

# VOLVO GROUP

GRI G4 INDEX 2017

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## **Sustainability reporting**

Since 2015, the Volvo Group has included the sustainability reporting in the Annual and Sustainability Report which is prepared in accordance with the Swedish Annual Accounts Act. This index is aimed at stakeholders with specific interest in our corporate social responsibility (CSR) and economic, environmental and social sustainability strategy and performance. It is based on the Global Reporting Initiative (GRI) G4 Guidelines at Core level and should be read in conjunction with our Annual and Sustainability Report 2017 (ASR17), available at: [volvogroup.com](http://volvogroup.com). See also the Sustainability Reporting Index in the ASR17 on page 82.



**VOLVO**

Volvo Group

## GENERAL STANDARD DISCLOSURES

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
|-----------|-------------|----------------------|

### STRATEGY AND ANALYSIS

|      |   |   |
|------|---|---|
| G4-1 | Statement from the most senior decision-maker about the relevance of sustainability and the organization's strategy for addressing sustainability | <p>The following text is an abstract of the CEO statement in the Annual and Sustainability Report 2017 (ASR17) page 6:</p> <p><b>Sustainability is at the heart of the Volvo Group</b></p> <p>Our transport and infrastructure solutions drive prosperity here and now, regardless of where in the world our customers operate. As the population in the world continues to grow, the need for sustainable transport will increase. For us, sustainability includes economic, environmental and social dimensions, and we have been working towards transport solutions that take these aspects into consideration for a long time. It is also manifested in the Volvo Group supporting UN Global Compact, which we signed as early as 2001. Global Compact is a call to companies to align strategies and operations with universal principles on human rights, labor, environment and anti-corruption, and take actions that advance societal goals.</p> <p>We believe that efficient and accessible transport is a driver of sustainable development and a precondition for economic growth, alleviating poverty and combating climate change. The shift towards sustainable transport represents great opportunities for society, our industry and for us in the Volvo Group. We are embracing these opportunities by developing new technologies and new business models and by working closely together with our customers and other parties in the entire value chain.</p> |
| G4-2 | Key impacts, risks, and opportunities   | <p>Business impacts, risks and opportunities for the Volvo Group are outlined in the risk section of the Board of Directors' Report in the ASR17 (page 112–117). Key opportunities are outlined in the value chain section, page 24–67. The materiality process identifies our key sustainability topics for 2017, which also serves as the base for our reporting. A summary of our materiality process is included in the ASR17 (pages 222–223), full details are given in the standard disclosures G4-18 to G4-23 (below).</p>   |

### ORGANIZATIONAL PROFILE

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|------|---|--|
| G4-3 | Name of the organization  | The company is registered in Sweden as AB Volvo (publ).  |
| G4-4 | Primary 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. See ASR17 pages 2–3.   |
| G4-5 | Location of the organization's headquarters   | The Volvo Group's headquarters are in Gothenburg, Sweden.  |
| G4-6 | Number of countries where the organization operates and names of countries with significant operations or relevance to sustainability | <p>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.</p> <p>For a list of all major production sites, see page 49 in the ASR17. For the number of employees in different markets, see page 69.</p> |
| G4-7 | Nature of ownership and legal form  | The Volvo Group is a publicly-held company. Volvo shares are listed on the stock exchange Nasdaq Stockholm, Sweden.  |
| G4-8 | Markets served (geographic breakdown, sectors served, and types of customers and beneficiaries)                                       | 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. The majority of customers are companies within the transportation or construction industries. For more detailed information, see the ASR17 pages 28–29.   |

| GENERAL STANDARD DISCLOSURES |  |   |
|------------------------------|--|---|
| Indicator                    | Description  | Notes and references  |
| G4-9                         | Scale of the organization (total employees, operations, net sales, products)   | The Volvo Group employs close to 100,000 people and net sales amounted to about SEK 335 billion. In 2017, the Volvo Group's wholly-owned truck operations delivered 202,402 (2015: 190,424) trucks. The Group also delivered 9,393 (9,553) buses; 64,127 (44,306) units of construction equipment; 19,565 (18,016) marine engines and 21,432 (19,251) industrial engines, see ASR17 pages 1 and 27.   |
| G4-10                        | Total number of employees  | At the end of 2017, the Group had 87,104 (84,039) regular employees and 12,384 (10,875) temporary employees and consultants of which 43,086 (40,798) regular employees and 6222 (4,946) temporary employees and consultants were blue collar, see ASR17 page 27.  |
| G4-11                        | Percentage of employees covered by collective bargaining agreements  | The Group reports on collective bargaining agreements in 21 (22) countries. Overall, 71% (72) of employees in these countries were covered by collective bargaining agreements, and we estimate that more than 42% (41) of employees were members of an independent trade union, see ASR17 page 71.   |
| G4-12                        | The organization's supply chain  | In total, around 48,000 (41,000) suppliers deliver products and services to the Volvo Group. In 2017, the Group made purchases of goods and services totaling SEK 227,4 (205,9) billion. Details of how we work with our suppliers are included in the ASR17 page 46-47.  |
| G4-13                        | Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain                                 | During 2017, the number of compulsory redundancies decreased significantly, to 1.6% of the total regular workforce compared to 3.5% in 2016. In total, the Volvo Group increased by some 4,500 employees due to macroeconomic factors and increased sales volumes, compared to a decrease of 3,000 employees in 2016. Read about the governance model in the Corporate Governance Report starting on page 188 in the ASR17. Significant events are listed in the ASR17 on pages 84-85.  |
| G4-14                        | Whether and how the precautionary approach or principle is addressed by the organization   | Our Environmental policy describes how we address environmental issues. Available at <a href="http://volvogroup.com">volvogroup.com</a> .   |
| G4-15                        | Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses | <p>The Volvo Group has been a signatory to the United Nations Global Compact (UNGC) on socially responsible business practices since 2001 and yearly report on our progress to UNGC. We actively support the UN's Sustainable Development Goals, see ASR17 pages 79.</p> <p>The Volvo Group uses the Greenhouse Gas (GHG) Protocol Corporate Standard and reports on scope 1 and 2 GHG emissions in the ASR17 (page 50). Volvo Group also measures the 15 factors in scope 3 of the GHG Protocol standard. The use of our products represents approximately 95% of the Volvo Group's total carbon footprint. Therefore we have a strong focus on reducing our products' emissions.</p> <p>We participate in the WWF Climate Savers program and have committed to reducing product lifetime emissions by 40 Mton CO<sub>2</sub> between 2015-2020. For 2015-2017, total savings were 17 Mton CO<sub>2</sub>, see ASR17 page 51 and 79.</p> |

## GENERAL STANDARD DISCLOSURES

| Indicator | Description  | Notes and references   |
|-----------|--|--|
| G4-16     | Memberships of associations (such as industry associations) and national or international advocacy organizations | <p>Since 2010, Volvo Group has been the only automotive manufacturer approved by WWF to participate in their Climate Savers program. In 2014, we renewed our commitment for the period 2015 to 2020, see ASR17 page 51 and 79.</p> <p>The Volvo Group is an active 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"> <li>• American Bus Association</li> <li>• American Public Transport Association</li> <li>• American Trucking Associations</li> <li>• Association of Equipment Manufacturers in the US</li> <li>• Committee for European Construction Equipment (CECE)</li> <li>• BIL Sweden</li> <li>• European Council for Automotive R&amp;D (EUCAR)</li> <li>• European Association of Internal Combustion Engine Manufacturers (Euromot)</li> <li>• European Automobile Manufacturers' Association (ACEA)</li> <li>• The world's road transport organisation (IRU)</li> <li>• International Transport Forum (ITF)</li> <li>• International Union of Public Transport (UITP)</li> <li>• Japan Automobile Manufacturers Association (JAMA)</li> <li>• National Marine Manufacturers Association</li> <li>• Society of Indian Automobile Manufacturers (SIAM)</li> <li>• Truck and Engine Manufacturers Association (EMA) in the US</li> </ul> |

## MATERIAL ASPECTS AND BOUNDARIES

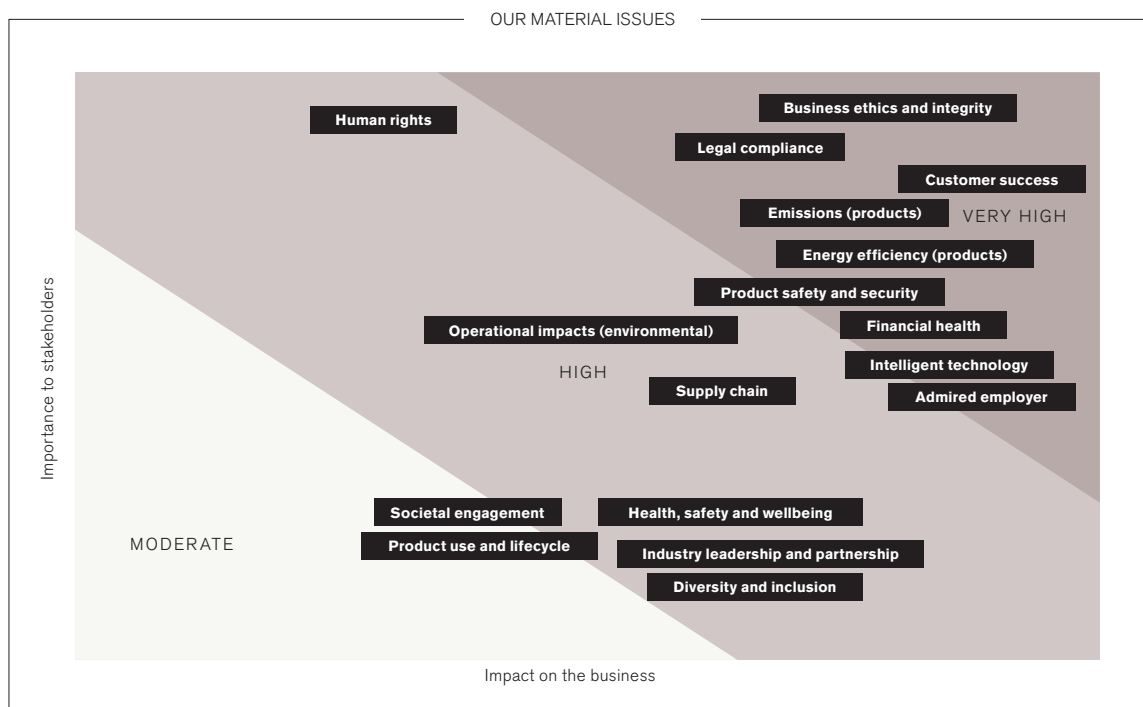
|       |  |  |
|-------|--|--|
| G4-17 | All entities included in the organization have consolidated financial statements or equivalent documents | Our accounting principles and definition of entities are covered in the Notes to the financial statements in our ASR17, starting on page 118.  |
| G4-18 | The process for defining the sustainability content and the aspect boundaries                            | <p><b>Identification:</b> 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 the stakeholders they work most closely with.</p> <p><b>Prioritization:</b> the 2016 shortlist of topics was prioritized through quantitative and qualitative means. Volvo Group employees across a representative spread of geographies and business units used a webbased 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> <p><b>Validation:</b> 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 the ASR17 and this GRI Index.</p> |

## GENERAL STANDARD DISCLOSURES

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
|-----------|-------------|----------------------|

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|-------|---|--|
| G4-19 | List all the material aspects identified in the process for defining report content |  |
|-------|---|--|

The materiality matrix, in the image below, is used to identify all the sustainability topics and priorities for reporting on in the Annual and Sustainability Report and/or GRI Index. The following were identified as being of both very high impact on the business and very high importance to stakeholders: business ethics and integrity; compliance; customer success; emissions (products); energy efficiency (products); product safety and security; financial health; intelligent technology and admired employer. See ASR17 page 222–223.



Based on 2016 materiality analysis, the material issues were confirmed and validated by members of the Executive Board for the reporting year 2017. No changes were needed; the ranking was assessed as still valid.

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, human rights, social and environmental principles set out in our Code of Conduct, including principles on anti-corruption, taxation and political involvement. Reflecting the 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, thanks to improved uptime, fuel efficiency and productivity.

## GENERAL STANDARD DISCLOSURES

| Indicator | Description            | Notes and references  |
|-----------|------------------------|---|
| G4-19     | Material aspects cont. | <p><b>Diversity &amp; inclusion:</b> 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.</p> <p><b>Emissions (products):</b> developing innovative transport solutions designed to reduce consumption of fossil fuels and lower emissions of CO<sub>2</sub>, NO<sub>x</sub>, particulate matters and noise.</p> <p><b>Energy efficiency (products):</b> developing innovative product and service solutions designed to reduce energy consumption, operational costs and environmental impacts.</p> <p><b>Financial health:</b> managing economic and financial risks and developing resilience to market volatility. Focusing on our new strategic priorities to 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.</p> <p><b>Health, safety &amp; wellbeing:</b> ensuring safe and healthy workplaces and aiming for zero accidents along our value chain. Protecting the physical and psychological safety, health and wellbeing of Volvo Group employees and workers. Promoting and supporting health and wellbeing for employees and their families.</p> <p><b>Human rights:</b> fulfilling 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 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.</p> <p><b>Industry leadership and partnership:</b> 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.</p> <p><b>Intelligent technology:</b> investing in pioneering research and development for innovative technology, transport and service solutions to contribute to efficient transport systems. Investing in connectivity, 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.</p> <p><b>Legal compliance:</b> ensuring compliance with all applicable laws and regulations, including corporate, fiscal, environmental, socioeconomic and data privacy laws, regulations, directives, international standards and widely-recognized initiatives. Continuous development of our corporate governance, policies and practices to ensure adherence.</p> <p><b>Operational impacts (environmental):</b> managing the environmental footprint of our production, distribution, dealerships, workshops and corporate functions. Being a global corporate citizen and a good neighbor 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.</p> |

## GENERAL STANDARD DISCLOSURES

| Indicator | Description  | Notes and references  |
|-----------|--|---|
| G4-19     | Material aspects cont.   | <p><b>Product safety and security:</b> researching and developing product, technology and training solutions designed to enhance driver and operator safety, traffic and site safety, and goods security.</p> <p><b>Product use &amp; lifecycle:</b> promoting socially, environmentally and economically responsible use of Volvo Group products. Engaging with stakeholders concerned about downstream product uses. Optimizing resource efficiency and supporting socio-economic opportunity in the circular economy of reuse, recycling and remanufacturing.</p> <p><b>Societal engagement:</b> contributing to a prosperous and resilient society and the Sustainable Development Goals 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.</p> <p><b>Supply chain:</b> creating long-term partnerships. Balancing cost and quality. Procuring locally where possible and applicable. Delivering on our plans. Encouraging economic, social and environmental responsibility 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.</p> |
| G4-20     | For each material aspect, report the boundary <b>within</b> the organization           | <p>The Volvo Group has varying levels of control over all the material aspects. Topics where the boundary is within the organization include: admired employer; business ethics and integrity; diversity and inclusion; emissions (products); energy efficiency (products); health, safety and wellbeing; human rights; industry leadership and partnerships; operational impacts (environmental); product safety and security; societal engagement and supply chain.</p>   |
| G4-21     | For each material aspect, report the boundary <b>outside</b> the organization          | <p>The Volvo Group takes a whole value chain approach to sustainability with the customer at the center. We expect our suppliers to meet our standards on business ethics and integrity; diversity and inclusion; health, safety and wellbeing; human rights; operational impacts (environmental) and supply chain.</p> <p>The topics of compliance (regulatory); customer success; financial health; intelligent technology and product use and lifecycle are all subject to external influences and/or decisions from regulatory bodies; customers; market development; and infrastructure, which are outside our direct control.</p> <p>Read more about our Value chain in the ASR, starting at page 24.</p>   |
| G4-22     | Effect of any restatements of information provided in previous reports                 | Not applicable.   |
| G4-23     | Significant changes from previous reporting periods in the scope and aspect boundaries | There were no significant changes in scope and boundaries from previous report.   |

**GENERAL STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
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**STAKEHOLDER ENGAGEMENT**

| G4-24<br>G4-25<br>G4-26<br>G4-27 | Stakeholder Group                             | How we engage   | Key interests   |
|----------------------------------|---|---|---|
|                                  | Customers                                     | <ul style="list-style-type: none"> <li>• Daily interactions</li> <li>• Satisfaction and brand image surveys</li> <li>• Dialogue via social media</li> <li>• Joint initiatives</li> </ul>  | Fuel efficiency, uptime and productivity  |
|                                  | Employees                                     | <ul style="list-style-type: none"> <li>• Annual review of personal business plan</li> <li>• Annual employee engagement survey</li> <li>• Regular team meetings</li> <li>• Intranet</li> <li>• In-house magazines</li> <li>• Videos, webcasts and online chats</li> </ul>  | Human rights, admired employer, business ethics and integrity   |
|                                  | Investors                                     | <ul style="list-style-type: none"> <li>• Capital market days</li> <li>• Regular investor meetings and dialogue</li> <li>• Annual Socially Responsible Investor dialogue</li> <li>• General meetings</li> <li>• Annual and interim reports</li> <li>• Press releases</li> </ul>  | Financial health, business ethics and integrity, compliance, admired employer, energy efficiency and intelligent technology |
|                                  | Business partners, suppliers and trade unions | <ul style="list-style-type: none"> <li>• Regular meetings and dialogue</li> <li>• Partners: APP, industry organization memberships, joint initiatives</li> <li>• Supplier portal, supplier days, training sessions, assessments, audits and awards</li> <li>• Unions: Representation on AB Volvo Board, Volvo Group Dialogue, Volvo Group Works Council meetings</li> </ul> | Supply chain, compliance, environmental impacts   |
|                                  | Society, including NGOs and local community   | <ul style="list-style-type: none"> <li>• NGO dialogue and joint initiatives</li> <li>• Volunteering, training programs, campaigns</li> </ul>  | Compliance, human rights, societal engagement   |

**REPORT PROFILE**

|       |                                     |  |
|-------|-------------------------------------|--|
| G4-28 | Reporting period                    | January 1 to December 31, 2017   |
| G4-29 | Date of most recent previous report | The Volvo Group Annual and Sustainability Report 2016 is available on <a href="http://volvogroup.com">volvogroup.com</a> . |
| G4-30 | Reporting cycle                     | Annual   |
| G4-31 | Contact point                       | <a href="mailto:malin.ripa@volvo.com">malin.ripa@volvo.com</a>   |
| G4-32 | GRI content index                   | This report includes disclosures at the 'Core' reporting level. This index shows where further information can be found.   |
| G4-33 | External assurance                  | The GRI content of the ASR17 and this index has not been externally assured.   |



**GENERAL STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
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**GOVERNANCE**

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| G4-34 | Governance structure of the organization, including CSR | <p>The Corporate Governance Report is contained within the ASR17, starting on page 188.</p> <p><b>Sustainability governance</b><br/>In 2016, we reviewed and updated our CSR and sustainability model. This model was valid also in 2017. The CSR and sustainability approach focus on areas that support the Volvo Group's new mission, vision, aspirations, values and strategic priorities and secures business value creation and integration with the SDGs. The Corporate CSR and Sustainability function develop the strategic model for the work while responsibility of delivery lies within business areas or entity closest to the objective.</p> <p><b>Group CSR Coordination Network</b><br/>The Volvo Group CSR Coordination Network supports and develops the Corporate CSR work. It focuses on work related to responsible business practice and the implementation of our Code of Conduct principles into daily operations. The network is chaired by the Volvo Group's Senior Vice President, Corporate Social Responsibility. The network members include CSR managers from across the Group who represent different relevant processes for implementing responsible business practice with the support of their own CSR networks.</p> <p><b>CSR country network</b><br/>The CSR country manager network implements the societal engagement program based on the Volvo Group Societal Engagement Directive. The members of this group coordinate CSR activity on a country level and share experiences of their work on the Volvo Group's societal engagement program.</p> |
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**Sustainability governance****Group CSR Coordination Network****CSR country network****ETHICS AND INTEGRITY**

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|-------|---|---|
| G4-56 | The organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics | <p><b>Five values</b><br/>The Volvo Group has five values as part of our strategic direction: customer success, trust, passion, change and performance. See ASR17 pages 10–11.</p> <p><b>Code of Conduct</b><br/>The Volvo Group Code of Conduct is a Group-wide policy for legal compliance and appropriate ethical business behavior, mandatory for all employees. In 2017, the policy was updated, and will be complemented by a supplier Code of Conduct 2018.<br/>The Code is publicly available on <a href="http://volvogroup.com/responsibility">volvogroup.com/responsibility</a>. It is complemented by other policies that describe in more detail how we address the code's minimum standards. Various implementation activities have been done during 2017. See ASR17 page 74–75.</p> |
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**Five values****Code of Conduct**

## SPECIFIC STANDARD DISCLOSURES

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
|-----------|-------------|----------------------|

### ECONOMIC

#### ECONOMIC PERFORMANCE

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|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach (materiality, management and assessment)                              | Financial health is the prerequisite for doing business and creating long-term value for our shareholders. In 2017, we introduced new financial Targets (see page 21). Full details of our approach to management of economic performance can be found throughout the ASR17.   |
| G4-EC1 | Direct economic value generated and distributed  | In 2017, Volvo Group generated sales of SEK 335 billion (302). Key ratios can be found on page 1 of the ASR17. The distribution of value to stakeholders is detailed on page 26.   |
| G4-EC2 | Financial implications and other risks and opportunities for the organization's activities due to climate change | Climate change presents multiple opportunities for both our products and production. Environmental concerns drive interest and opportunities in sustainable transport solutions including increased fuel efficiency; reduction of emissions; electromobility, alternative and renewable fuels. Increased energy efficiency within our operations has resulted in significant cost savings – SEK 200 million comparing 2017 to 2007. Our remanufacturing business is well placed to benefit from the great potential of the circular economy. Read more in the ASR17 value chain section starting on page 60. |
| G4-EC4 | Financial assistance received from government  | See ASR17 Note 26 on page 157.   |

#### PROCUREMENT PRACTICES

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|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach | <p>In 2016, the Group made purchases of goods and services totaling SEK 227 billion (205.9). We have around 48,000 (41,000) Tier 1 contractors, of which about 6,000 (7,000) supply automotive product components.</p> <p>We aim to build long-term relationships with suppliers and require all suppliers to undertake our Supplier Assessment Program and fulfill the level of responsible behavior and environmental standards as set out in our Key Element Procedures (KEP) and contribute to our socially and environmentally responsible supply chain. We procure from suppliers as close to our production sites as possible and expect all suppliers to be cost efficient and deliver the highest quality standards on products and services. For more details of our Supplier Assessment Program, see the ASR17 Purchasing section on pages 46–47.</p> |
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### ENVIRONMENTAL

#### MATERIALS

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | <p>The Volvo Group works consistently with lean methodologies and the Volvo Production System (VPS) to use less material and to integrate more recycled materials (see page 51). The ability to reuse, recycle, renovate and repair parts and components is considered as part of product development and supports our growing remanufacturing business. See ASR17 pages 51 and 60–61.</p> <p>We also assess the use and sourcing of conflict minerals. Read about our Sustainable Purchasing Program and Human Rights Due Diligence Process in the ASR17 page 47 and 61.</p> |
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**SPECIFIC STANDARD DISCLOSURES**

| Indicator | Description  | Notes and references  |
|-----------|--|---|
| G4-EN1    | Materials (renewable and non-renewable) used by weight or volume | A truck produced by the Volvo Group is largely recyclable since almost 85% of its weight consists of metal – mostly iron, steel and aluminum. The additional materials are mainly plastic, rubber and material from electronics components. See ASR17 page 60–61. |

**ENERGY**

|        |  |  |
|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach                 | <p>Since 2010, Volvo Group has been the world's only automotive manufacturer approved by WWF to participate in its Climate Savers program. In 2014, we renewed our commitment for the period 2015 to 2020, see ASR17 page 79. The new commitment includes an 8% reduction in energy use at our production sites by identifying and executing energy saving activities, reaching a level of 150 GWh by 2020.</p> <p>Within the WWF Climate Savers there is a commitment to reduce total lifetime CO<sub>2</sub> emissions from products by 40 million tons. The reduction of lifetime CO<sub>2</sub> emissions is to come from fuel efficiency targets on 15 product categories. See ASR17 pages 51 and 79.</p> |
| G4-EN3 | Energy consumption within the organization                 | The Group's 2017 total energy consumption amounted to 2,068 GWh, lower than the 2,076 GWh used in 2016. See ASR17 page 50.   |
| G4-EN5 | Energy intensity ratio                                     | Our energy efficiency index, which measures energy consumption with net sales, was 6.4 MWh/SEK M in 2017. Over the last five years, our energy efficiency index has improved by 25%. See ASR17 page 50.  |
| G4-EN6 | Reduction of energy consumption                            | Between 2007 and 2017, the Volvo Group's energy use from its own production processes decreased by 15% in absolute terms. This means that the corresponding energy cost has decreased by more than SEK 200 million comparing 2017 to 2007. The accumulated saving is significantly larger. See ASR17 page 50.  |
| G4-EN7 | Reductions in energy requirements of products and services | Our lifecycle assessments show that approximately 95% of our products' environmental impacts occur during the 'in use' phase, with fuel consumption and emissions as the main contributors. See ASR17 page 51.   |

**WATER**

|        |  |  |
|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach | <p>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.</p> <p>Total water consumption and intensity increased due to higher production volumes, from 4,430,000m<sup>3</sup> in 2016 to 4,817,000m<sup>3</sup> in 2017 and 15.2m<sup>3</sup>/SEK M to 14.9m<sup>3</sup>/SEK M. The Volvo Group works with preventive and mitigating activities based on an evaluation of areas with the highest water-related risks. See ASR17 page 220.</p> |
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**EMISSIONS**

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | <p>The Volvo Group focuses on reducing emissions of both our products and our production processes. Within the WWF Climate Savers commitment our target is a cumulative reduction of CO<sub>2</sub> emissions from products and production by at least 40 million tons by 2020 compared to 2013. We currently have carbon-neutral facilities in Ghent, Belgium, as well as Vara, Tuve and Braås in Sweden. More than 40% of our total energy consumption came from low-carbon renewable sources, including hydropower electricity and biomass heating.</p> <p>The Volvo Group publicly reports scope 1 and 2 emissions according to the Greenhouse Gas (GHG) Protocol Corporate Standard. Volvo Group also measures the 15 factors in scope 3 of the GHG Protocol standard. See ASR17 page 48–51.</p> |
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## SPECIFIC STANDARD DISCLOSURES

| Indicator | Description   | Notes and references  |
|-----------|---|---|
| G4-EN15   | Direct greenhouse gas (GHG) emissions (Scope 1)                         | Scope 1 ('000 metric tons of CO <sub>2</sub> e):<br>2017: 207<br>2016: 211<br>2015: 220<br>2014: 231<br>2013: 255<br>2012: 273<br>See ASR17 page 50.  |
| G4-EN16   | Energy indirect GHG emissions (Scope 2)                                 | Scope 2 ('000 metric tons of CO <sub>2</sub> e):<br>2017: 192<br>2016: 196<br>2015: 192<br>2014: 218<br>2013: 243<br>2012: 260<br>See ASR17 page 50.  |
| G4-EN17   | Other indirect GHG emissions (Scope 3)                                  | Volvo Group also measures the 15 factors in Scope 3 of the GHG Protocol standard. The use of our products represents approximately 95% of the Volvo Group's total carbon footprint. Therefore we focus on reducing our products' emissions. In our commitment to WWF Climate Savers we have a target to reduce product lifetime emissions by 40 Mton CO <sub>2</sub> between 2015-2020. For 2015-2017, the savings totaled to 17 Mton CO <sub>2</sub> . See ASR17 pages 51 and 79.              |
| G4-EN19   | Reduction of greenhouse gas (GHG) emissions                             | In 2017, the Volvo Group's total CO <sub>2</sub> emissions from production facilities, including scope 1 – direct emissions and scope 2 – indirect emissions, decreased from 408,000 tons to 399,000 tons i.e. 2%, which is more than the reduction in total energy used. See ASR17 page 50.  |
| G4-EN21   | NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions | Volvo Group complies with applicable emissions laws and regulations worldwide. In many parts of the world, these are based on EU and US legislation. With the implementation of US 2010 in North America, emissions levels for particulates and nitrogen oxides (NO <sub>x</sub> ) have decreased substantially. Euro 6 (2013) requires emissions of nitrogen oxides and particulate matter to be reduced by more than 95% compared to a truck from the early 1990s. See ASR17 pages 38, 40-41. |

## EFFLUENTS AND WASTE

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | <p>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.</p> <p>The total amount of waste in 2017 was 288,803 tons compared to 271,980 tons in 2016. Hazardous waste was 31,941 tons in 2017 (27,649). Hazardous waste sent to landfill amounted to 843 tons in 2017 (748). Historical hazardous waste data is in ASR17 on page 220-221.</p> <p>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.</p> <p>All the Volvo Group's wholly-owned production facilities and distribution centers are third party audited. See our certificates in the ASR17 on page 48.</p> |
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**SPECIFIC STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
|-----------|-------------|----------------------|

**PRODUCTS AND SERVICES**

|         |   |  |
|---------|---|--|
| G4-DMA  | Generic Disclosures on Management Approach                                    | <p>The Volvo Group takes a whole value chain approach to sustainability – from development through to reuse – with customer focus at the center. We place strong emphasis on reducing the impacts of our products in use, as this is where approximately 95% of environmental impact occurs. Focusing our product development on using resources and energy more efficiently simultaneously reduces the overall environmental footprint of our products while supporting our customers' profitability.</p> <p>Clear and transparent product, marketing and sales information is important for customers to make an informed decision about our products and services. Therefore, customers receive environmental product information for many of our products, based on the result of lifecycle assessment. The information is divided into three sections:</p> <ol style="list-style-type: none"> <li>1. Production: energy consumption, emissions and waste arising during production.</li> <li>2. Use: fuel consumption, emissions and spare parts during the use phase.</li> <li>3. End of life: scrapping and recycling of products.</li> </ol> <p>All Volvo Group-owned dealers work according to the Group's environmental requirements and towards fulfillment of the ISO 14001 standard. This means they receive, for example, detailed instructions on how used oils and other fluids are to be handled. For more information, see the ASR17 Value chain chapter, starting on page 24.</p> |
| G4-EN27 | Extent of impact mitigation of environmental impacts of products and services | As well as engineering and technological innovation (see ASR17 pages 34–45), we also invest in driver training and servicing solutions to support more fuel-efficient driving and to keep vehicles running at optimal performance. See ASR17 pages 31, 76 and 78. Our growing remanufacturing business reduces impacts significantly. See ASR17 pages 60–61.   |

**COMPLIANCE (ENVIRONMENTAL)**

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|---------|---|--|
| G4-DMA  | Generic Disclosures on Management Approach  | Compliance with legal and other applicable standards as a minimum standard is included in the Volvo Group environmental policy. See <a href="http://volvogroup.com">volvogroup.com</a> . |
| G4-EN29 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations | No significant fines.  |

**TRANSPORT**

|         |  |   |
|---------|--|---|
| G4-DMA  | Generic Disclosures on Management Approach   | <p>The Volvo Group is one of the world's leading manufacturers of trucks, buses, construction equipment and marine and industrial engines. Our product development focuses strongly on sustainable transport solutions. See ASR17 page 34.</p> <p>The carbon emissions of freight transport involved in the supply of materials to the Volvo Group and deliveries to customers are about the same size as the CO<sub>2</sub> emissions from our production plants. Therefore this is a prioritized area and part of our WWF Climate Savers commitment. See ASR17 pages 51 and 79.</p> |
| G4-EN30 | Significant environmental impacts of transporting products and other goods and materials for the organization's operations | The majority of the Volvo Group's major transport suppliers are certified in accordance with ISO 14001, or equivalent. By 2020, our WWF Climate Savers target is to reduce CO <sub>2</sub> emissions per produced unit from the Volvo Group freight transport by 20%, compared to the base year 2013. During 2017 we reached this target. See the ASR17 page 51 and 79.   |

**SPECIFIC STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
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**SUPPLIER ENVIRONMENTAL ASSESSMENT**

|         |   |  |
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| G4-DMA  | Generic Disclosures on Management Approach  | Since 1996, our responsible sourcing program has consistently increased supplier requirements on environmental issues, business ethics, human rights and social issues. The Volvo Group requires suppliers of automotive components to be certified by a third-party environmental and quality management system. The Volvo Group uses a self-assessment approach to evaluate potential and current suppliers' performance and compliance with our Code of Conduct requirements, including environmental care. Volvo Group is a lead company within Drive Sustainability, an industry collaboration among the automotive to enhance sustainability within the supply chain. See ASR17 page 47. |
| G4-EN33 | Significant actual and potential negative environmental impacts in the supply chain and actions taken | There were no major environmental incidents reported during 2017. See ASR17 page 48.   |

**ENVIRONMENTAL GRIEVANCE MECHANISMS**

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|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach | All employees are expected and encouraged to report suspected violations to their superiors. If reporting to superiors is not feasible or possible, a whistleblower procedure is available, which gives employees access to the Head of Corporate Audit and the opportunity to remain anonymous where permitted by law. See ASR17 page 75. |
|--------|--|--|

**SOCIAL: LABOR PRACTICES****EMPLOYMENT**

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| G4-DMA | Generic Disclosures on Management Approach | At the end of 2017, we employed nearly 100,000 people in more than 190 markets. See ASR17 starting at page 68.<br>Our commitment to all employees is set out in our Code of Conduct, which is supported by various human resources policies. Available at <a href="http://volvogroup.com">volvogroup.com</a> . |
|--------|--|--|

**LABOR/MANAGEMENT RELATIONS**

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| G4-DMA | Generic Disclosures on Management Approach | The Volvo Group respects the right of all employees to join an association to represent their interests as employees, to organize and to bargain collectively or individually. An employee's right to refrain from joining a union is equally respected.<br>There are several dialogue platforms for our employees. See ASR17 page 71. |
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**HEALTH, SAFETY & WELLBEING**

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach   | Health and safety is the responsibility of employees and managers, who are supported by Health and Safety network specialists for implementing roadmaps and activities. See ASR17 page 72-73.   |
| G4-LA6 | Injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities | In 2017, our Lost Time Accident Rate (LTAR) was 1.00 (1.06) covering 100% (100) of employees. Unfortunately in 2017 there were three fatalities in our retail workshops (0). We take this very serious and have established a particular focus on safety in these activities. See ASR17 page 72-73. |

**SPECIFIC STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
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**TRAINING AND EDUCATION**

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| G4-DMA  | Generic Disclosures on Management Approach   | During 2017 approximately 87,000 participants have taken part in training through Volvo Group University. See ASR17 starting at page 68.  |
| G4-LA10 | Programs for skills management and lifelong learning                                 | Programs include our International Graduate Program and Academic Partner Program.<br>All employees are expected to have a personal business plan that includes business-related and competence development targets, and provide essential feedback for both short- and long-term individual development. See ASR17 starting at page 68. |
| G4-LA11 | Percentage of employees receiving regular performance and career development reviews | Employees review their plan annually together with their manager to ensure mutual understanding of roles and expectations. See ASR17 page 70.   |

**DIVERSITY AND EQUAL OPPORTUNITY**

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | We strive to promote a diverse workforce and do not tolerate any form of discrimination, as detailed in our Code of Conduct. While diversity is considered to be a global competitive force, it still must be handled in a local way since diversity challenges can be different in different places. See ASR17 page 73 and volvogroup.com. |
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**SUPPLIER ASSESSMENT FOR LABOR PRACTICES**

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | Potential suppliers are required to undertake our Supplier Assessment Program, which evaluates their technical capabilities, as well as the quality standards in their products, services and operations. We also expect all our suppliers to fulfill the level of responsible behavior and environmental standards as set out in our Key Element Procedures (KEP) on CSR and Environment. Responsible behavior and environmental performance are measured through a Supplier Self-Assessment Questionnaire. The outcome of these assessments is used in the suppliers' selection process as well as to act as input for our general CSR risk assessment model. See ASR17 page 46-47. |
|--------|--|---|

**LABOR PRACTICE GRIEVANCE MECHANISMS**

|        |  |  |
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| G4-DMA | Generic Disclosures on Management Approach | All employees are expected and encouraged to report suspected violations to our Code of Conduct to their superiors. A whistleblower procedure is available, which gives employees access to the Head of Corporate Audit and the option to remain anonymous. See ASR17 page 75. |
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**SOCIAL: HUMAN RIGHTS****HUMAN RIGHTS INVESTMENT**

|        |  |  |
|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach | Since 2001, the Volvo Group is a signatory to the UN Global Compact. Specific policies guide our work such as our Code of Conduct, our Health and Safety Policy and our Responsible Supply Chain Directive. See ASR17 page 76-77 and volvogroup.com. |
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**NON-DISCRIMINATION**

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| G4-DMA | Generic Disclosures on Management Approach | The Volvo Group does not tolerate any form of discrimination, as outlined in our Code of Conduct. Available at volvogroup.com. See ASR17 page 73. |
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**SPECIFIC STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
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**FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING**

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | The Volvo Group respects the right of all employees to join an association to represent their interests as employees, to organize and to bargain collectively or individually. An employee's right to refrain from joining a union is equally respected. See ASR17 page 71. |
|--------|--|---|

**CHILD LABOR**

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | The Volvo Group does not tolerate any form of child labor, as outlined in our Code of Conduct. We define the minimum employment age as the age for completion of compulsory school but never less than 15 years. See volvgroup.com. See ASR17 page 76-77. |
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**FORCED OR COMPULSORY LABOR**

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | The Volvo Group does not tolerate any form of forced or compulsory labor, as outlined in our Code of Conduct. Available at volvgroup.com. See ASR17 page 76-77. |
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**SUPPLIER HUMAN RIGHTS ASSESSMENT**

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | Human and labor rights in our supply chain are assessed as part of our Sustainable Purchasing processes. See ASR17 on page 46-47.<br>We publish our Modern Slavery Act Statement at volvgroup.com annually. |
|--------|--|---|

**HUMAN RIGHTS GRIEVANCE MECHANISMS**

|        |  |  |
|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach | All employees are expected and encouraged to report suspected violations to their superiors. A whistleblower procedure is also available, which gives employees access to the Head of Corporate Audit and the opportunity to remain anonymous where permitted by law. See ASR17 page 75. |
|--------|--|--|

**SOCIAL: SOCIETY****LOCAL COMMUNITIES**

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | Volvo Group's approach to societal engagement consists of shared value activities, disaster relief, donations and community support. It involves driving Corporate Social Responsibility (CSR) initiatives, establishing strategic partnerships and encouraging employee participation in volunteering opportunities. In addition to our global efforts, we take a country-based approach to CSR. See ASR17 page 78-79. |
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**ANTI-CORRUPTION AND ANTI-COMPETITIVE BEHAVIOR**

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|--------|--|--|
| G4-DMA | Generic Disclosures on Management Approach   | As set out in our Code of Conduct, the Volvo Group is committed to complying with the anti-trust (competition) and anti-corruption laws in all jurisdictions where we conduct business. See ASR17 page 74.   |
| G4-SO4 | Communication and training on anti-corruption policies and procedures  | Our programs consist of a number of elements, including policies and guidelines, a comprehensive range of training tools and discussions, counseling and support, as well as auditing and review. See ASR17 page 74.   |
| G4-SO7 | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes | Following the adoption of the European Commission's settlement decision, the Volvo Group has received and will be dealing with numerous private damages claims from customers and other third parties alleging that they suffered loss by reason of the conduct covered in the decision. At this stage it is not possible to make a reliable estimate of the amount of any liability that could arise from any such proceedings. See ASR17 Note 24 |
| G4-SO8 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance                  | page 156.  |



**SPECIFIC STANDARD DISCLOSURES**

| Indicator | Description | Notes and references |
|-----------|-------------|----------------------|
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**SOCIAL: PRODUCT RESPONSIBILITY****CUSTOMER HEALTH AND SAFETY**

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|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | We are committed to support the Agenda 2030 for Sustainable Development. For the Volvo Group's approach to the Agenda 2030 see ASR17 pages 78–79. |
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**PRODUCT AND SERVICE LABELLING**

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | Customers receive environmental product information for many of our products, based on the result of lifecycle assessment. The information is divided into three sections: <ol style="list-style-type: none"> <li>1. Production: energy consumption, emissions and waste arising during production.</li> <li>2. Use: fuel consumption, emissions and spare parts during the use phase.</li> <li>3. End of life: scrapping and recycling of products.</li> </ol> |
|--------|--|---|

|        |  |   |
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| G4-PR5 | Results of surveys measuring customer satisfaction | Each brand organization within the Volvo Group tracks customer satisfaction and brand image perception through surveys worldwide. Performance is integrated in our key performance indicators reporting and is used to increase our understanding of our customers' needs. Research and studies are done by leading international organizations and interviews are carried out with decision makers among customers and non-customers. See ASR17 pages 28–31. |
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**MARKETING COMMUNICATIONS**

|        |  |   |
|--------|--|---|
| G4-DMA | Generic Disclosures on Management Approach | Information about our CSR and sustainability performance increasingly influences customers' decisions to do business with the Volvo Group, especially fleet owners. Clear and open product, marketing and sales information is essential for customers to be able to make an informed choice about our products and services. |
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| G4-PR6 | Sale of banned or disputed products | Government Sales includes special-purpose vehicles used by government, defense, peace-keeping and relief organizations. The Volvo Group's sales of defense material, as defined in the Swedish Military Equipment Ordinance (1992:1303) section A, amounted to 0.26% (0.26) of net sales in 2017. See ASR17 page 87. |
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**CUSTOMER PRIVACY**

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| G4-DMA | Generic Disclosures on Management Approach | The Volvo Group believes that automation will redefine the commercial transport solutions that most of us rely on every day. It will create benefits for both our customers and society. There are however challenges with this kind of technology and some of them relate to cyber security, liabilities, standards and regulations. Volvo Group encourages progress to secure data privacy and supports the development of safe and reliable communication standards and protocols. See ASR17 page 36. |
|--------|--|--|

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