56–58, GR 10–11			
GRI 102	102-13	Membership of associations	Memberships in associations	GR 10			
STRATEGY							
GRI 102	102-14	Statement from senior decision-maker	Statement from the President and CEO	AR 2–4			
GRI 102	102-15	Key impacts, risks and opportunities		AR 14–15, 18–20, GR 10, FS 8–13			

Abbreviations:
AR = Annual Review 2018
FS = Financial Statements 2018 and Information for Investors
GR = GRI Supplement 2018

GENERAL STANDARD DISCLOSURES							
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	GENERAL DISCLOSURES	LOCATION	COMMENTS	OMISSIONS	ASSUR-ANCE
ETHICS AND INTEGRITY							
GRI 102	102-16	Values, principles, standards, and norms of behavior	Organization's values, principles and codes	AR 18, 42–44, 56–59			
GOVERNANCE							
GRI 102	102-18	Governance structure	Governance structure	Corporate Governance Statement			
STAKEHOLDER ENGAGEMENT							
GRI 102	102-40	List of stakeholder groups	List of stakeholder groups engaged in the organization	GR 11–12			
GRI 102	102-41	Collective bargaining agreements	Percentage of total employees covered by collective bargaining agreements	GR 11			x
GRI 102	102-42	Identifying and selecting stakeholders	Identification and selection of stakeholders	GR 11–12			
GRI 102	102-43	Approach to stakeholder engagement	Organization's approach to stake-holder engagement	GR 11–12			
GRI 102	102-44	Key topics and concerns raised	Key topics and concerns raised through stakeholder engagement	GR 11–12			
REPORTING PRACTICE							
GRI 102	102-45	Entities included in the consolidated financial statements	Entities included in the organization's consolidated financial statements	FS 74–75	All group companies are included in Valmet's sustainability reporting.		
GRI 102	102-46	Defining report content and topic Boundaries	Process of defining the report content	GR 12			
GRI 102	102-47	List of material topics	Material topics identified	GR 12			
GRI 102	102-48	Restatements of information	Restatements of information provided in previous reports	See comments	No restatements		
GRI 102	102-49	Changes in reporting	Significant changes from previous reporting periods in the scope and topic boundaries	See comments	No significant changes		
GRI 102	102-50	Reporting period	Reporting period	See comments	January 1, 2018–December 31, 2018		
GRI 102	102-51	Date of most recent report	Date of the most recent previous report	See comments	Valmet's Annual Review describing the company's operations and sustainability in 2017 and a GRI supplement for 2017, were published on February 27, 2018.		
GRI 102	102-52	Reporting cycle	Reporting cycle	See comments	Annual		
GRI 102	102-53	Contact point for questions regarding the report	Contact point for questions	GR 32			
GRI 102	102-54	Claims of reporting in accordance with the GRI Standards		GR 1	Valmet's sustainability reporting in 2018 has been prepared in accordance with the GRI Standards, 2016: Core option.		
GRI 102	102-55	GRI content index	GRI content index	GR 2–8			
GRI 102	102-56	External assurance	Organization's policy with regard to external assurance	Assurance report: GR 30–31	The GRI content index indicates the general and topic-specific disclosures that have been externally assured.		

SPECIFIC STANDARD DISCLOSURES						
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION	COMMENTS	OMISSIONS	ASSURANCE
GRI 200 ECONOMIC STANDARD SERIES						
ECONOMIC PERFORMANCE						
GRI 103	103-1	Explanation of the material topic and its Boundary	CEO review: AR 2-4, Strategy and financial targets: AR 5, 18-21, GR 12	At Valmet, economic responsibility refers to creating long-term economic benefits for our stakeholders. Financial reporting and planning are based on the group management system, and development is monitored through financial reporting.		
GRI 103	103-2	The management approach and its components	GR 12			
GRI 103	103-3	Evaluation of the management approach	AR 2–4, 18–21			
GRI 201	201-1	Direct economic value generated and distributed	AR 57–58	Taxes are reported by the 10 largest countries to give a comprehensive overview of Valmet's tax footprint globally. Read more about Valmet's value creation: AR 14–15.		x
ANTI-CORRUPTION						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 18			
GRI 103	103-2	The management approach and its components	GR 18			
GRI 103	103-3	Evaluation of the management approach	GR 18			
GRI 205	205-1	Operations assessed for risks related to corruption	GR 19	Read more: www.valmet.com/riskmanagement		x
VALMET-SPECIFIC TOPIC: PURCHASES						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 13			
GRI 103	103-2	The management approach and its components	GR 13			
GRI 103	103-3	Evaluation of the management approach	GR 13			
	Own indicator	Purchases by 10 largest countries	AR 31			x

SPECIFIC STANDARD DISCLOSURES						
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION	COMMENTS	OMISSIONS	ASSURANCE
GRI 300 ENVIRONMENT STANDARD SERIES						
ENERGY						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 302	302-1	Energy consumption within the organization	GR 19			x
GRI 302	302-3	Energy intensity	GR 19			x
WATER						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 303	303-1 (2016)	Water withdrawal by source	GR 20			x
EMISSIONS						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 305	305-1	Direct (Scope 1) GHG emissions	GR 20			x
GRI 305	305-2	Energy indirect (Scope 2) GHG emissions	GR 20			x
GRI 305	305-3	Other indirect (Scope 3) GHG emissions	GR 20			x
GRI 305	305-4	GHG emissions intensity	GR 20			x
GRI 305	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	GR 21			x
EFFLUENTS AND WASTE						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 306	306-2	Waste by type and disposal method	GR 21			x
GRI 306	306-3	Significant spills	See comments	There were no significant spills in 2018.		x
VALMET-SPECIFIC TOPIC: ENVIRONMENTAL IMPACTS OF PRODUCTS AND SERVICES						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 17			
GRI 103	103-2	The management approach and its components	GR 17			
GRI 103	103-3	Evaluation of the management approach	GR 17			
	Own indicator	Environmental impacts of products and services	GR 22	Impacts are calculated per project or solution.		

SPECIFIC STANDARD DISCLOSURES						
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION	COMMENTS	OMISSIONS	ASSURANCE
ENVIRONMENTAL COMPLIANCE						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 307	307-1	Non-compliance with environmental laws and regulations	FS 11			x
GRI 400 SOCIAL STANDARD SERIES						
EMPLOYMENT						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 16			
GRI 103	103-2	The management approach and its components	GR 16			
GRI 103	103-3	Evaluation of the management approach	GR 16			
GRI 401	401-1	New employee hires and employee turnover	GR 23–24			x
OCCUPATIONAL HEALTH AND SAFETY						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 403	403-1 (2016)	Workers representation in formal joint management–worker health and safety committees	GR 24			x
GRI 403	403-2 (2016)	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	GR 25–26	Workhours for supervised/independent contractors are consolidated from local reporting systems.	Lost day rates are not calculated in our reporting systems. Gender data is not collected as it is not relevant for Valmet.	x
GRI 403	403-3 (2016)	Workers with high incidence or high risk of diseases related to their occupation	GR 27			x

SPECIFIC STANDARD DISCLOSURES						
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION	COMMENTS	OMISSIONS	ASSURANCE
TRAINING AND EDUCATION						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 16			
GRI 103	103-2	The management approach and its components	GR 16			
GRI 103	103-3	Evaluation of the management approach	GR 16			
GRI 404	404-1	Average hours of training per year per employee	GR 27		Training hours are not reported by employee category.	x
GRI 404	404-2	Programs for upgrading employee skills and transition assistance programs	GR 27, AR 43–45			x
GRI 404	404-3	Percentage of employees receiving regular performance and career development reviews	GR 27			x
DIVERSITY AND EQUAL OPPORTUNITY						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 16			
GRI 103	103-2	The management approach and its components	GR 16			
GRI 103	103-3	Evaluation of the management approach	GR 16			
GRI 405	405-1	Diversity of governance bodies and employees	GR 28		As Valmet's HR principles are based on equal treatment of all employees, collecting data on minority groups is not material for Valmet.	x
FORCED AND COMPULSORY LABOR						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 13			
GRI 103	103-2	The management approach and its components	GR 13			
GRI 103	103-3	Evaluation of the management approach	GR 13			
GRI 409	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Identified risk areas GR 29, Measures taken AR 30–33			x
SUPPLIER SOCIAL ASSESSMENT						
GRI 103	103-1	Explanation of the material topic and its Boundary	AR 32, GR 13			
GRI 103	103-2	The management approach and its components	GR 13			
GRI 103	103-3	Evaluation of the management approach	GR 13			
GRI 414	414-1	New suppliers that were screened using social criteria	AR 30–32, GR 29			x

SPECIFIC STANDARD DISCLOSURES						
GRI-STANDARD	DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION	COMMENTS	OMISSIONS	ASSURANCE
CUSTOMER HEALTH AND SAFETY						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 14–15			
GRI 103	103-2	The management approach and its components	GR 14			
GRI 103	103-3	Evaluation of the management approach	GR 15			
GRI 416	416-1	Assessment of the health and safety impacts of product and service categories	GR 29			x
SOCIO-ECONOMIC COMPLIANCE						
GRI 103	103-1	Explanation of the material topic and its Boundary	GR 18			
GRI 103	103-2	The management approach and its components	GR 18			
GRI 103	103-3	Evaluation of the management approach	GR 18			
GRI 419	419-1	Non-compliance with laws and regulations in the social and economic area	GR 29			x

Information on general standard disclosures

This section provides information on the general standard disclosures that are not reported in the Annual Review or the GRI content index.

Breakdown of employees by contract type, employment type, region and gender (GRI 102-8)

GRI 102-8: Total number of employees by employment contract and gender

	Female	Male	Total
Regular	2,187 (2,132)	9,072 (8,889)	11,259 (11,021)
Fixed Term	362 (358)	907 (889)	1,269 (1,247)
Total	**2,549 (2,490)**	**9,979 (9,778)**	**12,528 (12,268)**

GRI 102-8: Total number of permanent employees by employment type and gender

	Female	Male	Total
Full-time	2,070 (2,018)	8,966 (8,803)	11,036 (10,821)
Part-time	117 (114)	106 (86)	223 (200)
Total	**2,187 (2,132)**	**9,072 (8,889)**	**11,259 (11,021)**

GRI 102-8: Total workforce by region and gender

	Female	Male	Total
North America	170 (167)	1,032 (1,056)	1,202 (1,223)
South America	87 (88)	423 (446)	510 (534)
EMEA	1,792 (1,748)	6,511 (6,340)	8,303 (8,088)
China	402 (393)	1,350 (1,303)	1,752 (1,696)
Asia-Pacific	98 (94)	663 (633)	761 (727)
Total	**2,549 (2,490)**	**9,979 (9,778)**	**12,528 (12,268)**

Memberships in associations (GRI 102-13)

The following table lists Valmet's key memberships by country or area. Valmet is also involved in the work of several national associations of engineers', technical and R&D networks, standardization institutes, chambers of commerce and business forums.

Finland
Federation of Finnish Technology Industries
Confederation of Finnish Industries (EK)
Bioenergy Association of Finland
Association of Finnish Foundry Product Industries
Finnish Marine Industries
WEC Finland
Finnish Energy
Finnish Forest Industries
Cleantech Finland
Finnish Business & Society (FiBS)

Sweden
Teknikföretagen
Confederation of Swedish Enterprise (Svenskt Näringsliv)
Swedish Bioenergy Association (Svebio)
Värme och Kraftföreningen (VoK)
Swedish Forest Industries Federation
Swedish Waste Management Association (Avfall Sverige AB)
Swedenergy (Energiföretagen Sverige)

EU
Energy Technologies Europe (EPPSA)
Bioenergy Europe (AEBIOM)
Confederation of European Paper Industries (CEPI)
EDANA
Exhaust Gas Cleaning Systems Association (EGCSA)

North America
Energy Recovery Council
Council of Industrial Boiler Owners (CIBO)
American Boiler Manufactures Association (ABMA)
International District Energy Association (IDEA)
American Forest and Paper Association (AF&PA)
Association for the Suppliers to the Paper Industry (ASPI)

South America
Brazilian Machinery and Equipment Association (ABIMAQ)
Corporación Chilena de la Madera (CORMA)

Asia Pacific
Vietnam Pulp and Paper Association
Australian Industry Group (VIC & NSW)
Japan Paper Association
Korea Paper Association (KPA)
Industry Edge

China
China National Household Paper Industry Association
China Paper Associations
China Nonwovens & Industrial Textiles Association (CNITA)

Sustainability risk management (GRI 102-15)

Valmet's business and competition environment is subject to a wide range of risks (threats and opportunities), due to the company's broad scope of global operations and its technology and industry diversity. In this context, the role of Valmet's risk management is to support the achievement of Valmet's strategic targets and business objectives and the continuity of operations.

Valmet has a systematic method for regularly assessing the probability and impact of threats and opportunities related to sustainability. The topics include climate change, health and safety, environmental management, human rights and labor rights, and ethical business practices both in own operations and supply chain.

Management of sustainability threats and opportunities is integrated into the multi-disciplinary, groupwide risk management process at Valmet. Each Valmet business line annually assesses the probability and impact of e.g. climate change and environmental risks and defines the need and priority of the actions to remove, mitigate, minimize, retain or utilize risks by using Valmet's risk map.

Policies and commitments (GRI 102-12)

- Valmet's Code of Conduct
- Valmet's Health, Safety and Environment Policy
- Valmet's HR Policy
- Valmet's Quality Policy
- Valmet's Sustainable Supply Chain Policy
- Valmet's Global Travel Policy
- Valmet's Equal Opportunity and Diversity Policy
- Valmet's Anti-Corruption Policy
- Valmet's IPR Policy
- Drugs and Alcohol Guidelines at Valmet
- Valmet's Minimum Safety Standards
- Valmet's Human Rights Statement
- Valmet's Competition Compliance Guidelines
- Valmet is a signatory of the UN Global Compact (UNGC)
- Valmet supports and promotes the principles set in the United Nations Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the Declaration on Fundamental Principles and Rights at Work of the International Labour Organization (ILO)

- Valmet promotes and encourages compliance with international standards for health and safety, environmental and quality management such as OHSAS 18001, ISO 14001 and ISO 9001.
- We support and promote the principles set in the OECD's Guidelines for Multinational Enterprises.

Stakeholder engagement (GRI 102-40, GRI 102-41, GRI 102-42, GRI 102-43, GRI 102-44)

Valmet's stakeholders are existing and potential customers, existing and potential employees, suppliers and subcontractors, shareholders and investors, media, non-governmental organizations, authorities and local communities, as well as research institutes, universities and vocational schools.

The stakeholders are defined on the basis that the specified entities or individuals can reasonably be expected to be significantly affected by Valmet's activities, products, and/or services, and whose actions can reasonably be expected to affect the ability of Valmet to successfully implement its strategies and achieve its objectives.

Employees covered by collective bargaining agreements (GRI 102-41)

Valmet supports its employees' right to freedom of association and collective bargaining. We recognize and actively engage with employee representation bodies, such as the European Works Council which has representatives from Valmet countries within the European Union.

Overall, 72% of Valmet employees are covered by collective bargaining agreements. Participation in collective bargaining agreements varies significantly between regions, with the highest participation in South America (92%), EMEA (88%) and China (66%) and the lowest participation in North America (6%) and Asia-Pacific (4%). This reflects common practice in these regions.

Stakeholder dialogue

Valmet promotes its own and its stakeholders' operations through active stakeholder dialogue on sustainability themes such as the development and implementation of energy and climate policy, legislation and regulation, and research and technology development in environmental technology. Valmet promotes the development of energy-efficient technology and has a long tradition of supporting e.g. universities in researching sustainable production technologies and finding new solutions. We also share our knowledge and raise awareness of eco-efficient products among our stakeholders to initiate further discussion.

We maintain the dialogue with our customers through regular meetings and other direct contact such as fairs, seminars and customer satisfaction surveys, and through specific industry organizations.

With our own employees, we conduct annual review discussions and mid-year review discussions where we emphasize open and active dialogue. We also conduct regular engagement surveys to measure how engaged we are as a company. The survey gives everyone at Valmet the opportunity to be part of the discussion and influence how we move the company forward. The survey is run every second year and the results are used to develop the company over a two-year period.

We meet our suppliers regularly. During 2018, Valmet arranged three Supplier Day events, in Brazil, China and Poland. The events aimed to achieve more sustainable and open relationships with our suppliers and to increase their ability to deliver added value and innovative solutions for our businesses. The topics discussed included quality, sustainability and safety in everyday business. The importance of mutual collaboration, commitment and communication was also highlighted when building long-term competitiveness throughout the value chain. In total 47 supplier companies attended these events. We also audit and assess our global suppliers regularly. In 2018, Valmet launched a new global sustainability engagement program for selected key suppliers.

Valmet engages shareholders, investors and analysts in dialogue to ensure that the markets have correct and sufficient information for determining the value of Valmet shares. The dialogue includes financial statements, interim reviews, the company website, stock exchange releases, press releases, investor meetings, seminars, webcasts, results news conferences, site visits and general meetings. Valmet is also active on social media, for example on Twitter and LinkedIn, and also publishes videos dedicated to the investor community. In 2018, Valmet's IR team participated in 30 roadshows and engaged with investors and analysts approximately 230 times through different channels such as conference calls, roadshows, and face-to-face meetings.

Valmet meets with various media representatives through regular meetings and interviews and direct contact at fairs, seminars and other events. Valmet shares timely information about its operations through press and trade releases, the company website, several publications and social media channels.

In research and development, Valmet collaborates closely with its customers to collect information on their product development needs and to innovate new solutions. We also engage in dialogue with research institutes, universities and vocational schools through joint development projects and specific industry organizations.

Continuous improvement through active feedback gathering

In addition to the feedback gathered through regular business relationships, Valmet actively collects feedback from its stakeholders with specific surveys. For instance, suppliers, investors and customers are systematically asked for feedback at various events. We also participate in externally conducted surveys assessing Valmet's reputation. In addition, our customers are regularly asked for feedback regarding how the company is perceived in the market, its products and services, and customer relations. By reporting to selected third party sustainability ratings schemes, Valmet wants to help its stakeholders assess its sustainability performance. The rankings also serve as a management tool in helping to continuously enhance our sustainability performance and define areas for improvement.

Main topics highlighted in 2018

Valmet has a web-based survey tool for collecting and analyzing stakeholders' opinions. The process allows our stakeholders to express their views on Valmet's sustainability performance and propose ideas for further development. The web-based tool is open to all stakeholders and is utilized in annual reporting and one-off meetings with stakeholders to gather feedback from as many stakeholder groups as possible.

Valmet reviews the results of the online stakeholder survey and other stakeholder feedback on a regular basis. All information received is gathered and analyzed for the annual strategy review process. Valmet's sustainability agenda and its focus areas and actions are broadly based on the feedback from our stakeholders. Valmet responds to the issues raised in stakeholder dialogue in its Annual Review and through its company website.

The most highlighted topics in our stakeholder survey in 2018 concerned safety, sustainable solutions and human rights. All stakeholders agree that safety is important in all respects: the safety of Valmet's personnel and subcontractors as well as product safety were among the top topics. Stakeholders also raised issues such as the environmental impact of Valmet's operations and the environmental efficiency of Valmet's solutions, which indicates that environmental aspects are considered significant throughout Valmet's value chain. When it comes to Valmet's offering, understanding the customer's sustainability needs and supporting more sustainable operations were seen as important. Employee development and wellbeing came up both in internal and external responses. In the 2018 stakeholder survey, the most active groups were Valmet's own personnel, its customers and suppliers. The majority of the stakeholder survey respondents (75%) assessed Valmet's sustainability performance as excellent or very good.

Reported topics, topic boundaries and management approach (GRI 102-46, GRI 102-47, GRI 103-1)

Reported topics and topic boundaries

According to the GRI 101 Foundation standard, the principles for defining report content were applied when assessing material topics and boundaries. A list of material topics can be found on the GRI content index in this report on pages 2–8. The process was initially conducted in 2013, and updated in 2016. The process included a stakeholder survey sent to 9,000 stakeholders, including customers, Valmet employees and institutional investors and owners; interviews with key customers and a benchmark study. The current business environment and the most important market drivers affecting the industries, in which Valmet and its customers operate, were also reviewed as part of the process to build a comprehensive understanding of all potential sustainability topics.

The topics were then assessed on the basis of their importance to Valmet and its stakeholders in an internal workshop with key experts and management. As a result of the process, we defined five sustainability focus areas covering the most material sustainability topics for Valmet. The results of Valmet's stakeholder survey in 2018 indicated that Valmet's main stakeholders – such as customers, investors, suppliers and Valmet's own personnel – confirm Valmet's current view of what is important with regard to the company's sustainability performance.

Sustainability agenda

The topics included in Valmet's 2018 reporting are based on the process described above and create the basis for Valmet's sustainability agenda, which was initially defined in 2014 and renewed in 2016. Valmet has defined action plans for its sustainability agenda for 2016–2018. The action plans include detailed actions and targets for each sustainability focus area. The action plans were defined based on an extensive agenda review conducted in early 2016. In 2018, Valmet updated its sustainability agenda action plans for 2019–2021 with detailed actions and targets for each focus area.

Valmet's sustainability agenda is called Sustainability360° and it focuses on five core areas in our operations: sustainable supply chain; health, safety and environment; people and performance; sustainable solutions; and corporate citizenship.

The material topics are grouped according to the five focus areas of Valmet's sustainability agenda with corresponding goals, actions and KPIs. The topics and indicators related to each focus area are presented in the following tables, which also define the topic boundaries. More information about each focus area and specific action plans, targets and achievements can be found in the sustainability sections of the Annual Review (AR 24–59). The sustainability agenda has been approved by Valmet's Executive Team.

Management approach

Valmet's Executive Team determines and monitors Valmet's sustainability agenda and goals as well as all related policies. Valmet's sustainability performance is reviewed annually by the Executive Team. Valmet's Senior Vice President for Marketing, Communications, Sustainability and Corporate Relations is responsible for sustainability at Valmet; she is a member of Valmet's Management Team and reports to the CEO.

Valmet's Sustainability team is part of the Corporate Marketing, Communications, Sustainability and Corporate Relations function. The Sustainability team is responsible for coordinating and developing sustainability and related processes at the Valmet level and manages the group-wide sustainability agenda and the initiatives within it. It also coordinates the reporting and third party assurance of sustainability data according to GRI Standards, engages with stakeholders and communicates sustainability issues to internal and external stakeholders.

Our business lines and area organizations are responsible for ensuring that all the group-wide initiatives are implemented in order to meet Valmet's sustainability goals. They are responsible for reporting sustainability data to the Group Head Office and for assuring the accuracy of the data.

Valmet ties selected sustainability topics, such as health and safety and sustainable supply chain KPIs, to remuneration. Safety targets are part of team performance targets in bonus plans for selected employee

groups and top management. Individual performance targets might also include targets for emissions reductions or other sustainability-related topics. Sustainable supply chain targets are part of selected groups' performance targets in Valmet's global procurement.

The management approach of the selected GRI topics is described in more detail in the following tables.

Sustainable supply chain

Management approach	We constantly work to improve the transparency of our value chain to ensure responsible purchasing practices and to mitigate any risks to us or our stakeholders related to potential violations in such practices. Realization of such risks could impact Valmet's financial position and/or reputation. Through comprehensive supply chain management, we also aim to minimize the environmental impacts of our value chain.
Reported topics and indicators	Forced or compulsory labor: GRI 409-1 Supplier social assessment: GRI 414-1 Material Valmet Topic: Purchases by ten largest countries
Goals and targets	• Develop sustainable procurement practices globally – 100% of new direct suppliers gone through supplier approval process – 50 supplier sustainability audits per year • Support selected key suppliers to meet the level of sustainability expected by Valmet – Engage 100% of selected suppliers to supplier sustainability engagement program
Responsibilities	The Sustainability function develops and coordinates Valmet's Sustainability Agenda within the company. The Procurement function manages purchases and is responsible for ensuring that all purchasing is done in a sustainable and cost-effective manner. The initiatives under the "Sustainable supply chain" focus area are coordinated jointly by the sustainability and Group, business line and area procurement functions. • The Senior Vice President for Marketing, Communications, Sustainability and Corporate Relations is responsible for driving Valmet's brand and marketing performance, internal and external communications, sustainability and corporate relations; she is a member of Valmet Management Team and reports to the CEO. • The Head of Sustainability is responsible for sustainability at corporate level and reports to the SVP of Marketing, Communications, Sustainability and Corporate Relations. • The Vice President of Procurement is responsible for coordinating procurement operations across the four business lines and five areas.
Specific actions	Read more about the "Sustainable supply chain" focus area on pages 30–33 of the Annual Review. The Sustainable supply chain progress table and key achievements in 2018 can be found on the Sustainability 360º agenda progress on page 26. The action plan for 2016–2018 can be found on Valmet's website.
Evaluation of management approach	We continuously assess the impact of our processes and tools concerning our sustainable supply chain activities. We have a systematic method for supplier sustainability risk assessment that enables assessment of suppliers by country of origin and by purchasing category. The aim is to assess the potential negative indirect impacts and risks related to human rights, labor practices, ethical business practices, environmental performance, and health and safety. Based on the supplier sustainability risk assessment, we may request that our suppliers self-assess their sustainability performance and management. The self-assessment may lead to a supplier audit conducted by an independent third party and Valmet. With the self-assessments and audits, we aim to enhance risk management and ensure compliance with the policy.
Topic boundaries	**Within the organization (entire Group):** Valmet's Procurement organization manages purchases and is responsible for ensuring that all purchasing is done in a responsible and cost-effective manner. **Outside the organization:** Valmet purchases components, products, materials and services from some 10,000 active suppliers in more than 50 countries. Special attention is paid to assessing human rights, health and safety and environmental issues in risk countries. Valmet's strategic target is to increase procurement close to customer projects and its own operations. All indirect purchases supporting Valmet's operations are procured locally. The ten largest countries in terms of purchases (MEUR) are Finland, Sweden, China, USA, Germany, Poland, Estonia, Italy, Denmark and Canada. China, India and Thailand are defined as having the highest potential for human rights violations.

Health, safety and environment (HSE)

Management approach

We are committed to protecting the health, safety and environment (HSE) of our people, partners, customers and the communities where we operate. Since we spend about a third of our time at work, the quality of our working lives is an important topic for our overall wellbeing. Our people, and the contractors in our operations, are exposed to potential health and safety hazards at work in our workshops, in our offices, during business travel and when working at our customer's construction sites, mills and plants. The main risks of occupational injury and illness are associated with the unexpected start-up of machinery, use of tools and equipment, mechanical lifting, working at height or in confined spaces, hazardous manual handling, exposure to hazardous substances, road travel and the psychosocial work environment.

Our operations also impact their local environment, as well as contributing to global environmental challenges. The main operational aspects are energy consumption, water consumption, waste production, emissions into the air, discharges of effluent, use of hazardous substances, material consumption and noise.

Based on the above-mentioned impacts, we intend to provide safe and healthy workplaces for all, and to design and operate our facilities to promote the sustainable use of resources and prevent pollution. Our approach is aimed at ensuring appropriate systems, competence and behaviors are in place to identify and control hazards and impacts before they cause harm. Compliance with regulatory obligations, internal standards and customer requirements is the basis for all operations.

Everyone is expected to take responsibility for HSE. We integrate sound HSE management practices into all aspects of our business and promote best HSE practice with our customers, suppliers and partners. Constant emphasis is given to risk management, prevention and learning. We ensure worker participation and engage other interested parties in active and collaborative dialogue. We monitor and openly communicate our HSE performance to enable the continual development of our approach.

Reported topics and indicators

Energy: GRI 302-1, GRI 302-3
Water: GRI 303-1 (2016)
Emissions: GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4, GRI 305-7
Effluents and waste: GRI 306-2, GRI 306-3
Environmental compliance: GRI 307-1
Occupational health and safety: GRI 403-1 (2016), GRI 403-2 (2016), GRI 403-3 (2016)

Goals and targets

We pursue the goal of zero harm to people and environment. We focus on:

- **Ensuring risk-based HSE management in all operations:** We ensure processes for effective HSE management are in place wherever we operate with a focus on defining and implementing global standards and best practice.
- **Continuously improving safety performance:** We systematically enhance leadership, engagement and mindset to drive our safety culture forward. Preventive programs are implemented.
- **Minimizing the environmental impact of our operations and products:** We continuously develop our operational footprint, our supply chain and the solutions we provide our customers to improve environmental performance across the value chain.
- **Promoting health and wellbeing:** We support wellbeing at work through five evidence-based action areas – connect, be active, take notice, keep learning, and give – in local health promotion activities.

Responsibilities	The HSE function is responsible for continuously improving HSE processes, performance, awareness and ways to operate. Valmet remuneration is tied to HSE performance. • The Valmet Executive team has overall responsibility for the management and oversight of Valmet's day-to-day business, including HSE aspects and impacts. • The Senior Vice President for Strategy and Operational Development owns Valmet's strategy processes and drives further development of Valmet's operations in Procurement, Sales Management, Project Management, Quality, HSE and Real Estate; he is a member of the Valmet Executive Team and reports to the CEO. • Valmet's Director HSE is responsible for Valmet's HSE standards, procedures and systems, including reporting processes, as well as for ensuring HSE compliance, driving HSE performance development and leading the global HSE team; she reports to the SVP for Strategy and Operational Development. • The global HSE management team (Valmet's Director HSE together with the relevant business line and area HSE experts) is a matrix management team responsible for developing common processes, procedures and tools and for sharing best practices to accelerate improvement across all operations. These experts are the company's serious incident investigators and lead HSE auditors. • Local HSE managers/specialists provide HSE support to the organization and coordinate and facilitate development of unit/location-based HSE activities. • All Valmet managers are responsible for ensuring the health and safety of their employees and for the management and compliance of their operations with applicable HSE regulations and standards. • All Valmet employees are responsible for taking care of their own health and safety and for looking out for the health and safety of others. All employees are accountable for following the company's rules and procedures.
Specific actions	Read more about the "Health, safety and environment" focus area on pages 36–39 of the Annual Review. The Health, safety and environment progress table and key achievements in 2018 can be found on the Sustainability 360º agenda progress on page 26. The action plan for 2016–2018 can be found on Valmet's website.
Evaluation of management approach	We continuously assess the effectiveness of our HSE management processes through monitoring of HSE KPIs and non-compliance cases, and through regular assessment via engagement, stakeholder and reputation surveys. Local HSE compliance with internal standards, regulations and customer requirements is audited in regular daily, weekly and monthly HSE inspections, periodic evaluations of compliance, inspections by authorities, internal and external management system audits, corporate HSE audits, risk management audits, and as an element of corporate internal audits. We also regularly benchmark the approach and performance of our peers and customers for best practices. The results of HSE performance, including highlights and challenges, are consolidated and necessary actions are planned on a monthly basis in management reviews held in the Executive Team, in business line and area management teams, and continuing down to the department meetings. HSE is reviewed in Board of Director meetings on an annual basis.
Topic boundaries	**Within the organization (entire Group):** Valmet's environmental reporting covers 51 foundries, technology centers and assembly, manufacturing and service workshops worldwide. **Outside the organization:** Valmet serves close to 2,000 customer mills and plants globally. Services are provided especially in Europe and North America which both have a large installed base. Valmet delivers new installations and rebuilds to all its market areas. Valmet aims to cover its contractors' incidents in its reporting.

People and performance

Management approach	We develop an engaged and performance-driven community, and we continuously drive the development of our employees' capabilities globally. Our efforts in capability development focus on ensuring we are operating with the best tools and processes and offering training opportunities to match our strategic needs. We encourage development throughout an employee's career at Valmet, making sure our people develop their competence continuously. We see that success starts with people – strong teams form the foundation for strong performance. We recognize the business benefits of having a diverse workforce and we aim to create and sustain a work environment that values diversity and provides equal opportunities for everyone.
Reported topics and indicators	Employment: GRI 401-1 Training and education: GRI 404-1, GRI 404-2, GRI 404-3 Diversity and equal opportunity: GRI 405-1
Goals and targets	**Boost employee engagement:** Valmet believes that an engaged and performance-driven community is built from within. We use the OurVoice survey to measure engagement, performance excellence and values awareness levels, which are important for growing as a company and for building a strong Valmet community. We encourage our people to live our shared values by connecting them to our way forward as a company. **Develop the best talent:** We continuously look for ways to enable individual performance and support development. We utilize our global training portfolio to inspire new thinking, bring minds together, and ultimately, support growth and drive our strategic initiatives and Must-Wins. We follow a 70–20–10 approach to learning where 70% occurs through on the job learning, 20% through learning relationships and 10% through structured learning. **Increase diversity:** The Valmet community is a diverse one. We continuously work to build and develop teams from different backgrounds, genders and cultures. Having a diverse workforce creates a more dynamic work environment and leads to new ideas and more competitive products. **Responsible employer:** We value teamwork as an important part of our organizations' success and emphasize respectful behavior and a safe, healthy and well-managed working environment in all locations. We set clear expectations for managers through our Manager Role description, which is focused on driving performance, building engagement, supporting development and living our values.
Responsibilities	The Human Resources function defines and guides the processes surrounding talent management, learning and development, compensation and benefits, and human resources reporting. Remuneration at Valmet is partly tied to sustainability topics. • The Senior Vice President for Human Resources is responsible for Human Resources at Valmet; she is a member of the Valmet Management Team and reports to the CEO. • The Director of Compensation and Benefits is responsible for the performance review process. • The Vice President of Talent Management is responsible for processes related to talent attraction and development, including learning programs, talent reviews and successor plans.
Specific actions	Read more about the "People and performance" focus area on pages 42–45 of the Annual Review. The People and performance progress table and key achievements in 2018 can be found on the Sustainability 360º agenda progress on page 27. The action plan for 2016–2018 can be found on Valmet's website.
Evaluation of management approach	We continuously assess the impact of our processes and tools on our material topics. We use regular assessment and reporting tools, including our engagement, stakeholder and reputation surveys, and our anonymous reporting channel to enhance the positive impacts and to avoid, mitigate and remediate any negative impacts on our most material topics.
Topic boundaries	**Within the organization (entire Group):** Valmet has around 12,500 employees in 35 countries around the world. The largest countries in terms of headcount are Finland, China, Sweden, USA and Brazil. **Outside the organization:** Valmet's strategic goal is to strengthen its local presence close to customers and growth markets, which is an important consideration when hiring new employees in respective areas such as South America, China and Asia-Pacific.

Sustainable solutions

Management approach

We provide our customers with sustainable solutions that help to improve their safety and environmental performance. Based on life cycle analysis (LCA) of selected product families, we estimate that around 95% of the environmental impacts of Valmet's entire value chain are emitted when Valmet's solutions are being used for production at the customer sites. For this reason, choosing efficient production technologies play a key role in mitigating climate impacts. We provide our customers safe, reliable, cost-effective, sustainable solutions that improve environmental and process efficiency and respond to the needs of the changing market environment and legislative requirements.

Our approach is that we have created, and are continuously developing, management systems to ensure that the whole business chain works as one for customer success. We establish and adhere to environmentally sound policies and practices in product design and engineering, and we follow product and process safety standards. We offer our customers product life cycle support that ensures the best long-term environmental performance. We educate and encourage our customers to use the products they purchase from us in environmentally responsible and safe ways. We encourage all our personnel to participate in innovation and finding ways to reduce the environmental impact of our products and services.

Reported topics and indicators

Customer health and safety: GRI 416-1
Socio-economic compliance: GRI 419-1
Material Valmet topic: Environmental impacts of products and services

Goals and targets

Valmet's mission is to convert renewable resources into sustainable results. This means that our technology and services will make it possible for our customers to manufacture products sustainably and for us and our customers to make profit responsibly. We focus on:

- Environmental efficiency and safety of solutions:
  - We continuously improve energy, water, raw material and chemical efficiency of solutions and ensure product safety.
  - We integrate sustainability into research and development processes and tools.
  - We ensure product compliance.
- New offering: We develop and commercialize new solutions to increase the sustainability and economy of customer processes and to create new revenue streams.
- Adapting to changing market needs: We deepen our understanding of customers' sustainability needs.

Responsibilities

- Technology development and product management are managed by the respective technology organizations of the business lines, supported by the sales, marketing and engineering functions.
- The Vice President of Research and Development is responsible for managing Valmet-level R&D functions. He reports to the Senior Vice President for Strategy and Development.
- Each business line has a person or persons coordinating R&D within the business line.
- Each technology unit within the business line has technology and/or R&D responsibles for product development.
- The Valmet R&D Management Team, consisting of technology/R&D responsibles of all business lines and areas, leads and coordinates joint technology and R&D activities.
- R&D managers are responsible for systematic research and development activities associated with the search for and discovery of new knowledge and expertise required in developing new and existing products, services, processes or technologies.

Specific actions

Read more about the "Sustainable solutions" focus area on pages 48–53 of the Annual Review. The Sustainable solutions progress table and key achievements in 2018 can be found on the Sustainability 360º agenda progress on page 26. The action plan for 2016–2018 can be found on Valmet's website.

Evaluation of management approach

The management approach is assessed continuously as part of our operations, and processes are improved accordingly to ensure that the goals that have been set are achieved. The improvement actions taken in 2018 include:

- Maintaining the use of guidelines for sustainable and responsible research, product development and design in Valmet.
- Implementation of a software tool for evaluation of new R&D initiatives and management of the R&D project portfolio.
- Updated group-wide instructions for R&D process and reporting metrics.

Topic boundaries

Within the organization (entire Group): Valmet's technology organization is responsible for product development and for ensuring that Valmet's solutions meet all applicable environmental and safety requirements. Valmet's sales organizations globally are responsible for ensuring that the solutions we deliver meet customer needs and support their safety and environmental targets.

Outside the organization: Valmet provides services, automation and process technologies for the pulp, paper and energy industries around the world. The majority of the life cycle environmental impacts arise from the use of Valmet's technologies and services. Valmet delivers new installations and rebuilds in all its market areas.

Corporate citizenship

Management approach	We want to ensure that our operations are globally aligned and socially responsible, and create added value to all our stakeholders in a sustainable manner.
Reported topics and indicators	Economic performance: GRI 201-1 Anti-corruption: GRI 205-1
Goals and targets	• We aim to create long-term added value for our stakeholders. – We promote transparent reporting and active stakeholder collaboration. • Globally aligned principles: – We operate in compliance with laws and regulations and respect globally acknowledged ethical values, principles and human rights. – We ensure compliance with guiding principles. – 100% of existing and new employees have completed the Code of Conduct training.
Responsibilities	• The Accounting and Finance function is headed by the CFO. Financial reporting and planning are based on the group management system, and development is monitored through financial reporting. • The Legal function is part of Valmet's Group Finance and responsible for the legal governance of Valmet and for monitoring the proper and consistent application of and adherence to the rules and principles of the company such as the Code of Conduct. The Code of Conduct and related policies are reviewed and approved by the Board of Directors and/or the Executive Team on a regular basis. • The Group Risk Management function is part of Valmet's Group Finance and is responsible for supporting and controlling the implementation of the Enterprise Risk Management Policy and the annual Risk Management Program as well as for developing the common processes, practices, instructions and tools to be enforced throughout Valmet. • The Internal Audit function acts as an independent and objective assurance and consulting function for evaluating and improving the effectiveness of risk management, control, and governance processes such as the reporting of misconduct to AC. • The Sustainability function develops and coordinates Valmet's Sustainability Agenda within the company. The Head of Sustainability is responsible for sustainability at corporate level and reports to the SVP of Marketing Communications, Sustainability and Corporate Relations, who is a member of Valmet Management Team and reports to the CEO.
Specific actions	Read more about the "Corporate citizenship" focus area on pages 56–59 of the Annual Review. The Corporate citizenship progress table and key achievements in 2018 can be found on the Sustainability 360º agenda progress on page 27. The action plan for 2016–2018 can be found on Valmet's website.
Evaluation of management approach	The management approach to anti-corruption is assessed continuously as part of our operations and processes. The improvement actions taken in 2018 include: • Valmet's Code of Conduct and related processes are supported by a training for management and obligatory global e-learning for all employees. • Valmet has established an open channel for reporting violations to Valmet's Code of Conduct or other concerns related to fraud, abuse or misconduct. The channel is maintained by a third party to guarantee anonymity, to the extent permitted by local laws, and it enables Valmet's employees and any of our stakeholders to make a report via telephone or the Internet 24/7 in their native language.
Topic boundary	**Within the organization (entire Group):** all Valmet functions and employees work in compliance with our Code of Conduct to create added value in an ethical manner to our broad stakeholder base globally. **Outside the organization:** Valmet has truly global operations in around 35 countries and a broad stakeholder base in all market areas. We provide added value to our stakeholders in the form of dividends, jobs and business opportunities for instance. The biggest countries in terms of headcount and net sales are Finland, China, Sweden, USA and Brazil.

Information on specific standard disclosures

This section provides information on the specific standard disclosures which are not reported in the Annual Review or the GRI content index.

Anti-corruption (GRI 205-1)

Group level risk assessments cover 100% of Valmet's operations. The FRIME audits are annually conducted in five key units, covering about 80% of Valmet's turnover within a five-year evaluation cycle. Corruption risks are assessed as part of compliance and crime-related risks, e.g. fraud and misconduct, in the FRIME audits and in Valmet's annual group-level risk assessment process. The most significant corruption risks relate to financial impacts and reputation.

Energy consumption within the organization (GRI 302-1[1], GRI 302-3[2])

GRI 302-1: Fuel consumption

TJ	2018	2017	2016
Renewable fuels	2	2	0
Non-renewable fuels	298	281	285
Total	**300**	**283**	**285**

GRI 302-1: Energy consumption by source

TJ	2018	2017	2016
Electricity	828	790	762
Heating	231	232	251
Steam	25	30	38
Total	**1,083**	**1,052**	**1,051**

GRI 302-1: Energy sold

TJ	2018	2017	2016
Electricity	10	13	15
Heating	2	10	5
Total	**12**	**23**	**20**

GRI 302-1: Total energy consumption

TJ	2018	2017	2016
	1,381	1,331	1,336

GRI 302-3: Energy intensity

	2018	2017	2016
TJ/ MEUR Net sales	0.42	0.42	0.46

[1] Consumption is reported based on local invoicing. Standard conversion factors are used in our reporting system. Electricty is consumed in production processes, use of equipment and facility services such as lighting, cooling and heating. Fuel used for internal transportations is comparatively minor and is excluded from fuel consumption amounts.

[2] The ratio uses energy consumed within the organization from the following types: electricity, heating, cooling and steam and fuel (excluding fuel for internal transportations).

Total water withdrawal by source (GRI 303-1 (2016)[1])

GRI 303-1: Total water withdrawal by source

1,000 m³	2018	2017	2016
Municipal water	526	508	532
Surface water	2,522	2,519	2,594
Other[2]	29	22	23
Total	**3,077**	**3,049**	**3,149**

[1] Municipal supplies and other water utilities are reported by each unit based on invoicing. Surface water consumption is in some cases estimated based on pump capacity. Ground water and rain water are based on local records and methodologies.
[2] Ground water, rainwater, water from other organizations.

Greenhouse gas emissions (GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4)

GRI 305-1 and GRI 305-2: Greenhouse gas (GHG) emissions (Scope 1 and 2)[1]

1,000 tCO_2	2018	2017	2016
Scope 1[2]	17.70	16.80	16.60
Scope 2 (location based)[3]	73.10	70.00	66.70
Scope 2 (market based)[4]	95.20	92.70	95.60

GRI 305-3: Other indirect greenhouse gas (GHG) emissions (Scope 3)[5]

1,000 tCO_2	2018	2017	2016
Category 1: CO_2 emissions from purchased goods and services[6]	2,025	1,665	1,288
Category 4: CO_2 emissions from upstream transportation and distribution[7]	63	60	49
Category 6: CO_2 emissions from business travel[8]	34	32	31
Category 9: CO_2 emissions from downstream transportation and distribution[9]	11	11	9

GRI 305-4: Greenhouse gas (GHG) emissions intensity (Scope 1 and 2)[10]

	2018	2017	2016
1,000 tCO_2/MEUR Net sales	0.027	0.027	0.029

[1] Only CO_2 is included in the calculation. The amount of Biogenic Scope 1 emissions is 1.5% of total Scope 1 emissions. The base year reference is the yearly average CO_2 emissions for 2005–2009: 32,000 tCO_2 (Scope 1) and 91,600 tCO_2 (Scope 2, location based). A yearly average is taken to ensure that the baseline is a representative yearly consumption across the business cycle. The methodology used to calculate emissions is direct measurement of energy sources consumed based on invoicing at the location level and conversion to CO_2 emissions.
[2] Scope 1 emissions are based on default CO_2 emission factors for combustion from the "2006 ICPP Guidelines for National Greenhouse Gas Inventories, Volume 2 Energy".
[3] Location based CO_2 emission factors are based on an average value from 2009–2011 as given by the International Energy Agency (IEA) in "CO_2 Emissions from Fuel Combustion Highlights 2013".
[4] Valmet calculated market-based CO_2 emission for the first time in 2016. The following emissions factors have been applied to the 2016 data: "eGRID 2014 Subregion GHG Output Emission Rates" (United States Environmental Protection Agency), "China eGRID 2016 Emission Output Rates" (Clean Development Mechanism China), "CO_2 emission factors of the National Interconnected System of Brazil" for 2016 (Brazilian Technology and Science Ministry) and "European Residual Mixes 2016" (Association of Issuing Bodies) except for Portugal where supplier specific emission factors for 2016 were applied. The following emissions factors have been applied to the 2017 and 2018 data: "eGRID 2016 Subregion GHG Output Emission Rates" (United States Environmental Protection Agency), "China eGRID 2017 Emission Output Rates" (Clean Development Mechanism China), "CO_2 emission factors of the National Interconnected System of Brazil" for 2017 (Brazilian Technology and Science Ministry) and "European Residual Mixes 2017" (Association of Issuing Bodies) except for Portugal where supplier specific emission factors for 2018 were applied. In Canada, we apply specific factors from 2015, and in Thailand and Australia location-based factors were applied for all three years of calculations.
[5] The specific emission factors used in calculating the greenhouse gas emissions are based on databases and publicly available sources using monetary values from Valmet's monitoring and reporting tools.
[6] The analysis of purchased goods and services is based on monetary value of purchased goods and services by category and supplier country. The emission flows have been calculated based on environmentally extended input output analysis and emission factors from Exiobase (www.exiobase.eu). The purchasing spend data used covers approximately 99% (2017: 96%) of Valmet's total direct supplier spend.
[7] The analysis on upstream and downstream transportation and distribution emissions is based on suppliers' emission reports, and when not available, the monetary value of purchased transportation services following the same calculation methodology as for category 1 emissions. Upstream transportation and distribution data used covers approximately 91% of Valmet's total supplier spend. The calculated transportation modes include air, train, ocean and road transportation.
[8] The analysis of business travel emissions is based on emission, mileage and spend data from travel agencies. The business travel data used covers Finland, Sweden, North America, and China, and represents 75% (2017: 78%) of Valmet's global workforce. The calculated business travel modes include travelling by air, rented vehicle and compensated mileages as well as hotel nights.
[9] Emissions from downstream transportation and distribution are based on an estimated volume of downstream transportation services. The distribution of transportation modes and emission intensity from upstream transportations has been applied for downstream transportations. The downstream transportation and distribution data includes air, train, ocean and road transportation and is estimated to be 15% of total transportation emissions.
[10] Emissions intensity is calculated on location-based emission factors. The ratio covers includes CO_2 gases from direct (Scope 1) and energy indirect (Scope 2) emissions.

NO_x, SO_x, and other significant air emissions (GRI 305-7[1])

GRI 305-7[1]: NO_x, SO_x, and other significant air emissions

t	2018	2017	2016
Hazardous air pollutants (HAP)	2.1	1.8	3
NO_x	16.6	17.4	15
Particulate Matter (PM)	7.1	8.5	6
SO_x	1.3	1.9	0.5
Volatile organic compounds (VOC)	77.9	62.1	48.5
Others standard categories	1.8	1.9	2

[1] Significant air emissions are defined as those listed in environmental permits of local operations. Calculations are based on published emissions factors.

Total weight of waste by type and disposal method (GRI 306-2[1])

GRI 306-2: Hazardous waste

1,000 t	2018	2017	2016
Recycling	0.76	0.59	0.29
Energy recovery	0.06	0.15	0.11
Incineration	1.59	1.22	1.19
Landfill	0.38	0.35	0.38
Other[2]	0.07	0.11	0.08
Total	**2.86**	**2.42**	**2.05**

GRI 306-2: Non-hazardous waste

1,000 t	2018	2017	2016
Reuse	9.25	7.36	0
Recycling	20.7	17.62	14.49
Energy recovery	2.43	2.06	2.55
Incineration	0.24	0.17	0.17
Landfill	11.65	12.47	19.6
Other[2]	0.24	0.7	0.33
Total	**44.51**	**40.38**	**37.14**

GRI 306-2: Total waste

	2018	2017	2016
1,000 t	47.37	42.79	39.19

[1] Waste disposal method is determined based on information provided by the waste disposal contractor according to national classification regulations.
[2] Other includes composting, deep well inject or on site storage.

Environmental impacts of products and services (Material Valmet topic)

Based on life cycle analysis (LCA) of selected product families, we estimate that around 95% of the environmental impacts of Valmet's entire value chain occur when Valmet's solutions are being used for production at the customer sites.

Since Valmet's solutions are relatively complex in nature, their environmental impacts, such as energy, water, raw material and chemical use as well as the amount of emissions, depend on the project specifications. The actual impact of the technologies also depends on factors such as how they are operated and the selection of raw materials.

The following examples demonstrate quantified actions concerning the mitigation of the environmental impact of Valmet's products and services.

Advanced and competitive technologies based on innovations

Valmet has a systematic approach to research and technology development. Transforming an idea to the commercial product consists of various steps often including tests in Valmet's own pilot facilities, and may in some cases take several years. Over the years Valmet has been able to introduce both small product improvements and revolutionary innovations to the market. Our innovations improve the competitiveness of our technologies and satisfy the customer's needs.

Beating chrome in Yankee metallizing

Damaged Yankee cylinders in tissue machines impede production output and can have a detrimental impact on tissue quality. Cylinders with damaged surfaces are often metallized. A recognized risk of metallizing is that during the process, potentially harmful hexavalent chromium is created. Valmet Infinikote-2 Yankee Metallizing process for tissue machine Yankee cylinders contains no chrome and generates no hexavalent chrome during application, and so it is an environmentally safe and durable solution.

Renewable biomass to replace coal

One of Valmet's technologies to move from fossil to renewable energy production are steam exploded black pellets. Black pellets are safer, easier to transport, and hold about 15% more energy than conventional "white" biomass pellets. The black pellets have high moisture durability and can replace fossil coal up to 70–100% depending on the size of the power plants and thus significantly reduce carbon emissions.

Lightweighting with aqua cooling calendering

Lightweighting means that at least the same end-product quality can be produced with less raw materials. Using aqua cooling calendering in producing coated board, bulk savings of up to 5% can be gained while maintaining strength and visual properties. In this method, web cooling uses jets of cool, dry air blown over both surfaces of the web to evaporate water. This effect is boosted by spraying a controlled amount of water onto the web surfaces.

Total number and rates of new employee hires and employee turnover by age group, gender, and area (GRI 401-1)

New hires[1]

GRI 401-1: Total number and rate of new employee hires by age

	New hires	New hires, %
Under 30	730 (801)	45.6 (51.3)
30–50	751 (657)	46.9 (42.1)
Over 50	120 (104)	7.5 (6.7)
Total	**1,601 (1,562)**	**100.0 (100.0)**

GRI 401-1: Total number and rate of new employee hires by gender

	New hires	New hires, %
Female	429 (374)	26.8 (23.9)
Male	1,172 (1,188)	73.2 (76.1)
Total	**1,601 (1,562)**	**100.0 (100.0)**

GRI 401-1: Total number and rate of new employee hires by region

	New hires	New hires, %
North America	111 (96)	6.9 (6.1)
South America	46 (53)	2.9 (3.4)
EMEA	1,165 (1,134)	72.8 (72.6)
China	191 (181)	11.9 (11.6)
Asia-Pacific	88 (98)	5.5 (6.3)
Total	**1,601 (1,562)**	**100.0 (100.0)**

[1] New hires calculation: (new hires per category/total number of new hires in 2018) *100
New hires includes summer trainees.

Turnover[2]

GRI 401-1: Total number of leavers and turnover rate by age

	Number of leavers	Turnover, %
Under 30	458 (512)	37.0 (37.3)
30–50	480 (485)	6.7 (7.3)
Over 50	326 (341)	7.5 (8.1)
Total	**1,264 (1,338)**	**9.9 (11.0)**

GRI 401-1: Total number of leavers and turnover rate by gender

	Number of leavers	Turnover, %
Female	337 (328)	12.6 (13.2)
Male	927 (1,010)	9.2 (10.4)
Total	**1,264 (1,338)**	**9.9 (11.0)**

GRI 401-1: Total number of leavers and turnover rate by region

	Number of leavers	Turnover, %
North America	140 (136)	11.5 (10.8)
South America	58 (62)	11.5 (11.4)
EMEA	877 (902)	10.3 (11.2)
China	133 (175)	7.6 (10.4)
Asia-Pacific	56 (63)	7.3 (8.9)
Total	**1,264 (1,338)**	**9.9 (11.0)**

[2] Turnover rate calculation: (number of leavers/total number of employees per category as of December 31, 2018) *100.
Turnover includes summer trainees.

Percentage of total workforce represented in formal joint management-worker health and safety committees (GRI 403-1 (2016))

GRI 403-1: Percentage of employees represented in health and safety committees by region

	Headcount, %
North America	97 (96)
South America	93 (93)
EMEA	93 (93)
China	99 (93)
Asia-Pacific	76 (82)
Total	**93 (92)**

Injury rate, occupational disease rate, absentee rate and work-related fatalities (GRI 403-2 (2016)[1])

GRI 403-2: Work-related fatalities by gender (own employees)

	2018	2017	2016
Female	0	0	0
Male	0	0	0
Total	**0**	**0**	**0**

GRI 403-2: Work-related fatalities by area (own employees)

	2018	2017	2016
North America	0	0	0
South America	0	0	0
EMEA	0	0	0
China	0	0	0
Asia-Pacific	0	0	0
Total	**0**	**0**	**0**

GRI 403-2: Work-related fatalities by gender (supervised and independent contractors[2])

	2018	2017	2016
Female	0	0	2
Male	0	0	0
Total	**0**	**0**	**2**

GRI 403-2: Work-related fatalities by area (supervised and independent contractors[2])

	2018	2017	2016
North America	0	0	1
South America	0	0	0
EMEA	0	0	1
China	0	0	0
Asia-Pacific	0	0	0
Total	**0**	**0**	**2**

GRI 403-2: Lost time incident frequency, LTIF[3], by area (own employees[4])

	2018	2017	2016
North America	0.4	1.6	1.6
South America	1.7	1.9	0.9
EMEA	2.8	3.3	2.9
China	1.5	1.5	1.1
Asia-Pacific	0.8	0	0
Total	**2.3**	**2.6**	**2.3**

[1] The European Statistics at Work Methodlogy is used for recording and reporting accident statistics. This methodology follows the ILO Code. Incident data is collected in the global HSE monitor reporting system. It covers all countries and all operations, including work on customer and delivery project sites.

[2] Supervised and independent contractors = contractors whose work, or workplace, is controlled by Valmet. Incident frequencies for supervised/independent contractors are calculated based on both theoretical and actual workhours.

[3] 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 one to three calender days absense, and lost time incidents resulting in four or more calender days absense.

[4] Incident frequencies for Valmet employees are calculated according to theoretical workhours based on active headcount.

GRI 403-2: Lost time incident frequency, LTIF[3], by area (supervised and independent contractors[2])

	2018	2017	2016
North America	0	8.5	-
South America	7.7	1.8	2
EMEA	5.3	7.8	6.9
China	5.2	4.4	2.2
Asia-Pacific	0	2.7	0
Total	**5.4**	**5.5**	**4.4**

GRI 403-2: Total recordable incident frequency by area, TRIF[5] (own employees[4])

	2018	2017	2016
North America	3.9	4.1	4.3
South America	5.1	4.8	4.7
EMEA	4.6	5.9	6.5
China	4.2	5.6	7.0
Asia-Pacific	2.4	3.0	2.9
Total	**4.4**	**5.5**	**6.0**

GRI 403-2: Total recordable incident frequency, TRIF[5], by area (supervised and independent contractors[2])

	2018	2017	2016
North America	0	8.5	-
South America	11	6.1	7.3
EMEA	9.3	13.3	10.1
China	10.4	4.4	6.6
Asia-Pacific	0.0	4.0	0
Total	**9.3**	**10.1**	**7.6**

GRI 403-2: Absentee rate[6] by area (own employees)

%	2018	2017	2016
North America	2.3	2.2	1.7
South America	0.8	0.7	1.1
EMEA	3.3	3.1	3.2
China	1	0.9	1.2
Asia-Pacific	1.2	1.1	1.4
Total	**2.6**	**2.5**	**2.5**

GRI 403-2: Occupational disease[7] rate by area (own employees)

	2018	2017	2016
North America	0	0	0
South America	0	0	0
EMEA[8]	0.3	0.1	0.4
China	0	0	0
Asia-Pacific	0	0	0
Total	**0.2**	**0**	**0.3**

[5] TRIF is based on fatalities, lost time incidents, medical treatment and restricted work cases (first aid cases are excluded).
[6] Absentee rate reflects the actual absentee days lost expressed as a percentage of total days scheduled to be worked by the workforce for the same period.
[7] Occupational disease rate reflects the number of occupational diseases registered at the local social insurance authorities per million hours worked.
[8] Data from Sweden and Germany is omitted due to data privacy issues.

Workers with high risk of diseases related to their occupation (GRI 403-3 (2016))

Valmet maintains up-to-date risk maps for all its operations to identify health hazards, implements necessary controls with the aim of preventing ill-health and continuously monitors health. Workers in production and construction environments are at risk of:

- Skin disease caused by physical, chemical or biological agents
- Hearing impairment caused by noise
- Diseases caused by vibration
- Repetitive strain injury
- Respiratory diseases

Training hours (GRI 404-1)

The average number of training hours for a Valmet employee in 2018 was 16 hours (females 14 hours, males 17 hours). In addition, we have provided 26,401 hours (females 4.7 hours, males 1.4 hours) of training to 1,181 key/end users to support the implementation of our ERP project. Training hours are reported for all employees based on the information available in the Valmet Training Database.

Learning programs (GRI 404-2)

We encourage development throughout an employee's career at Valmet, making sure our people develop their competence continuously. We follow a 70–20–10 learning philosophy, with 70% occurring through on-the-job learning, 20% through learning relationships and 10% through formal learning.

We always adhere to legal requirements and country practices regarding the management of career endings. In situations that have a significant impact on individuals and local communities, we take steps to provide additional support in the form of outplacement training, individual skill development, financing for new enterprises, entrepreneur training and compensation for relocation costs.

Performance reviews (GRI 404-3)

Valmet carries out a documented annual review discussion comprising a performance review and development plan for its white-collar employees. Annual review discussions are also encouraged for Valmet's blue-collar employees, some of which take place as documented group discussions.

GRI 404-3: Employees receiving regular performance and career development reviews

	Female, %	Male, %	Total, %
White-collar	97.8 (96.1)	97.6 (97.0)	97.7 (96.8)
Senior management	100.0 (100.0)	99.2 (100.0)	99.4 (100.0)
Managerial and specialist	97.8 (96.0)	97.6 (96.9)	97.6 (96.7)
Blue-collar	71.0 (75.0)	39.2 (37.0)	44.3 (42.6)

Employee category definitions

White-collar has the following two sub-categories:

- Senior Management: Executive and senior management roles responsible for strategy development and long-term operational plans.
- Managerial and Specialists: Functional and department managers, team leaders, supervisors and white-collar specialist roles.

Blue-collar: Workers in operational roles, mainly in manufacturing and field service.

Composition of governance bodies and employee breakdown (GRI 405-1)

GRI 405-1: Board of Directors

Years	Female total, %	Male total, %	Total, %
Under 30	0 (0)	0 (0)	0 (0)
30–50	14.3 (14.3)	0 (0)	14.3 (14.3)
Over 50	28.6 (28.6)	57.1 (57.1)	85.7 (85.7)
Total	**42.9 (42.9)**	**57.1 (57.1)**	**100.0 (100.0)**

GRI 405-1: Executive Team

Years	Female total, %	Male total, %	Total, %
Under 30	0 (0)	0 (0)	0 (0)
30–50	14.3 (14.3)	14.3 (21.4)	28.6 (35.7)
Over 50	0 (0)	71.4 (64.3)	71.4 (64.3)
Total	**14.3 (14.3)**	**85.7 (85.7)**	**100.0 (100.0)**

GRI 405-1: Breakdown of employees by employee category and gender

	Female total, %	Male total, %	Total, %	Total
White-collar	15.8 (15.7)	54.6 (53.7)	70.5 (69.4)	8,826 (8,512)
Senior management	0.2 (0.2)	1.1 (1.0)	1.3 (1.3)	161 (155)
Managerial and specialist	15.6 (15.5)	53.6 (52.6)	69.2 (68.1)	8,665 (8,357)
Blue-collar	4.5 (4.6)	25.0 (26.0)	29.5 (30.6)	3,702 (3,756)
Total	**20.3 (20.3)**	**79.7 (79.7)**	**100.0 (100.0)**	**12,528 (12,268)**

GRI 405-1: Breakdown of employees by employee category and age group

	Age in years				
	Under 30 Total, %	30–50 Total, %	Over 50 Total, %	Total, %	Total
White-collar	6.0 (5.7)	40.2 (40.1)	24.3 (23.6)	70.5 (69.4)	8,826 (8,512)
Senior management	0.0 (0.0)	0.6 (0.6)	0.7 (0.7)	1.3 (1.3)	161 (155)
Managerial and specialist	6.0 (5.7)	39.6 (39.5)	23.6 (22.9)	69.2 (68.1)	8,665 (8,357)
Blue-collar	3.8 (4.0)	16.3 (16.8)	9.5 (9.8)	29.5 (30.6)	3,702 (3,756)
Total	**9.7 (9.8)**	**56.5 (56.8)**	**33.8 (33.4)**	**100.0 (100.0)**	**12,528 (12,268)**

GRI 405-1: Breakdown of employees by nationality for the largest employee groups

Nationality	Total, %
Finnish	39.7 (39.4)
Chinese	13.9 (13.7)
Swedish	12.1 (12.4)
American	7.7 (8.1)
Brazilian	3.9 (4.1)
Portuguese	2.9 (2.9)
Indian	2.1 (2.1)
German	2.1 (2.1)
Spanish	1.9 (1.9)
Canadian	1.5 (1.6)

Measures taken to eliminate forced or compulsory labor in risk areas (GRI 409-1)

In the industries from which Valmet makes most of its purchases, the potential human rights risks relate to freedom of association, possible use of forced labor, and occupational health and safety. Valmet has also acknowledged that countries such as China, India and Thailand, where it has both its own operations and makes purchases, are commonly identified as risk countries in terms of human rights impacts. Child labor and forced labor are part of the indicators assessed to define country-specific risk.

Valmet has a global process in place to ensure compliance with the requirements set out in its Sustainable Supply Chain policy. All suppliers are required to sign the policy as part of their contract with Valmet. Valmet has an automated sustainability risk assessment for all its suppliers. Based on the risk assessment, Valmet may ask its suppliers to evaluate their sustainability performance by conducting a self-assessment through an online-tool, which is used as one of the criteria to define the need for a potential sustainability audit. Valmet conducts supplier sustainability audits together with an independent, certified third-party auditor.

New suppliers that were screened using social criteria (GRI 414-1)

Screening of new direct suppliers from a sustainability risk perspective is an automated and integrated feature in Valmet's supplier approval process globally. Valmet's key performance indicators related to sustainable supply chain are integrated in the global supplier sustainability management process. In 2018, 84% (73%) of all new direct suppliers were automatically screened on sustainability. The remaining suppliers have been manually assessed in regard to potential sustainability risk. The screening covers business ethics, compliance, human and labor rights, health, safety and environmental management, as well as product safety topics.

Assessment of the health and safety impacts of product and service categories (GRI 416-1)

Safety is an integral part of Valmet's technologies, automation and services. The safety requirements of all Valmet's solutions are carefully reviewed and assessed in the R&D process and must be fulfilled in each product development phase.

Valmet's solutions are required to be safe to use, and they are designed to meet or exceed all applicable safety standards and regulations. To ensure safe operations, customer training is included in all project deliveries. Moreover, the majority of Valmet's operations are certified to quality, health and safety and environmental management standards, and processes that ensure product safety are followed.

Non-compliance with laws and regulations in the social and economic area (GRI 419-1)

There were no significant fines regarding non-compliance with social and economic laws and regulations in 2018. In 2017, Valmet had two minor non-compliance incidents related to safety regulations, but no significant cases.

Independent Limited Assurance Report to the Management of Valmet Corporation

Scope of Engagement

Valmet Corporation ("Valmet") commissioned **DNV GL Business Assurance Finland OY/AB** ("DNV GL") to conduct a limited assurance engagement over Selected Information presented in the Valmet Corporation's Financial Statements, Annual Review 2018 and GRI Supplement 2018 (the "Report") for the reporting period 1st January to 31st December 2018.

Selected Information

The scope and boundary of our work is restricted to the non-financial indicators presented in the Report of the Board of Directors in Valmet Financial Statements 2018 and key sustainability performance indicators and metrics presented in Valmet Annual Review 2018 and GRI Supplement 2018. The indicators that have been assured as part of the scope of work are all the non-financial disclosures in the pages 8–13 in the Report of the Board of Directors and selected GRI-based sustainability disclosures identified with 'x' in the Assurance column of the GRI content index in Valmet GRI Supplement 2018 in the pages 2–8 (the "Selected Information").

To assess the Selected Information, which includes an assessment of the risk of material misstatement in the Report, we have used Global Sustainability Standard Board's GRI-standards (2016) and Valmet's reporting principles, (the "Criteria", see page 1 in Valmet GRI Supplement 2018).

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 Valmet's website for the current reporting period.

Our 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 the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria.

This conclusion relates only to the Selected Information, and is to be read in the context of this Assurance Report, in particular 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 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 from, 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 that the risk of this conclusion being in error is reduced, but not reduced completely.

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 Valmet's management to obtain an understanding of the data management systems and processes used to generate, aggregate, and report the Selected Information;
- Site visits to review process and systems for preparing site level data consolidated at Head Office at four sites in Germany, Indonesia, Russia and Sweden. DNV GL were free to choose the sites on the basis of materiality and type of sites visited in previous assurance engagements;
- 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; and
- Reviewing the Report and narrative accompanying the Selected Information in the Report with regard to the Criteria.

Inherent limitations

Our assurance relies on the premise that the data and information provided by Valmet to us 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 Greenhouse Gas

(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 established policies and procedures are designed to ensure that DNV GL, its personnel and – where applicable – others are 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, whose members 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 Valmet and DNV GL

The Management of Valmet have 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 Valmet 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

15th February 2019

Mikael Niskala
Lead Auditor
DNV GL – Business Assurance

Shaun Walden
Principal Consultant and Reviewer
DNV GL – Business Assurance

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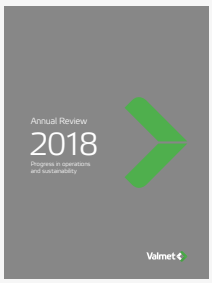

ANNUAL REVIEW 2018

The report describes Valmet's market environment and the progress of its strategy, operations and sustainability in 2018.

FINANCIAL STATEMENTS 2018 AND INFORMATION FOR INVESTORS

The report includes Valmet's Financial Statements for 2018 and information about its shares, shareholders and management.

GRI SUPPLEMENT 2018

The report includes Valmet's sustainability reporting indicators and principles, and its alignment with the Global Reporting Initiative (GRI) Standards framework.

CORPORATE GOVERNANCE STATEMENT 2018

The report covers Valmet's governance principles and activities, Board and management in 2018.

REMUNERATION STATEMENT 2018

The report covers Valmet's remuneration principles and remuneration in 2018.

About this report

This report is made from paper and pulp that were produced on Valmet machinery and equipment. It is printed on Maxioffset paper, which is certified according to the PEFC standard and the Nordic Ecolabel.

This report is from sustainably managed forests and controlled sources. PEFC certification requires that the forests are managed well with regard to biodiversity, forest health and maintenance, as well as recreational use. The PEFC logo promotes responsible consumption.

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