

Sustainability  
Report  
2018/2019



# Contents

<b>Preface</b>	04
<b>The MAHLE Group</b>	06
<b>Sustainability management at MAHLE</b>	10
<b>Responsible corporate governance</b>	16
<b>Working at MAHLE</b>	22
<b>Environmental management</b>	32
<b>Sustainable innovations</b>	38
<b>Sustainability in the supply chain</b>	42
<b>Corporate citizenship</b>	44
<b>The MAHLE Foundation</b>	46
<b>Report profile</b>	48
<b>GRI content index</b>	49
<b>Imprint/contact information</b>	63

# Sustainability Report

Early on, our company founders, Hermann and Dr. Ernst Mahle, associated corporate success with social responsibility. After almost 100 years, MAHLE is now a globally operating company and all the more aware of its social responsibility. Our goal is to be a technological driving force for efficient and environmentally friendly mobility. Through our long-term planning and actions,

we therefore strive to reconcile the existence and economic success of our company with the requirements of the environment, society, and our employees on a sustained basis. Sustainability is an important operational principle for a foundation-owned company like MAHLE.

# Preface

## Dear readers,

Our world is changing more drastically than ever before: digitalization, urbanization, and mobility coupled with a shortage of resources and climate change—these developments are affecting everyone around the world. In the face of all this change, it is essential that we strive to preserve the planet for coming generations and protect it accordingly.

This is a great challenge and a great responsibility—for our sector too. Our expert know-how and experience are crucial to achieve further reductions in pollutants, greenhouse gases, and noise, to drive forward the transition to economically viable and environmentally friendly transport models, and to ensure that our actions are transparent. As an industry, we are called upon to develop solutions that increase people's mobility while maintaining their health and protecting natural resources and habitats.

MAHLE is addressing these challenges with a dual strategy, and it sees the future of individual mobility as a practical mix of efficient drives. Thanks to our optimized products, we make an important contribution toward further reducing the fuel consumption and emissions of combustion engines, particularly through the use of synthetic fuels. At the same time, we are developing systems for alternative

drive types, such as electric and hybrid vehicles. Our objective is to make all drives more efficient, more economical, and more comfortable. Alongside other actions, we have made a clear statement of our ambitions with our concept vehicle MEET (MAHLE Efficient Electric Transport). It highlights the extent to which the meshing of different energy-saving MAHLE technologies improves the efficiency of the entire powertrain and thereby also increases the cruising range—a decisive factor. MEET impressively demonstrates that the path we have taken is the right one.

“People come first”—this motto is especially applicable in times of change. It was Ernst and Hermann Mahle who made this commitment with respect to their conduct in business. It remains unchanged to this day and is an important part of our DNA. As a foundation-owned company, we enjoy crucial advantages: We can plan and act over the long term, manage the business independently, and thus work with our employees to secure the success of our company. And that is exactly what we have been doing for 100 years now.

At MAHLE, running a profitable business always means acting in an environmentally friendly and ethically sound manner. This means that, for us, sustainability is a question of corporate responsibility

toward the people who work for and with us, toward the environment, and toward society. We also uphold this commitment in our dealings with our suppliers.

With this updated Sustainability Report, we aim to inform you about our goals, strategies, and measures relating to this subject as well as the progress we have made. It is based on the international Standards of the Global Reporting Initiative. The objective is to ensure ongoing communication on the subject of sustainability.

We hope you find our report an inspiring read.



Michael Frick



At MAHLE, running a profitable business always means acting in an environmentally friendly and ethically sound manner.



Michael Frick, Chairman of the Management Board and CEO (ad interim)/Member of the Management Board for Finance

# The MAHLE Group

*Our product portfolio addresses all the crucial aspects of the powertrain and air conditioning technology—both for drives with combustion engines and for e-mobility. In 2019, the Group generated sales of approximately EUR 12 billion with more than 77,000 employees and is represented in over 30 countries with around 160 production locations. The company is headquartered in Stuttgart/Germany.*



MAHLE is a leading international development partner and supplier to the automotive industry as well as a pioneer and technology driver for the mobility of tomorrow.

## Markets and products

Our product portfolio is based on a broad systems competence and, with Engine Systems and Components, Filtration, and Thermal Management, it addresses all the crucial issues relating to the powertrain and air conditioning technology.

We also offer electric and electronic components as well as integrated systems solutions for e-mobility and fuel cell technology. MAHLE products are fitted in at least every second vehicle worldwide. In addition, our Aftermarket business unit supplies around 25,000 sales partners around the world with spare and wear parts.

The MAHLE Group focuses its business activities on mobility markets. MAHLE has derived a dual strategy from the analysis of relevant megatrends. This allows us to respond to developments such as the increasing electrification and diversification of the powertrain, the growing digital connectivity of vehicles, and autonomous driving. Our dual strategy aims, on the one hand, to increase the efficiency of

### MAHLE Group business segments 2019

Sales: EUR 12,049 million Headcount: 77,015					
BUSINESS UNITS				DIVISION	PROFIT CENTERS
Engine Systems and Components	Filtration and Engine Peripherals	Thermal Management	Aftermarket	Mechatronics	Engineering Services, Motorsports, and Special Applications
					Large and Small Engine Components
					Pumps
					Industrial Thermal Management
					Compressors
					Control units
Sales: EUR 2,617 million Headcount: 26,482	Sales: EUR 2,092 million Headcount: 10,437	Sales: EUR 4,556 million Headcount: 22,850	Sales: EUR 950 million Headcount: 1,731	Sales: EUR 492 million Headcount: 4,771	Sales: EUR 1,342 million Headcount: 10,744

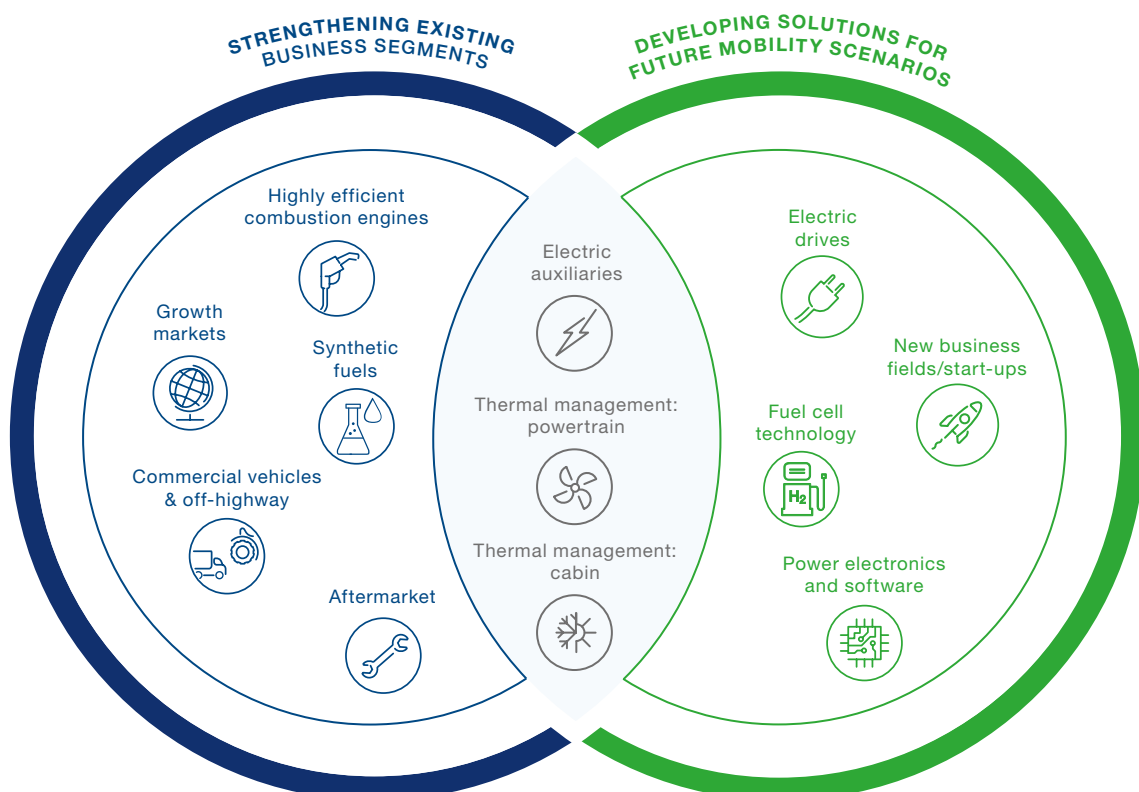


vehicles fitted with combustion engines and, on the other, to expand our activities in the alternative drives product segment. We want to strengthen our position as a leading global development partner and supplier of innovative and efficient key technologies.

The “Dual strategy” diagram shows which products serve the respective areas. Our Engine Systems and Components as well as Filtration and Engine Peripherals business units offer decades

of development and systems competence. The Aftermarket business unit has a broad portfolio of services and spare parts in original equipment quality. Our thermal management products are relevant for the powertrain and cabin of vehicles of all drive types. With electric drives and power electronics, the Mechatronics division supplies innovations for the mobility of the future. We also offer electric auxiliaries from this division together with the solutions from our Thermal Management business unit.

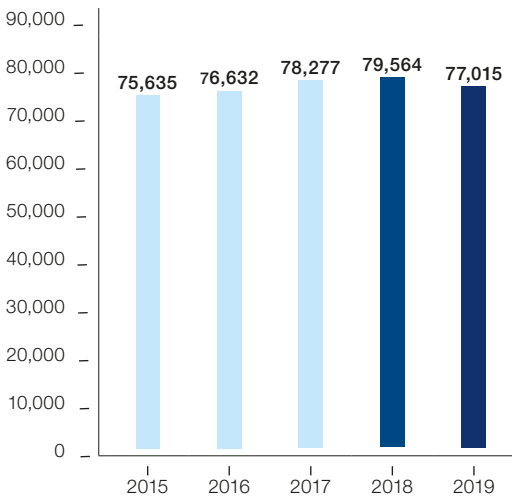
## Dual strategy



MAHLE has derived its dual strategy from the analysis of relevant megatrends. We will continue to be a technology leader in the ongoing development of the combustion engine and will concentrate especially on unlocking further CO<sub>2</sub> savings potential with regard to friction, thermal management, and the air pathway. At the same time, we will push ahead with the development of innovative solutions and products for alternative powertrain technologies and expand the appropriate business segments. Business segments that do not depend on the OEM business for the passenger car combustion engine today already account for more than 50 percent of Group sales—and we intend to consistently increase this share.



**Development of employee numbers  
2015–2019**

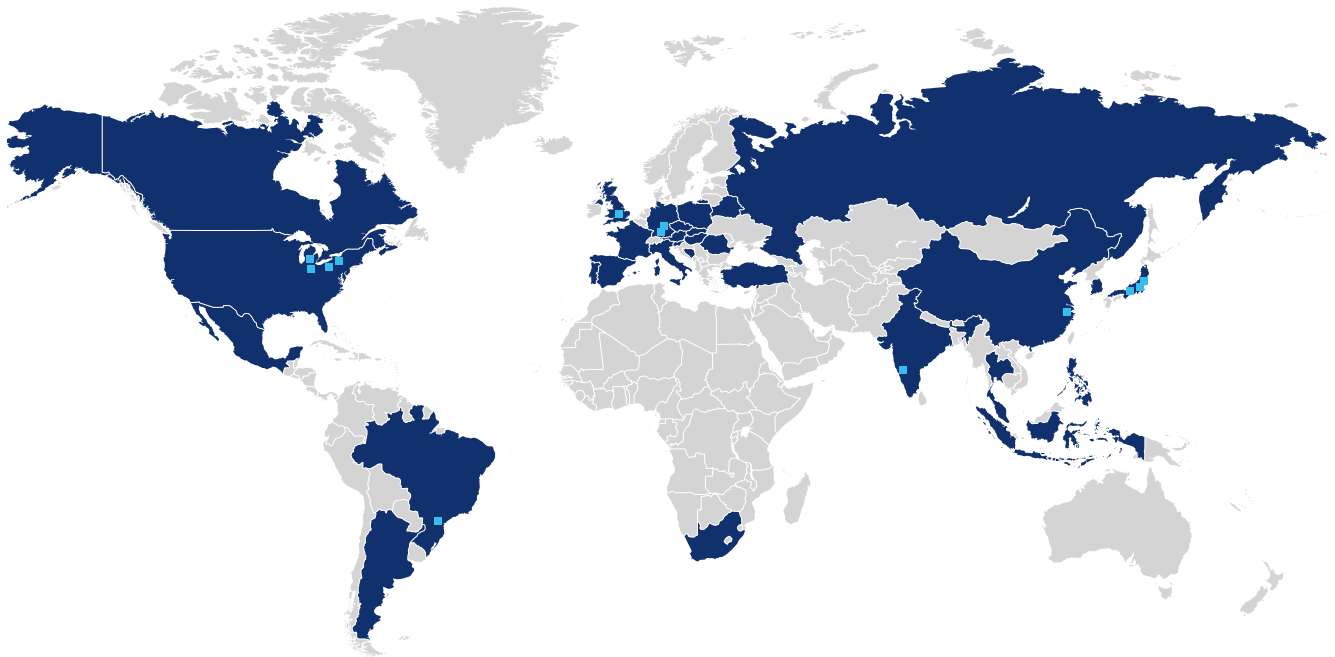


**Key figures of the MAHLE Group by region**

	Production locations/research and development centers	Employees	Sales (in EUR million)
<b>Europe/Africa</b>	<b>71/6</b>	<b>36,947</b>	<b>5,624</b>
of which Europe	69/6	35,336	5,569
of which Africa	2/0	991	55
<b>America</b>	<b>36/5</b>	<b>24,527</b>	<b>4,021</b>
of which North America	27/4	16,136	3,391
of which South America	9/1	8,391	630
<b>Asia/Pacific</b>	<b>58/5</b>	<b>16,161</b>	<b>2,404</b>
<b>Total</b>	<b>165/16</b>	<b>77,015</b>	<b>12,049</b>

Last revised: End of 2019

As a result of the technological transformation as well as declining markets and a tougher competitive environment, MAHLE began to implement cost reduction programs in 2018. Starting in 2019, these were followed by additional restructuring measures aimed at putting the company on a sustainable footing and safeguarding competitiveness.



■ Production locations      ■ Major development centers

# Sustainability management at MAHLE

*Sustainability is part of our identity. We believe that one of our most important tasks is to harmonize our corporate success with the well-being of people and the environment. Consequently, we always aim to incorporate environmental and social perspectives in our decisions alongside economic aspects.*

## Principles of sustainability management

The principles that guide our actions are ethically correct and lawful conduct, the protection of the environment and resources, the well-being of our employees, safety at work, and the establishment of a positive working environment. We apply international standards that are typical for our industry—for example, when designing our management systems with regard to the environment, quality, and safety at work.

In 2018, a central unit was set up for the coordination and communication of sustainability topics. The precise responsibilities and reporting and decision-making structures are outlined in the following topic chapters of this report.

## The MAHLE risk management system

Our risk management system covers economic, environmental, and social Aspects. In order to identify opportunities and risks at an early stage and address them proactively, our experts in the corporate functions and business areas continuously assess short-, medium-, and long-term market trends. For example, we make use of scenario analyses drawn up by our Corporate Planning department so as to model changes in markets and regulatory frameworks.

The Risk Management Committee, in which members of the Management Board and the Group Risk Manager are represent-

ed, is responsible for managing and monitoring the risk management system. This committee defines the top risks for the company and prioritizes them according to potential financial impact and likelihood of occurrence. For each risk identified, the committee appoints one or more risk owners whose task is to initiate targeted measures to reduce or manage the potential impact of the risk.

The Group Risk Manager is responsible for the practical implementation of the risk management system and summarizes the top risks and countermeasures taken in the annual Top Risk Management Report for presentation to the Management Board.

## Examples of relevant risks and opportunities connected with sustainability

The relevant risks and opportunities identified in connection with the environment include the increasing environmental awareness in the markets and new emission reduction targets. Our Research and Development department explores trends promptly to ensure that MAHLE can offer competitive and innovative products both now and in the future. We see opportunities in the development and application of new technologies to increase the efficiency of the combustion engine. With the expansion of our portfolio of electric drives and auxiliary components, we are also benefiting from the growing market for hybridized and fully electric motor vehicles.

Other sustainability-related risks arise from the topics: compliance, product responsibility, climate and environmental protection, employee development, and attractiveness as an employer. These risks are examined in more detail in the relevant topic chapters of this report.



Our objective is to communicate our efforts in the area of sustainability with even greater transparency—both internally and externally.

## External engagement and dialog

MAHLE assumes social responsibility. We are committed to promoting diversity within the workforce as well as associated programs and initiatives. That's why we have been a signatory of the Diversity Charter since 2016. We condemn discrimination and are committed to providing a working environment that is respectful and free of prejudice.

MAHLE is one of the largest employers in Baden-Württemberg's regional capital, Stuttgart, where the Group is headquartered. MAHLE also adds to the everyday traffic in Stuttgart with the commuting and business trips of its employees as well as our delivery journeys. We are aware of our shared responsibility for clean air. On February 13, 2019, as part of a broad alliance of large local employers, MAHLE pledged to make a positive contribution toward combating air pollution. The primary action involves purchasing a fleet of electric cars for journeys between our locations in the greater Stuttgart area and installing 100 chargeBIG charging points for electric vehicles in the company's own parking garage in Bad Cannstatt, which went into operation on July 16, 2019. Furthermore, the infrastructure for employees who cycle to work has been improved.

### Political lobbying

The policy framework for shaping sustainable mobility is of vital importance to MAHLE in view of our product portfolio and its focus on the powertrain and thermal management. For this reason, we keep a particularly close eye on regulatory plans relating to climate protection as well as transport and environmental policy. Policy issues relating to digitalization or the aftermarket are equally important.

To ensure our interests are represented in the political arena, we stay abreast of regulatory plans and strive to establish contact with public authorities, ministries, government representatives, or embassies at regional, national, and European level. By doing so, we keep up to date with current developments in areas that affect us as well as being able to monitor political and social trends and clearly communicate our own positions.

At Group level, the central department External Affairs coordinates contact with outside parties, above all with political decision makers in Germany and the European Union. Our regional companies, such as those in the United States, Brazil, and China, also cultivate their own relationships. MAHLE aims to contribute technical expertise and specialist knowledge to the political decision-making process and to be a reliable contact for policy makers by taking a fact-based approach.

MAHLE takes transparency very seriously, and it therefore goes without saying that the company is listed on the European Commission's European Transparency Register with respect to its lobbying activities at European level. Should something similar be introduced in Berlin, MAHLE will apply for registration in that system too. In all political activities, the MAHLE Business Code defines a clear code of conduct for our dealings with third parties.

MAHLE holds regular discussions with political stakeholders and is a member of various external initiatives, such as the Strategic

Dialog for the Automotive Sector, initiated by the Land government of Baden-Württemberg/Germany, and Germany's National Platform Future of Mobility. We regularly welcome politicians and public officials to our locations in order to give them direct insights into our company on site. If our expertise is requested, we are happy to contribute to policy forums and panel discussions, including with nongovernmental organizations, to discuss issues with other companies and industry associations, or to take part in parliamentary events and consultation formats organized by democratic centrist parties.

Since 2019, MAHLE has been an active member of the German Konzertierte Aktion Mobilität group, a regular high-level exchange between ten large members of the German Association of the Automotive Industry (VDA), the German federal government, minister presidents from selected federal states, and employee representatives, where strategic issues relating to the automotive industry are discussed.

Worldwide, we are active in over 100 associations, interest groups, and networks, including industry associations such as the VDA and the European Association of Automotive Suppliers (CLEPA), as well as in organizations related to finance, research and technology, IT, logistics, trade, and purchasing. These are valuable platforms for us in terms of pooling interests within the industry and, in some cases, facilitating active communication with external stakeholders.

From MAHLE's perspective, publicly funded research and innovation is a key component when it comes to safeguarding competitiveness. For this purpose, we deliberately seek out partnerships with universities, institutions outside the university framework, and other companies in order to help shape innovative topics at an early, precompetitive stage.

## Ongoing development of our sustainability management system

In recent years, we have noted a growing interest in sustainability issues on the part of our stakeholders. Besides the rising number of customer inquiries regarding our sustainability activities, external regulatory requirements are also becoming increasingly strict. For example, in accordance with the Dodd-Frank Act in the United States, we are under obligation to guarantee that our products are free of conflict minerals.<sup>1</sup> The German government has also called upon all companies with more than 500 employees to report on the measures they are taking to ensure that human rights are respected within their value chains. Our objective is therefore to communicate our sustainability activities with even greater transparency—both internally and externally. We will regularly publish sustainability reports that comply with the international reporting Standards of the Global Reporting Initiative.

With this goal in mind, we created a central sustainability unit in 2018 with the task of coordinating our internal and external sustainability communication, including the MAHLE Sustainability Report. The unit also assesses external sustainability requirements and prompts the development of suitable implementation concepts by the Group's specialist departments, business areas, and regions.

As part of the ongoing development of our sustainability management system, we are also improving the data we hold on sustainability Aspects that are important to us. In areas such as safety at work and energy consumption, we already record global key figures and performance indicators. Where we do not yet have sufficiently comprehensive or detailed information, we will take specific action to improve data collection.

<sup>1</sup> The term conflict minerals refers to the metals tungsten, tin, tantalum, and gold from conflict regions, whose mining and trade contribute toward serious violations of human rights on site or result in infringements of international law.

## Defining the report content

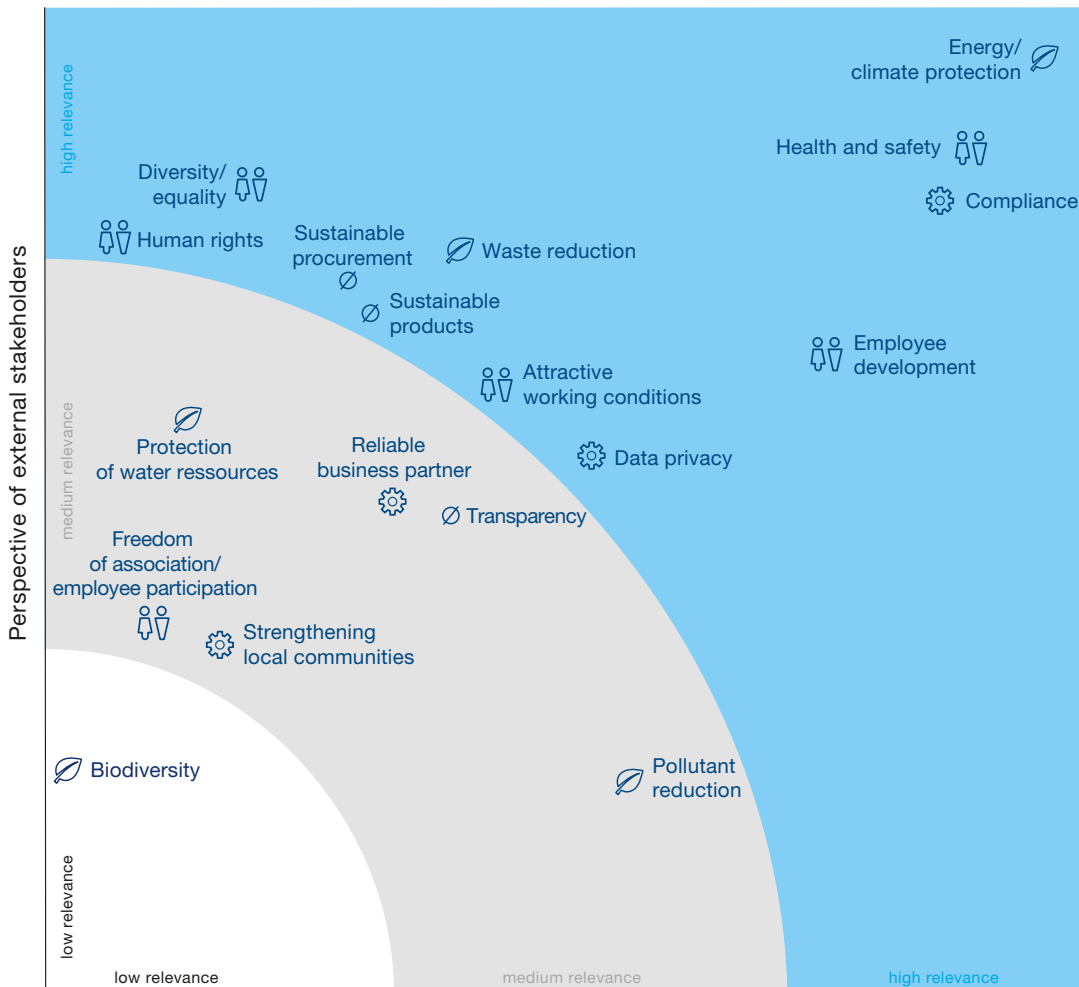
The primary focus of our sustainability management system is on topics that are of material importance to MAHLE itself or to our stakeholders. To identify these topics, we carry out what are known as materiality analyses. These allow us to

ascertain the sustainability Aspects that are currently of importance to the automotive industry—from an internal perspective as well as from the perspective of major customers and relevant competitors.

Due to current developments in the automotive industry and a growing number of customer inquiries on individual sustain-

ability Aspects, we have revised selected subtopics of the last materiality analysis. For example, greater attention has been given to the human rights Aspect and the legal requirements arising from the European General Data Protection Regulation (EU-GDPR), which came into force in 2018.

### Materiality matrix



## Reporting topics by chapter and relevance

Topics	Key Aspects covered	Chapter	Relevance*
<b>Occupational health and safety</b>	Preventive health care, accident prevention	Working at MAHLE	+
<b>Employee development</b>	Further training, career management, leadership		+
<b>Attractive working conditions</b>	Fair pay, voluntary benefits, healthy work-life balance		+
<b>Diversity and equal opportunity</b>	Diversity of workforce, protection against discrimination and harassment		+
<b>Freedom of association/codetermination</b>	Employee representation, freedom of assembly		o
<b>Human rights</b>	Prevention of child or forced labor and elimination of human rights risks within the company		+
<b>Compliance</b>	Corruption prevention and antitrust law, compliant conduct by all employees	Ethical corporate governance	+
<b>Data protection</b>	Protection of data relating to business partners and employees		+
<b>Transparency</b>	Reporting approach, dialog with stakeholders	Sustainability management	o
<b>Energy and climate protection</b>	Reduction of energy consumption and greenhouse gas emissions at our locations	Environmental management	+
<b>Waste prevention</b>	Material efficiency, waste management, and recycling		+
<b>Reduction in pollutants</b>	Decreasing emissions into the air, water, and soil from our plants		o
<b>Protection of water resources</b>	Water management, wastewater treatment		o

Topics	Key Aspects covered	Chapter	Relevance*
<b>Sustainable procurement</b>	Compliance with social and environmental standards and human rights in the supply chain, conflict minerals	Responsibility in the supply chain	+
<b>Sustainable products</b>	Environmental considerations throughout the product life cycle, product safety	Sustainable products	+
<b>Reliable business partner</b>	Delivery capacity, product quality, business continuity		o
<b>Strengthening local communities</b>	Impact on the area surrounding our locations, local suppliers, cooperations, voluntary engagement	Responsibility in the supply chain; social engagement	o
<b>Biodiversity</b>	Impact of locations and products on biodiversity	<i>Not reported</i>	-

\* Legend: +/o/- topic with high/medium/low relevance for MAHLE



# Responsible corporate governance

*Responsible business behavior means complying with legal regulations and internal rules as well as ensuring fair competition. The term “compliance” describes adherence to these requirements. Violations can have serious consequences for companies, such as fines, claims for damages, loss of business partners, or a damaged reputation. Consequently, compliance has always been an important element of MAHLE’s corporate governance.*

## Principles of our compliance management system

At Group level, we ensure that our conduct and actions adhere to laws and internal rules by means of the MAHLE compliance structure. This includes the MAHLE Business Code as a basic code of conduct for all employees worldwide as well as our compliance organization, preventive measures, and a training concept. We take various steps to safeguard the effectiveness and sustainability of our compliance structure, including documenting our compliance activities and conducting compliance audits as well as regular web-based compliance learning programs and classroom training.

As a general rule, all organizational units, functions, and departments are responsible for the processes applicable in their area aimed at upholding legal regulations and internal rules as per the legal compliance procedure. The compliance risk areas of anti-trust law and corruption prevention are exceptions. These are managed centrally by the Group-wide MAHLE compliance organization (see subsection “Corruption prevention and anti-trust law”).

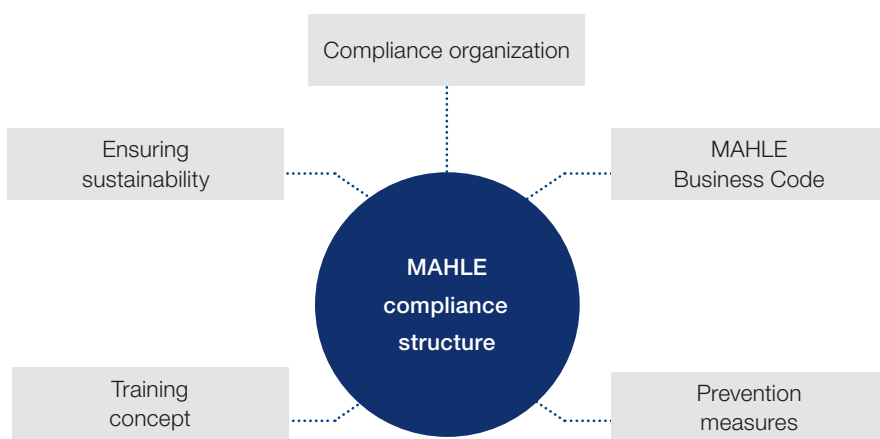
### MAHLE Business Code

In all our business activities, we are committed to compliance with ethical standards and legal requirements. This is based on the MAHLE Business Code, which is signed by the Management Board and defines the legal and ethical framework for all MAHLE employees, including the Management Board and executives. For affiliated companies located outside Germany, the Business Code describes the minimum standards, which should then be supplemented by local requirements and specific characteristics. At joint ventures and companies in which MAHLE does not have a majority holding, but rather a holding of at least 25 percent and not more than 50 percent, appropriate measures should be taken to ensure compliance with the objectives of the MAHLE Business Code. Subjects covered by the MAHLE Business Code include regulations on competition and antitrust law, corruption prevention, product quality and safety, data protection, and data security.

The MAHLE Business Code is revised when necessary, particularly in the event of legislative changes. For example, it was adjusted in February 2018, and a further update is scheduled for January 2020. We are proactive in communicating the MAHLE Business Code on our intranet and on the Internet, publishing it in 12 languages for employees, business partners, and the public.<sup>1</sup> New employees are given a copy with their orientation documents. In addition, the Management Board and executives are required to make a written commitment to comply with the contents of the MAHLE Business Code and ensure that it is observed within their scope of responsibility.

<sup>1</sup> [www.mahle.com/en/about-mahle/compliance](http://www.mahle.com/en/about-mahle/compliance)

## The MAHLE compliance structure



The existing compliance structure is continuously optimized and adjusted on the basis of risk by the MAHLE compliance organization.

### Compliance organization

The MAHLE Group Compliance Organization Guideline defines and designates the responsibilities of the compliance organization within the MAHLE compliance structure and describes its tasks and reporting lines in the event of compliance violations.

At Group level, the compliance organization consists of the Management Board, a Compliance Steering Committee, and the Corporate Compliance Office. Further Regional Compliance Committees and Regional Compliance Offices have also been established at a regional level.

The Compliance Steering Committee consists of members of the Management Board as well as managers from Human Resources, Legal, and Internal Audit. It is responsible for the content and strategic further development of the compliance structure and reports directly to the Management Board.

The Corporate Compliance Office implements preventive measures such as training and communication activities relating to antitrust law and corruption prevention. It also handles reports of violations, evaluates them, and passes them on to the appropriate bodies. The Corporate Compliance Office is attached to the Corporate Legal department. For the planning of internal compliance audits, it consults with the Corporate Internal Audit department, which then undertakes the compliance audits. The Corporate Compliance Office is supported by the Regional Compliance Offices, which are available to support employees in the region with compliance queries and reports of violations. The Regional Compliance Offices implement any necessary compliance measures, such as training activities, at a local level, and are an important link between employees and the Corporate Compliance Office. The Regional Compliance Offices also preside over the Regional Compliance Committees, which are composed of representatives from compliance-relevant departments, such as Sales, Purchasing, Human Resources, Finance, and Legal. They are primarily responsible for analyzing local compliance risks, reporting on local compliance issues, and adapting the guidelines to suit local characteristics.

## Management of compliance violations

Our decentralized compliance approach means that all organizational units, functions, and departments are responsible for the compliance risks that are relevant to them. For example, the corporate function CO (Corporate Occupational Health, Safety, and Environment) is responsible for handling environmental violations, while the HR (Human Resources) department deals with violations relating to social concerns. The compliance risks of antitrust law and corruption prevention are managed centrally by the MAHLE compliance organization.

The Corporate Compliance Office must be involved in the case of any incidents that may have a significant impact on the whole Group. It assesses compliance incidents in accordance with the provisions of the MAHLE Group Compliance Organization Guideline. Any serious and significant violations are immediately reported by the Corporate Compliance Office to the Compliance Steering Committee. It decides whether the Corporate Internal Audit department should be involved for investigation purposes.

Employees wishing to report a potential violation of compliance rules can approach their supervisor. Furthermore, they can contact the Corporate Compliance Office or the Regional Compliance Office responsible for them.

In the event of serious compliance violations or an increased need for confidentiality, employees can also contact the external ombudsperson responsible for their region by e-mail, telephone, or mail. Alternatively, the web-based whistleblower system Integrity Platform can be used—anononymously, if desired. The regional ombudspersons will verify the report and, depending on the circumstances, either contact the Corporate Compliance Office or refer to the internal reporting channels. The web-based whistleblower system Integrity Platform was introduced in May 2018 as part of a pilot project in the South America region (Brazil and Argentina). It has been available to all employees since the end of 2018 and also to external parties since April 2019 via a link on the MAHLE website.

The Management Board receives an annual compliance report informing it about the current developments and activities of the MAHLE compliance system. Corporate Internal Audit also communicates the key results of the audits undertaken.

The compliance management system is reviewed regularly and developed further if necessary.



NON COMPLIANCE



COMPLIANCE

## Corruption prevention and antitrust law

The compliance risk areas of corruption and antitrust law are managed centrally by the Group-wide MAHLE compliance organization as these risk areas are not assigned to particular organizational units.

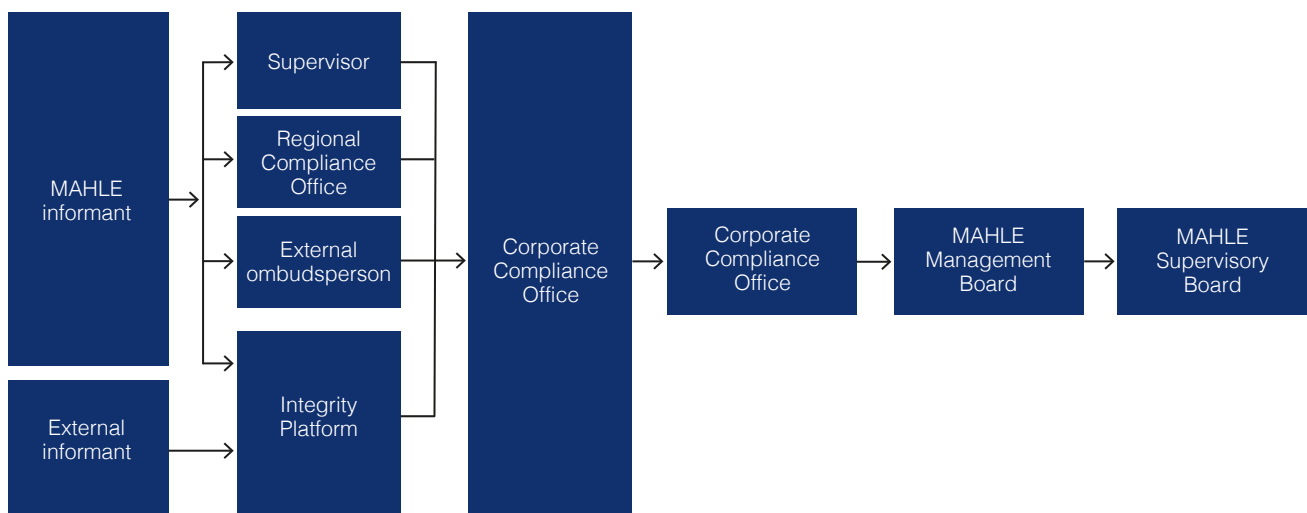
Corruption prevention is an important topic at MAHLE. The purpose of our Guide on Prevention of Corruption is to give employees guidance and support with respect to the most important rules relating to corruption prevention. It can be accessed on the compliance page of the MAHLE intranet. In particular, the guide defines what constitutes an improper influence over business decisions, when gifts and invitations may be accepted or offered, and how to behave appropriately toward public officials. These topics are also covered in detail in our compliance training.

In addition, the guide covers the correct approach to donations and sponsorship activities. To ensure they cannot be used for unlawful purposes, donations and sponsorship activities must be transparent and traceable. Donations greater than EUR 5,000 must be approved by the MAHLE Management Board. Donations to individuals or to private accounts are generally not permitted.

The aforementioned provisions are governed by our Approval and Signature Guideline (ASG). It also defines the dual control principle and which processes need to be approved by which management level. It is therefore another tool that helps us avoid corruption.

We refer our business partners to our strict anticorruption policy, part of the Supplier Code of Conduct, with which all our suppliers have had to comply since 2011. In January 2019, it was fundamentally revised, and its content expanded. The current version is available for our business partners to download from the MAHLE website.<sup>2</sup>

### Compliance reporting process



<sup>2</sup> [www.mahle.com/en/about-mahle/compliance](http://www.mahle.com/en/about-mahle/compliance)

## Antitrust law

It is particularly important to follow the antitrust regulations, which safeguard and ensure free and fair competition worldwide. This is reflected in the MAHLE Business Code, which states that all employees must comply with the statutory regulations relating to competition and antitrust law. We promote free and fair competition and work proactively to prevent potential violations—it is in our own interests to do so. Our Guide on Antitrust Law provides detailed instructions on how employees should behave in areas sensitive to antitrust law—such as in their conduct toward competitors, customers, and suppliers, in association meetings, and in the context of joint venture activities. These topics are also covered in detail in our compliance training.

## Training on corruption prevention and antitrust law

To prevent violations of legal requirements and internal company rules from the outset, we have organized regular web-based compliance training since 2012, covering the topics of antitrust law and corruption prevention. We thereby raise awareness among our employees and help them to fulfill compliance requirements. The training is mandatory for all members of the Management Board as well as for executives and employees in risk-exposed areas, such as sales. In addition, every member of the workforce has the option of following the training programs voluntarily on the compliance page of the MAHLE intranet. In 2018 and 2019, a total of 3,831 MAHLE employees completed the compliance courses. We also offer classroom training to further increase awareness among our employees.

## Number of employees trained in corruption prevention and antitrust law from 2018 to 2019

Region	Total	Management Board (MB) and executive levels 1 to 3	Other levels	Coverage of MB, executives, and relevant employees
Europe/ South Africa	2,143	411	1,732	100%
North America	488	107	381	100%
South America	303	36	267	100%
Asia/Pacific	897	89	808	100%
<b>Total</b>	<b>3,831</b>	<b>643</b>	<b>3,188</b>	<b>100%</b>

Details of our internal guidelines relating to compliance are also published on the MAHLE intranet and in MAHLE connect. We refer new staff to these guidelines in our orientation documents. This ensures that the entire workforce is familiar with the guides and knows where to consult them if needed.

## Data protection

As part of the ongoing process of digitalization, an increasingly high priority is given to protecting personal data as well as internal company data containing personally identifiable information. As one of the leading suppliers to the automotive industry, we process information from internal and external employees, customers, and business partners all over the world. They can have confidence that their data is handled securely and processed only by persons who have access authorization granted in accordance with the need-to-know principle.

MAHLE has pledged to strictly comply with legislation aimed at preserving the right to informational self-determination. When processing personally identifiable information, we observe European regulations on data protection and all relevant national laws derived from them. As a globally active company headquartered in Germany, we are primarily subject to the European General Data Protection Regulation (EU-GDPR) and the German Federal Data Protection Act (BDSG). The German Telecommunications Act (TKG) and the German Telemedia Act (TMG) are also applicable. In addition, we ensure compliance with non-European data protection laws and regulations.

### Reorganization of MAHLE's data protection organization

Since the General Data Protection Regulation (GDPR) came into force in 2018, there has been an even stronger focus on the subject of data protection. In July 2019, we restructured the organization—it is now led jointly by our external Group data protection officer and an internal department manager. The department manager and the Group data protection officer are supported by a team composed of experienced data protection specialists. This division is necessary to ensure that the data protection audit function, which acts independently, and data protection management are kept separate.

In Germany alone, our data protection organization comprises around 75 data protection coordinators (DPCs), who act as the initial points of contact on site. These specially trained employees are tasked with implementing the regulations that have been defined centrally. They thus form the important link between the workforce and the central data protection team.

Our IT systems make use of the latest security technologies that protect against unauthorized external or internal access to or misuse of data. In 2019, we began to develop an integrated data protection management system (DPMS).

Any violations of applicable data protection policies must be reported to the Corporate Data Privacy department, which will carefully assess and investigate the situation. Corporate Data Privacy will be advised on these matters by the Group data protection officer. If a suspected violation of data protection regulations or a suspected data breach is confirmed, the Group data protection officer will refer the incident immediately to the Management Committee. During the period under review, no violations of data protection regulations that led to a loss of personally identifiable information relating to customer data or infringed the confidentiality of such information were reported.

# Working at MAHLE

*A company's most important asset is its employees, a view held by our company founders, Hermann and Dr. Ernst Mahle. It is only by being an attractive employer that we can excite people about working for our company. We also place a high value on our employees' continuous development. It is equally essential for our company's future success that our staff are satisfied in their jobs and feel part of the MAHLE family. This is why diversity and equal opportunity in the workplace are top priorities and we actively oppose all forms of discrimination.*

## Occupational health and safety

According to the guiding principle formulated by our company founders, Hermann and Dr. Ernst Mahle, our core responsibility is to ensure the safety of our employees. To achieve this, we need workplaces that protect them from accidents and injuries. However, working with machinery and certain materials involves an element of potential risk. We tackle this topic proactively across the Group and raise awareness among our employees in order to keep occupational risks to a minimum.

### Principles of safety at work at MAHLE

We act within the framework of our Health, Safety, and Environment (HSE) guideline, which specifies consistent occupational health and safety standards for the whole Group. In 2017, we defined the following three basic safety at work rules as a simple guide for all employees:

#### 1. Safety First

Safety takes top priority. Risks are not accepted.

#### 2. I Care—We Care

We are all responsible: for ourselves and for others.

#### 3. Walk the Talk

Safety is not something we just talk about—it must also be reflected in our actions.

In the MAHLE Business Code, the company pledges that it will always act in accordance with the applicable standards with regard to health, safety at work, and environmental protection.<sup>1</sup> Regular training sessions and briefings are designed to prevent accidents and minimize risks.

The HSE corporate function coordinates and monitors health, safety at work, and environmental protection activities worldwide. On-site HSE representatives are responsible for implementation at the locations in consultation with the regional HSE managers. Operational responsibility lies with the respective location managers. At all locations, we are also establishing safety committees comprising members of management, employee representatives if applicable, and the location's HSE representative. The task of these committees is to manage and monitor occupational health and safety issues and to establish measures for continuous improvement.

In 2019, the safety at work management system at 52 locations was certified in accordance with OHSAS 18001 or ISO 45001. We are working on the rollout of our central action plan for the phased implementation of the standards at all production locations. By the end of 2023, all MAHLE locations will be certified in accordance with ISO 45001 or OHSAS 18001.

<sup>1</sup>[www.mahle.com/media/global/about-mahle/compliance/2020/200728\\_b-code\\_en\\_03.pdf](http://www.mahle.com/media/global/about-mahle/compliance/2020/200728_b-code_en_03.pdf)



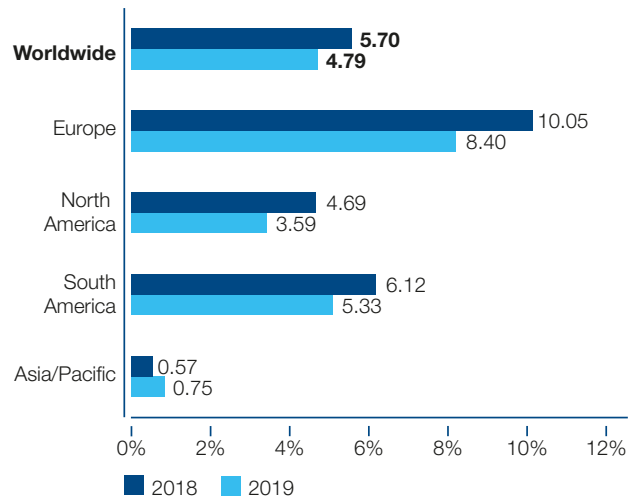
**Our objective: to reduce the accident rate**

To bring about a continuous reduction in the occurrence of accidents, MAHLE works with individual target agreements for all plants. Our long-term target was fewer than five accidents per million working hours. Accidents were recorded if they caused at least one day of absence. This target has already been achieved, with the worldwide accident rate falling from 5.7 in 2018 to 4.8 in 2019—a reduction of around 16 percent. This is a significant decline in comparison with the previous year, and we successfully reduced the number of accidents in all regions. We also want to continue reducing the Group-wide accident rate in the future. We aim to achieve an accident rate below 4 in 2020. All individual MAHLE Group location targets are directed toward this objective.

We promote good examples of safety at work at our plants, which is why we present an annual MAHLE Safety Excellence Award to plants that have implemented successful safety measures. In 2018, the prize went to our filter plant in Mogi Guaçu/Brazil, where employees and managers were actively involved in our global safety initiative under the motto “Safety First”—specifically recognizing safe behavior. As a result of this and other projects, there were absolutely no occupational accidents involving lost days in Mogi Guaçu in 2018, for example. The winner in 2019 was our plant in Pune/India, which has been accident-free for several years and has driven forward the implementation of a wide range of safety at work initiatives, including our “I Care—We Care” rule.



**Development of accident rates, globally and per region**



Accidents with at least one day of absence per million working hours

**Group-wide safety at work initiative**

In 2018/19, as part of our Group-wide initiative on safety at work, we launched a global, mandatory training program for managers entitled “Managing safely.” In the program, we emphasize that safety takes absolute priority at MAHLE and that managers have a special responsibility to ensure safety at the workplace.

### Regular observation tours and analyses to ensure safety in all areas

One of the ways we put the core message of “I Care—We Care” into practice is by conducting regular safety observation tours (SOTs) at our locations. A Group-wide work instruction encourages participation by all managers through to the plant managers at the production locations. Generally speaking, employee representatives and production staff are also involved in the observation tours and training measures. Our focus through these activities is on communicating our three basic safety at work rules (Safety First, I Care—We Care, Walk the Talk) as well as working together to identify, resolve, and prevent shortcomings.

We monitor compliance with applicable safety at work regulations through HSE audits, for which we also engage external experts in some cases.

### Reinforcing safety culture through training

As part of our safety initiative, we also provide ongoing training to all employees and work continuously to develop our safety culture. We encourage our employees to report or, where possible, eliminate potential risks. This helps us prevent occupational accidents, foster internal dialog within the company, and involve our employees more closely.

### Dealing with incidents

We have clear policies for the proper handling of work-related hazards. In the event of an accident, a joint analysis of the causes is carried out by the plant and the regional HSE organizations from which actions are derived. The HSE corporate function then helps to communicate the findings to all plants in order to achieve a continuous learning process beyond the limits of individual locations.

With the aim of preventing similar incidents at other locations as well. We record not only events that could endanger our employees but also those that pose a potential risk to our external service providers.

We have defined clear process flows for the reporting chain. Hazardous situations that have caused or could cause serious injury to our employees must be reported via the plant management to the head of the business unit, the relevant central departments, the members of the Management Board, and Corporate Communications. In the event that our business partners were directly or indirectly affected by the impact of an incident, we would inform them at the earliest opportunity.



Between 2018 and 2019, our accident rate fell by around 16 percent worldwide.

#### Frequency of safety observation tours at our locations

<b>Production locations</b>	Plant manager	Department manager	Safety officer	Supervisor
	Once per month	Twice per month	Twice per month	Once per week
<b>Technical locations/ warehouses</b>	At least once per month			
<b>Offices, etc.</b>	At least once every two months			

## Health care and advice

In addition to safety at work, the general well-being of our employees is extremely important to us. We work together to develop needs-based measures to improve our employees' well-being and job satisfaction.

In particular, we attach great significance to awareness, prevention, and encouraging people to take responsibility for their own actions. Health days at the MAHLE locations in numerous countries promote healthy dietary and lifestyle concepts. Company medical services ensure medical assistance and advice are available on site. The activities and benefits we offer range from free vaccinations and other medical services to health classes, company sports teams, and fitness programs through advice on social issues and company health insurance.

In a process agreed with the employee representatives in Germany, our risk assessment additionally includes investigating whether workplaces pose potential health risks. The investigation also covers psychological hazards. In addition, we strive to help our employees with problems that are often considered taboo—examples include addiction and mental illness. We want to raise awareness of these issues and train our managers in particular in the right way to act toward those affected. In Germany, this task is taken up by our in-house addiction counselors.

Employees who are returning to the workplace after a long period of illness are supported by means of reintegration programs that make it easier for them to resume their duties.



“People come first!” This motto passed down by our company founders Hermann and Dr. Ernst Mahle still applies today and is reflected in our company philosophy.



Get ready for team MAHLE.

Go further, faster and be  
#StrongerTogether!

New #StrongerTogether HR campaign

## MAHLE as an attractive employer

Megatrends like digitalization, globalization, and technological change are having an impact on the world of work and presenting us with new challenges.

Our employees are our most important resource and safeguard the future viability of our company. Thanks to their wide range of skills, expertise, and commitment, they make a valuable contribution to our corporate success every day. It is important to us that our employees are motivated, experience a respectful working environment that is free of prejudice, and are able to perform their tasks effectively and efficiently. To provide them with the best possible support, we continue to align our HR concepts and processes on a global basis and work continuously to optimize and redesign our HR activities.

### Generating enthusiasm for MAHLE— with a strong employer brand

As an employer, our dual corporate strategy is helping us to position ourselves purposefully on the job market, where we want to get the right talent excited about working for us. In addition to automotive engineering, power engineering, and computer science professionals, our activities are particularly focused on target groups in the fields of mechatronics and electrical engineering. As one of the key events aimed at addressing this target group, an E-Mobility Night in Stuttgart/Germany was organized for the first time in 2018 and successfully repeated in 2019.

With our new international HR marketing campaign, we have given MAHLE as an employer a new look. In doing so, we're highlighting what makes us unique: our diversity, our team spirit, and our motivation to shape the mobility of the future together. At the same time, our global careers website was updated with new content and a more user-friendly design.

## Work–life balance

As a modern, attractive employer, it is important to us to help employees find a healthy work–life balance and to use a range of measures to make continuous improvements.

Flexible working hours, flexitime, part-time work, working from home, and other employee-friendly conditions have therefore been part of our personnel policy in many countries for some time. These opportunities allow employees to respond to the needs of their families and private matters as needed. For example, the part-time models offered by MAHLE encourage staff to return to work during and after parental leave.

As part of the MAHLEforME initiative, we have also put in place additional, local services. These include assistance with regard to the provision of childcare and nursing care as well as household and dry cleaning services.

In recognition of their employee-focused working conditions, MAHLE's locations in Stuttgart/Germany have held the highly respected *berufundfamilie* quality label, awarded by the non-profit Hertie Foundation, since 2017 and can officially call themselves family-friendly employers. In Slovenia too, our locations in Šempeter pri Gorici, Ljubljana, and Maribor were awarded the Family-Friendly Enterprise certificate (*Družini prijazno podjetje*).



E-Mobility Night in Stuttgart

## Fair pay and voluntary benefits

With regard to working conditions, we meet the applicable statutory regulations at each of our locations as well as any rules connected with labor agreements. We ensure that our employees are remunerated fairly and in line with market conditions.

In addition to the benefits provided under the law and in labor agreements, we also offer notable supplementary benefits at many locations. For example, in Germany, employees—including trainees—can benefit from an attractive, company-funded pension scheme.

## Representation of employee interests

We are keen to maintain close communication with our employees and their representatives. We therefore regularly inform them about new developments and respect the right of our workforce to form employee representation bodies in accordance with statutory requirements. In most countries and locations, there are local employee representation bodies with whom we cooperate closely. In Germany, in addition to the location-based Works Councils, a Central Works Council represents the overriding interests of the workforce. The employee representatives from our European locations also send delegates to a European Works Council.

## Diversity, equal opportunity, and nondiscrimination

As an international Group, we employ people in all, and from all, continents. Diversity and equal opportunity are part of our identity and are firmly established in our corporate values.<sup>1</sup> We believe that all our employees should feel valued—irrespective of gender, gender identity, nationality, ethnic origin, religion or ideology, disability, age, and sexual orientation or identity.

### Supporting One MAHLE—with diversity & inclusion

We encourage diversity and inclusion in our workforce. Our goal is to create a working environment that reinforces team spirit and is free from prejudice. To help our employees break down unconscious patterns in their thinking and actions and deconstruct prejudices, we developed and carried out unconscious bias training. These courses have been a key component of our global training catalog since 2017 and are available to all employees.

By signing Germany's Diversity Charter in 2016, MAHLE also made an official Group-wide commitment to fostering diversity and implementing corresponding initiatives.<sup>2</sup> And, in 2018, MAHLE was one of the first organizations in Romania to sign the Romanian Diversity Charter and thus make a public commitment to furthering diversity and inclusion.

### Promotion of female executives

Independently of the legal requirements, we would like to further increase the proportion of women in managerial positions at MAHLE. We are achieving this through targeted succession planning, the advancement of female junior executives, and the expansion of our measures to support a healthy work-life balance. In addition, we organize numerous projects and initiatives, such as the targeted promotion of high-potential female employees and networking events. In 2018, for example, Female Leadership Conferences took place for the first time in Argentina, Brazil, Germany, Japan, and Slovenia. We also use International Women's Day as a global opportunity for action on the issue of equal rights for women in society and in working life. In 2018, more than ten countries engaged with the topic of Women at MAHLE through numerous activities.

In addition, we have set the following targets and deadlines for the advancement of women into management positions. In 2017, with regard to the proportion of women on the Supervisory Board of MAHLE GmbH, the Supervisory Board decided on the following target figures: "For the period until June 30, 2022, the target for the proportion of female employee representatives on the Supervisory Board is set at 20 percent. The target for shareholder representatives is also set at 20 percent." Also in 2017, the Supervisory Board passed the following resolution with regard to the proportion of women on the Management Board of MAHLE GmbH: "For the period from July 1, 2017, to June 30, 2022, a target figure for the proportion of women on the Management Board has been set in accordance with the current proportion of women. For the first two management levels below the Management Board, in 2017, the Management Board of MAHLE GmbH set target figures for MAHLE legal entities in Germany of 5 percent for the first management level and 10 percent for the second management level by June 30, 2022."

<sup>1</sup> [www.jobs.mahle.com/germany/en/about-us/our-values](http://www.jobs.mahle.com/germany/en/about-us/our-values)

<sup>2</sup> [www.charta-der-vielfalt.de/en](http://www.charta-der-vielfalt.de/en)



By setting the abovementioned targets, both the Supervisory Board and the Management Board aimed to do as much justice as possible to the German legislature's intention to increase the number of women in managerial positions. In doing so, the Supervisory Board and Management Board have taken into account the current proportion of women and the realistic change to be achieved by June 30, 2022.

### Eliminating pay gaps

To ensure a good working atmosphere and fair employment conditions, we are eager to close any gender pay gaps and prevent them from the outset in all areas of the business. As a company that is bound by labor agreements in many regions, we guarantee equal pay regardless of gender on this basis. Across the Group, evaluation and remuneration at managerial level are free of gender bias and based on technical criteria. In several countries, we are required by law to work to counter gender pay gaps. In Germany, for example, we prepare a corresponding report in accordance with the Transparency in Wage Structures Act (Entgelttransparenzgesetz).

### Upholding human rights

We believe that upholding human rights, combating child and forced labor, and respecting employees' freedom of association are self-evident principles. The MAHLE Business Code imposes an obligation on the company and its employees to comply with all the laws and regulations applicable in their respective working environments. In particular, this includes regulations designed to prevent forced and child labor. Any violations will be subject to



Female Leadership Forum in Brazil, 2018

disciplinary action under the applicable labor law. Policies are in place to identify risks both during the recruitment process and for the duration of the employment relationship. In particular, a candidate's age and the availability of important documents, such as a residence or work permit, are checked before employment commences.

MAHLE also has a strong employee representation structure. Employee representatives—with whom MAHLE maintains a constructive relationship—are also involved in ensuring human rights are upheld. Employees who witness violations against human rights have the option to report these violations without risking personal disadvantage via MAHLE's internal reporting channels, be that via their supervisors, the Corporate or Regional Compliance Office, the external ombudsperson, or by using the web-based Integrity Platform whistleblower system.



## Recruiting and developing employees

### Attracting talent to MAHLE—with a global HR marketing and recruitment concept

In 2018, we adapted our personnel marketing and sourcing tools across the Group in line with the dual strategy, and we realigned and harmonized our global recruitment concept. We are thereby able to identify the best candidates and attract them to MAHLE. Since the new recruitment concept was finalized, national Recruiting Centers have been set up in Stuttgart/Germany, Farmington Hills/USA, Tokyo/Japan, Rugby/United Kingdom, and Mogi Guaçu/Brazil. Over the course of 2019, additional Recruiting Centers in China, Romania, Poland, and Czechia also opened their doors.

Reaching out to specific groups of students and graduates at an early stage and creating a bond with them is an important part of our recruitment strategy. We currently have a relationship with 74 selected key universities in 18 countries worldwide with which we foster a dialog with professors and students through guest lectures, sponsorship activities, and other events. For example, an eTechathon was held at our location in Valencia/Spain. At this competition for up-and-coming electrical engineers, talented individuals based at our partner institution, Universitat Politècnica de València, were able to prove their expertise. This event was a great opportunity for us to get an impression of the participants' specialist qualifications, level of knowledge, and problem-solving skills.

### Developing skills for MAHLE—with an extensive range of training opportunities

Needs-based continuous development and building up qualifications through a targeted program for advanced training are key

components of our HR activities. The goal is to make our employees fit for the challenges ahead and offer them long-term prospects at MAHLE. That is why we are investing in selected measures and instruments that support continuous development as well as in vocational training and part-time study courses. Our wide range of training options covers over 300 subject areas, which are constantly reviewed with respect to the current requirements of the relevant departments.

To build up the skills that are increasingly required for the transformation within MAHLE, we launched the Transformation Roadmap qualification initiative. We want to use this training and qualification program to develop our employees, so that they can be assigned to work in our future business areas, such as e-mobility, going forward.

Alongside this initiative, we are exploring new ways of passing on knowledge to our employees through our Learning Meetup @MAHLE event series. This informal cross-functional format is also helping to support the transformation. Experts provide information about the latest future topics in a keynote presentation and then invite the audience to participate in a round of discussions. After the success of two such events in Stuttgart, each attended by over 100 participants, there are plans to offer this format in other countries too.

### Developing potential

We give our high-potential employees strong support throughout their development and prepare them extensively for their demanding roles. To do so, it is important to identify and foster talent at an early stage. With the reorganization of our development programs as part of the strategic Group initiative HR Boost!, we introduced the first Global Talent Circle in 2018. This is a worldwide initiative for the ongoing development of top executives and includes modules in Brazil, China, and Germany. Region-specific Regional Talent Circles and national Leadership Development



Learning Meetup @MAHLE on the subject of blockchain technology

### Employee training in Germany

	2018	2019
Employees trained	8,486	<b>7,183</b>
Staffing level as at December 31	11,972	<b>11,649</b>
Proportion of participating employees	71%	<b>62%</b>
Total training hours	121,369	<b>107,353</b>
Average participation (hours)	10.14	<b>9.22</b>

Programs also took place to further support our managers. These measures contribute toward the ongoing development of professional and personal skills, bolster the expansion of cross-functional and international networks, and represent an important cornerstone of systematic succession planning.

### Improving leadership quality

In periods of change, it is vital for a global company to have a modern leadership structure—in addition to a clear vision and highly motivated employees. In 2019, new leadership principles were defined as part of an Organizational Health Index project together with employees and managers around the world in order to implement a standardized leadership model. The purpose of these principles is to provide orientation for clearly focused leadership. The next step is to implement them globally and train our managers to apply them.

# Environmental management

*Like many companies in the automotive industry, production at MAHLE is energy- and material-intensive. Our manufacturing activities also generate various types of waste as well as emissions released into the air and water. Conserving water resources, reducing emissions and energy consumption, and minimizing the impact of our business activities on the environment are primary concerns for us—above and beyond the legal requirements. The fact that environmental topics are also important to our stakeholders is illustrated, among other things, by numerous and sometimes detailed inquiries and customer requirements we receive on this matter.*

## Principles of environmental management at MAHLE

A Group-wide Health, Safety, and Environment (HSE) guideline defines our basic rules for handling environmental topics. It requires environmental criteria to be taken into consideration during the development of new products and processes as well as calling for existing processes to reduce their environmental impact through concrete objectives, improvement programs, and action plans. Our goals include continuously improving our resource efficiency and—in connection with this—saving energy and avoiding waste in production.

Environmental management is coordinated by the HSE corporate function with support from the regional departments.

At MAHLE, programs with the aim of improving our environmental impact are set up and managed in collaboration with the business units and regions.

Each location also has an HSE team or at least one HSE officer. The local HSE representatives' responsibilities include recording key environmental figures on a monthly basis and providing support toward the implementation of the HSE targets. On the basis of the reporting, key performance indicators (KPIs) are aggregated across the Group and discussed with the Management Board during an annual management review. Measures are developed out of these discussions as part of a continuous improvement process.

Our environmental management system is based on internationally established standards. We are working to introduce environmental management systems in accordance with ISO 14001 and/or EMAS at all our locations. In 2019, over 80 percent of our approximately 160 locations were already certified in line with at least one of these standards. We have our safety at work and environmental management systems verified by external experts.

Our compliance with statutory environmental requirements is monitored by means of HSE audits, some of which are carried out by external partners.



In 2019, over 80 percent of our approximately 160 locations were certified in accordance with the environmental management systems ISO 14001 and/or EMAS.

## Energy and climate protection

As a producing company, the energy consumption at our locations and the associated greenhouse gas emissions are key elements of our impact on the environment. Particularly energy-intensive processes include smelting and casting in the Engine Systems and Components business unit as well as plastics processing methods, such as injection molding or deformation, in the Thermal Management business unit.

### Energy management at MAHLE

At our locations, we primarily use electricity, natural gas, liquefied petroleum gas, heating oil, diesel, and gasoline as sources of energy. The locations record their monthly consumption figures in a central database so that major deviations in monthly trends can be identified and investigated. This allows the locations to take swift action where required. The consumption figures are also analyzed in regular management reviews and appropriate actions identified. Annual consumption targets are defined at location level.

As at the end of 2019, eleven locations were certified in accordance with the ISO 50001 energy management system. In accordance with the standard, the system is supervised on site by an energy manager. With their support, we subject all energy-intensive processes to continuous testing to achieve optimal efficiency.

As one of our key priorities, we want to further develop the energy management systems at our locations in the future.

Our suppliers of production materials also carry out a number of processes that make intensive use of raw materials and energy, such as metal, plastics, or rubber manufacturing. We therefore favor suppliers who can provide evidence of an environmental management system that has been certified in accordance with ISO 14001. Further information about supply chain management at MAHLE can be found in the chapter “Responsibility in the supply chain.”

### Energy-saving concepts worldwide

Our plant in McConnelsville/USA is a model for just how much energy can be saved through systematic reduction activities. By implementing various measures, the location’s electricity consumption has been cut by around 13.5 percent in five years, which is the equivalent of a CO<sub>2</sub> saving of approximately 3,300 metric tons. One of the measures involved installing an automated shut-off system for the radial fans located on the cooling section of the strip annealing line. The plant has also set up a remote monitoring



**Award-winning:** The exemplary energy-saving concept implemented by our colleagues in McConnelsville/USA cut electricity consumption at the location by 13.5 percent—and earned them a prize.

and control system for its production machinery, enabling the energy-efficient operation of several furnaces thanks to programmed temperature reduction of the furnaces during idle times. The location received the Energy Efficiency Champion Award presented by electricity supplier AEP Ohio for the successful program.

Our location in St. Michael ob Bleiburg/ Austria is also taking a pioneering role in matters of energy efficiency and climate protection. For example, the plant purchases electricity from carbon-neutral renewable sources. To reduce its energy requirement, savings projects were carried out with a focus on buildings and infrastructure. These included optimizing hall lighting and the supply of cooling water in addition to measures aimed at raising awareness and changing behavior. As a result, the plant was able to decrease its annual energy requirement by around 7 gigawatt-hours.

Other MAHLE locations are also implementing energy-saving measures. For instance, our plant in Izmir/Turkey optimized its furnaces in 2018. This step alone has resulted in an annual saving of 747,000 kWh of natural gas, corresponding to a reduction of 22 percent.

By switching our plant lighting over to energy-saving LEDs, the combined annual electricity consumption of our plants in Mühlacker/Germany and Numazu/ Japan has decreased by around 360,000 kWh.

In 2019, we cut our relative energy consumption as measured against sales by a total of 5 percent in comparison with the previous year (see table: "Primary energy consumption 2018/19 by energy source").

### Primary energy consumption 2018/19 by energy source

Energy source	Unit	2018	2019	Change
Total electricity	MWh	2,340,444	<b>2,157,920</b>	-7.8%
of which nonrenewable	MWh	2,292,231	<b>2,114,736</b>	-7.7%
of which renewable	MWh	48,213	<b>43,183</b>	-10.4%
Heating oil	MWh	27,775	<b>27,529</b>	-0.9%
Natural gas	MWh	1,027,641	<b>900,380</b>	-12.4%
Diesel	MWh	19,552	<b>21,201</b>	8.4%
Gasoline	MWh	4,615	<b>4,757</b>	3.1%
Propane	MWh	30,238	<b>19,508</b>	-35.5%
Ammonia	MWh	554	<b>281</b>	-49.3%
District heat/steam	MWh	15,611	<b>17,142</b>	9.8%
Liquefied petroleum gas (LPG)	MWh	28,203	<b>31,411</b>	11.4%
<b>Total</b>	<b>MWh</b>	<b>3,494,632</b>	<b>3,180,128</b>	<b>-9.0%</b>
Relative energy consumption as measured against sales	MWh/ EUR million sales	278	<b>264</b>	-5.0%

<sup>1</sup> Scope 1 covers direct greenhouse gas emissions from combustion processes in the company's own facilities, operations, and vehicles, i.e., heating systems, engine test benches, and company vehicles, for example.

<sup>2</sup> Scope 2 encompasses the greenhouse gas emissions produced in the generation of purchased energy, such as electricity, district heating, and steam.

## Greenhouse gas emissions 2018/19\*

	Unit	2018	2019	Change
Scope 1	t CO <sub>2</sub> e	253,003	<b>217,081</b>	-14.2%
Scope 2	t CO <sub>2</sub> e	1,389,800	<b>1,233,054</b>	-11.3%
<b>Absolute total emissions</b>	<b>t CO<sub>2</sub>e</b>	<b>1,642,803</b>	<b>1,450,135</b>	<b>-11.7%</b>
Relative emissions as measured against sales	t CO <sub>2</sub> e/EUR million sales	130.6	<b>120.4</b>	-7.8%



Between 2018 and 2019, we succeeded in cutting our absolute greenhouse gas emissions by 11.7 percent and our relative emissions by 7.8 percent.

\* All greenhouse gas emissions are calculated as CO<sub>2</sub> equivalents in accordance with the Greenhouse Gas Protocol.

## Reducing greenhouse gas emissions

Greenhouse gas (GHG) emissions connected with our business activities are recorded in Scope 1<sup>1</sup> and Scope 2<sup>2</sup>. Scope 1 includes all direct emissions from the use of fuels as well as direct process emissions. Scope 2 comprises indirect emissions connected with the energy supply. We report our greenhouse gas emissions as part of the CDP (Carbon Disclosure Project). The organization gave our climate protection measures in 2018 and 2019 a grade of B, which was achieved by only the top 6 percent of all participating companies. We plan to take increasing account of emissions in the upstream and downstream value chain (Scope 3) in our data recording in the coming years.

When renovating and maintaining our buildings, we aim to make steady improvements to their energy efficiency. We are also working continuously to further reduce our direct CO<sub>2</sub> emissions. Examples of action taken include the reduction of compressed air leakages, the recovery of waste heat from processes, innovative cooling systems, and, as previously mentioned, the use of LED bulbs at our locations.

Not only did our absolute greenhouse gas emissions fall by 11.7 percent in 2019 in comparison with the previous year—which is a significant decline—but our relative emissions also dropped by 7.8 percent.

## Waste management, chemicals, and hazardous substances

In our production processes, and when using packaging, we take care to use materials efficiently. We always strive to minimize scrap and surplus with the help of the most state-of-the-art techniques available. Nevertheless, it is not possible to eliminate production waste entirely. We aim to recycle any waste that cannot be reused. Disposal without recovery of materials should only take place in exceptional cases. The waste pyramid on the following page illustrates the principles behind our waste management system.



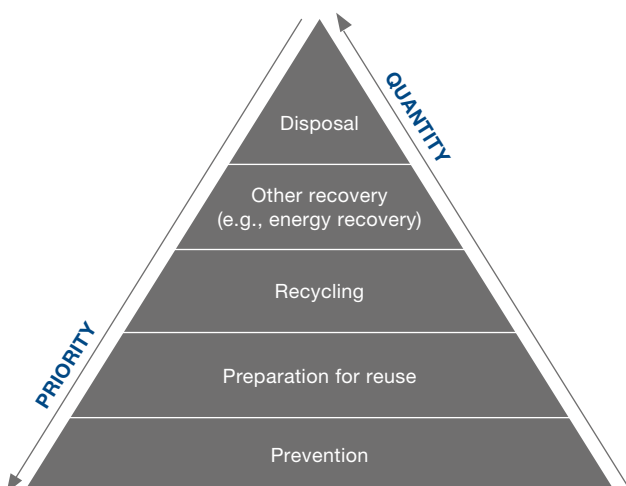
At Group level, we intend to make a further reduction in the volume of waste as measured against sales—by a total of 10 percent by 2022. To achieve this, targets are defined for the individual locations. In order to track the progress of these targets and ensure they are achieved, we are currently setting up a Group-wide reporting system to record waste figures and disposal costs at each location.

### Measures for waste prevention and recycling

During the period under review, a number of measures were introduced to reduce waste at MAHLE locations. For example, our Brazilian locations in Itajubá, São Bernardo do Campo, and Rafaela/Argentina collectively saved more than 90 metric tons of waste. We made the largest contribution in Rafaela by optimizing wastewater treatment, resulting in much smaller quantities of sludge.

### Keeping a close eye on hazardous substances

The use of hazardous materials in production and operations is subject to strict legal requirements. Compliance is monitored closely by the HSE officers at each location.



During the period under review, we expanded our chemicals management system in the individual regions and introduced computer-aided processes in order to document the use of hazardous materials and supplies in a central database. These processes allow us to record the chemicals in use in each region, monitor the status of local substitution activities (replacing hazardous substances with harmless materials), and exchange best practice examples between the locations.

At product level, constituents, including problematic substances, are recorded in the International Material Data System (see chapter “Sustainable supply chain”).

## Water and wastewater

We primarily require water as an auxiliary material or consumable—for example, for production processes such as cooling and metalworking. High-quality supplies must therefore be available in a sufficient quantity on site.

To improve the way we manage water consumption in the future, we are developing a Group-wide water reporting system. The water KPIs for each location are accessed globally via a database. We also report on our water usage to the Carbon Disclosure Project (CDP). In 2019, our water management was awarded grade C, on a scale from A to D. We have already defined water conservation objectives for individual locations or regions (see subsection “TERRA environmental program”). In the future, we aim to extend these objectives to cover additional locations.

In 2018 and 2019, we largely utilized groundwater (52 percent) or drew the resource from the public supply network (44 percent).

### Measures to reduce wastewater

Cleaned process water is reused for cooling valve blanks in the pressing process at our engine components plant in Macheng/China. This saves around 100,000 m<sup>3</sup> of water each year.



At our piston plant in Tsuruoka/Japan, we collect the cooling water arising during production and reuse it in further processing. This has allowed us to reduce water consumption by 30 percent.

Our Spanish locations in Montblanc and L'Espluga de Francolí have cut their total water consumption by more than 730,000 liters per year by implementing a demand-driven control system, optimizing the use of cooling water, and employing treatment measures.

Further action taken includes demand-based water withdrawal and the reuse of rainwater or treated process water (see subsection "TERRA environmental program").

## TERRA environmental program

The TERRA environmental sustainability program is a cross-functional, interdisciplinary initiative. Its objective is to improve the environmental balance sheet of our locations in South America. Measured against the number of products manufactured, our target is to reduce energy and water consumption as well as waste and wastewater by 2 percent, taking 2016 as a baseline. A wide range of measures have been implemented since the program began. An integrated and systematic approach, involving several specialist functions—including

HSE, Purchasing, Controlling, and Production—has proven to be particularly successful.

In Jaguariúna/Brazil, for example, we were able to reduce annual water consumption by more than 12,000 m<sup>3</sup> by reusing treated water, carrying out continuous leakage monitoring, and managing withdrawal on a demand basis.



### Water footprint by source

Water source	Unit	2018	2019	Proportion
Public supply network	m <sup>3</sup>	4,028,357	<b>3,653,522</b>	44%
Groundwater/well water	m <sup>3</sup>	3,976,515	<b>4,338,521</b>	52%
Surface water	m <sup>3</sup>	87,178	<b>91,350</b>	1%
Reused water	m <sup>3</sup>	—*	<b>21,413</b>	<1%
Groundwater withdrawn (processed)	m <sup>3</sup>	649,700	<b>168,494</b>	<1%
<b>Total water input</b>	<b>m<sup>3</sup></b>	<b>8,741,750</b>	<b>8,273,300</b>	<b>100%</b>

\* We often use water several times—for example, as rinsing and cooling water. These volumes of water were not yet recorded in our water footprint in 2018.

# Sustainable innovations

## Contribution to environmental and climate protection

To achieve the targets set out in the Paris Agreement, greenhouse gas emissions from transport must be dramatically reduced. In the European Union, to name just one important example, new motor vehicles may not emit more than 95 grams of carbon dioxide per kilometer on average starting in 2020/2021. In 2019, EU legislators adopted even more far-reaching reduction targets. As a result, emissions from the passenger car fleet must be cut by 37.5 percent by 2030 compared with 2021 and by 31 percent in the case of light commercial vehicles. An interim reduction target of 15 percent has been prescribed for both vehicle classes for 2025. These objectives come on top of strict-

er regulations governing pollutant emissions and new testing methods that are more in line with real-world conditions, referred to as Real Driving Emissions.

### Consistent implementation of the dual strategy

In 2019, we continued to pursue our dual strategy. On the one hand, we are working to further optimize the combustion engine—with the goal of making it even cleaner and more efficient. And on the other hand, we are consistently advancing the development of alternative drive concepts. These include hybrid and battery electric powertrains as well as fuel cell technologies and synthetic fuels, known as synfuels. The goal is demand-oriented mobility, where the right drive type is available for each specific application—with no restrictions regarding the technology.



In order to meet the Paris climate targets, it is necessary to further optimize the combustion engine, focus on alternative fuels, and advance e-mobility.



With our innovative solutions and our versatile product portfolio, we contribute to environmental and climate protection.

The MAHLE corporate start-up chargeBIG has developed an intelligent charge management system for users of long-stay parking, which can be integrated into the existing infrastructure at low cost and without protracted conversion work.

Today, MAHLE already generates more than 50 percent of its sales with products that are not directly linked to the combustion engine. Thanks to our expertise in the development and manufacture of electric motors as well as electronic and mechatronic systems, we are driving progress in the field of e-mobility. With our thermal management systems for batteries, we distribute key technologies successfully around the world.

#### **Air and thermal management for fuel cells**

In 2019, we worked within the scope of an interdisciplinary project to transfer research and development findings relating to conventional transport to fuel cell technology and to make thermal, air, and liquid management and filtration work together as a system. The long-term objective is to achieve cost parity

with the conventional combustion engine, especially for heavy vehicles used over long distances.

#### **Ultrafast charging and extended cruising ranges thanks to integrated thermal management**

Our newly developed battery management system with integrated thermal management increases the fast charging capability of electric vehicle batteries (beyond 3C). As a result, traction batteries can be designed to be significantly smaller, because they can be charged more quickly. This not only improves the carbon footprint of the electric vehicle but also lowers the demand for raw materials for battery production, which are becoming increasingly scarce worldwide.

Due to the absence of waste heat from an internal combustion engine, today's electric vehicles normally rely on direct resistive heating by electric heaters to heat cabin and traction battery in wintertime, which consumes a comparatively large amount of electricity. In cold temperatures, this can reduce the cruising range of an electric vehicle by as much as half. MAHLE has developed a compact system based on a heat pump (Integrated Thermal System—ITS), which reduces the loss of cruising range in the winter by up to 20 percent. It is easy to control and can be readily adapted to future vehicle architectures—at low cost.

### Fuel savings through wide-ranging hybridization

In view of the market development, we have designed a new, fully integrated, and modular hybrid drive that can be tailored to suit a wide range of vehicle applications. The MAHLE Modular Hybrid Powertrain is a fully integrated, plug-in hybrid drive incorporating a two- or three-cylinder turbocharged gasoline engine, which features our latest technologies and stands out on account of its remarkable efficiency. In comparison with established hybrid technologies, it offers several advantages: it is cheaper, more compact, and lighter.



High cost savings: the scalable and modular hybrid drive from MAHLE can power vehicles in the B-segment through to large SUVs.

### Potential of climate-friendly e-fuels

With regard to synthetic fuels, we have studied the influence of alternative fuels on filter media and engine components. In engine tests run in parallel, we determined the proportions up to which engine operation is possible without major adjustments to hardware or software if fuels outside the current standard are admixed. These tests revealed that a proportion of up to 20 percent could be used with the current technologies—delivering a correspondingly positive impact on the CO<sub>2</sub> emissions from the existing fleet.

### Engine filters containing responsibly sourced cellulose

We also take a responsible approach to our use of raw materials and consumables. Since 2016, eleven of our plants have received Chain of Custody certification from the international organization Forest Stewardship Council® (FSC®). We want other plants to achieve this certification in the future too. This will allow us to offer our customers cellulose air filter elements with cellulose that verifiably originates from responsibly managed forests.



The mark of responsible forestry



The flat membrane humidifier from MAHLE ensures that the intake air is kept reliably moist, which protects the fuel cell.

## Product responsibility

Malfunctions can have serious consequences in the case of safety-related components for automobiles. As agreed with our customers, we therefore assume responsibility for the defined function and safety of our products throughout their planned life cycle. This is something we take into consideration right from the product development stage. At our plants, we adhere to strict quality management. This means that our entire production of automotive products is certified and monitored in accordance with the guidelines of the International Automotive Task Force (IATF 16949). Our Annual Report 2019 contains further information about MAHLE's quality management system (from page 90).

The constituents we use are documented in the International Material Data System (IMDS), which also provides information about potentially hazardous substances. We regularly compare the constituents of our products with the stringent requirements of the EU REACH regulation and corresponding regulations in other countries in order to prevent the use of hazardous substances in our production as far as possible.

If, despite all these precautions, a product recall becomes necessary, MAHLE will work in close coordination with its customer and the relevant supervisory authorities. There are defined processes for this eventuality. An ad hoc reporting chain is used to inform the business unit's leadership and the Management Board.



For us, sustainability begins in the research and development phase.



As a leading development partner to the automotive industry, the MAHLE Group offers its customers complete systems from a product range that is unrivaled in breadth and depth.

## MAHLE as a reliable business partner

MAHLE is a vital link in the automotive industry's complex global value chain. This means we have responsibility for the upstream supply chain as well as the fulfillment of our own supply obligations toward our customers, who expect absolute reliability from us. Logistics in the automotive sector are closely synchronized, which means that supply disruptions can, in the worst-case scenario, lead to production stoppage for the customer. We counter this risk with contingency plans, which lay down our response to unforeseen events and ensure business continuity. We have also arranged an economically prudent degree of cover by means of insurance policies for the financial consequences of production losses, business interruptions—including due to natural disasters—and other liability issues.

Risk monitoring of our own supply chain takes place in close cooperation with our Purchasing function (see "Sustainable supply chain" chapter). This allows us to respond swiftly to extreme events and the potential failure of individual suppliers to deliver.

# Sustainability in the supply chain

*MAHLE is aware of its responsibility for its own supply chain. Our aim is to make it as sustainable as possible—in terms of the production of the materials used, their impact on people and the environment, as well as the working conditions at supplier companies.*

## Supplier management

If suppliers contracted by us violate social or environmental standards, this may be detrimental to MAHLE in the form of supply disruptions, quality and cost problems, or damage to our reputation, for example. Imposing sustainability Aspects in the supply chain also helps us avoid risk. Moreover, suppliers who operate sustainably often prove to be reliable and innovative partners in the long term. With increasingly stringent sustainability requirements also being placed on our supply chain management by customers and legislation, we are taking a proactive approach to this topic.

### The MAHLE supplier network

Our network comprises around 9,000 suppliers for our production materials alone. The most important supplier countries are Germany, China, and the United States. We procure raw materials such as metals and plastics as well as semi-finished products and prefabricated components—from simple plastic parts through complex mechatronic assemblies. Further materials include specialty chemicals and other materials and supplies.

### Requirements for MAHLE suppliers

Our Supplier Code of Conduct forms the basis for the responsible design of the supply chain.<sup>1</sup> Because of the relevance of the topic, the code was made even more specific in the year under review, 2019, focusing in particular on compliance with environmental and social standards, including most notably the International Labour Organization's core labor standards with respect to exploitative child labor. The suppliers undertake to enforce our guidelines in their own supply chain too.

The Supplier Code of Conduct contains guidelines in the following areas:

- Human rights: prohibition of forced or child labor, promotion of equal opportunities, protection from discrimination, freedom of association
- Working conditions: working hours and holiday, occupational health and safety
- Prohibition of corruption and bribery
- Fair and free competition
- Data protection and confidentiality
- Environmental and climate protection

We provide supplementary information on our procurement and supplier management in the MAHLE Supplier Guide-line, which also sets out our expectations and requirements for suppliers.

In view of the complexity of our supply chain, we have taken measures in recent years to harmonize our sustainability activities across the Group in this regard. This document includes additional guidelines for suppliers in selected business areas and regions—depending on legal regulations or specific customer requirements. For example, suppliers to our companies in the USA are required to report on the fulfillment of diversity criteria and the inclusion of minorities in their workforce.

### Supplier registration and assessment

When selecting suppliers, one factor we consider is their compliance with certified quality and environmental management standards. If quotations are equal in price, environmental criteria, such as ISO 14001 certification, are the deciding factor. In the future, we aim to introduce uniform supplier scorecards to facilitate the comprehensive assessment of suppliers on the basis of quantitative key performance indicators (KPIs). In addition to social factors, the criteria will include environment, hazardous substances, and carbon footprint.

When registering new suppliers, we inquire about their certifications via the supplier portal. These may include IATF 16949 and ISO 9001 (quality management) or ISO 14001 (environmental



management). We also assess them regularly after they are commissioned and require certificates to be renewed on a timely basis.

### Risk management in the supply chain

We have been using a software system for several years that allows us to monitor risks that may arise in the supply chain on the basis of 76 indicators in different areas. These include, for example, key financial figures, location indicators such as a country's corruption index, and key figures relating to environmental or social aspects. The continuous monitoring means our purchasers receive an early warning of any increased risk, enabling us to respond promptly with appropriate countermeasures. The risk management tool currently monitors around 8,000 of our active suppliers of production materials. This covers around 80 percent of our expenditure in this area.

In the event of a clear violation of our code of conduct, we urge the supplier to remedy the problem. As a last resort, we would remove the supplier from our pool. We report serious compliance violations to our Compliance Office for appropriate action. At the same time, both our suppliers and their suppliers can register violations of our code of conduct using an established reporting system (MAHLE Integrity Platform), which can be accessed via the MAHLE website.

### The particular challenge of conflict minerals

Conflict minerals are materials whose mining and sale fund armed conflicts in war zones or high-risk regions. The term refers to tin, tungsten, tantalum, and gold mined, for example, in disputed regions of the Democratic Republic of the Congo or neighboring countries. Companies that use these metals are urged to monitor and document their origin accurately to avoid indirectly supporting conflicts and related human rights abuses. In the United States, this obligation is laid down in the Dodd–Frank Act.

Our suppliers must provide us with confirmation of the conflict-free origin of the metals in our products. To this end, we use an internationally standardized form (the Conflict Minerals Reporting Template [CMRT]) and monitor the responses using special software. If we discover that a supplier is using conflict minerals, we work toward switching to conflict-free metals as quickly as possible.

### Largest supplier countries by purchasing volume 2019

Ranking	Supplier country	Volume
1	Germany	19%
2	China	18%
3	USA	17%
4	Japan	5%
5	Mexico	5%
6	Italy	4%
7	South Korea	4%
8	Brazil	3%
9	India	2%
10	Poland	2%
11	Czechia	2%
12	France	2%
13	Spain	2%
14	Switzerland	1%
15	South Africa	1%
16	Austria	1%



Compliance and sustainable action as defined in our Supplier Code of Conduct are prerequisites for inclusion in MAHLE's pool of suppliers.

<sup>1</sup> [www.mahle.com/en/purchasing/general-guidelines-for-suppliers](http://www.mahle.com/en/purchasing/general-guidelines-for-suppliers)

# Corporate citizenship

*We have been supporting numerous projects and initiatives in the vicinity of our locations around the world for many years. This voluntary engagement is particularly focused on the issues of social interaction, education, the environment, and the fight against poverty and disease. As well as supporting and funding certain long-standing initiatives and institutions, MAHLE regularly organizes additional campaigns to address acute problems.*

## Employee engagement

MAHLE employees at many of our locations worldwide are strongly committed to social issues. Projects are often launched on the initiative of our employees: people who work for us start the projects and drive them forward. Our corporate culture firmly advocates supporting society. In addition to the initiatives described below—which are just a selection of our activities—other projects are presented in our Annual Report<sup>1</sup> and on our website<sup>2</sup>. The Management Board would like to express its heartfelt thanks and appreciation to all the helpers for their tireless efforts.

### Helping the needy at many MAHLE locations

Bringing joy by making wishes come true for fellow citizens in need—this sums up the objective of the engagement by our employees around the world.

In 2018, for example, colleagues at our Polish locations again took part in the Noble Gift (Szlachetna Paczka) charity campaign, one of the largest and most well-known fund-raising programs in Poland. People in need are supplied with furniture, food, clothing, or even medical equipment. Our Polish colleagues also supported a children's home near the location in Ostrów Wielkopolski by donating sports and leisure equipment for two recreation rooms.

Social engagement is also a top priority in the United Kingdom. The Warwick Rotary Club's annual dragon boat race on the River Avon has become a real highlight. University graduates take part in the special race during their first year at MAHLE UK. The 2018 team had the task of recruiting people from all over the company to form a rowing team and collecting charitable donations for a local hospice as well as a children's hospital. Our team, MAHLELICIOUS, won all three races and successfully raised GBP 777 for this good cause.

In a major fund-raising campaign by our colleagues in the US in 2019, employees from eight MAHLE locations gave USD 50,000 to the charitable organization United Way. The plant in St. Johns also supports the local foundation Relay For Life of St. John's University every year and was able to help people in need again in 2019 by raising over USD 35,000.



At MAHLE, engagement with society and the assumption of social responsibility are integral elements of our corporate culture.



## Commitment to education

Preparing children and young people for the professional challenges of the future—this is the objective of the many MAHLE employees who are engaged in education projects.

In Durban/South Africa, for example, 15 primary school teams and 15 high school teams were given the chance to take part in a multidisciplinary challenge. The teams' task was to develop, make, and test a miniature race car powered by compressed air. To accomplish the task, the teams had to get to grips with physics, aerodynamics, design, manufacture, branding, marketing, and sponsorship—with the benefit of several months of support from MAHLE employees acting as mentors. Along the way, the school-children and students also gained valuable experience of leadership and teamwork. Plus, on a plant tour of the location itself, the teams obtained insights into the state-of-the-art production of vehicle parts.



Employees from our location in Balassagyarmat/Hungary help to construct a playground for local children.

In North America too, MAHLE is supporting the education of high school pupils to boost their interest in scientific and technical careers in particular. In 2018, our US plants in Morristown, Troy, Lockport, Amherst, and Farmington Hills as well as our plant in Tilbury/Canada took part in various robotics programs at local schools. Supported by mentors from MAHLE's workforce, 110 pupils in senior high school designed and built working robots in teams, while also solving every-

day engineering challenges under budgetary and time constraints.

Every year, the employees at our plant in Balassagyarmat/Hungary select three projects that merit support. In a centrally organized poll, each member of staff can cast their vote for a project of their choice. In 2019, a playground was built nearby and play equipment purchased in cooperation with the local community and with the assistance of ten MAHLE employees.

<sup>1</sup> [www.mahle.com/en/investor-relations/financial-reports](http://www.mahle.com/en/investor-relations/financial-reports)

<sup>2</sup> [www.mahle.com/en/about-mahle/corporate\\_citizenship](http://www.mahle.com/en/about-mahle/corporate_citizenship)

# The MAHLE Foundation



The MAHLE Foundation supports the FZD initiative, which cultivates high-quality, mixed-population varieties of grains that are adapted to today's environmental conditions.

*This nonprofit foundation holds 99.9 percent of the shares in the MAHLE Group but has no voting rights, as a matter of principle. The foundation uses the annual dividend from the Group's net income for the year to support social projects. This arrangement guarantees the Group's independence and ensures that the majority of the profit generated can be reinvested in the company.*

In line with the objectives stated in its Articles of Association, the foundation is particularly involved in health and nursing care, agriculture and food, education and upbringing, as well as art and culture. It primarily provides start-up financing but also supports a number of more long-term projects. One of its core projects has always been the construction and ongoing sponsorship of the Filderklinik in Filderstadt-Bonlanden near Stuttgart/Germany.

The MAHLE Foundation also supports around 150 projects and initiatives

throughout the world every year. A few examples are outlined below, while others are described in detail in the MAHLE Foundation's Annual Report.<sup>1</sup>

### **Sponsorship of the Filderklinik**

One of the MAHLE Foundation's funding priorities is health and nursing care, a category that supports numerous projects, including those involving anthroposophical medicine. In 2019, for example, the MAHLE Foundation continued to fund the work of the Filderklinik, which is a member of the Kompetenznetzwerk

Integrative Medizin. This competence network is an alliance of nine renowned clinics and hospitals in southern Germany and aims to promote an integrative approach to medicine. "The Kompetenznetzwerk acts as a bridge between conventional medicine and integrative medicine. The network is thus intensifying dialog among medical professionals and combines both approaches to a high standard," explains Jürgen Schweiß-Ertl, managing partner of the MAHLE Foundation.



## Agriculture and food

Agriculture and food has been one of the foundation's funding priorities for decades, with a particular commitment to promoting biodynamic farming. This includes seed breeding, especially the cultivation of varieties adapted to their respective growing regions. "We continued to support certain research projects in the field in 2018," says Jürgen Schweiß-Ertl.

For example, the Forschung & Züchtung Dottenfelderhof (Dottenfelderhof Research and Breeding, FZD) initiative has for many years been cultivating delicious and healthy vegetables and cereal crops that are adapted to today's environmental conditions. In one new approach, mixed-population varieties of high-quality grains are grown alongside isolated varieties. They are cultivated to be resistant to pests and weeds even without the use of pesticides, synthetic fertilizers, or genetic engineering. The initiative also uses breeding methods that have been handed down for centuries: selection and crossing. By doing so, the FZD preserves and exploits the genetic variety of cultivated plants. Through its research, it is making a major contribution to main-

taining the diversity, health, high quality, and productivity of cultivated plants in the future and thus playing an important role in providing people with a healthy and varied diet.

## Manege der Kulturen project

Young performers teach circus skills to refugee children and young people—that's the idea behind the Manege der Kulturen project, begun in 2015. The advantage of this scheme is that training together doesn't require a shared language, so potential barriers are overcome through nonverbal communication. Refugee children and adolescents practice acrobatic tricks, learn to juggle, and rediscover the joy and fun of movement. The project—inspired by Waldorf philosophy—places a particular focus on the young people's state of mind. With the support of caregivers who have been well trained in trauma-informed education, the young refugees are better able to process any suffering and terror they have experienced. In 2019, the project received support from the MAHLE Foundation and was awarded the ninth Stuttgart Citizens' Prize.



In the Manege der Kulturen project, child refugees and young performers practice acrobatics and juggling, enjoying the fun of movement.



Our company founders, Hermann and Dr. Ernst Mahle, associated their commercial success with social responsibility at an early stage. In 1964, they established the MAHLE Foundation.

<sup>1</sup> [www.mahle-stiftung.de/en/downloads](http://www.mahle-stiftung.de/en/downloads)

# Report profile

This report has been prepared in accordance with the Global Reporting Initiative (GRI) Standards: Core option. It relates to the whole MAHLE Group with its around 160 production locations, 16 research and development centers, and all associated business segments.

Holdings in which MAHLE is not the majority shareholder have not been taken into account.

The reporting period relates to the 2018 and 2019 business years—that is, the period between January 1, 2018, and December 31, 2019.

Due to the restrictions in place during the coronavirus pandemic, this Sustainability Report has been published in 2021 rather than in 2020, as originally scheduled. We plan to produce a Sustainability Report every two years, with publication of the report for the reporting period 2020 and 2021 anticipated in 2022.

# GRI content index

Disclosure	Page	Status	Omissions/explanations
GRI 102-1: Name of the organization	6	●	
GRI 102-2: Activities, brands, products, and services	7	●	
GRI 102-3: Location of headquarters	7–10	●	
GRI 102-4: Location of operations	9	●	
GRI 102-5: Ownership and legal form		●	AR 2019, pp. 74–75
GRI 102-6: Markets served	7–8	●	
GRI 102-7: Scale of the organization	6–7, 9	○	<p><b>a. iv.</b> No calculation of market capitalization was undertaken.</p> <p><b>a. v.</b> Due to the great number and diversity of the different product groups, no total quantity figure is available.</p>
GRI 102-8: Information on employees and other workers	9	○	<p>Our records do not currently allow us to provide a detailed breakdown of our workforce by:</p> <p><b>a.</b> Gender, <b>b.</b> Employment contract and region, <b>c.</b> Employment type and gender.</p> <p>We are working to improve the database. Further explanations:</p> <p><b>d.</b> Only an insignificant amount of our business activity is performed by workers who are not employees. <b>e.</b> No significant variations reported in Disclosures 102-8-a, 102-8-b, and 102-8-c.</p> <p><b>f.</b> No summary of the data available yet, therefore no explanation.</p>
GRI 102-9: Supply chain	42	●	
GRI 102-10: Significant changes to the organization and its supply chain	n/a	●	There were no significant changes to the organization during the reporting period.
GRI 102-11: Precautionary Principle or approach	10	●	
GRI 102-12: External initiatives	11, 44–47	●	
GRI 102-13: Membership of associations	11	●	

Disclosure	Page	Status	Omissions/explanations
GRI 102-14: Statement from senior decision-maker	4	●	
GRI 102-15: Key impacts, risks, and opportunities	10–11	●	
GRI 102-16: Values, principles, standards, and norms of behavior	10	●	
GRI 102-18: Governance structure	10	●	AR 2019, pp. 52–53
GRI 102-29: Identifying and managing economic, environmental, and social impacts	10	●	
GRI 102-31: Review of economic, environmental, and social topics	10	●	
GRI 102-40: List of stakeholder groups	n/a	○	a. A comprehensive stakeholder analysis was not carried out, but one is planned for the next report.
GRI 102-41: Collective bargaining agreements	27	●	a. Working conditions at MAHLE are regulated by collective bargaining agreements (where available). Percentage figures of employees covered by collective bargaining agreements are not currently available.
GRI 102-42: Identifying and selecting stakeholders	n/a	○	a. A comprehensive stakeholder analysis was not carried out, but one is planned for the next report.
GRI 102-43: Approach to stakeholder engagement	n/a	○	a. A comprehensive stakeholder analysis was not carried out, but one is planned for the next report.
GRI 102-44: Key topics and concerns raised	12–13	●	
GRI 102-45: Entities included in the consolidated financial statements	48	●	AR 2019, pp.120–125
GRI 102-46: Defining report content and topic Boundaries	13	●	
GRI 102-47: List of material topics	13	●	
GRI 102-48: Restatements of information	n/a	○	
GRI 102-49: Changes in reporting	n/a	○	The reporting period covers the years 2018 and 2019.

Disclosure	Page	Status	Omissions/explanations
GRI 102-50: Reporting period	n/a	●	The reporting period covers the years 2018 and 2019.
GRI 102-51: Date of most recent report	48	●	The most recent Sustainability Report covered the reporting years 2016 and 2017.
GRI 102-52: Reporting cycle	48	●	
GRI 102-53: Contact for questions regarding the report	63	●	
GRI 102-54: Claims of reporting in accordance with the GRI Standards	48	●	
GRI 102-55: GRI content index	49–62	●	
GRI 102-56: External assurance	n/a	●	The Sustainability Report has not been assured.

## Topic-specific Standards

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Market Presence</b>				
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	27	①	
<b>Procurement Practices</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	42	①	
	103-2 The management approach and its components	42–43	①	
	103-3 Evaluation of the management approach	42–43	①	
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	42	●	

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Anticorruption</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	10, 16	●	All major, relevant sustainability topics are organized by means of an integrated management approach for the purpose of identifying and avoiding risks. The components of the approach, including policies, goals, responsibilities, resources, and feedback mechanisms, are regularly internally reviewed to ensure their effectiveness. Modifications and optimizations are undertaken in line with current requirements. If there is an additional approach for a specific topic, this is explicitly stated in the applicable chapter. For ease of reading, we have otherwise not given additional references in the copy/"GRI content index."
	103-2 The management approach and its components	10, 16	●	
	103-3 Evaluation of the management approach	10	●	
GRI 205: Anticorruption 2016	205-1 Operations assessed for risks related to corruption	18–19	⓪	Only absolute figures are given with respect to <b>a.</b> , <b>b.</b> , <b>d.</b> , and <b>e.</b> We do not currently record information about training participants by employee category/region, only by the categorization shown. Regarding <b>c.</b> , we inform all our suppliers about MAHLE's binding Supplier Code of Conduct. Other business partners have not yet been addressed separately.
	205-2 Communication and training about anticorruption policies and procedures	20, 43	●	
	205-3 Confirmed incidents of corruption and actions taken		⓪	
<b>Anticompetitive Behavior</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	10, 16	●	
	103-2 The management approach and its components	10, 16	●	
	103-3 Evaluation of the management approach	10, 16	●	
GRI 206: Anticompetitive Behavior	206-1 Legal actions for anticompetitive behavior, antitrust, and monopoly practices	18–20	⓪	Restrictions due to duty of confidentiality. Numbers and details relating to reported incidents are not published for reasons of confidentiality. AR 2019, p. 94



GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Materials</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	35–36	●	We are currently setting up Group-wide reporting for the recording of waste and disposal costs at each location.
	103-2 The management approach and its components	32	●	
	103-3 Evaluation of the management approach		○	
<b>Energy</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	33	●	
	103-2 The management approach and its components	32	●	
	103-3 Evaluation of the management approach	33–34	●	
GRI 302: Energy	302-1 Energy consumption within the organization	34	●	Our records do not currently allow us to break down energy consumption figures by: <b>b.</b> Fuel type <b>c. ii./iii.</b> Heating/cooling consumption <b>d.</b> Energy sold <b>f.</b> No specific standards/tools were used <b>g.</b> No conversion factors were used
GRI 302: Energy	302-3 Energy intensity	33–34	●	<b>a.</b> See table: “Primary energy consumption 2018/19 by energy source” <b>b.</b> The denominator is sales <b>c.</b> All types of energy included <b>d.</b> Within the organization
	302-4 Reduction of energy consumption	33–34	●	<b>c.</b> Base year is 2018, database available <b>d.</b> Calculation methods as per GHG Protocol

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Water</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	36–37	●	The database for water management at Group level is still in the consolidation phase. No targets have yet been defined.
	103-2 The management approach and its components	32	●	
	103-3 Evaluation of the management approach	36–37	●	
GRI 303: Water	303-1 Water withdrawal by source	36–37	●	The database for water management at Group level is still in the consolidation phase. In the future, we plan to report key water management figures.
	303-3 Water recycled and reused	36–37	●	
<b>Emissions</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	34–35	●	
	103-2 The management approach and its components	32	●	
	103-3 Evaluation of the management approach	34–35	●	

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Emissions</b>				
GRI 305: Emissionen	305-1 Direct (Scope 1) GHG emissions	35	●	<b>e.</b> Main sources of emission factors: DEFRA 2017 and EN 16258. GWP rates correspond to IPCC Fifth Assessment Report, details on request.
	305-2 Energy indirect (Scope 2) GHG emissions	35		
	305-3 Other indirect (Scope 3) GHG emissions		○	Information not available. We are investigating whether we can extend our data recording in the coming years to include emissions in the upstream and downstream value chain (Scope 3).
	305-4 GHG emissions intensity	35	●	<b>a.</b> See table: “Greenhouse gas emissions 2018/2019” <b>b.</b> The denominator is sales <b>c.</b> Scope 1 and Scope 2 included <b>d.</b> All types of greenhouse gases included, given as CO <sub>2</sub> equivalents
	305-5 Reduction of GHG emissions	35	●	<b>a.</b> See table: “Greenhouse gas emissions 2018/2019” <b>b.</b> All types of greenhouse gases included, given as CO <sub>2</sub> equivalents <b>c.</b> Base year is 2016, database available <b>d.</b> Scope 1 and Scope 2 included <b>e.</b> Calculation method as per GHG Protocol
	305-6 Emissions of ozone-depleting substances (ODS)	n/a	○	We do not yet aggregate information on air pollutants, such as NO <sub>x</sub> (nitrogen oxides), SO <sub>x</sub> (sulfur oxides), or ODS (ozone-depleting substances), across the Group.
	305-7 Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	n/a	○	

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Effluents and Waste</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	35–36	●	
	103-2 The management approach and its components	32	●	
	103-3 Evaluation of the management approach	36–37	●	
GRI 306: Effluents and Waste	306-1 Water discharge by quality and destination	35–36	ⓘ	<b>a. i.–iii.</b> The database for water management at Group level is still in the consolidation phase. The available water KPIs for each location are currently examined globally.
<b>Environmental Compliance</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	16–17	●	
	103-2 The management approach and its components	16–17	●	
	103-3 Evaluation of the management approach	16–17	●	
GRI 307: Environmental Compliance	307-1 Noncompliance with environmental laws and regulations	18	ⓘ	Restrictions due to duty of confidentiality <b>b.</b> We ensure compliance with legal requirements by means of the continued development of internal and external HSE audits (including ISO 14001, EMAS). In 2019, over 80 percent of our approximately 160 locations were already certified in line with at least one of these standards.

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Supplier Environmental Assessment</b>			<b>!</b>	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	42–43	●	
	103-2 The management approach and its components	42–43	●	
	103-3 Evaluation of the management approach	42–43	●	
GRI 308: Supplier Environmental Assessment	308-1 New suppliers that were screened using environmental criteria	42	ⓘ	The environmental certifications of all new suppliers of production materials are checked.
<b>Employment</b>			<b>!</b>	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	22	●	
	103-2 The management approach and its components	22	●	
	103-3 Evaluation of the management approach	22–23	●	
GRI 401: Employment	401-1 New employee hires and employee turnover	9	ⓘ	Certain information is not available. We do not currently record new employee hires and employee turnover by gender, age group, and region. We plan to record the corresponding data for the next reporting period.
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	27	ⓘ	<b>i.–iii., v., and vii.</b> We are in the process of creating a Group-wide database to cover these points. <b>iv.</b> We offer supplementary benefits at many locations, such as a company-funded pension scheme in Germany. <b>v.</b> See 401-3.
	401-3 Parental leave	27	ⓘ	<b>a.</b> In alignment with legal requirements. <b>b.–e.</b> We are in the process of creating a Group-wide database. Information is currently only available for Germany.

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Labor–Management Relations</b>				
GRI 402: Labor–Management Relations	402-1 Minimum notice periods regarding operational changes	27	●	A standard answer cannot be given, depends on the specific circumstances at the locations.
<b>Occupational Health and Safety</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	22–23	●	
	103-2 The management approach and its components	22–23	●	
	103-3 Evaluation of the management approach	22–23	●	
GRI 403: Occupational Health and Safety	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	23	●	<b>a.</b> and <b>b.</b> Types of injury are not yet documented in a standardized form. We are working on a centralized method of data acquisition. <b>a., b., ii.</b> Breakdown by gender has not been documented.
	403-4 Health and safety topics covered in formal agreements with trade unions	22	●	
<b>Training and Education</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	22	●	
	103-2 The management approach and its components	26	●	
	103-3 Evaluation of the management approach	22	●	

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Training and Education</b>				
GRI 404: Training and Education	404-1 Average hours of training per year per employee	31	●	Data only available for Germany, not broken down by gender and employee category
	404-2 Programs for upgrading employee skills and transition assistance programs	30–31	●	<b>b.</b> No programs for transition assistance or career endings yet defined
	404-3 Percentage of employees receiving regular performance and career development reviews	30–31	●	100% coverage
<b>Diversity and Equal Opportunity</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	28	●	
	103-2 The management approach and its components	28–29	●	
	103-3 Evaluation of the management approach	28–29	●	
GRI 405: Diversity and Equal Opportunity	405-1 Diversity of governance bodies and employees	28	●	<b>a. ii. and iii.</b> Data not yet recorded. <b>b. ii. and iii.</b> Data not yet recorded.
<b>Nondiscrimination</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	28–29	●	
	103-2 The management approach and its components	28–29	●	
	103-3 Evaluation of the management approach	28–29	●	
GRI 406: Nondiscrimination	406-1 Incidents of discrimination and corrective actions taken		○	No data available about incidents of discrimination.



GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Freedom of Association and Collective Bargaining</b>				
GRI 407: Freedom of Association and Collective Bargaining	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	27	●	a. No breakdown by operations, suppliers, and countries is available.
<b>Human Rights Assessment</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	28–29	●	
	103-2 The management approach and its components	28–29	●	
	103-3 Evaluation of the management approach	29	●	
	412-2 Employee training on human rights policies or procedures	31	●	No precise data on participation in training is available.
<b>Supplier Social Assessment</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	42–43	●	
	103-2 The management approach and its components	42–43	●	
	103-3 Evaluation of the management approach	42–43	●	
GRI 414: Supplier Social Assessment	414-1 New suppliers that were screened using social criteria	42–43	●	All new suppliers undertake to comply with MAHLE's Supplier Code of Conduct. We do not currently screen suppliers against social criteria.
	414-2 Negative social impacts in the supply chain and actions taken	42–43	●	No awareness of negative impacts in the reporting period.

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Public Policy</b>				
GRI 415: Public Policy	415-1 Political contributions	19	●	
<b>Customer Health and Safety</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	16	●	
	103-2 The management approach and its components	41	●	
	103-3 Evaluation of the management approach		●	
GRI 416: Customer Health and Safety	416-1 Assessment of the health and safety impacts of product and service categories	41	●	<b>a.</b> Percentage of product and service categories is not explicitly recorded at present. See Annual Report 2018/2019 for overarching information. The constituents we use are documented in the International Material Data System (IMDS). AR 2019, pp. 90–91
	416-2 Incidents of noncompliance concerning the health and safety impacts of products and services	41	●	
<b>Customer Privacy</b>				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	16	●	
	103-2 The management approach and its components	21		
	103-3 Evaluation of the management approach	21		
GRI 418: Customer Privacy	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	21	●	<b>a., b.:</b> Restrictions due to duty of confidentiality

GRI Standard	Disclosure	Page	Status	Omissions/explanations
<b>Socioeconomic Compliance</b>			!	
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	16–19	●	
	103-2 The management approach and its components	16	●	
	103-3 Evaluation of the management approach	18	●	
GRI 419: Socioeconomic Compliance	419-1 Noncompliance with laws and regulations in the social and economic area		ⓘ	Restrictions due to duty of confidentiality AR 2018/2019, p. 94

## Imprint/contact information

### Published by

MAHLE GmbH  
Pragstraße 26–46  
70376 Stuttgart/Germany  
Phone +49 711-501-0  
[www.mahle.com](http://www.mahle.com)

### Contact

MAHLE International GmbH  
Kathrin Apel, Head of Corporate Occupational Health,  
Safety, and Environment Management (CO)  
Pragstraße 26–46  
70376 Stuttgart/Germany  
[nachhaltigkeit@mahle.com](mailto:nachhaltigkeit@mahle.com)

### Graphic design and layout

freelance project gmbh  
Reinsburgstraße 96 A  
70197 Stuttgart/Germany  
[www.freelance-project.de](http://www.freelance-project.de)

### Translation

Target Languages GmbH  
Waldhofer Straße 102  
69123 Heidelberg/Germany  
[www.target-languages.com](http://www.target-languages.com)

### Picture credits

Tinnakorn — [stock.adobe.com](https://stock.adobe.com) (cover),  
MAHLE Foundation (pp. 46, 47), MAHLE Archive

MAHLE International GmbH  
Pragstraße 26-46  
70376 Stuttgart/Germany  
Phone: +49 711 501-0

[www.mahle.com](http://www.mahle.com)

00007855EN.04/21