SAFE AND EFFICIENT USE OF RESOURCES

The Manufacturing Excellence Program, which develops Trelleborg's production processes, and the Group's Safety@Work program relating to health and safety, are two of the pillars of the company's efforts to achieve a safe workplace and efficient resource management.

The most important program to achieve a safe workplace and efficient resource management is Manufacturing Excellence, which also includes the occupational health and safety program Safety@Work.

The Manufacturing Excellence framework takes a systematic approach to improvements for enhanced safety, quality, delivery precision that also yields distinct positive effects on resource consumption by focusing on minimizing all resource waste. Read more about this and other Excellence Programs on page 33.

Work environment – health and safety. Trelleborg's Safety@Work program aims to create a shared safety culture and to prevent occupational accidents and injuries at all of the Group's production units. The program includes all staff, both employees and insourced, without exception.

The program is monitored by performing annual internal audits in which the facilities are assessed in relation to best practice in terms of occupational health and safety management, machine safety, accident follow-ups with the aim of avoiding a recurrence of the same type of incident and so forth.

In 2018 two fatal accidents occurred – see page 60 – which resulted in specific measures to eliminate similar risks and strongly contributed to a renewed focus on preventing and eliminating risks in the work environment, which included new teaching tools and e-learning. See the President and CEO's comments on page 47.

The total outcome for the year for OHS-related indicators is shown in the table on page 60 ⊞.

Raw materials and chemicals. The Group's principal raw materials in Trelleborg's processes are polymers (rubber, composites and plastics) and metal components, as well as additives comprising softening agents (oils), fillers such as carbon black, and vulcanizing agents (sulfur, peroxides).

The Trelleborg's Group environmental policy stipulates that attention is given to the precautionary principle, and that hazardous substances and materials are, to the greatest extent possible, to be reduced and replaced in products and processes. As a chemical user, Trelleborg is affected by the EU REACH regulation. In addition to the local work with REACH compliance, work related to chemicals during the year was carried out by the Global Chemical Task Force, a corporate-level team. The team assists the business units in their efforts to phase out and replace substances that are currently considered harmful, and monitors such substances that may be of interest in the future. An internal Restricted Materials List has been compiled, and a project was actively pursued in 2018 by the Global Chemical Task Force focusing on such prioritized materials.

Within the scope of ETRMA, the European organization for tire and rubber manufacturers, Trelleborg is represented and participates in work monitoring and implementing EU legislation in, for example, chemicals.

Energy. A significant portion of the Group's energy consumption – and thus its climate impact – is connected to fossil-fuel combustion for the production of steam (direct energy and emissions) and purchased electricity, steam and district heating (indirect energy and emissions).

Energy Excellence, a long-standing initiative for systematic energy optimization at all units, is an integrated part of the Manufacturing Excellence program (refer to page 33).

All production units must present an activity plan to reduce energy consumption. In addition to process-related measures, many units are focusing on systems for improved monitoring of energy consumption and on increasing energy awareness among personnel.

The outcome for the year (see table on page 60 ⊞) reflects ongoing efficiency enhancements that is most clearly seen in profit improvements for the Group's recently acquired units.

Renewable energy. The proportion of renewable energy increased in 2018, and is for the first time reported as a separate indicator in the table on page 60 ⊞.

More units are making the transition: a project is under way in Sri Lanka, where biomass is to replace the current fossil fuel for production starting in 2019.

Internally generated electricity is being produced using solar cells in India and Malta.

CDP
DRIVING SUSTAINABLE ECONOMIES

TRANSPARENT REPORTING ON ISSUES OF CLIMATE AND WATER IN ACCORDANCE WITH THE CDP

Since 2007, Trelleborg has participated in the CDP's (formerly referred to as the Carbon Disclosure Project) voluntary reporting of greenhouse gas emissions. This involves openly reporting relevant key figures and data, measures to prevent adverse climate impacts, and products, solutions and initiatives to improve society in this respect.

In the Annual CDP Report for 2018 on climate issues, Trelleborg received a score of B (2017: C), which means the company demonstrates *Governance of how environmental concerns are inter-related with operations*. This is higher than the sector average, and higher than Europe's regional average of B-. Water issues are also reported for the first time, and here Trelleborg received a score of B-.

A company's path towards a high level of environmental protection/administration is described by CDP using a process in four scoring levels that begin with D (Transparency), continues with C (Awareness), followed by B (Governance), and finally A (Leadership).

GRI: 102-11, 102-12, 102-13, 102-16, 302-1, 302-4, 403-1, 403-8, 403-9. MAD Resources (103-1, 103-2, 103-3)

Climate. Trelleborg's "20 by 20" climate objectives (refer to pages 52 and 60) address and reflect the carbon intensity (no other greenhouse gases are included), meaning the total size of CO_2 emissions relative to the size of operations, as well as work on a transition to emission-optimization of energy sources in each country. The outcome in 2018 for climate-related indicators is shown in the table on page 60 ⊞. An overview of targets and challenges in the climate area is presented on pages 52–53.

The acquisitions of recent years have entailed that operations have become more energy-intensive as a result of an increased proportion of tire manufacturing. For the next few years, one key goal is to continue work to make recently acquired units more energy-efficient.

The base line for the "20 by 20" climate goal was set on the basis of the performance of all Trelleborg units in 2015. Using this baseline, developments in 2018 were highly favorable and provide a solid foundation moving forward. Trelleborg is carefully following developments in order to achieve the "20 by 20" climate target.

The calculation of CO_2 emissions from the consumption of purchased electricity or steam is mainly based on national conversion factors from the International Energy Agency. These factors reflect the average total energy mix of each country. Emissions are lower from hydro and nuclear power, but higher from coal and oil.

The most recently acquired units are primarily located in countries (the Czech Republic, Serbia, etc.) with a national energy mix featuring a high level of fossil fuels, which initially produces relatively high emissions.

In the Czech Republic, several units transitioned to "green electricity" during the year, which produced a distinct improvement in results. At the same time, a rising price for "green" electricity was noted in most markets.

Only two of the Group's units – Prague in the Czech Republic and Tivoli in Italy – are included in the EU Emissions Trading System (EU ETS). Described simply, operations are allotted emission allowances (1 allowance = 1 ton CO_2) after applying for and/or purchasing emission allowances on the international market. Each year, these operations must report their emissions of CO_2 and transfer emission allowances corresponding to the emissions caused.

Water. Water is mainly used for cooling and washing in our production processes.

The outcome for the year for water-related indicators is shown in the table on page 61 ⊞. Major reductions in consumption have been made since 2008 by using, for example, improved cooling and recycling systems.

Emissions to water are limited. They mainly comprise organic matter.

A mapping of water scarcity has been carried out for regions where Trelleborg's production units are located, and indicates that certain units are located in regions where water scarcity may become an issue, such as in China, Italy, Malta, the U.S. and Sri Lanka. The focus for the central follow-up is on these regions.

Waste. Continuous efforts are taking place within local operations to cut production waste, which helps to reduce the amount of waste, and to increase the rate of recycling. Recycling is carried out by external partners and internally.

The outcome for the year is shown in the table on page 61 ⊞.

Emissions to air. In addition to energy-related emissions – such as CO_2 (see page 60), sulfur dioxide and nitrogen oxides – the company's emissions to air mainly consist of volatile organic compounds (VOCs). Trelleborg uses the same definition of VOC as the EU.

Emissions are mainly derived from the use of solvent-based adhesives, which are critical only for a relatively limited number of products and production units.

The reduction of VOC emissions is a priority, both from an environmental and health perspective, and these emissions have been continuously reduced in recent years, see table on page 61 ⊞. The latest example being a newly installed solvents recovery plant that was commissioned in Barueri, in Brazil, in 2018.

-31%

Emissions to air of volatile organic compounds (VOC) was drastically reduced during the year, in part through increased recycling.

-6%

Energy consumption relative to sales, decreased 6 percent in 2018, which is clearly better than the internal goal of 3 percent.

-10%

Water use decreased during the year, despite growth in sales and production volumes. In total, the Group reduced water use by 10 percent relative to sales.

-5%

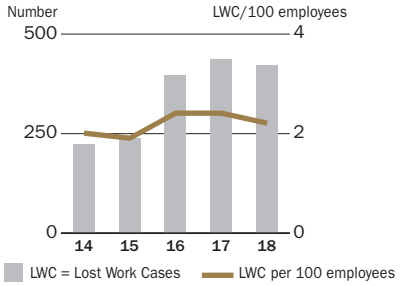
Relative to sales, total waste decreased 5 percent. The volume of hazardous waste is also gradually decreasing.

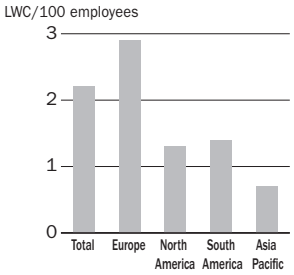
CDP: B

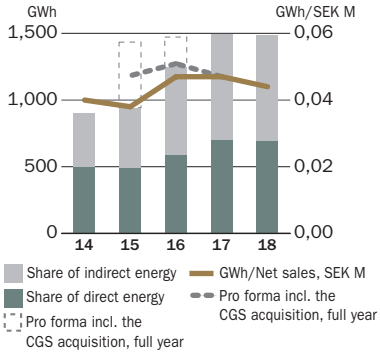
Trelleborg is at levels B and B- respectively in its transparent report to the CDP of climate and water issues. Both levels are better than the sector average, and better than Europe's regional average.

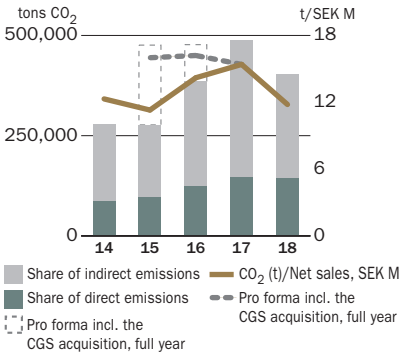
Outcome in 2018 in the area of Resources

Resources	Where?	Outcome 2018	Goals and main governance
HEALTH AND SAFETY		The curve shows the number of work-related injury/illness cases per 100 employees resulting in more than one day's absence (LWC). This figure has gradually declined. In 2018, the figure declined approximately 8 percent.	The Safety@Work program aims to establish a shared safety culture through improvement programs and preventive measures at all production units. Self-assessment is combined with internal and external audits. By 2020, the number of accidents is to decrease so LWC per 100 employees falls below 2.0.
Fatal accidents		2 fatal accidents (0). In Barueri in Brazil, an employee was killed in an accident involving a paper machine in March 2018. In Xingtai in China, an employee was killed in conjunction with the explosion of a tire during fitting in July 2018.	
LWC		422 cases (438) resulting in at least one day's absence (LWC). Of these, 9 were insourced employees, and 21 women.	
LWC per 100 employees		2.2 LWC per 100 employees (2.4). For insourced employees, the figure was 1.3, and for women 0.3. See the diagram to the right for the regional situation.	
LWD		28.7 work days lost on average per injury (30.3).	
Safety committee		89 percent of facilities have a safety committee (84) with representatives from both employers and employees.	
Absenteeism in Sweden		5.0 percent of normal working hours (5.2).	
ENERGY		In total, energy consumption has been at a slightly lower level year-on-year, despite volume increases. Relative to sales, consumption is decreasing, which is consistent with the expectation that Trelleborg's systematic measures for energy-efficiency over time will lead to improved results despite the fact that acquisitions may have a temporary impact.	Energy-efficiency has been a prioritized area for Trelleborg for some time through the Energy Excellence initiative, which is part of the Manufacturing Excellence program (refer to page 33). The internal target for the Group is to improve its energy-efficiency by at least 3 percent annually. Local energy coordinators are trained via global training sessions, and a shared toolbox is available. The proportion of renewable energy is to gradually increase, both direct and indirect energy.
Energy consumption		Total of 1,486 GWh (1,493). The share of direct energy is 692 GWh (696), and the share of indirect energy is 794 GWh (797).	
Energy consumption relative to sales		0.044 GWh per SEK M (0.047) Energy consumption relative to sales declined approximately 6 percent.	
Renewable energy		12 percent of total energy consumption, consisting of renewable electricity, biomass and internally generated electricity. The internally generated electricity is produced from solar cells and amounted to 524 MWh.	
Energy cost		SEK 789 M (734). The figure for the preceding year is adjusted.	
CLIMATE		Both in total and relative to sales, CO_2 emissions decreased in 2018, which is primarily due to more green electricity in the European tire manufacturing. Trelleborg's systematic measures for energy-efficiency also contribute to results, which for 2018 reached a 26-percent decrease in CO_2 emissions in relation to sales compared with the base value from 2015 (refer to the bottom of page 52). For 2015 and 2016, pro forma values are included in the diagram that reflect the total full-year outcome for Trelleborg including CGS units (acquired in 2016).	The "20 by 20" climate goal aims to achieve a 20 percent reduction of CO_2 emissions in relation to sales in the 2015–2020 period. Energy-efficiency is supported by the Energy Excellence initiative (page 33) and has been a prioritized method to reduce emissions. This is supplemented by a transition to green energy. Read more in "Trelleborg and climate" on page 52–53.
Total CO_2 emissions		401,900 tons (487,200), of which direct emissions amounted to 142,400 tons (144,700), and indirect emissions 259,500 tons (342,500). The reduction in total emissions compared with 2017 reflects a higher proportion of green electricity, primarily for tire manufacturing in Italy and the Czech Republic.	
CO_2 emissions relative to sales		11.8 tons per SEK M (15.4) Compared with last year, there was an improvement during 2018, both in terms of increased energy-efficiency and the transition to green energy and through improvements in energy-efficiency.	







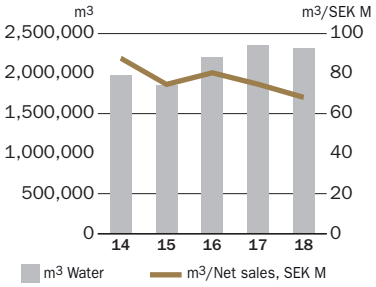


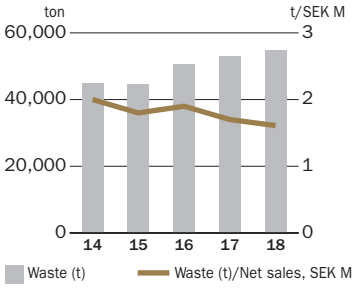
Symbols: = Internal, all units = Internal, all production units = Internal, certain units = External, suppliers

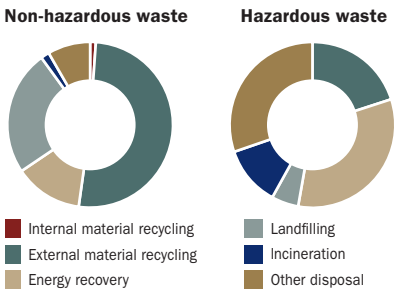
GRI: 102-16, 102-48, 302-1, 302-3, 302-4, 305-1, 305-2, 305-4, 305-5, 403-1, 403-8, 403-9, 403-10. MAD Resources (103-1, 103-2, 103-3)

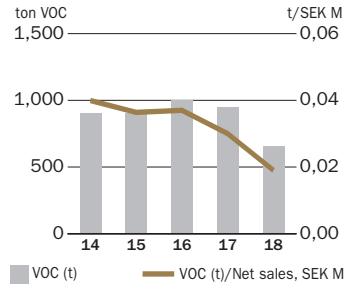
Outcome in 2018 in the area of Resources

Resources	Where?	Outcome 2018	Goals and main governance
WATER		In 2018, water use, meaning water for production and sanitary water, decreased in both absolute terms and relative to sales.	Even if water is one of the central environmental key figures reported, consumption is most crucial in production areas with water shortages, or where water shortages can be expected. Refer to page 59.
Water use		2.29 million m³ (2.36)	
Water use relative to sales		67.4 m³ per SEK M (74.7)	
Water withdrawal		60 percent municipal water (61) 19 percent from the company's own wells (18) 20 percent surface water (rivers, lakes, etc.) (20) 1 percent other sources (1)	
WASTE		In 2018, the amount of waste increased slightly in absolute terms with rising production volumes, although a decrease was noted relative to sales due to efficiency enhancements. The volume of hazardous waste decreased clearly, which was in line with goals. Waste management methods, both for hazardous waste and other waste, are shown in the diagram.	Waste minimization is an expressed goal in the Manufacturing Excellence initiative, which is conducted in all production units and is followed up on a monthly basis, see also page 33. The volume of hazardous waste is to gradually decrease.
Waste volume		54,700 tons (53,500). Of the total volume, rubber accounted for 30 percent (28) Hazardous waste totaled 5,240 tons (7,113).	
Waste volume relative to sales		1.6 tons per SEK M (1.7)	
Waste cost		SEK 59 M (51)	
Waste management		1 percent to internal material recycling (4) 48 percent to external material recycling (47) 15 percent for energy recovery (14) 3 percent to incineration (-) 23 percent to landfill (24) 10 percent for other disposal (11) The distribution between methods for handling non-hazardous waste and hazardous waste is presented in the diagram to the right. The handling method was chosen by the supplier in more than half of the cases. In about a quarter of cases, the method was chosen by Trelleborg, and in about a quarter of cases the chosen method was the only available.	
EMISSIONS		Emissions of volatile organic compounds (VOC), measured as total emissions and relative to sales, clearly declined during the year despite increased production volumes. The bulk of this decrease is due to the new recovery plant that was commissioned in Brazil. Emissions of sulfur dioxides and nitrogen oxides decreased somewhat despite higher production volumes.	Significant emissions comprise mainly VOC (volatile organic compounds), defined according to EU standards. Reducing VOC emissions is a priority both from an environmental and health perspective.
VOC		655 tons (952)	
VOCs relative to sales		0.019 tons per SEK M (0.030)	
Sulfur dioxide		181 tons (187)	
Nitrogen oxides		62 tons (65)	









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