

VOLVO GROUP

GRI Index 2018

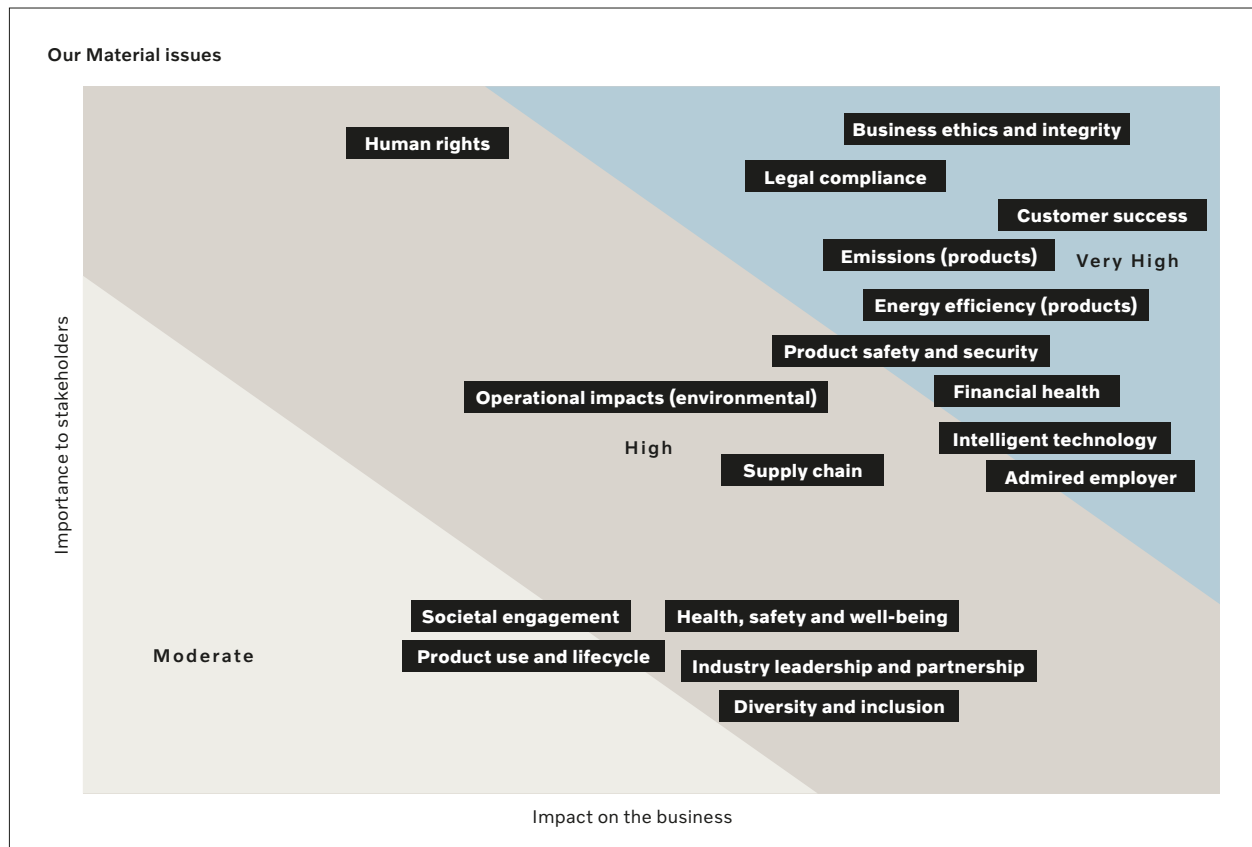
Sustainability reporting

Since 2015, the Volvo Group has included the sustainability reporting in our Annual and Sustainability Report which is prepared in accordance with the Swedish Annual Accounts Act. In this GRI Index we disclose the economic, environmental and social sustainability topics that are material to the Volvo Group. This report has been prepared in accordance with the GRI Standards: Core Option. It should be read in conjunction with our Annual and Sustainability Report 2018 (ASR18), available at: volvogroup.com. See also the Sustainability Reporting Index in the ASR18 on page 116.



VOLVO GROUP MATERIAL TOPICS

MATERIALITY MATRIX



LIST OF MATERIAL TOPICS

The materiality matrix, in the image above, is used to identify all the sustainability topics and priorities with importance to our stakeholders, and that has a material impact on the Volvo Group. The following were identified as being of both very high impact on the business and very high importance to stakeholders: business ethics and integrity; legal compliance; customer success; emissions (products); energy efficiency (products); product safety and security; financial health; intelligent technology and admired employer. See also ASR18 page 226.

GRI topics related to the Volvo Group material topics and where the impact occurs in the value chain, see page 4 in this document.

Material topics and definitions (alphabetical order):

Admired employer: being the most admired employer in our industry. Leading and embracing change. Attracting people with a strong business instinct and developing a skilled and agile workforce with the optimal knowledge and competences at all levels. Trusting and empowering colleagues to use their intuition and make the right decisions.

Business ethics and integrity: creating, leading and maintaining a responsible culture built on the business ethics, human rights, social and environmental principles set out in our Code of Conduct, including principles on anti-corruption, taxation and political involvement. Reflecting our values of: customer success, trust, passion, change and performance.

Customer success: engaging with customers to truly understand their business challenges, needs and ambitions. Creating value for customers by delivering transport solutions that increase profitability through lower running costs and higher revenues, due to improved uptime, fuel efficiency and productivity.

Volvo Group material topics

Diversity & inclusion: enabling the diversity of thought in our global workforce to fuel our passion and drive innovation. Creating and ensuring an inclusive work environment that empowers employees of all backgrounds, gender, gender identity, nationality, ethnicity, disability, age, sexual orientation and religion to contribute to their full potential.

Emissions (products): developing innovative transport solutions designed to reduce consumption of fossil fuels and lower emissions of carbon dioxide (CO₂), nitrogen oxide (NO_x), particulate matters and noise.

Energy efficiency (products): developing innovative product and service solutions designed to reduce energy consumption, operational costs and environmental impacts.

Financial health: managing economic and financial risks and developing resilience to market volatility. Reinforce and regain market share; grow by meeting customer needs in specific segments; and secure industry-leading profitability. Generating and distributing economic value to various stakeholders.

Health, safety & well-being: ensuring safe and healthy workplaces and aiming for zero accidents along our value chain. Protecting the physical and psychological safety, health and well-being of the Volvo Group employees and workers. Promoting and supporting health and well-being for employees and their families.

Human rights: addressing our obligations as signatories to the UN Global Compact: respect for human rights, such as labor rights, freedom of association, land ownership; no child or forced labor; non-discrimination – both within the Volvo Group and our value chain. Managing risks through due diligence of our own operations and of selected business partners in selected high-risk markets.

Industry leadership and partnership: being recognized as a thought leader, contributor and magnifier for sustainable innovation that drives growth within our sector. Taking a leading role on international sustainable transport platforms and development goals. Partnering with leading universities and research partners to advance sustainable change in our industry. Collaborating with project partners and influencing policy makers. Actively participating in networks and sharing knowledge with trade organizations.

Intelligent technology: investing in pioneering research and development for innovative technology, transport and service solutions to contribute to efficient transport systems. Investing in connectivity, electromobility, automation, safety, data protection and security. Adapting products and services to reduce congestion and improve the economic, social and environmental dimensions of mobility, distribution and infrastructure.

Legal compliance: working to ensure compliance with all applicable laws and regulations, regulations, directives, international standards and widely-recognized initiatives. Continuous development of our corporate governance, policies and practices to ensure adherence.

Operational impacts (environmental): managing the environmental footprint of our production, distribution, dealerships, workshops and corporate functions. Being a responsible and sustainable company by minimizing and mitigating our environmental impacts on local communities near our facilities. Using resources – energy, materials, chemicals, water – frugally and efficiently. Minimizing our operational waste, emissions of greenhouse gases, pollutants and noise, transport and logistics.

Product safety and security: researching and developing product, technology and training solutions designed to enhance driver and operator safety, traffic and site safety, and goods security.

Product use & lifecycle: promoting sustainable and responsible use of Volvo Group products. Engaging with stakeholders concerned about downstream product uses. Optimizing resource efficiency and supporting socioeconomic opportunity in the circular economy of reuse, recycling and remanufacturing.

Societal engagement: contributing to a prosperous and resilient society and the Sustainable Development Goals (SDG) by addressing the societal challenges related to our industry. Taking a shared value approach to corporate citizenship and moving both our business and society forward through partnerships, programs and employee volunteering opportunities that support environmental sustainability, traffic and worksite safety, and skills development. Donating resources to disaster relief efforts.

Supply chain: creating long-term partnerships. Balancing cost and quality. Procuring locally where possible and applicable. Delivering on our plans. Encouraging economic, social and environmental sustainability among all suppliers. Conducting CSR self-assessment programs and providing support among Tier 1 suppliers; suppliers of high-risk materials (conflict minerals) and suppliers in high-risk countries.

WHERE THE IMPACT OCCURS IN THE VALUE CHAIN				
GRI topic	Material topic for Volvo	Suppliers	Volvo	Customers
ECONOMIC ASPECTS				
Economic Performance	Customer success Financial health	X	X	X
Procurement practices	Business ethics and integrity Supply chain	X	X	
Anti-corruption	Business ethics and integrity Legal compliance	X	X	X
Anti-competitive behaviour	Business ethics and integrity Legal compliance	X	X	X
ENVIRONMENTAL ASPECTS				
Materials	Operational impacts (environmental) Product use and life cycle	X	X	X
Energy	Customer success Energy efficiency (products) Emissions (products) Industry leadership and partnership Operational impacts (environmental) Product use and life cycle	X	X	X
Water	Operational impacts (environmental) Product use and lifecycle	X	X	X
Emissions	Customer success Emissions (products) Energy efficiency (products) Industry leadership and partnership Operational impacts (environmental) Product use and life cycle	X	X	X
Effluents and waste	Operational impacts (environmental) Product use and life cycle		X	X
Environmental compliance	Business ethics and integrity Legal compliance		X	
Supplier environmental compliance	Business ethics and integrity Legal compliance Supply chain	X		

Where the impact occurs in the value chain				
GRI topic	Material topic for Volvo	Suppliers	Volvo	Customers
SOCIAL ASPECTS				
Employment	Admired employer		X	
Labour Management Relations	Admired employer Human rights	X	X	
Occupational health and safety	Admired employer Health, safety and wellbeing	X	X	
Training and education	Admired employer	X	X	X
Diversity and Equal opportunity	Admired employer Diversity and inclusion		X	
Non-discrimination	Admired employer Business ethics and integrity Diversity and inclusion	X	X	
Freedom of association and collective bargaining	Admired employer Human rights	X	X	
Child labour	Business ethics and integrity Health, safety and wellbeing Supply chain	X	X	
Forced or compulsory behaviour	Business ethics and integrity Human rights Supply chain	X	X	
Human rights Assessment	Business ethics and integrity Human rights Supply chain	X	X	
Local communities	Human rights Societal engagement	X	X	X
Supplier social assessment	Business ethics and integrity Human rights Supply chain	X		
Customer health and safety	Customer Success Health, safety and well-being Product safety and security			X
Marketing and labelling	Customer success Health, safety and well-being Product safety and security		X	X
Customer privacy	Customer success Intelligent technology Legal compliance Product safety and security		X	X

GRI 101: FOUNDATION 2016
GRI 102: GENERAL DISCLOSURES 2016

GRI standard	Disclosure number and name	Page reference
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ORGANIZATIONAL PROFILE

102-1	Name of the organization	The company is registered in Sweden as AB Volvo (publ).
102-2	Activities, brands, products, and services	The Volvo Group is one of the world's leading manufacturers of trucks, buses, construction equipment and marine and industrial engines. The Group also provides complete solutions for financing and service. ASR18 page 2.
102-3	Location of headquarters	The Volvo Group's headquarters are in Gothenburg, Sweden.
102-4	Location of operations	The Volvo Group has factories in 18 countries and sells products and services in more than 190 markets. Our main operations are located in Sweden, where the company was founded in 1927. We have several operations in the US, Brazil, India, France, Japan and China. Major production sites, ASR18 page 61.
102-5	Ownership and legal form	The Volvo Group is a publicly-held company. Volvo shares are listed on the stock exchange Nasdaq Stockholm, Sweden.
102-6	Markets served	The Volvo Group sells its products in more than 190 countries. The Group's five largest markets are the US, France, United Kingdom, Japan and Germany. Share of net sales by market/business area/ revenue type, ASR18 page 3.
102-7	Scale of the organization	Net sales amounted to SEK 391 billion. ASR18 page 5.
102-8	Information on employees and other workers	The Volvo Group employs more than 105,000 people, ASR18 page 71.
102-9	Supply chain	In total, around 51,000 Tier 1 suppliers deliver products and services to the Volvo Group. In 2018, the Group made purchases of goods and services totaling SEK 270,3 billion, ASR18 page 58.
102-10	Significant changes to the organization and its supply chain	In total 2018, the Volvo Group increased by some 5,000 employees due to macroeconomic factors and increased sales volumes. We also increased the number of Tier 1 suppliers with approximately 3,000. Significant events: ASR18 page 80.
102-11	Precautionary Principle or approach	Code of Conduct: ASR18 page 32. Environmental policy, Key Element Procedure (KEP) 5 and 6: volvogroup.com, Human rights management: ASR18 page 38.
102-12	External initiatives	UN Sustainable Development Goals: ASR18 page 32. WWF Climate Savers agreement: ASR18 page 33. Societal Engagement: ASR18 page 34. Sustainability Reporting Index: ASR18 page 116.

GRI 101: Foundation 2016**GRI 102: General Disclosures 2016**

GRI standard	Disclosure number and name	Page reference
	102-13 Membership of associations	<p>In 2010, the Volvo Group was approved by the World Wide Fund for Nature (WWF), to join its Climate Savers program, as the first automotive manufacturer in the world. ASR18 page 33.</p> <p>The Volvo Group is a member of the Swedish Leadership for Sustainable Development network and the World Economic Forum.</p> <p>We actively participate in many trade and industry forums including:</p> <ul style="list-style-type: none"> • American Bus Association • American Public Transport Association • American Trucking Associations • Association of Equipment Manufacturers in the US • Committee for European Construction Equipment (CECE) • BIL Sweden • ERTRAC (the European Road Transport Research Advisory Council) • European Council for Automotive R&D (EUCAR) • European Association of Internal Combustion Engine Manufacturers (Euromot) • European Automobile Manufacturers' Association (ACEA) • International Transport Forum (ITF) • International Union of Public Transport (UITP) • Japan Automobile Manufacturers Association (JAMA) • National Marine Manufacturers Association • Society of Indian Automobile Manufacturers (SIAM) • Truck and Engine Manufacturers Association (EMA) in the US • The world's road transport organisation (IRU)

STRATEGY

102-14	Statement from senior decision-maker	ASR18 page 6.
102-15	Key impacts, risks, and opportunities	<p>Sustainability reporting: ASR18 page 116.</p> <p>Global trends: ASR18 page 10.</p> <p>Material issues: ASR18 page 226.</p> <p>Risks: ASR18 page 108.</p> <p>Opportunities: ASR18 Value Chain section pages 40–69.</p>

ETHICS AND INTEGRITY

102-16	Values, principles, standards, and norms of behavior	<p>Values: ASR18 page 12.</p> <p>Ethical and compliant business: ASR18 page 36.</p> <p>Human rights management: ASR18 page 38.</p> <p>Employees: ASR18 page 70.</p>
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GOVERNANCE

102-18	Governance structure	<p>Corporate Governance report: ASR18 page 192.</p> <p>Responsible business: ASR18 page 30.</p>
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GRI 101: Foundation 2016
GRI 102: General Disclosures 2016

GRI standard	Disclosure number and name	Page reference
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STAKEHOLDER DIALOGUE

102-40 List of stakeholder groups	Stakeholder group	How we engage	Key interest
	Customers	<ul style="list-style-type: none"> • Daily interactions • Customer Satisfaction and Brand Image surveys • Dialogue via social media • Joint initiatives 	Business ethics and integrity, Customer success, Emissions, Energy efficiency, Intelligent technology, Product safety and security, Product use and lifecycle
	Employees	<ul style="list-style-type: none"> • Review of personal performance • Employee engagement surveys • Regular team meetings • Intranet • Internal magazines • Videos, webcasts and online chats 	Admired employer, Business ethics and integrity, Diversity and inclusion, Health, safety and well-being, Human rights, Societal engagement
	Investors	<ul style="list-style-type: none"> • Capital market days • Regular investor meetings and dialogues • Annual General meeting • Annual and interim reports • Press releases 	Business ethics and integrity, Emissions, Energy efficiency, Financial health, Human rights, Intelligent technology, Legal compliance
	Business partners, suppliers and trade unions	<ul style="list-style-type: none"> • Partners: Academic Partner Programs, industry organization memberships, joint initiatives and research programs • Suppliers: supplier portal, supplier days, training sessions, assessments, audits and awards • Unions: representation on AB Volvo Board, Volvo Group Dialogue, Volvo Group Works Council meetings 	Business ethics and integrity, Human rights, Industry leadership and partnership, Intelligent technology, Legal compliance, Operational impact (environmental), Product use and lifecycle, Supply chain

GRI 101: Foundation 2016**GRI 102: General Disclosures 2016**

GRI standard	Disclosure number and name	Page reference						
		<table border="1"> <thead> <tr> <th>Stakeholder group</th> <th>How we engage</th> <th>Key interest</th> </tr> </thead> <tbody> <tr> <td>Society, including NGOs and local community</td> <td> <ul style="list-style-type: none"> • NGO dialogues and joint initiatives • Volunteering, training programs, societal engagement programs </td> <td> Business ethics and integrity, Emissions, Energy efficiency, Human rights, Legal compliance, Operational impact (environmental), Societal engagement </td> </tr> </tbody> </table>	Stakeholder group	How we engage	Key interest	Society, including NGOs and local community	<ul style="list-style-type: none"> • NGO dialogues and joint initiatives • Volunteering, training programs, societal engagement programs 	Business ethics and integrity, Emissions, Energy efficiency, Human rights, Legal compliance, Operational impact (environmental), Societal engagement
Stakeholder group	How we engage	Key interest						
Society, including NGOs and local community	<ul style="list-style-type: none"> • NGO dialogues and joint initiatives • Volunteering, training programs, societal engagement programs 	Business ethics and integrity, Emissions, Energy efficiency, Human rights, Legal compliance, Operational impact (environmental), Societal engagement						
	102-41 Collective bargaining agreements	Human rights: ASR18 page 38. Labor relations: ASR18 page 75.						
	102-42 Identifying and selecting stakeholders	GRI 102-40 and 102-46.						
	102-43 Approach to stakeholder engagement	GRI 102-40 and 102-46.						
	102-44 Key topics and concerns raised	Key topic/stakeholder group: GRI 102-40. Stakeholder concerns: ASR18 page 39.						

REPORTING PRACTICE

102-45	Entities included in the consolidated financial statements	Our accounting principles and definition of entities are covered in the Notes to the financial statements, ASR18 page 120.
102-46	Defining report content and topic Boundaries	<p>Identification: An internal workshop with colleagues from Legal, Compliance, Strategy, Sales, Finance, Investor Relations, CSR including Production and Purchasing, HR and Communication reviewed 2015's materiality analysis plus a wide range of sources, including internal business reporting, global drivers, investor questions, media stories, competitor activity, customer surveys, and legislation. They identified the topics of highest impact on the business's ability to create value over time and topics of most interest to our stakeholders. Our material aspects are applied in our Enterprise Risk Management (ERM) to ensure we monitor material risks. To define the contents of this report, GRI's principles of materiality, stakeholder dialogues, sustainability context and completeness have been considered.</p> <p>Prioritization: The shortlist of topics was prioritized through quantitative and qualitative means 2017. The Volvo Group employees across a representative spread of geographies and business units used a web-based survey to rate each topic according to its potential impact on the business and likelihood of occurrence. The topics of highest importance to stakeholders were determined through feedback from our 2016 face-to-face stakeholder dialogues, which was used to qualify the quantitative survey results, where data was weighted according to stakeholder influence. The results were used to map out the topics in a materiality matrix and boundaries were identified internally.</p>

GRI 101: Foundation 2016**GRI 102: General Disclosures 2016**

GRI standard	Disclosure number and name	Page reference
		<p>Validation: Members of the Group Management approved that the material topics accurately reflect the organization's material sustainability issues and validated nine priority areas to be reported with added detail in our Annual and Sustainability Report and in our GRI Index. Since our materiality analysis is incorporated in our report, it is anchored and validated annually with the Executive board and the Volvo Group Board of Directors. In 2018, we conducted a gap analysis and stakeholder dialogues with internal and external stakeholders to identify and include disclosures relevant according to the Taskforce on Climate-related Financial Disclosures (TCFD). No changes of material topics were needed for the reporting year 2018.</p>
	102-47 List of material topics	Volvo Group GRI Index 2018, page 2.
	102-48 Restatements of information	Not applicable.
	102-49 Changes in reporting	There were no significant changes in scope and boundaries from previous report.
	102-50 Reporting period	January 1 to December 31, 2018
	102-51 Date of most recent report	March 2018
	102-52 Reporting cycle	Annual
	102-53 Contact point for questions regarding the report	Martina Klaus, SVP Corporate Responsibility: martina.klaus@volvo.com
	102-54 Claims of reporting in accordance with the GRI Standards	The Volvo Group's GRI Index 2018 is prepared in accordance with the GRI Standards: Core Option.
	102-55 GRI content index	Volvo Group GRI Index 2018, pages 1–22.
	102-56 External assurance	The GRI content of the ASR18 and this index has not been externally assured.

GRI 200: ECONOMIC STANDARDS

GRI standard	Disclosure number and name	Page reference
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ECONOMIC PERFORMANCE

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Customer Success, Financial health: GRI 102-47.
	103-2	The management approach and its components	Full details of our approach to management of economic performance can be found throughout the ASR18. Corporate Governance report: ASR18 page 192.
	103-3	Evaluation of the management approach	Financial targets: ASR18 page 17.
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	In 2018, the Volvo Group generated sales of SEK 391 billion. Key ratios: ASR18 page 5. Value to stakeholders: ASR18 page 40.
	201-2	Financial implications and other risks and opportunities due to climate change	Sustainability Reporting Index: ASR18 page 116. Global trends and challenges: ASR18 page 10. Opportunities: ASR18 Value chain section on page 40–69. Risks: ASR18 page 108.
	201-4	Financial assistance received from government	See ASR18 Note 26 on page 163.

PROCUREMENT PRACTICES

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Supply chain: GRI 102-47
	103-2	The management approach and its components	Sustainability requirement on suppliers, Key Element Procedure (KEP) 5 and 6: volvogroup.com. Sustainable Purchasing Program: ASR18 page 59.
	103-3	Evaluation of the management approach	Purchasing: ASR18 page 58. Human rights Due Diligence program: ASR18 page 59.
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	Percentage of purchases by region: ASR18 page 58.

ANTI-CORRUPTION

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Legal compliance: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Sustainability requirement on suppliers, Key Element Procedure (KEP) 5 and 6: volvogroup.com.
	103-3	Evaluation of the management approach	Ethical and compliant business: ASR18 page 36. Human rights management : ASR18 page 38. Responsible sales process: ASR18 page 66.
GRI 205: Anti-corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	Code of Conduct training and the Volvo Group Compliance Programs, ASR18 page 36. Responsible sales process training: ASR18 page 67.

GRI 200: Economic standards

GRI standard	Disclosure number and name	Page reference
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ANTI-COMPETITIVE BEHAVIOR

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Legal compliance: GRI 102-47
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36.
	103-3	Evaluation of the management approach	Ethical and compliant business: ASR18 page 36. Human rights management : ASR18 page 38. Responsible sales process: ASR18 page 66.
GRI 206: Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	ASR18 Note 24 page 162.

GRI 300: ENVIRONMENTAL STANDARDS

GRI standard	Disclosure number and name	Page reference
MATERIALS		
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	Operational impacts (environmental), Product use and lifecycle: GRI 102-47.
	103-2 The management approach and its components	Our global environmental standard for production plants requires processes for health and environmental assessment of all chemicals. Since 1996, to restrict the use of chemicals with unwanted characteristics, the Volvo Group has maintained a 'black list' of prohibited chemicals and a 'grey list' of products whose use must be limited. The lists are revised annually and serve as tools for substituting harmful substances in our production processes. Environmental policy: volvogroup.com.
	103-3 Evaluation of the management approach	Production and logistics: ASR18 page 62. Reuse: ASR18 page 68. Purchasing: ASR18 page 58. Reliance on suppliers and scarce materials: ASR18 page 111.
GRI 301: Materials 2016	301-1 Materials used by weight or volume	Reuse in the value chain and recyclability rate: ASR18 page 68. Supplier management and conflict minerals: ASR18 page 58. Omission: Total weight or volume of materials is not reported in the ASR18.

ENERGY

GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	Customer Success, Emissions (products), Energy efficiency (products), Industry leadership and partnership, Operational impacts (environmental), Product use and lifecycle: GRI 102-47.
	103-2 The management approach and its components	In 2010, the Volvo Group was approved by the World Wide Fund for Nature (WWF), to join its Climate Savers program, as the first automotive manufacturer in the world. The agreed targets help us to focus on reduction of greenhouse gas emissions, transition to renewable energy sources and contribute to a lower-emissions society. Environmental policy: volvogroup.com. WWF Climate Savers agreement: ASR18 page 33. Energy use: ASR18 page 62. Certifications: ASR18 page 60.
	103-3 Evaluation of the management approach	Our WWF Climate Savers results are audited yearly by independent experts, ASR18 page 33.
GRI 302: Energy 2016	302-1 Energy consumption within the organization	The Group's total energy use 2018 amounted to 2,196 GWh, which is an increase from 2,068 in 2017, due to high production. Environmental performance: ASR18 page 224.
	302-3 Energy intensity	Energy efficiency index: ASR18 page 62.
	302-4 Reduction of energy consumption	Energy efficiency, renewable energy sources and reduction of carbon: ASR18 page 62.
	302-5 Reductions in energy requirements of products and services	Reducing the carbon footprint: ASR18 page 63. Fuel efficiency: ASR18 page 51. Alternative fuels and drivelines: ASR18 page 51. Electrification: ASR18 page 18.

GRI 300: Environmental standards			
GRI standard	Disclosure number and name		Page reference
WATER			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Operational impacts (environmental), Product use and lifecycle: GRI 102-47.
	103-2	The management approach and its components	Water measurement is included in the Group's minimum environmental requirements for production relating to substances in process water. The standard also requires plants to address sustainable usage of water resources. Environmental policy: volvogroup.com. Resource management: ASR18 page 68.
	103-3	Evaluation of the management approach	The Volvo Group works with preventive and mitigating activities based on an evaluation of areas with the highest water-related risks.
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	We apply the WWF's recommendations on water stressed areas.
	303-5	Water consumption	Total water consumption and intensity increased slightly due to higher production volumes to 4,870,000 m ³ (4,817,000). Water consumption compared to net sales continued to show a positive trend of 12,9 m ³ /SEK M (14,9 m ³ /SEK M). Environmental performance: ASR18 page 224. Example of reduced waste water in production: ASR18 page 69.
EMISSIONS			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Customer success, Emissions (products), Energy efficiency (products), Industry leadership and partnership, Intelligent technology, Operational impacts (environmental): GRI 102-47.
	103-2	The management approach and its components	Around 95% of the environmental impact from a truck occurs during the use phase. Therefore sustainable solutions are an integral focus for our product development. WWF Climate Savers commitment: ASR18 page 33. Environmental policy: volvogroup.com.
	103-3	Evaluation of the management approach	Follow-up on WWF Climate Savers results: ASR18 page 33.
GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	ASR18 page 62.
	305-2	Energy indirect (Scope 2) GHG emissions	ASR18 page 62.
	305-3	Other indirect (Scope 3) GHG emissions	ASR18 page 63.
	305-5	Reduction of GHG emissions	Production and logistics: ASR18 page 62. Emission regulations: ASR18 page 54.
	305-7	Nitrogen oxides (NO _x), sulfur oxides (SO _x), and other significant air emissions	Environmental performance in operations: ASR18 page 224. Emissions regulations: ASR18 page 54.

GRI 300: Environmental standards

GRI standard	Disclosure number and name	Page reference
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EFFLUENTS AND WASTE

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Operational impacts (environmental), Product use and lifecycle: GRI 102-47.																					
	103-2	The management approach and its components	The Volvo Group's minimum requirements on production plants include sorting and quantifying all waste at source, implementing measures to reduce the quantity of waste and increase reuse, material recycling and energy recovery as well as reducing the quantity of waste consigned to landfill. Waste is usually classified as either hazardous or non-hazardous. Environmental policy: volvogroup.com . Resource management: ASR18 page 68.																					
	103-3	Evaluation of the management approach	All the Volvo Group's wholly-owned production facilities and distribution centers are third party audited. Certificates: ASR18 page 60. Reuse in the value chain and recyclability rate: ASR18 page 68. Hazardous waste and solvent emissions: ASR18 page 226. Waste in production: ASR18 page 63. Industrial operations risks: ASR18 page 111.																					
	306-2	Waste by type and disposal method	<table border="1"> <thead> <tr> <th>Waste type</th> <th>Total ton</th> </tr> </thead> <tbody> <tr> <td>Recycling, excl. metal scrap</td> <td>119,358</td> </tr> <tr> <td>Recycling, metal scrap from operations</td> <td>97,691</td> </tr> <tr> <td>Recycling, other metal scrap</td> <td>18,868</td> </tr> <tr> <td>Composting</td> <td>2,524</td> </tr> <tr> <td>Incineration with energy recovery</td> <td>32,920</td> </tr> <tr> <td>Incineration, mass burn</td> <td>2,598</td> </tr> <tr> <td>Treatment by professional waste contractor</td> <td>15,153</td> </tr> <tr> <td>Landfill</td> <td>24,202</td> </tr> <tr> <td>Landfill, only inert material</td> <td>699</td> </tr> <tr> <td>TOTAL</td> <td>314,014</td> </tr> </tbody> </table>	Waste type	Total ton	Recycling, excl. metal scrap	119,358	Recycling, metal scrap from operations	97,691	Recycling, other metal scrap	18,868	Composting	2,524	Incineration with energy recovery	32,920	Incineration, mass burn	2,598	Treatment by professional waste contractor	15,153	Landfill	24,202	Landfill, only inert material	699	TOTAL
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TOTAL	314,014																							

ENVIRONMENTAL COMPLIANCE

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Legal compliance: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Environmental policy: volvogroup.com
	103-3	Evaluation of the management approach	All the Volvo Group's wholly-owned production facilities and distribution centers are third party audited. Certificates: ASR18 page 60. Environmental regulation risks: ASR18 page 114.
GRI 307: Environmental Compliance 2016	307-1	Non-compliance with environmental laws and regulations	No significant fines 2018.

GRI 300: Environmental standards

GRI standard	Disclosure number and name	Page reference
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SUPPLIER ENVIRONMENTAL ASSESSMENT

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Supply chain: GRI 102-47.
	103-2	The management approach and its components	Sustainability requirement on suppliers, Key Element Procedure (KEP) 5: volvogroup.com.
	103-3	Evaluation of the management approach	Sustainable Purchasing Program: ASR18 page 59.
GRI 308: Supplier Environmental Assessment 2016	308-2	Negative environmental impacts in the supply chain and actions taken	No significant environmental impacts identified at suppliers.

GRI 400: SOCIAL STANDARDS

GRI standard	Disclosure number and name	Page reference
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EMPLOYMENT

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Admired employee: GRI 102-47.
	103-2	The management approach and its components	Our commitment to all employees is set out in our Code of Conduct, which is supported by various human resources policies, available at volvogroup.com. Code of Conduct: ASR18 page 36.
	103-3	Evaluation of the management approach	Employees: ASR18 page 70.
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	At the end of 2018 we employed more than 105,000 people. Number of employees per category and market: ASR18 page 71. Compulsory redundancies: ASR18 page 75.

LABOR/MANAGEMENT RELATIONS

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Admired Employer, Human rights: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36.
	103-3	Evaluation of the management approach	Labor relations: ASR18 page 75.
GRI 402: Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	In case of significant changes, we have processes in place to ensure that the statutory notice periods for employees and their representatives, that are outlined by country legislation or collective bargaining agreements, are respected. Labor relations: ASR18 page 75.

OCCUPATIONAL HEALTH AND SAFETY

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Admired employer, Health, safety and well-being, GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Health and safety policy: ASR18 page 72.
	103-3	Evaluation of the management approach	Health and safety: ASR18 page 72.
GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Health and safety policy: ASR18 page 72.
	403-2	Hazard identification, risk assessment, and incident investigation	Health and safety: ASR18 page 72.
	403-3	Occupational health services	Mental health toolbox implemented 2018: ASR18 page 72.

GRI 400: Social standards		
GRI standard	Disclosure number and name	Page reference
	403-4 Worker participation, consultation, and communication on occupational health and safety	Employees: ASR18 page 70.
	403-5 Worker training on occupational health and safety	Health and safety: ASR18 page 72.
	403-6 Promotion of worker health	Employees: ASR18 page 70.
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Health and safety: ASR18 page 72.
	403-9 Work-related injuries	Lost time accident rate: ASR18 page 72.
TRAINING AND EDUCATION		
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	Admired employer, Health, safety and well-being, GRI 102-47.
	103-2 The management approach and its components	Education: ASR18 page 71. The Volvo Group University: ASR18 page 72.
	103-3 Evaluation of the management approach	Employees: ASR18 page 70.
GRI 404: Training and Education 2016	404-2 Programs for upgrading employee skills and transition assistance programs	During 2018, approximately 165,000 participants attended training through the Volvo Group University. Education: ASR18 page 71.
	404-3 Percentage of employees receiving regular performance and career development reviews	Employee dialogues: ASR18 page 71.
DIVERSITY AND EQUAL OPPORTUNITY		
GRI 103: Management approach 2016	103-1 Explanation of the material topic and its boundary	Admired employer, Diversity and inclusion: GRI 102-47.
	103-2 The management approach and its components	Code of Conduct: ASR18 page 36. Diversity and inclusion: ASR18 page 74.
	103-3 Evaluation of the management approach	Diversity and inclusion: ASR18 page 74.
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	Gender diversity of the Volvo Group workforce per region and among the board members and other executives: ASR18 page 166.

GRI 400: Social standards			
GRI standard	Disclosure number and name	Page reference	
NON-DISCRIMINATION			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Diversity and inclusion, Human rights: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36.
	103-3	Evaluation of the management approach	Ethical and compliant business: ASR18 page 36. Human rights management : ASR18 page 38.
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	Whistle blower cases: ASR18 page 36.
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Admired employer, Human rights: GRI 102-47.
	103-2	The management approach and its components	According to the Volvo Group Code of Conduct, we respect the right of all employees to form and join a union or their choice to refrain from doing so. Code of Conduct: ASR18 page 36.
	103-3	Evaluation of the management approach	Labor relations: ASR18 page 70. Human rights management: ASR18 page 38.
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	Human rights management: ASR18 page 38. Human rights risks: ASR18 page 112.
CHILD LABOR			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Human rights, Supply chain: GRI 102-47
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Key Element Procedure (KEP) 6: volvogroup.com
	103-3	Evaluation of the management approach	Human rights management: ASR18 page 38. Supplier management: ASR18 page 58. Human rights risks: ASR18 page 112.
GRI 408: Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	We did not identify any instance of child labor at own operations or at suppliers during 2018.

GRI 400: Social standards			
GRI standard		Disclosure number and name	Page reference
FORCED OR COMPULSORY LABOR			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Human rights, Supply chain: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Key Element Procedure (KEP) 6: volvogroup.com
	103-3	Evaluation of the management approach	Human rights management: ASR18 page 38. Supplier management: ASR18 page 58. Human rights risks: ASR18 page 112.
GRI 409: Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Human rights management: ASR18 page 38. Supplier management: ASR18 page 58.
HUMAN RIGHTS ASSESSMENT			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Human rights, Supply chain: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Human rights management: ASR18 page 38.
	103-3	Evaluation of the management approach	Ethical and compliant business: ASR18 page 36. Human rights management: ASR18 page 38. Suppliers: ASR18 page 58. Responsible Sales: ASR18 page 66.
GRI 412: Human rights Assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	Responsible business activities map 2018: ASR18 page 39.
	412-2	Employee training on human rights policies or procedures	Code of Conduct training: ASR18 page 36. Human rights review in own operations: ASR18 page 38.
	412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	All suppliers under contract include our Sustainability requirement on suppliers: Key Element Procedures 5 available on volvogroup.com.

GRI 400: Social standards			
GRI standard	Disclosure number and name	Page reference	
LOCAL COMMUNITIES			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Human rights, Societal engagement: GRI 102-47.
	103-2	The management approach and its components	Code of Conduct: ASR18 page 36. Environmental policy: volvogroup.com. Our role in society: ASR18 page 30.
	103-3	Evaluation of the management approach	Our role in society: ASR18 page 30. Societal engagement: ASR18 page 34.
GRI 413: Local Communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	UN Sustainable Development Goals: ASR18 page 32. Societal engagement: ASR18 page 34. Human rights review in own operations: ASR18 page 38. Vocational training: ASR18 page 35. Traffic safety programs: ASR18 page 34.
	413-2	Operations with significant actual and potential negative impacts on local communities	We did not identify any significant impact on local communities of our own operations during 2018.
SUPPLIER SOCIAL ASSESSMENT			
GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Business ethics and integrity, Human rights, Supply chain: GRI 102-47.
	103-2	The management approach and its components	Sustainability requirement on suppliers, Key Element Procedure (KEP) 5 and 6: volvogroup.com.
	103-3	Evaluation of the management approach	Purchasing: ASR18 page 58.
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	All new suppliers go through a CSR self-assessment. ASR18 page 59.
	414-2	Negative social impacts in the supply chain and actions taken	Due diligence and audits in the supply chain: ASR18 page 58.

GRI 400: Social standards		
GRI standard	Disclosure number and name	Page reference

CUSTOMER HEALTH AND SAFETY

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Customer Success, Health, safety and well-being, Product safety and security: GRI 102-47.
	103-2	The management approach and its components	The Volvo Group Safety Ambition – Zero accidents involving our vehicles and equipment: ASR18 page 51. Volvo Group Accident Research Team: ASR18 page 51.
	103-3	Evaluation of the management approach	Safety in product development: ASR18 page 48. Driver training: ASR18 page 35. Support to SDG3: ASR18 page 32.
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	Responsible Sales: ASR18 page 66.

MARKETING AND LABELING

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Customer Success, Health, safety and well-being, Product safety and security: GRI 102-47.
	103-2	The management approach and its components	Environmental product information, based on life cycle assessment, are available for our products online. Emissions regulations: ASR18 page 54.
	103-3	Evaluation of the management approach	Emissions regulations: ASR18 page 54. Customer Satisfaction: ASR18 page 44 and 111.
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	To regulate carbon dioxide (CO ₂) emissions from heavy-duty vehicles, a declaration of CO ₂ emissions and fuel consumption for new heavy-duty trucks will start in EU in the beginning of 2019.

CUSTOMER PRIVACY

GRI 103: Management approach 2016	103-1	Explanation of the material topic and its boundary	Customer Success, Intelligent technology, Legal compliance, Product safety and security: GRI 102-47.
	103-2	The management approach and its components	Data privacy: ASR18 page 36.
	103-3	Evaluation of the management approach	Risk related to non-compliance with data privacy laws: ASR18 page 113.
GRI 418: Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	No known substantial complaints concerning breaches of customer privacy and losses of customer data.

AB Volvo (publ)
SE-40508 Göteborg, Sweden
Telephone +46 31 66 00 00
www.volvogroup.com

