Sustainability Report 2019
Responsibility for tomorrow
The Sustainability Report 2019 also includes the combined separate non-financial report (GNFK) of the Schaeffler Group. Schaeffler thereby discloses the required non-financial information in accordance with the CSR Directive Implementation Act Sections 289, 315 German Commercial Code. GNFK-relevant content is marked in the report with the following symbols: 📊, 🗂️.
# Key figures on sustainability

## Strategy and management

<table>
<thead>
<tr>
<th>Year</th>
<th>Total revenue (EUR millions)</th>
<th>Confirmed cases of human rights violations</th>
<th>Coverage rate of certified smelters in the supply chain</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>14,021</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>14,241</td>
<td>0</td>
<td>100%</td>
</tr>
<tr>
<td>2019</td>
<td>14,427</td>
<td>0</td>
<td>100%</td>
</tr>
</tbody>
</table>

## Customers and products

<table>
<thead>
<tr>
<th>Year</th>
<th>Awards for customer satisfaction/product quality</th>
<th>R&amp;D employees</th>
<th>Coverage rate of quality management systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>58</td>
<td>7,784</td>
<td>100%</td>
</tr>
<tr>
<td>2018</td>
<td>65</td>
<td>7,784</td>
<td>100%</td>
</tr>
<tr>
<td>2019</td>
<td>66</td>
<td>7,784</td>
<td>100%</td>
</tr>
</tbody>
</table>

## Environment and energy

<table>
<thead>
<tr>
<th>Year</th>
<th>Greenhouse gas emissions (tCO₂)</th>
<th>Total energy consumption (GWh)</th>
<th>Coverage rate for ISO 50001 certification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>1,008,985</td>
<td>3,290</td>
<td>98.0%</td>
</tr>
<tr>
<td>2018</td>
<td>1,045,627</td>
<td>3,290</td>
<td>98.0%</td>
</tr>
<tr>
<td>2019</td>
<td>1,026,057</td>
<td>3,290</td>
<td>98.0%</td>
</tr>
</tbody>
</table>

## Employees and society

<table>
<thead>
<tr>
<th>Year</th>
<th>Accident rate (LTIR)</th>
<th>Number of employees, total</th>
<th>Coverage rate of OHSAS 18001/ISO 45001</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>7.1</td>
<td>87,748</td>
<td>99.0%</td>
</tr>
<tr>
<td>2018</td>
<td>6.2</td>
<td>87,748</td>
<td>99.0%</td>
</tr>
<tr>
<td>2019</td>
<td>5.2</td>
<td>87,748</td>
<td>99.0%</td>
</tr>
</tbody>
</table>

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1) Contraventions of the prohibition on forced labor and child labor and cases of discrimination by origin, skin color, or gender. 2) Survey period from March to February of the following year. 3) Risk areas as defined in the RCOI. 4) The values reflect the workforce headcount at the end of the year. 5) According to the scope of the Schaeffler Group’s management manual and valid certification rules. 6) The calculation of greenhouse gas emissions is based on the emission factors of the VDA (2017) and the Probas database of the German Federal Environmental Agency. Emission sources covered: Scope 1 (natural gas, fuel oil, propane) and Scope 2 (electricity, district heating). 7) As from 2018: Total of Scope 1 and Scope 2 (market-based). 8) Energy sources included: Electricity, natural gas, district heating, propane, fuel oil, without the amount of electricity produced by the gas-powered CHP. 9) Relating to employees on the production sites. 10) Measurement: Lost Time Injury Rate, LTIR = occupational accidents from one lost day per 1 million hours worked. Employees incl. temporary staff, apprentices, and trainees.

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A complete overview of all key figures on sustainability is shown on page 47 et seq.
MESSAGE FROM THE SHAREHOLDERS
As a global technology company, the Schaeffler Group is actively shaping the far-reaching transformation of mobility and energy systems. Together with its customers, the company is using the potential for new solutions ranging from climate-friendly power generation, alternative drives, and intelligent repair solutions to new mobility concepts.

In order to shape the transformation successfully, it is necessary to focus on long-term values and objectives. The Schaeffler values “Sustainable”, “Innovative”, “Excellent”, and “Passionate” are now more than ever a central compass that points the way. These values sum up what characterizes the Schaeffler Group and makes it successful: the willingness and ability to face challenges, to constantly explore new ideas, to strive for the highest quality, and to pursue long-term goals. As family shareholders, we stand for these values and live out our responsibility for the sustainable orientation of the Schaeffler Group.

Schaeffler’s innovative strength is the key to actively and successfully shaping the upcoming transformation. More than 2,000 initial patent applications in the last year portray the outstanding inventiveness of the Schaeffler Group. Today, the Schaeffler Group is able to outline the development and the entire industrialization of the construction of electrical motors within the company in the field of alternative drives and new mobility concepts. This is a good basis for the future that has also gained external recognition. Last year, the German Federal Ministry of Transport and Digital Infrastructure awarded the Schaeffler Group the German Mobility Prize. It honored the electrically powered Schaeffler Mover, an innovative solution for transporting people and goods in cities. We can be justifiably proud of this.

To ensure that the Schaeffler Group continues to be successful in the future, the company places the highest demands on itself and its business partners. This includes ensuring that the Schaeffler Group’s values and ethical principles are incorporated throughout the company and along the entire value chain. This is based on the globally valid Schaeffler Group’s Corporate Code of Conduct.

We are convinced that the Schaeffler Group, together with its partners, is helping to manage the current transformation and find solutions that offer true added value for our society.
Sustainability has been deeply rooted in the values and actions of Schaeffler for many years. At the same time, the perception of the public on the importance of sustainability has significantly increased. We have reviewed and relaunched our sustainability strategy in the current financial year on this basis. I am pleased to present our Sustainability Report 2019 on behalf of my colleagues of the Executive Board. The report should give you an insight of our understanding of sustainability at Schaeffler, how we make it measurable, and what targets we have set ourselves.

Based on the requirements of our relevant stakeholders obtained from a worldwide stakeholder survey, we have restructured our sustainability management. Additionally, we have reconsidered our own standards for a viable sustainability management, and – where necessary – have developed it self-critically, open-minded, and future-oriented. This includes the establishment of a Sustainability Committee consisting of the members of the Executive Board and selected leaders of the first-level management. The committee has met once a quarter since mid-2019 to decide on sustainability topics.

One of the most important decisions made by the Sustainability Committee concerned the realignment of our goals. We have replaced targets that are not coherent with this realignment with new targets for energy efficiency, renewable energies, accident prevention, and sustainable supply chain. As an example, we will implement measures to increase cumulated annual energy efficiency by 100 gigawatt hours until 2024 and to obtain 100% purchased power from renewable sources. We have also set ourselves the goal of reducing the number of accidents involving lost time by an average of 10 percent per year by 2024.

The taken measures are already having an impact. This is reflected in the improvement in our sustainability ratings. One example is the CDP climate rating, where we have significantly improved our score from “D” to a solid “B-”. For 2021, we have set ourselves the goal of achieving a score of A-.

Sustainability has highest priority at Schaeffler. Sustainability targets were integrated into the variable remuneration of upper management for the first time in 2020. This is an important step towards anchoring the issue of sustainability even more firmly and encouraging our senior executives to make sustainability a natural part of their management work and the corporate culture at Schaeffler. My colleagues on the Executive Board and I are firmly convinced that we are on the right track with the realignment of our sustainability strategy in 2019. We will continue along this path consistently. We would like to take this opportunity to sincerely thank all employees who are committed to this path, as well as to all partners who contribute to it. I hope you find reading our Sustainability Report 2019 informative and interesting.
Shaping change

Global challenges such as climate change are determining how the mobility and energy sectors are being transformed. Schaeffler, together with its partners, is creating new products and solutions to meet these challenges, ranging from climate-friendly power generation to alternative drives and intelligent repair solutions to new mobility concepts. In doing so, Schaeffler keeps an eye on all future-oriented technologies.
As a partner to the automotive industry, the Automotive OEM division is meeting the challenge of significantly reducing CO₂ emissions in the mobility sector. Schaeffler sees the current change as an opportunity to use its technologies to make the powertrain and chassis more climate-friendly – and to transform mobility together with its customers. At the same time, the company remains open to new technologies and focuses, among other things, on electrifying the powertrain and technologies for fuel cells.

Thinking ahead on e-mobility

Future consumption and emission targets can be achieved by electrifying the powertrain. With its understanding of systems, Schaeffler offers the right solutions for every degree of electrification – for example, both for hybrid powertrains and for purely electric axle drives in the power classes from 15 to over 300 kW.
Progressive urbanization is also influencing the mobility of tomorrow. Electric, agile, autonomous, and networked – Schaeffler is shaping this megatrend with innovative mobility concepts like the Schaeffler Mover. Various superstructures can be flexibly mounted on the Schaeffler Mover vehicle platform, from robo-taxis to autonomous delivery vehicles. The Mover development platform, awarded the German Mobility Prize by the German Federal Ministry of Transport and Digital Infrastructure in 2019, uses numerous new Schaeffler technologies such as the Space Drive drive-by-wire technology, the key technology for autonomous and networked driving that is being further developed for large-scale production. Another highlight is the Schaeffler Intelligent Corner Modules. In the four wheel modules, all drive and chassis components including the electric wheel hub motor are combined in one space-saving unit.

Using the potential of fuel cells

With the goal of maximum sustainability and CO₂ neutrality, Schaeffler, as an automotive and industrial supplier, is designing mobility and the associated energy chain. The company is investing in the enormous future potential of green hydrogen along the entire value chain. In addition to all-electric vehicles, fuel cell technologies can also contribute to reducing emissions in the transport sector. The inconsistent availability of renewable energy emphasizes the need for new energy sources and Schaeffler has recognized the great potential of hydrogen as one energy source of the future and developed key components for fuel cells and fuel cell stacks called metallic bipolar plates. To help advance the development of this hydrogen technology, Schaeffler founded the “Bavarian Hydrogen Alliance” with the Free State of Bavaria and other alliance partners in 2019. The goal is to combine climate protection, energy, mobility, and technological innovation and to utilize the potential of hydrogen technology as an energy source of the future.
Intelligent repair solutions

The transformation is accelerated by the CO₂ limits set by the European Union for new passenger-car registrations that are mandatory for the first time in 2020. The classic combination of combustion engine and transmission is increasingly being supplemented by hybrid and electric components. The advanced technical complexity of these vehicles also requires innovative repair solutions and spare parts with which the Automotive Aftermarket division offers resource-saving solutions for the spare parts market.

Climate-friendly repairs

Technologically, Schaeffler is excellently positioned for hybrid vehicle generations with its original equipment expertise. The 48-volt mild-hybrid technology is key to developing repair solutions: For the first time in automotive history, this technology transforms the engine’s auxiliary drive from an energy consumer to an energy supplier. With the INA FEAD KIT, Schaeffler is the first supplier in the spare parts market to offer a repair solution for the front end auxiliary drive (FEAD) in hybrid vehicles with 48 volts, which enables stricter CO₂ regulations to be met.

Energy-saving repair solutions for hybrid vehicles are a central component for a holistic transformation of mobility

The INA FEAD KIT enables efficient repair by replacing all affected components in a single work step.

7% potentially saved CO₂ emissions

Here the starter and alternator are replaced by a belt alternator starter. In combination with a 48-volt battery, the vehicle can “coast” with the combustion engine completely switched off, which saves up to 7% of CO₂ emissions in road traffic.
Driving the energy transition

A holistic transformation of mobility also requires a transformation of the energy supply. After all, not only industrial machinery, but also increasingly electric vehicles all over the world need to be supplied with electricity – and this should ideally come from renewable sources. At the same time, it is important to use our resources sparingly and make energy consumption as efficient as possible. The Industrial division supplies the necessary components for this.

Durable wind turbines

Against the backdrop of major climate challenges, the global demand for renewable energies is growing. As a partner of the energy industry, Schaeffler supports the expansion of renewable energy production. From bearing solutions for wind turbines to solutions for the solar and hydropower sectors, Schaeffler offers its customers a comprehensive product portfolio to make the production of renewable energy more economical. An example is the asymmetrical spherical roller bearings for wind turbines. The bearing of the rotor shaft is of central importance because all of the forces generated by the wind have a direct effect on that bearing. The design of the new spherical roller bearings, which has been specially optimized for rotor bearing arrangements, increases the nominal service life by about 70% compared to conventional spherical roller bearings. This way, Schaeffler helps to make wind turbines more reliable and to reduce the cost of renewable energy production.

The portfolio now also includes predictive monitoring for variable speed drives in wind turbines. Together with a partner, Schaeffler has developed a compact Industry 4.0 solution. It combines different measuring systems with a new condition-and-torque monitoring system. The system not only identifies and limits peak loads and their frequency, but it also allows early detection of incipient damage. Repairs can therefore be planned in advance for windless days.
Efficient engines

Rolling bearings in aviation must operate with maximum reliability even under the most critical operating conditions, while at the same time keeping fuel consumption as low as possible. Schaeffler Aerospace fulfills these requirements with its new engine bearings. Together with a cooperation partner, the company has developed ball bearings that exceed the speed parameter of four million millimeters per minute for the first time. Because the bearings require only small quantities of cooling oil, there is a considerable increase in mechanical and thermal efficiency. The bearings represent a significant technological leap forward in the development of more efficient engines and have the potential to reduce the consumption of the global passenger aircraft fleet by up to 1.2 million tons of fuel annually.
The Schaeffler Group is a publicly listed family business with a strong foundation in its values that shapes its entrepreneurial activity and corporate culture. Economic success, long-term orientation, and awareness of the social and environmental concerns of its own business are traditionally closely interlinked at Schaeffler. The corporate values are the compass that Schaeffler, together with its stakeholders, uses to set the course for the future and implement the strategy “Mobility for tomorrow”. To this end, the Schaeffler Group has established management structures and processes with the aim of ensuring that all business activities along the entire value chain are legally compliant and meet high ethical standards.
1.1 Company profile and business model

**AT A GLANCE**

- Schaeffler offers innovative product solutions in the industrial, automotive, and aftermarket sectors
- Around 87,700 employees work together across divisions and countries at around 170 locations worldwide

**Organizational structure and business activities**

The Schaeffler Group (also referred to as “Schaeffler” below) is a global automotive and industrial supplier. Employing a workforce of approximately 87,700, the company develops and manufactures high-precision components and systems in engine, transmission, and chassis applications, as well as rolling and plain bearing solutions for a large number of industrial applications. These include innovative and sustainable technologies both for vehicles with only an internal combustion engine and for hybrid and electric vehicles, as well as components and systems for rotary and linear movements, and services, maintenance products, and monitoring systems for a large number of industrial applications. Additionally, the company provides repair solutions in original-equipment quality for the automotive spare parts market worldwide.

The Schaeffler Group is characterized by a three-dimensional organizational and leadership structure which differentiates between divisions, functions, and regions.

**Schaeffler Group organizational structure**

<table>
<thead>
<tr>
<th>Divisions</th>
<th>Functions</th>
<th>Regions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive OEM</td>
<td>CEO Functions</td>
<td>Europe</td>
</tr>
<tr>
<td>Automotive Aftermarket</td>
<td>R &amp; D</td>
<td>Americas</td>
</tr>
<tr>
<td>Industrial</td>
<td>Operations, SCM, Purchasing</td>
<td>Greater China</td>
</tr>
<tr>
<td></td>
<td>Finance &amp; IT</td>
<td>Asia/Pacific</td>
</tr>
</tbody>
</table>

Simplified presentation for illustration purposes.

1) Original Equipment Manufacturer, OEM

Locations and production network

With its approximately 170 locations worldwide, 77 production facilities in 22 countries, 20 research and development centers, and a tight-knit sales and service network, the Schaeffler Group ensures customer proximity. Cooperation across divisions and countries thus leads to a high degree of flexibility in solving new customer requirements and the opportunity of anticipating emerging trends early on.
1.2 Corporate strategy and values

**AT A GLANCE**

- Sustainability is an integral part of Schaeffler’s corporate values
- The strategy “Mobility for tomorrow” creates the foundation for sustainably profitable growth

**Corporate values**

<table>
<thead>
<tr>
<th>Sustainable</th>
<th>Innovative</th>
</tr>
</thead>
<tbody>
<tr>
<td>A long-term view and continuity will foster the growth of the Schaeffler Group, thereby enabling a future worth living.</td>
<td>For (nearly) every problem there is a solution. If not, we will create one!</td>
</tr>
</tbody>
</table>

**Excellent**

We develop solutions that are of the highest quality based on our extensive expertise.

**Passionate**

Our biggest driver is our passion for innovative technologies and joint success with our customers.

Guiding values of a global family business

The Schaeffler Group is a global automotive and industrial supplier and a listed family business – a company with a strong foundation of values, established by its founders. Schaeffler particularly identifies with the corporate values “Sustainable”, “Innovative”, “Excellent”, and “Passionate”. These values form an important basis for the success of the Schaeffler Group for the benefit and in the interest of its customers and business partners, employees and managers, as well as its shareholders and family shareholders.

**Strategy – “Mobility for tomorrow”**

With the strategy of “Mobility for tomorrow”, Schaeffler is setting the foundation for sustainably profitable growth. In response to global challenges – especially climate change, urbanization, globalization and digitalization – the company has defined four focus areas:

- Eco-friendly drives
- Urban mobility
- Interurban mobility
- Energy chain

To execute the strategy “Mobility for tomorrow”, the company also launched its program for the future, the “Agenda 4 plus One”, with the Schaeffler Group’s 16 most significant strategic initiatives in 2016. The program was expanded to include four additional initiatives, increasing the number of initiatives to 20 effective January 1, 2018. The strategic initiatives are grouped in 4 + 1 categories: Customer focus, Operational excellence, Financial flexibility, Leadership and talent management, and – as “plus One” – Securing long-term competitiveness and value creation.

More information on the four focus areas in the current sustainability report can be found on page 24 et seq.

**Roadmap 2024**

Given the changing environment and a persistently challenging competitive environment, the Schaeffler Group will continue to press ahead with its transformation in the coming years.

The Schaeffler Group will announce its Strategy 2024 on March 24, 2020. One of the main focal points of the strategy will be on identifying business fields in which the Schaeffler Group can grow profitably in the long term and on how this growth can be generated. The capital allocation management framework will play an important role in addressing these issues.

1.3 Sustainability management and organization

**AT A GLANCE**

- The Sustainability, Environment, Health and Safety (SEHS) department under the HR function is responsible for sustainability management
- The Sustainability Committee is the central decision-making body

**Sustainability management strengthened**

The Schaeffler Group sees sustainable action as a cross-sectoral issue that is relevant in all business divisions. To lend more weight to the issue, Schaeffler has established a central decision-making body in the form of the Sustainability Committee, which consists of the eight members of the...
Board of Managing Directors, the four regional CEOs, and the functional managers of sustainability-relevant departments. The Sustainability Committee meets quarterly. Supported by the preparatory Sustainability Coordination Council, the Sustainability Committee makes central strategic decisions for the sustainable development of the Schaeffler Group and sets non-financial corporate targets.

The SEHS department – as part of the HR function – has been responsible for sustainability since 2019. Among other things, it manages the sustainability strategy, defines performance indicators, conducts internal and external sustainability reporting, and supports the dialogue with key stakeholders.

The operational implementation of sustainability-related topics is decentralized in various functions, divisions, and regions of the Schaeffler Group. The supply chain was particularly in focus in 2019. Against this background, the Purchasing & Supplier Management Sustainability department was created in May 2019.

Sustainability organization

1.4 Materiality and stakeholder management

**AT A GLANCE**

- An online survey was conducted in 2019 with around 300 external and internal stakeholders
- As a result, eleven issues have been identified as material for non-financial reporting in 2019

**Materiality analysis 2019**

- **Reassessment of the sustainability context**: Research of potentially relevant topics based on a competitive analysis and current sustainability frameworks
- **Consolidation**: Consolidation of the findings and compilation of a list of 14 topics
- **Stakeholder involvement**: Evaluation of the topics with regard to their relevance for stakeholders and Schaeffler’s impact on the environment, employees, and society by carrying out an online survey
- **Materiality workshops**: Discussion of the results of the online survey with relevant departments taking into account the business perspective and preliminary determination of the material topics
- **Validation**: Validation of the identified material issues by the Executive Board

As a result, eleven material issues were identified for the Schaeffler Group. These are relevant both for understanding the core business, business results, and the company situation as well as understanding the impact on non-financial aspects. Schaeffler reports on further topics in the context of the extended sustainability reporting.
As a result of the materiality analysis, the topics “compensation and retirement benefits” and “work-life balance” are no longer part of the non-financial report as compared to the previous year. Other topics were partly reorganized or renamed.

Schaeffler regularly maintains a close dialogue with its stakeholders. Key stakeholders include customers, employees, and suppliers, as well as non-governmental organizations, policy-makers and government agencies, residents, associations, trade unions, investors and analysts, universities, research institutes, and the media. As an example, the following opportunities for exchanging ideas were offered in 2019:

• Stakeholder online survey as part of the materiality analysis
• Customer workshops in the automotive sector
• Dialogue with industry associations, for example with the German Association of the Automotive Industry (VDA)
• Exchange of professional expertise with universities

Material non-financial topics in 2019

Compliance
• Corporate compliance
• Information security

Environmental matters
• Innovative mobility solutions
• Innovative solutions for the industry and energy sector
• Environment and climate protection

Responsibility for tomorrow

Social matters
• Customer satisfaction
• Product quality and safety

Employee matters
• Employee advancement and development
• Occupational health and safety
• Diversity and equal opportunity

Human rights
• Social and ecological standards in the value chain

Ratings and indices

For analysts and investors, the sustainability performance of a company is an important guide for assessing the sustainability of a business model. Therefore, they rely on the results of sustainability ratings assessing the activities of the evaluated companies in the environmental, social, or corporate governance fields. Schaeffler achieved the following results:

<table>
<thead>
<tr>
<th>Ranking/rating</th>
<th>Result</th>
<th>Year</th>
</tr>
</thead>
</table>
| CDP            | • Climate: Score of B-  
                | • Water: Score of B | 2019 |
| EcoVadis       | • Silver status  
                | • 60/100 points | 2018 |
| Sustainalytics | 19.5 (“low risk” category) | 2020 |

TARGET

CDP score

“A-“-rating for CDP Climate Score by 2021 and at least “B” by 2020
1.5 Corporate governance

**AT A GLANCE**
- The Group Compliance & Risk Committee is a central pillar of the governance structure
- No reportable non-financial risks were identified in 2019

**Responsible corporate governance**

Trusting customer relationships and acting with integrity are an integral part of corporate governance. In principle, business dealings and relationships are only entered into if they are in line with the corporate values “Sustainable”, “Innovative”, “Excellent”, and “Passionate”. The governance structure of the Schaeffler Group promotes transparency, supports the corporate values, and creates the necessary transparency in internal structures, the organization, and responsibilities. It also ensures that these components work together in an organized manner.

The Group Compliance and Risk Committee (GCRC) represents a key governance component in this regard, increasing transparency in internal structures, the organization, and responsibilities. The GCRC is chaired by the Schaeffler Group’s Group Chief Compliance Officer. It consists of the heads of the relevant governance functions (including Compliance, Legal, Risk Management, Internal Control System, and Controlling). The GCRC is responsible for assisting the Board of Managing Directors with its organizational responsibilities with respect to compliance and risk management. Among the key objectives of the GCRC are defining and delineating responsibilities and interfaces and preventing redundancies in the process. In addition, it is expected to create a consistent and complete view of the risk situation in the divisions, functions, and regions based on a uniform measurement and prioritization methodology. A further objective of the GCRC is developing and monitoring risk mitigation activities. The Compliance & Risk Working Group, consisting of staff representatives from the functions represented on the GCRC, provides operational support to the GCRC.

The elements of the governance structure – the internal control system, the compliance and risk management system, and Internal Audit – work together according to the internally recognized “Three Lines of Defense Model”. It assigns clear responsibility for dealing with risks to Schaeffler’s continued existence and development and is based on the principle that primary responsibility for a risk lies with its originator.

**Risk reporting**

To achieve its corporate objectives, Schaeffler takes deliberately calculated business risks in order to implement its corporate strategy and realize the associated opportunities. The risk management system aims to identify these risks at an early stage and to manage them in accordance with the risk strategy.

The Schaeffler Group’s opportunity and risk reporting in the group management report provides comprehensive information about the company’s risk management system as well as significant risks that have a medium or high negative impact on assets, finances or income. It also includes risks related to the Schaeffler Group’s business operations, business relationships, or products and services.

More information on the Schaeffler Group’s opportunity and risk reporting can be found in the current Annual Report 2019 starting on page 47 et seq.

With the integration of the non-financial risk assessment into the Schaeffler Group’s risk management system, the assessment of the non-financial risk impact of the five reportable aspects – in addition to the evaluation of their financial risk impact – is carried out using a similar assessment logic.

The risk survey showed that there were no reportable risks in 2019 in accordance with CSR-RUG (Section 289c, paragraph 3 HGB). As proactive risk management, the EnEHS (Energy, Environment, Health and Safety) management system serves to identify and avoid systematic risks and potential negative impacts from Schaeffler on the environment, energy, and occupational health and safety at an early stage. As a further development in the analysis of climate-related risks, the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) – an expert commission of the G20 Financial Stability Council – are being followed.

**Corporate compliance**

Integrity is a significant cornerstone of the Schaeffler Group’s manner of conducting business. Schaeffler adheres to high standards of compliance, especially in preventing corruption. Schaeffler sets high expectations for data protection, information, and IT security.
The compliance management system (CMS) is a part of the Schaeffler Group’s overall corporate governance structure. The management and all employees are obliged by the Schaeffler Group Corporate Code of Conduct (CoC) to comply with all applicable local, national, and international laws and regulations. The entire worldwide compliance organization of the Schaeffler Group provides support in doing this. The Schaeffler Group’s CMS is based on national and international standards. In 2018, an independent auditing company confirmed the appropriateness and implementation of the Schaeffler Group’s compliance management system in accordance with the IDWAsS 980 standard for auditing compliance management systems.

The CMS serves the purpose of:

• The prevention and early detection of legal violations in the areas of corruption, money laundering, competition, and antitrust law as well as economic crime.
• Active risk control and as a protective function for both the company and its employees.

The Schaeffler Group’s Group Chief Compliance Officer heads up the compliance organization and reports directly to the Chief Executive Officer. The Group Chief Compliance Officer also has a reporting line to the Chairman of the Supervisory Board and reports to the chairman of the audit committee on a regular basis.

The Schaeffler Group Corporate Code of Conduct and corporate policies on competition and antitrust compliance, fighting corruption, the protection of confidential information, and conflicts of interest include requirements to prevent compliance violations. A compliance helpdesk is available for consultation on specific compliance issues. In addition, Schaeffler has taken measures to detect any compliance violations. These include controls as well as a globally accessible whistleblowing system which allows anonymous reporting of alleged violations. As a part of the central competence team for compliance at the headquarters in Herzogenaurach, the “Forensics & Investigations” department is responsible for the independent investigation of alleged violations.

The Schaeffler Group Code of Conduct is available at:
www.schaeffler.com/code-of-conduct

Compliance training

Training topics in 2019 were in particular:
• Integrity/Code of Conduct
• Anti-corruption
• Antitrust and competition law
• Conflicts of interest

The training courses are continuously developed to meet best standards. 6,461 participants (prior year: 9,578) took part in web-based training on compliance in the reporting period. Furthermore, 8,091 employees (prior year: 8,793) were trained in face-to-face trainings and workshops.

More information on the individual subsystems of the governance structure and the compliance management system of the Schaeffler Group can be found in the current Annual Report 2019 starting on page 76 et seq.

More information on material compliance can be found in the “Responsibility in the value chain” chapter on page 20 et seq.

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More information on the individual subsystems of the governance structure and the compliance management system of the Schaeffler Group can be found in the current Annual Report 2019 starting on page 76 et seq.

More information on material compliance can be found in the “Responsibility in the value chain” chapter on page 20 et seq.

Participants in compliance training

Face-to-face training 8,091
E-Learning 6,461

Participants in compliance training

Face-to-face training 8,091
E-Learning 6,461

Due diligence processes: systematically securing lawful behavior

In order to systematically avoid legal and reputational risks, the Schaeffler Group further strengthened its measures in the fiscal year 2019. The competitor contact register was digitalized. It promotes transparency and supports the pre-approval process for competitor contacts. The IT-based "Business Partner Due Diligence Workflow" that had been integrated was transferred to ongoing operations. In the Automotive Aftermarket, Industrial divisions and in the Purchasing department, the process was already implemented in selected areas and countries. The rollout for the remaining areas and countries will take place in 2020. The process

2) Employees incl. temporary staff, apprentices, interns, and contract workers.
primarily focuses on risks associated with corruption and export control and aims to facilitate and improve business partner reviews.

**Data protection, information, and IT security**

Protecting personal rights is a high priority for Schaeffler and is part of the Group Code of Conduct. It handles the processing of data belonging to business partners and employees with the greatest care and sensitivity. The corresponding processes comply with legal data protection requirements. The data protection officer at Schaeffler AG plays a central managing role. He is assigned to the “Compliance & Corporate Security” department and thus to the Chief Executive Officer’s function.

The Schaeffler Group’s information security measures are based on the ISO/IEC 27001 standard and take national and industry-specific regulations and compliance with the VDA-ISA standard within the framework of TISAX (Trusted Information Security Assessment Exchange) into account where necessary. These measures are designed to protect Schaeffler’s intellectual property and the business secrets of business partners from theft, loss, unauthorized disclosure, unlawful access or misuse. As part of the “Information & Cyber Security Program”, the regulatory framework has been consolidated and prepared for a global rollout in 2019.

Preventive measures to protect against cybercrime in particular will be gradually systematically expanded as part of the “Information & Cyber Security Program”, among others, and accompanied by training and information offerings.

An “IT Security by Design” process based on national and international standards has been introduced at Schaeffler. It will secure that IT security is already taken into account when developing systems and applications. Corresponding protective measures are integrated in the process depending on the protection requirements. The implementation of the “IT Security by Design” process in the regions was started in 2019. The global introduction will be completed in 2020.

**Business continuity and crisis management**

In 2018, Schaeffler has begun to coordinate business continuity activities at the corporate level. Elements such as effective emergency and crisis management have been established. A unified approach to a business impact analysis was created and piloted at a plant in China in 2019. The introduction into relevant business areas will take place by 2021. Different measures prepare the members of the crisis management teams to deal with crisis situations.

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**HIGHLIGHT**

Compliance conference on information and cyber security

In 2019, Schaeffler dedicated its compliance conference to the important field of information and cyber security in addition to the topic of optimizing the control landscape. During the conference, senior executives at management level completed an executive education program on information and cyber security in cooperation with the Goethe University Frankfurt and external experts. Business and internal IT experts discussed the topic of cyber security intensively with senior Schaeffler executives and provided valuable insights.

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**1.6 Responsibility in the value chain**

**AT A GLANCE**

- The Supplier Code of Conduct sets minimum requirements for suppliers
- A new central function manages and develops the topic of sustainability in the supply chain

**Social and ecological standards in the value chain**

Social and environmental issues such as working conditions, fair wages, freedom of association, occupational health and safety, and environmental protection in the supply chain are part of many national laws and internationally recognized policies. As a global family business, the Schaeffler Group supports these efforts and aims at ensuring compliance with these aspects in its supply chain. In its
Supplier Code of Conduct (SCoC), Schaeffler has formulated minimum requirements for suppliers based on the principles of the United Nations Global Compact and the core labor standards of the International Labour Organization (ILO).

On May 1, 2019, Schaeffler created the new central function Purchasing & Supplier Management Sustainability in order to manage the topic centrally and promote it throughout the group.

The Schaeffler Group Corporate Supplier Code of Conduct is available at: www.schaeffler.com/supplier-code-of-conduct

All new suppliers for the Schaeffler Group are required to accept the CoC and SCoC in writing. Supplier screening also provides the necessary emphasis. Existing suppliers who have neither implemented a certified environmental or occupational health and safety management system nor accept the SCoC/CoC are rated down by one level by Purchasing in the supplier evaluation. This procedure decreases their chances in the selection process for new projects or procurement volumes. The supplier information refers to the direct (Tier 1) suppliers of the Schaeffler Group.

In 2019, 863 new suppliers of production material were checked for Schaeffler’s supplier portfolio by way of an initial assessment. Applicants previously had to accept the SCoC, thus committing to the values it defines. On-site assessments were then carried out. Integral parts of this assessment are production tours during which questions are asked about production-related aspects of occupational health and safety and environmental protection. At the end of 2019, the questionnaires were expanded to include social aspects.

If a company does not accept the SCoC or is not ready to cooperate to address critical issues directly by taking immediate action, the approval process is stopped. Applicants who fail to adequately meet the requirements of the questionnaire during on-site assessments will need to identify appropriate actions following a root cause analysis.

No serious negative environmental or social impacts in the supply chain were identified in the year under review.

The activities planned for the systematic development of sustainability in the supply chain include the use of questionnaires which are provided in cooperation with a platform service provider. If required, on-site audits and assessments at selected suppliers follow. <

**TARGET**

**Sustainable Suppliers**

90% of purchasing volume of production material from suppliers with sustainability self-assessments by 2022.

The Schaeffler Group works closely with its production material suppliers regarding the materials and substances used ("Material Compliance"). The Material Compliance department supports the Purchasing department by continuously evaluating the requirements that are relevant for Schaeffler and determining criteria to be taken into account when choosing suppliers. These include all material requirements from legislation, public standards, and customer requirements with regard to:

- Chemical substances
- Preparations
- Packaging and materials in manufacturing processes and products
- Transporting the products

This also involves responsibly procuring raw materials such as tin, tungsten, tantalum, and gold, whose extraction in some countries contributes to financing armed conflicts or human rights violations. Schaeffler uses the “Reasonable Country of Origin Inquiries” (RCOI) procedure to ascertain from which regions sub-tier suppliers source components with critical materials and, where appropriate, initiate targeted supply chain actions. Compared to the previous year, the response rate<sup>4</sup> of the suppliers surveyed fell slightly to 93.8%<sup>4</sup> (prior year: 94.3%)<sup>5</sup> (<sup>6</sup>) 100%<sup>6</sup> of the smelters reported in Schaeffler’s pre-supply chain that are located in affected countries under the RCOI are certified by the “Responsible Minerals Initiative”<sup>7</sup>. Material compliance implementation is based on an audited management process that is included in the Material Compliance Management service provider. If required, on-site audits and assessments at selected suppliers follow. <

4) Response rate of relevant suppliers surveyed on the use of conflict minerals as defined under the Responsible Minerals Initiative.
5) 2019 value checked in interim status in December 2019.
6) Survey period from March to February of the following year.
7) Risk areas as defined in the RCOI.
guideline. The progress is determined and monitored continuously.

Customers are able to request Schaeffler’s Conflict Minerals Report. With further improvements to the material compliance process, the company will meet the OECD guidelines for the responsible use of minerals from conflict and high-risk areas by 2021, and thus also the EU requirements in a timely manner. As an important prerequisite for this, a Conflict Minerals Policy was adopted by the Executive Board in 2019 and made available online.


Supplier management at Schaeffler

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<td>Coverage rate of certified smelters in the supply chain in %</td>
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2) Response rate of relevant suppliers surveyed on the use of conflict minerals as defined under the Responsible Minerals Initiative.
3) Survey period from March to February of the following year.
4) 2019 value checked in interim status in December 2019.
5) Risk areas as defined in the RCOI.

Initiatives and industry solutions for responsible supply chains

In national and international initiatives and associations, Schaeffler participates in standardizing content, processes, and measures to improve sustainability in supply chains. Schaeffler is a member of the “Sustainability in the Supply Chain” working group, an initiative of the German Association of the Automotive Industry (VDA), in addition to other groups. In this context, Schaeffler significantly contributed to standardizing the industry-wide sustainability questionnaire and sustainability protocol for sustainability-related supplier inspections. Schaeffler extended its own questionnaire for new suppliers with additional social questions.

Human rights

As a global family business with a strong foundation based on its values, respect for human rights is an indispensable part of corporate responsibility for the Schaeffler Group.

The company rejects any form of human rights violations such as child and forced labor or discrimination based on race, color, or gender. This claim applies to all Schaeffler locations as well as to all business partners and goes beyond compliance with local legal provisions. The company management commits to the “UN Guiding Principles for Business and Human Rights”, the ten principles of the “UN Global Compact”, the German government’s National Action Plan for Business and Human Rights (NAP), the “Dodd-Frank Act” and the “Modern Slavery Act”.

The requirement to respect and uphold human rights is part of the current group-wide Code of Conduct and the Schaeffler Group’s Supplier Code of Conduct. They are aimed at every employee at the company and selected business partners, such as suppliers of production and non-production materials. Responsibility for human rights issues rests with the Sustainability department under the HR function. If necessary, it will also report on human rights issues as part of Schaeffler AG’s internal risk reporting. Any violations of human rights topics can be reported through the Schaeffler Group’s global compliance whistleblowing system. No violations of human rights were reported via the system in 2019.

The employees and managers at the Schaeffler Group are trained on the Code of Conduct, which demands respect for human rights (see compliance training, p. 19). Elements for managing risks associated with human rights violations are developed and coordinated by the Sustainability department.

To implement the NAP, the Schaeffler Group is in contact with the German Federal Foreign Office and the German Federal Ministry of Labor and Social Affairs. Schaeffler’s goal is to meet the so far voluntary EU requirements of the NAP by 2020 by continuing to develop the human rights due diligence process on time.

Compliance with international disclosure requirements

The “Modern Slavery Act”, which was passed in the U.K. in 2015, calls for companies to demonstrate their commitment to protecting human rights along their value chain. The Schaeffler Group maintains business relations with the U.K. and is therefore impacted by this disclosure requirement. A corresponding statement is published for Schaeffler (UK) Ltd.

The “Modern Slavery Statement” from Schaeffler (UK) Ltd. is available at: www.schaeffler.co.uk
The megatrends of climate change, urbanization, globalization, and digitalization are presenting the Schaeffler Group’s automotive and industrial customers with new challenges. Schaeffler analyzes how the demands of stakeholders are changing due to these megatrends – and develops innovative products for the demands of the future. Schaeffler is open to new technologies and keeps an eye on promising solutions for sustainable mobility and a future-oriented industry. At the same time, the company works closely with its customers and aligns its development work based on their expectations. Across all divisions, Schaeffler focuses on the four strategic fields of “eco-friendly drives”, “urban mobility”, “interurban mobility” and “energy chain”.

CONTENTS

2.1 Sustainable products and technologies 24
2.2 Product quality and safety 29
2.3 Customer satisfaction 30

The products of the Schaeffler Group directly contribute to achieving the SDGs. For example, technical developments for electrically powered cars, scooters, e-boards, and e-bikes encourage the development of “Sustainable cities and communities” (SDG 11). Products in the energy chain also contribute to this development goal and additionally help to realize “Sustainable and modern energy for all” (SDG 7).
2.1 Sustainable products and technologies

**AT A GLANCE**

- Schaeffler offers innovative mobility solutions as well as solutions for industry and the energy sector
- The company actively supports its customers in designing environmentally and climate-friendly products and technologies

**Shaping the mobility of the future**

The Schaeffler Group offers innovative, environmentally and climate-friendly products and technologies. The company employs 7,784 people in research and development (R&D) at 20 R&D centers and other R&D sites. The extent and success of its innovation activity is illustrated by the number of patent applications submitted to the German Patent and Trademark Office based on inventions reported throughout the Group. 2,057 patents have been submitted in 2019 (prior year: 2,417). This achievement was also recognized by the nomination for the JUVE Award as the In-House Team of the Year for Intellectual Property (IP).

Schaeffler focuses its innovative strength across divisions on four focus areas where growth potential has been identified: “eco-friendly drives”, “urban mobility”, “interurban mobility”, and “energy chain”.

Energy efficiency, resource consumption, and system reliability are key issues in all transport sectors, but also in many industrial processes. They also affect the upstream energy chain since sustainable mobility and industrial production will ultimately only be achieved with energy from renewable sources.

Customers and users must be able to fully rely on the performance and durability of the products. To ensure this, the company continues to develop its quality management system.

Fundamental to the Schaeffler Group’s R&D activities is the goal of helping to shape the mobility of the future with safe, economically successful products and technologies produced in an ecologically and socially responsible manner. This goal is anchored in the company strategy via the four focus areas described below. **2,057 patent applications filed**

**Focus areas “eco-friendly drives”**

Schaeffler is working on a variety of technologies that will make the mobility of the future more sustainable and efficient. With innovative ideas, creative engineering, and comprehensive manufacturing expertise, the company is developing solutions for combustion engine driven, hybrid, and all-electric powertrains.

Based on market analyses, a scenario was developed with the “Schaeffler Vision Powertrain” indicating that in 2030 around 30% of new cars will be equipped with internal combustion engines, 40% with hybrid powertrains, and 30% with purely electric powertrains on average worldwide. Therefore, a holistic view of the powertrain and the interaction of electric motors, internal combustion engines, transmissions, chassis, and the associated infrastructure is of high ecological and economic importance. Based on the degree of electrification – micro, mild, plug-in hybrid, or pure electric vehicles – Schaeffler is developing new solutions in the engine, transmission, and electric drive subsystems in a powertrain matrix. This includes electromechanical actuators as well as 48-volt hybrid technologies and efficient electric drives.

According to the aforementioned scenario, 70% of all newly registered vehicles will have an electric drive in 2030. Therefore, Schaeffler sees e-mobility as one of the key opportunities for the future. In addition to Industry 4.0 and Digitalization, it represents a cornerstone of the strategy “Mobility for tomorrow”. As part of the “Agenda 4 plus One”, Schaeffler has created a dedicated business division for its e-mobility activities. A majority of the products and system solutions for hybrid and all-electric vehicles are managed centrally from the e-mobility business division.

The focus on electric mobility is reflected in the development of sector-specific revenues: They increased from EUR 493 m in 2018 to EUR 676 m in 2019.

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1) The values reflect the workforce headcount at the end of the year.

2) Patent applications concern first filings filed at the German Patent and Trade Mark Office.

3) Previous year’s figures according to the segment structure reported in 2019.
Schaeffler has established four competence centers for e-mobility since 2017: in Bühl, Germany; in Herzogenaurach, Germany; in Anting, China; and in Wooster, USA. With the competence center in China, Schaeffler is addressing the growing importance of the Chinese e-mobility market, while in Wooster, the company is working on U.S.-specific issues such as the electrification of larger cars.

The Schaeffler Group’s research-related facilities cooperate intensively with leading universities and research institutes in the field of e-mobility, including the Karlsruhe Institute of Technology (KIT). At the institute, a research facility is operated as part of the “Schaeffler Hub for Advanced Research” (SHARE) program. The SHARE at KIT focuses on energy storage, electric drives, and automated mobility. Schaeffler operates four different SHARE programs worldwide.

Eco-friendly drives increasingly play an important role not only in mobility but also in industrial production. Schaeffler supports the industry in this transformation with highly efficient direct drives in machine tools that can be operated with the lowest possible energy consumption because the power can be generated directly at the point where it is needed. As a result, no mechanical transmission components are required and losses due to friction are minimized compared to conventional drives.

In modern machine tools, there are several direct drives in different swivel axes and direct-driven linear drives. Schaeffler’s rotary and linear direct drives require less power while providing the power or torque yield that is typical in the market, and they have up to 30% less power loss. This not only leads directly to lower energy consumption, but also to positive indirect effects, such as less effort for cooling the motors. Schaeffler’s loss-optimized direct drives can therefore sustainably reduce energy consumption in industrial production.

Approximately 37% increase in revenue in the business division e-mobility

Electric vehicle innovations
Schaeffler already offers numerous innovative products and components for specific electrification levels: The spectrum ranges from electrically operated coupling devices to components and drives for mild hybrids, in which the electric motor has only a supporting function, to completely electric drives for hybrid and entirely electric vehicles.

In early 2019, Schaeffler went into series production with the third generation of the hybrid module. To further increase the degree of integration and thus further reduce the installation space required, the start-up element is also integrated into the module. In particular, this series rollout involves a solution with an integrated torque converter developed for the US market.

Furthermore, Schaeffler entered into the production of electric motors in 2019 with a modular and highly integrated technology platform. With the acquisition of Elmotec-Statomat, a manufacturer of stators, at the end of 2018, the industrialization of electric motors can be comprehensively outlined within the company. Extensive skill sets with regard to mechanical components, manufacturing processes, and winding technologies, as well as an advanced understanding of systems for the entire vehicle, guarantee short development times and ensure smooth processes in the production of technologically sophisticated electric motors. The application spectrum of the electric motor family, trimmed for efficiency and reliability, ranges from hybrid modules and dedicated hybrid transmissions (DHT) to electric motors for electric axle drives. Voltage levels between 48 and 800 V and power classes from 15 to over 300 kW are possible. Series production for various customer projects will start worldwide beginning in 2021.

In addition, Schaeffler contributes to making e-mobility more attractive and exciting with its involvement in the FIA Formula E. At the end of the 2018/2019 season, the team achieved a strong second place. This testifies to outstanding skills in the electric-based powertrain. With the “Schaeffler 4ePerformance” concept vehicle, Schaeffler also demonstrates how innovations from the racing environment can be translated into a pre-series drive concept.
Low-emission internal combustion engines

In order to make internal combustion engines as low-emission and energy-efficient as possible, Schaeffler is developing friction-reducing technologies throughout the powertrain that will reduce fuel consumption, for example through innovative surface coatings. Another focus is optimizing the valve train system. The goal is to always provide the optimum amount of air at each operating point in the cylinder and thus to increase efficiency and reduce emissions. In addition, Schaeffler is expanding its product portfolio in the area of thermal management. It is used to distribute the heat flow within the internal combustion engine dynamically and according to the demand. This allows the engine to reach its operating temperature faster, among other things, which decreases fuel consumption. Individual smart actuators with central control (smart single valves) will be used for this as a standard.

Hybridization – for example by using a “belt starter generator” – can reduce fuel consumption and emissions by about 5 to 7%. In addition to comfortable and efficient start-stop operation of the engine, the hybrid drive also enables brake energy recovery.

Schaeffler conducts ongoing research on synthetic fuels produced using renewable energy sources. Since no fossil fuels are used here, these “synfuels” should be able to power internal combustion engines in a carbon-neutral manner in the future.

Schaeffler identifies high future potential in fuel cell technology for the mobility sector. Existing manufacturing technology capabilities are being used to develop and produce powerful bipolar plates. These plates are a central component of fuel cells. The first prototypes of a fuel cell stack have already been put into operation and scaled up to an output of 120 kW.

Focus area “urban mobility”

According to United Nations forecasts, two-thirds of the world’s population is expected to live in cities by 2050. The need for individual mobility will change the way that people move around the city and autonomous vehicles will play an important role. Schaeffler is providing the technical basis for this kind of urban mobility concept: the “Schaeffler Mover”. The electric vehicle, which is powered by four-wheel hub motors, forms the basis for various utilization concepts from cars to robo-taxis to autonomous driving cargo solutions. Drive and suspension components are integrated in a compact unit, the “Schaeffler Intelligent Corner Module”.

HIGHLIGHT

CO₂ reduction with CNG as fuel

As part of the publicly funded “GasOn” program, Schaeffler made a significant contribution to the development of a monovalent compressed natural gas (CNG) powered internal combustion engine which enables CO₂ reduction of up to 25% in the entire engine. This means that this engine map already meets future emission limits today.

HIGHLIGHT

“Schaeffler Mover” awarded

In 2019, the “Schaeffler Mover” was awarded the German Mobility Prize from the Federal Ministry of Transport and Digital Infrastructure and the initiative “Germany – Land of Ideas”. Particular emphasis was placed on the universal application possibilities for a wide variety of passenger or goods transport.
Micromobility: relieving city congestion

In the field of micromobility, Schaeffler is also helping to relieve congestion in metropolitan areas. Micromobility includes micro vehicles such as scooters, e-boards, and e-bikes. With the “Bio-Hybrid”, Schaeffler offers a four-wheeled vehicle with a roof that is pedaled by the rider and supported by an electric motor. To industrialize the “Bio-Hybrid”, the activities were bundled in Schaeffler Bio-Hybrid GmbH. The passenger and cargo versions were presented at the CES trade fair (Consumer Electronics Show) in 2019 in Las Vegas. The modular concept, whose market launch is planned for the end of 2020, offers numerous application possibilities – from transporting goods via a mobile coffee shop to sightseeing vehicles in the tourism sector.

HIGHLIGHT
Red Dot Award for the “Bio-Hybrid”

For the innovative design concept of the “Bio-Hybrid”, Schaeffler received the renowned Red Dot Award in the reporting period.

In addition, Schaeffler is working on innovative drive systems for vehicles in urban areas, called the electronic chain. This is characterized by fewer mechanical parts and therefore less wear. Because the mechanical chain is omitted, less lubricant gets into the surrounding area and the system becomes more robust. The electronic chain can help achieve a breakthrough in zero-emission city logistics, reduces maintenance costs with sharing concepts, and enables economical fleet operation.

Focus area “interurban mobility”

In the course of progressing urbanization, the movement of people and materials between urban centers is increasing. Schaeffler is developing increasingly low-friction and highly reliable components that help to make long-distance transport, both by rail and by air, more resource and climate friendly. Concrete developments include bearings with ceramic rolling elements, for example, which have a much lower frictional resistance than conventional rolling elements made of steel and thus reduce losses in the drives. In addition, Schaeffler is investing worldwide in appropriate production capacities to improve customer proximity and reduce transport distances.

Another development focus is on predictive maintenance and servicing of wheelset bearings for railway vehicles. According to Schaeffler’s calculations, it is possible to save at least one wheelset bearing maintenance operation, and in some cases even two, out of four to five over the life cycle of a vehicle. This allows the number of maintenance operations to be minimized, which in turn saves resources for cleaning and greasing the bearings. As a result, vehicles can be used longer or their power reserves can be more fully utilized, which leads to a significant reduction in maintenance costs. This is not only more cost-efficient than replacing the old bearings, but also results in shorter delivery times. Schaeffler has drawn up its own life cycle assessment in which the complete product life cycle of a standard wheelset bearing was analyzed using special assessment software and compared with the bearing refurbishment.

HIGHLIGHT
Climate-friendly maintenance

Around 95% of CO₂ emissions can be saved by reconditioning wheelset bearings compared to new production. Per reconditioned axlebox bearings, this corresponds to the emissions of an air passenger traveling from Frankfurt to Crete, or a nearly 3,000 km journey in a typical middle class car with 65 kW.

Schaeffler has created its own brand called X-life to identify particularly high-performance bearings for industrial applications. Thanks to an optimized internal design, X-life bearings achieve longer operating lives, lower friction and lower bearing temperatures under the same operating conditions. The lubricant is also subjected to less stress. Alternatively, the increased performance capacity of the bearings can be used to optimize installation space and thus reduce weight. Rolling bearings in X-life quality are widely used in rail vehicle applications, for example in wheelset bearings, drives, and traction motors.

The operating life of rolling bearings can be significantly extended or the load even increased with special materials and with the carbonitrided high-performance Mancrodur rolling bearing steel is also suitable for wheelset bearings. The combination of high-performance steel and special heat treatment results in approximately 30% more load carrying capacity and thus offers a more than doubled nominal service life.
Focus area “energy chain”

The move away from fossil fuels and the transformation of mobility require a profound change in the entire energy sector, creating new market potential. It ranges from generating energy to providing energy to concepts for energy use. Schaeffler’s activities in the “energy chain” focus area are aimed precisely at these market segments.

The irregular availability of renewable energies requires new energy sources and electricity storage technologies. This is the only way to ensure the sustainable mobility of tomorrow. Alternatives such as hydrogen are becoming increasingly important. Schaeffler has recognized the potential of hydrogen technology as an energy source of the future and has developed key components for fuel cells and fuel cell stacks. Schaeffler has been a guiding member of the global hydrogen interest group “Hydrogen Council” since 2020. The international initiative consists of 81 companies from the energy, transport, and industrial sectors and aims to further advance the industrialization of hydrogen technology. In addition, Schaeffler is a founding member of the “Hydrogen Alliance Bavaria” founded in 2019. The alliance aims at further advancing climate protection, energy, mobility, and technological innovation and using the potential of hydrogen technology as the energy source of the future.

In its development work, the Schaeffler Group also relies on improved and completely new products for wind turbines. The company is one of the leaders on the world market depending on the type of turbine. The focus here is on bearings with lower friction and wear. Global investments in manufacturing capacity for these bearings are helping to support the shift towards renewable energies. In addition, Schaeffler offers monitoring systems via cloud-based software. This also increases the reliability of the systems in this area and extends the operating times, which directly leads to better use of resources.

In rolling bearing arrangements in hydroelectric or marine current power plants as well as in pumps and compressors, there are concepts in which lubricants are avoided and rolling bearings are lubricated with media or even run dry. In addition to the goal of saving resources, the focus is on the possibility of dispensing with costly and high-friction sealing systems. Rolling bearings operated in this way have the highest demands put on the robustness of the materials used and their surfaces. With this focus, Schaeffler is participating in the Poseidon II research project from the German Federal Ministry of Economics and Energy in which suitable materials and special surface coatings are being developed to further improve the sustainability of rolling bearings and rolling bearing systems.

Research and development as a systematic strategy and planning process

The Technology function is responsible for research and development within the Schaeffler Group. Schaeffler’s innovative strength is also based on its annual cross-departmental strategy and planning process, which consists of several phases:

- The Technology Dialogue looks at current megatrends and the resulting requirements for technologies and innovations. In this way, Schaeffler lays the foundation for future development directions and products.
- In the subsequent phases – the Strategy and Planning Dialogues – the development activities are specified.

In addition, market trends are examined from an individual customer perspective. Among other things, Schaeffler organizes annual “Top Technology Meetings” with key customers. The company uses the market analysis results for its customer-specific requirements management. Customer expectations are thereby systematically translated into sustainable products and technologies.

In order to represent customer expectations in new products, Schaeffler has created a standardized product creation process (PCP). It specifies in detail which steps are necessary to develop a product that meets the requirements of all relevant stakeholders (customer, company, and legislators). This includes proof of the product functionality, stable production and logistics processes, and suitable suppliers. As part of the PCP, customer requirements for the entire product life cycle are agreed upon in writing, from production to operation and maintenance to disposal. The PCP also explicitly states compliance with sustainability criteria.

Schaeffler also works with other companies across the industry to improve the market and production conditions for future, more sustainable products. For this reason, Schaeffler is involved in the “European Association of Automotive Suppliers” (CLEPA). Schaeffler is involved in various working groups focusing on technology and sustainability issues such as autonomous driving, the Euro 7 emissions standard, and compliance.

5) Comité de Liaison Européen des Fabricants d’Equipements et de Pièces Automobiles.
2.2 Product quality and safety

**AT A GLANCE**

- Schaeffler has the highest standards for holistic product quality and safety
- All production sites have certified quality management systems

**“Quality for Tomorrow” initiative**

To ensure the highest quality both today and in the future, Schaeffler has launched the “Quality for Tomorrow” initiative as part of the “Agenda 4 plus One”. To ensure that both products and processes are free from errors, the following priorities have been set:

- Continuous improvement of products and services in the core business
- Constant improvement of the quality management system as well as the manufacturing and business processes
- Preventive measures in product development through product safety assessments on products selected according to the risk-based approach defined in IATF 16949

The “Quality for Tomorrow” Initiative will be completed by the end of 2020. Until then, Schaeffler wants to further reduce the number of complaints as an important quality indicator from year to year.

Schaeffler ensures and improves the quality of its products and processes with a variety of tools: All Schaeffler Group production sites have certified management systems in accordance with globally recognized quality standards and regulations.

The company has successfully implemented the requirements of the following certification-relevant standards in all Schaeffler plants concerned worldwide:

- IATF 16949:2016 quality management system (automotive industry standard)
- ISO/TS 22163 quality management system (with specific requirements for the application of ISO 9001:2015 in the railway sector)
- SAE AS 9100D:2016-09-20 quality management systems (requirements for aerospace and defense organizations)

The conformity of the products, systems, and processes is periodically checked and confirmed at the affected locations by way of internal and external audits.

In 2019, product liability cases were able to be avoided thanks to the standard company processes and the integrated product safety management system that was introduced.

**High standards in product safety**

Product safety is an essential quality characteristic for industrial plants and transport systems. Schaeffler ensures safety through standardized and audited processes. In July 2019, the integrated product safety management system (IPSMS) was successfully introduced.

The Schaeffler Group’s product safety officers are trained in a combined online and face-to-face training. In addition, Schaeffler conducts annual industry-related product safety days during which automotive professionals and executives discuss safety matters with NGOs, authorities, and government organizations. The meetings serve to make product safety and compliance processes even more reliable together. The fourth product safety day was held in Herzogenaurach, Germany in March 2019. In addition to representatives of the German Federal Ministry of Economics and Energy, 28 companies from China, the USA, Brazil, France, and Germany attended the event.

The 100% coverage rate of quality management systems indicates the commitment to quality assurance and continuous improvement at Schaeffler Group.
Trademark protection in real time via an app

Quality must also be protected from external threats. Trade in counterfeit products, for example, not only damages the manufacturer, but their use can also result in material damage to vehicles and industrial equipment or personal injury. The Schaeffler Group fights product piracy with a holistic approach. A brand protection team coordinates preventive measures against trademark infringements and the legal prosecution of confirmed cases. In addition, Schaeffler provides its customers with solutions to authenticate suspected counterfeit products. In 2019, several requests from different countries have been identified as fake by the app.

2.3 Customer satisfaction

AT A GLANCE

- Consistent customer orientation is the basis for product development, service, and quality assurance
- 66 awards in the reporting year for customer satisfaction and product quality verify our positive reputation worldwide

Consistent customer orientation

Schaeffler uses a central Global Key Account Management system (GKAM) to shape its customer relationships worldwide according to standardized principles. The GKAM works closely with the regional and divisional sales functions of the Automotive OEM, Automotive Aftermarket, and Industrial business divisions. The necessary expertise is pooled from the relevant divisions for each key customer. Every major customer has a contact person who takes care of all of his or her concerns according to the “one face to the customer” principle. As a non-financial performance indicator, customer satisfaction is reported to the Executive Board during the year and monitored by it.

As another control instrument, Schaeffler is using “Customer Relationship Management” software in order to shape its customer relationship. Since 2019, it has mapped a cross-divisional system architecture.

Schaeffler uses international trade and consumer fairs and organizes individual customer events such as the Schaeffler Colloquium as classic tools to communicate with customers.

Global expansion of the spare parts business

Schaeffler wants to serve its customers worldwide even faster and more reliably, thereby further increasing the level of customer satisfaction and loyalty. To this end, the Automotive Aftermarket division is investing heavily in the global expansion of its logistics infrastructure.

HIGHLIGHT

Operative excellence

Schaeffler is currently building a European “Aftermarket Kitting Operation (AKO)” center in Halle (Saale), Germany. The level of investment is at around EUR 180 m. The center is scheduled to be put into operation in the second quarter of 2020.

The Automotive Aftermarket division continues to rely on digital tools such as a global product and service platform or the expansion of the services offered for garages with the REPXPERT app. In addition, it is further developing its e-commerce and account-based marketing activities for even closer integration of marketing, sales, and services.

Winner of multiple awards

In 2019, Schaeffler received 66 awards for customer satisfaction and product quality. Schaeffler sees this as an indicator of its positive reputation in global markets.

Schaeffler was named “Supplier of the Year” in March 2019 by NEXUS Automotive International, a global association of leading automotive aftermarket parts dealers. This was in recognition of the successful and trusting collaboration with the Schaeffler Automotive Aftermarket division since the establishment of the trade cooperation in 2014.

Schaeffler received further awards as the “Supplier of the Year” in the automotive aftermarket from the global trade cooperation TEMOT International and GROUPAUTO International.
Schaeffler supplies products and technologies that make mobility and industrial equipment more eco-friendly and efficient. As a leading technology company, Schaeffler is also committed to creating its own processes as energy-efficient, eco-friendly, and resource-efficient as possible. For this purpose, Schaeffler relies on a continuous improvement process for all environmental and energy-relevant processes. The worldwide standardization of the associated processes enables effective management of all relevant aspects. For example, material consumption and energy requirements are taken into account comprehensively and at an early stage during planning.

3 Environment and energy

Schaeffler supplies products and technologies that make mobility and industrial equipment more eco-friendly and efficient. As a leading technology company, Schaeffler is also committed to creating its own processes as energy-efficient, eco-friendly, and resource-efficient as possible. For this purpose, Schaeffler relies on a continuous improvement process for all environmental and energy-relevant processes. The worldwide standardization of the associated processes enables effective management of all relevant aspects. For example, material consumption and energy requirements are taken into account comprehensively and at an early stage during planning.

CONTENTS

3.1 Environmental management 32
3.2 Energy and emissions 32
3.3 Material and resource management 34
3.4 Logistics 36

With its energy-efficient and eco-friendly processes, the company contributes to the SDGs “Sustainable forms of consumption and production” (SDG 12) as well as “Fighting against climate change and its effects” (SDG 13).
3.1 Environmental management

**AT A GLANCE**

- Environmental and energy topics are organized in a worldwide matrix organization
- The integrated environmental management is certified in accordance with the ISO 14001 standard and the EMAS eco-audit standard

**Worldwide standardization of environmentally relevant processes**

The Schaeffler Group aims to set an example not only for its products, but also for its own processes in terms of environmental protection and energy efficiency. The company pursues an ambitious environmental and energy policy on a global level. To manage its energy and environmental issues across the company, the Schaeffler Group maintains an EnEHS (Energy, Environment, Health, and Safety) management system that applies worldwide. It is based on the energy and environmental standards ISO 50001 for energy management, ISO 14001 for environmental management, and the EMAS eco-audit standard, among others. The continuous improvement of energy management and the further development of environmental services are ensured by regular internal and external audits. The company management carries out stakeholder analyses with a subsequent opportunity and risk assessment throughout the Group and down to each individual location.

98.1% of Schaeffler production sites are EMAS certified¹

The Schaeffler Group organizes its environmental and energy topics in a global matrix organization. Local environmental protection and energy representatives, regional coordinators, and experts from the strategic departments work closely together in a network. Key performance indicators (KPIs) are used to plan, assess, and manage environmental measures. The need for action and measures are discussed and resolved in the context of regular management reviews with the Executive Board.

In 2019, 98.1%¹ of Schaeffler production sites were EMAS certified and 98.8%¹ were ISO 14001 certified. Schaeffler continues to develop its environmental management and has the system audited regularly by an external auditor.

There were no violations of environmental protection laws within the Schaeffler Group during the reporting period. Accordingly, no fines or sanctions were imposed.

**Production sites with an environmental management system**

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage rate for EMAS certification in %¹</td>
<td>98.1</td>
<td>98.1</td>
<td>98.2</td>
</tr>
<tr>
<td>Coverage rate for ISO 14001 certification in %¹</td>
<td>98.8</td>
<td>98.7</td>
<td>98.7</td>
</tr>
</tbody>
</table>

¹ Relating to employees on the production sites.

3.2 Energy and emissions

**AT A GLANCE**

- Schaeffler is committed to the Paris Climate Change Agreement to limit global warming to less than 2° or 1.5° Celsius
- The basis for calculating the environmental and climate objectives will be revised to improve the validity of the indicators

**More efficiency through data-based management**

The company-wide measurement and management of energy consumption forms the basis for more efficiency. Therefore, Schaeffler has been gradually introducing an energy management system in accordance with ISO 50001 as part of its EnEHS management since 2013. In 2019, the coverage rate¹ of this system reached 98.0% (prior year: 97.9%).

¹) Relating to employees on the production sites.
Internal EnEHS specialists and auditors monitor the effectiveness of the efficiency measures using a standardized, global energy data management system. Within this framework, minimum standards are defined. In addition, the plants define individual goals.

98.0\% of Schaeffler production sites are ISO 50001 certified\(^1\)

Starting in 2020, the company management will also carry out stakeholder analyses with a subsequent assessment of opportunities and risks throughout the Group and down to each individual location.

In 2019, the Schaeffler Group’s absolute CO\(_2\) emissions\(^2,3\) decreased by 1.9\% compared to the previous year, from 1,045,627 to 1,026,057 tons of CO\(_2\). Projects were initiated with the support of external experts to identify, classify, and potentially reduce Scope 3 emissions. In addition, the company is expanding its energy efficiency measures and is focusing on more sustainable alternatives, such as the use of renewable energies.

The climate and environmental goals reported last year were reassessed and will be continued in an adapted form. The company’s climate protection activities will be accelerated using an improved data basis.

### Energy and CO\(_2\) emissions

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage rate for ISO 50001 certification in %(^1)</td>
<td>98.0</td>
<td>97.9</td>
<td>98.0</td>
</tr>
<tr>
<td><strong>Energy consumption broken down by categories</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total energy consumption in GWh(^3)</td>
<td>3,290</td>
<td>3,367</td>
<td>3,233</td>
</tr>
<tr>
<td>Electricity consumption in GWh(^3)</td>
<td>2,316</td>
<td>2,365</td>
<td>2,339</td>
</tr>
<tr>
<td>Natural gas consumption in GWh</td>
<td>872</td>
<td>877</td>
<td>798</td>
</tr>
<tr>
<td>Fuel oil consumption in GWh</td>
<td>7</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>District heating consumption in GWh(^4)</td>
<td>48</td>
<td>63</td>
<td>67</td>
</tr>
<tr>
<td>Propane/LPG consumption in GWh</td>
<td>47</td>
<td>53</td>
<td>51</td>
</tr>
<tr>
<td><strong>Greenhouse gas emissions in t CO(_2)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total(^5,6)</td>
<td>1,026,057</td>
<td>1,045,627</td>
<td>1,008,985</td>
</tr>
<tr>
<td>Scope 1(^5)</td>
<td>190,575</td>
<td>193,711</td>
<td>175,635</td>
</tr>
<tr>
<td>Scope 2 (market-based)(^5)</td>
<td>835,482</td>
<td>851,916</td>
<td>833,350</td>
</tr>
<tr>
<td>Scope 2 (location-based)(^5)</td>
<td>1,179,534</td>
<td>1,268,082</td>
<td>1,233,752</td>
</tr>
</tbody>
</table>

1) Relating to employees on the production sites.  
2) Energy sources included: Electricity, natural gas, district heating, propane, fuel oil, without the amount of electricity produced by the gas-powered CHP.  
3) Only external electricity purchases since CHP electricity is recorded via gas consumption.  
4) Consumption reduced in 2019 because the Wuppertal plant has been using natural gas for its heating requirements since 2019.  
5) The calculation of greenhouse gas emissions is based on the emission factors of the VDA (2019) and the Probas database of the German Federal Environmental Agency. Emission sources covered: Scope 1 (natural gas, heating oil, propane) and Scope 2 (electricity, district heating).  
6) 2017 value not included in the review scope.

### Total greenhouse gas emissions in t CO\(_2\)

- **Scope 1**
- **Scope 2 (market-based)**

<table>
<thead>
<tr>
<th></th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>833,350</td>
<td>851,916</td>
<td>835,482</td>
<td></td>
</tr>
<tr>
<td>175,635</td>
<td>193,711</td>
<td>190,575</td>
<td></td>
</tr>
</tbody>
</table>
Measures to increase energy efficiency

Schaeffler already uses a wide range of different technologies. They range from energy-saving LED lighting for production lines, business premises, and open spaces to modern cogeneration plants that combine power, heating, and cooling and efficient refrigeration technology in administrative, workshop, and storage areas to buffer storage that enable waste heat and cooling to be used later on. In addition, Schaeffler is continuously reducing the energy consumption of its production facilities, thereby creating increased energy efficiency. Among other things, this is done through the €COMODE button, which was specifically developed by Schaeffler’s Special Machine Construction department. This allows components that are not constantly in use, such as lighting, compressed air, or drives, to be temporarily switched off and reactivated as required. Measurements show that potential energy savings of up to 30% can be achieved compared to an existing system.

Avoiding waste

Waste should be avoided above all. If the waste cannot be reduced beyond a certain level, it should be sent for approved recycling. The aim is to achieve a recycling rate of 95% across all waste categories at all production sites. A waste database has been in use since 2019 and forms the basis for worldwide waste reporting. All Schaeffler Group manufacturing sites are required to use this database to document all waste operations.

Target

Energy Efficiency
100 GWh cumulated annual efficiency gain through implementation of energy efficiency measures until 2024

To ensure a consistent focus on environmental and energy management, Schaeffler organizes EnEHS conferences every three to five years. In addition, regional conferences are held at more frequent intervals.

3.3 Material and resource management

At a glance

- One of Schaeffler’s central aims is to use resources sparingly
- Material and energy requirements are taken into account at an early stage when designing production processes

Repairing, processing, and testing with virtual components

Repairing and processing used components can save valuable resources and reduce costs. Schaeffler offers its customers tailor-made products and services for this purpose. These include, for example, reprocessed components in original part quality and a digital system for predictive maintenance of technical equipment.

Schaeffler also contributes to material efficiency through the use of simulation technology and virtual engineering. Many test series for product adjustments are now being carried out virtually by the company. This saves material as test series with actual components are no longer needed.

Schaeffler also expects to save materials and conserve resources through additive manufacturing (AM). Also known as 3D printing, the manufacturing process includes many technologies that simplify manufacturing processes.
AM speeds up the designing of manufacturing processes and is particularly suitable for the flexible production of small batches. It avoids the usual waste from traditional processes like machining. Every year, Schaeffler produces around 5,000 parts in Herzogenaurach via additive manufacturing.

Saving water in production

Schaeffler strives to further reduce water consumption at all locations worldwide year after year. Despite its recent growth, the company’s water consumption decreased slightly by 5.0%. In the course of the revision and new formulation of the environmental goals, various water initiatives were included to reduce the consumption of fresh water and reuse treated wastewater. The design of the production facilities plays an important role in reducing water consumption. In planning new plants with a high need for water, for example, the developers generally anticipate the construction of reprocessing facilities. Existing plants are being upgraded in accordance with technical and economic assessments. For example, the electroplating (electrochemical surface coating) production area requires large quantities of water. In order to reduce water consumption in this area, the used rinse water is processed by means of ion exchangers and returned to the operating process.

Water consumption, waste, and recycling rate

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water consumption in m³</td>
<td>5,783,781</td>
<td>6,089,564</td>
<td>5,964,821</td>
</tr>
<tr>
<td>Recycling rate², Germany, in %</td>
<td>93.1</td>
<td>91.1</td>
<td>94.9</td>
</tr>
<tr>
<td>Amount of waste, Germany, in t</td>
<td>284,558</td>
<td>312,383</td>
<td>302,969</td>
</tr>
</tbody>
</table>

1) Water consumption includes municipal and internal company water.
2) Recycled or recovered amount of total waste, excluding metals and scrap.

“Factory for Tomorrow”

When designing production processes, relevant environmental issues such as material and energy demands are taken into account comprehensively and at an early stage. In order to combine and further intensify the sustainability activities in the production environment, Schaeffler defined the additional work focus “Sustainable Factory” in August 2018 as part of the program for the future “Agenda 4 plus One” for the “Factory for Tomorrow” (FaT) initiative. This workstream includes 21 subprojects on the topics of energy generation and consumption reduction, resource efficiency, production systems, employee mobility, and material transport. Auditing and certification systems for buildings were also included. In addition, the projects in the workstream include the creation of worldwide standards within the topics mentioned. In the subproject “Alternative Drive Concepts”, benchmarks are carried out in order to determine the most viable drive concept for Schaeffler intralogistics vehicles. The SEHS division has been responsible for the “Sustainable Factory” workstream since 2019.

One-time subprojects of the “Sustainable Factory”, such as “Wastewater-free Factory” and “Zero Waste to Landfill” were reassessed and continued in an adapted forms (see the chapter on avoiding waste, p. 34). Those projects aim to make plants independent in terms of waste and wastewater in the future. Also noteworthy is the “On Campus Transportation” project. The company wants to use its own e-mobility solutions such as the E-Board, Bio-Hybrid, or Schaeffler Mover in the operating areas of its locations to transport passengers and materials for this purpose. Another project is dedicated to the sustainable manufacturing machine of the future.

In a first phase, the project team looked at existing sustainability activities in the manufacturing sector from energy supply and use to maintenance and tool changes to material and passenger transportation. The goal is to be able to network and monitor relevant machines in a single system. In addition, uniform standards for the interface to the hall infrastructure are to be developed, both for internally and externally produced machines. On the other hand, this is achieved through a uniform standard for the pipe systems. On the other hand, the various teams are working on a connection solution so that all machines can be connected to the hall infrastructure in a uniform manner. Schaeffler has set itself the concrete goal of realizing the “digital, semiautonomous, and sustainable factory” by 2021 at a production site as part of a pilot project.

At individual locations, solutions for the sustainable “production of the future” are taking shape more and more. For example, a pilot project for holistic energy management was started at the Austrian plant in Berndorf. In 2018, together with the project managers from the central energy management, the responsible site managers developed a concept for a condition monitoring system to digitally monitor the condition of the machines and to control the resources, for example, the coolant supply, as required.
They also defined KPIs for energy consumption, vibration values, and other metrics. The employees concerned will be trained to operate the new technology. The intermediate results include KPI monitoring – for example, kWh per part produced, visualizations, and solutions for a needs-based media supply. The KPIs will be used directly to control the processes in the production area. The current and future results in the areas of energy management, predictive maintenance, and data analytics will also be used to make the condition monitoring system usable for greenfield and brownfield projects (new factory builds and renovations).

More information on the “Factory for Tomorrow” is available at: www.schaeffler-tomorrow.com/tomorrow/178/

3.4 Logistics

AT A GLANCE

- The concentration of logistics activities enables efficient market supply
- Global expansion of charging infrastructure for electric and hybrid vehicles at Schaeffler locations enables climate-friendly employee mobility

Shorter routes and better utilization

During the reporting period, supply and traffic flows were further optimized in order to improve their energy and CO₂ footprint. Meaningful key figures are important for the targeted reduction of CO₂ emissions in logistics. That is why Schaeffler is working on collecting data on Scope 3 emissions across the Group in the future. In addition to freight transports, this includes business trips and access routes.

Automated transport management

The Schaeffler Group is working on introducing a group-wide transport management system (TMS) that collects transport orders and forwards them seamlessly and securely to the involved parties. The TMS facilitates freight bundling, improves the utilization of the means of transportation used, and thereby saves energy and CO₂ emissions. At the same time, the regional transport management organizations are continuously examining the current transport network for ways of optimizing capacity on individual routes and improving the existing network through route changes.

New distribution centers reduce emissions in the supply chain

The Schaeffler Group has steadily consolidated its logistics in recent years, including the reporting year. The EDC location in Kitzingen was opened in 2018 as part of the new distribution network for industrial products in Europe and was put into full operation in July 2019 with the product ramp-up. The investments made make the industry supply chain faster and more energy and cost efficient. In the Automotive Aftermarket division, another central European logistics center (“Aftermarket Kitting Operations”) will be built by the second quarter of 2020.

Employee mobility electrified

Schaeffler wants to further reduce the emissions linked to employee and business travel. Like in Germany, hybrid and electric vehicles are now available as company cars in Europe and the other Schaeffler regions. With its company car guidelines, Schaeffler is promoting the use of vehicles with low CO₂ emissions, especially electrified vehicles, on its own initiative in addition to the existing governmental subsidy programs. Following the revision of the Framework Directive for Schaeffler’s European Company Car Guidelines in 2018, further nine national company car guidelines were released for electric cars and hybrids in 2019. Another three are under revision and will be released soon.

Schaeffler is consistently expanding its charging infrastructure for electric and hybrid vehicles worldwide. By the end of 2019, 143 charging stations were available at 28 sites. In the first half of 2019, charging stations for employees were also opened at the Bühl and Hagenau sites.
Employees and society

The Schaeffler Group’s employees are one of the most important pillars of its success. Their expertise, their skills, their dedication, and their ingenuity ensure the continuous development of the company and thereby contribute significantly to its current and future success. In mutual interest, the Schaeffler Group supports the professional development of its employees from apprentices to specialists and executives, aims to ensure effective occupational health and safety and to promote diversity in its workforce. The Group offers them fair, performance-based payment and retirement plans and helps them to achieve work-life balance through flexible working hours. The HR strategy and the associated Roadmap 2020 with the strategic initiatives of the Human Resources (HR) department form the basis of HR work. This is based on the five pillars Employer Branding & Recruiting, Talent Management, Leadership & Corporate Values, Training & Learning, and Sustainability, Environment, Health & Safety. The overarching focus topics are Diversity, Strategic Workforce Planning, and Digitalization.

In addition, the Schaeffler Group is committed to the well-being of society in the areas surrounding its many sites according to the “global company with local presence throughout the world” principle.

The Schaeffler Group’s commitment to its employees and society contributes in many ways to achieving the SDGs. This applies in particular to “Good health and well-being for all” (SDG 3), “Education for all” (SDG 4), and “Gender equality” (SDG 5).
4.1 Employee advancement and development

**At a Glance**

- Attracting, promoting, and retaining the best employees worldwide are the core elements of Human Resources Management.
- Successful implementation of the “Qualification for Tomorrow”, “Leadership & Corporate Values”, and “New Work” initiatives.

> Employees at Schaeffler

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of employees, total</td>
<td>87,748</td>
<td>92,478</td>
<td>90,151</td>
</tr>
<tr>
<td>Average age in years</td>
<td>40.5</td>
<td>39.9</td>
<td>39.7</td>
</tr>
<tr>
<td>Average tenure in years</td>
<td>11.9</td>
<td>11.2</td>
<td>11.0</td>
</tr>
<tr>
<td>Proportion of female employees, total in %</td>
<td>22.1</td>
<td>22.0</td>
<td>21.7</td>
</tr>
<tr>
<td>Proportion of female managers, total in %²</td>
<td>11.5</td>
<td>10.9</td>
<td>12.4</td>
</tr>
<tr>
<td>Labor turnover rate in %³</td>
<td>4.4</td>
<td>4.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Permanent employees in %</td>
<td>91.5</td>
<td>90.7</td>
<td>90.1</td>
</tr>
<tr>
<td>Part-time ratio, Germany in %</td>
<td>7.1</td>
<td>6.3</td>
<td>6.5</td>
</tr>
</tbody>
</table>

1) Unless otherwise indicated, the employee figures refer to the reporting date of December 31 of the respective year.
2) Managers are defined as employees in a supervisory function. A new basis for calculation based on an adjusted definition of the management function results in different % values for the year 2018 compared to the previous year's report.
3) Initiated by employees, related to the average number of employees from 1/1 to 12/31 of the year.

**Distribution of employees by region¹**

- Europe: 68.6%
- Americas: 14.0%
- Greater China: 13.9%
- Asia/Pacific: 3.6%

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**Compensation and company pensions**

Compensation at Schaeffler is competitively positioned and the relevant legal requirements are fulfilled. In Germany, this means observing the General Act on Equal Treatment (AGG), among others. In addition, the company fulfills its obligations to provide information in accordance with the new Pay Transparency Act in Germany. Together with the Works Council, the Executive Board has taken all the necessary measures for this act.

Compensation at Schaeffler is individually based on the tasks and also includes performance-related components. Variable compensation models are also harmonized throughout the company. The compensation-relevant key figures are now consistently based on the target values of “Schaeffler Value Added” and “Cash Flow”. Additionally, employees below the top management level can set individual quantitative and qualitative goals.

Employees in Germany can learn about different retirement plans via a company-internal retirement portal and can calculate the expected income to receive from the various retirement models.

**Attracting talent and developing potential**

In order to attract and recruit new talents, Schaeffler relies on target group-oriented measures in employer branding and vocational training marketing. Specific measures are:

- Participation in various information days and events at which young people receive information about careers and training opportunities at Schaeffler.
- Partnership-based and sustainable cooperation with universities, student bodies, student associations, and organizations.
- Main sponsor of Formula Student Germany for many years.

> An annual talent management process takes place to systematically monitor the development of internal potential. The basis of this process is the Employee Development Dialog (EDD) between an employee and a senior executive. The interview is used to discuss behavior, performance, and potential. This information is included in the Global Talent Review (GTR), which calibrates employee assessments between senior executives.
Within the framework of this GTR, Schaeffler also ensures the new staffing and replacement of key positions. Employees with high potential are identified at an early stage and receive both professional and personal training. The Schaeffler Academy, the company’s own education and training department, is continually expanding its range of corresponding qualifications.

Promoting young talent: high-quality training opportunities

Quality training and further development of young professionals has always been a high priority at Schaeffler. In 2019, Schaeffler employed 3,078 apprentices worldwide (prior year: 3,275) at 51 locations in 16 countries.

Good qualification of young professionals begins with their trainers: All trainers in Germany have been familiarized with new learning methods, the use of modern media in day-to-day training, and the special expectations of generations Y and Z as part of a modular qualification program. At the beginning of 2019, the qualification program was also launched in Eastern Europe.

The training content is being developed to meet changing needs, such as for trends like Industry 4.0 or Digitalization.

In addition, Schaeffler offers young people in Germany various learning opportunities for higher education. These include a dual course of study, a “Two in One” course study with technical colleges, and a master’s degree program.

Schaeffler is preparing its apprentices for new requirements with pioneering projects, such as the use of augmented reality concepts in the form of virtual welding simulators. The training concept that was developed in Germany over the last two years in which apprentices build their own 3D printers is now also used at many locations abroad.

Focus on: “Qualification for Tomorrow”

As part of the strategic education initiative “Qualification for Tomorrow”, the Schaeffler Academy has created target group-specific training opportunities in close cooperation with the strategic business fields. This is achieved via modern and global qualification programs, for example on agile project management, digitalization, and mechatronics as well as offerings for the Sales & Key Account Management target group. The Schaeffler Academy also has the task of identifying training needs and designing subject-specific training and educational programs together with the respective business divisions. These offerings are increasingly made available digitally, for example in the form of explanatory videos or online training with a gamification approach. This decouples the learning process from time and location.

The new forms of learning are available via the Learning Management System used at Schaeffler, as are the classic classroom training sessions. At the end of the reporting period, this system was already available in 27 countries and covered 93.0% of the total workforce. The global rollout should be completed by the end of 2020. Overall, 134 online training courses were globally available to employees (previous year: 95). In addition, 27,906 participants (prior year: 31,874) took part in classroom training sessions in 2019.

### Apprentices, students, and trainees

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apprentices, total</td>
<td>3,078</td>
<td>3,275</td>
<td>3,185</td>
</tr>
<tr>
<td>Trainees, Germany</td>
<td>42</td>
<td>46²</td>
<td>49</td>
</tr>
<tr>
<td>Students, Germany³</td>
<td>340</td>
<td>359</td>
<td>358</td>
</tr>
</tbody>
</table>

1) Unless otherwise indicated, the employee figures refer to the reporting date of December 31 of the respective year.

2) Figures for 2018 were adjusted retrospectively compared with the previous year’s report.

3) Dual students, Master’s degree, and “Two in One” students. The “Two in One” study program combines a bachelor’s degree with vocational training.
Focus on: “Leadership & Corporate Values”

As part of the “Leadership & Corporate Values” initiative, Schaeffler already introduced six Leadership Essentials in 2017. These describe the behavior that Schaeffler senior executives at all levels should exemplify in their daily work with their colleagues and their employees. In 2018 and 2019, the following measures were taken to implement the Leadership Essentials in the company:

- Conducting nine roadshows with senior executives worldwide and with the involvement of the CEO and all members of the Executive Board.
- Conducting cascading workshops across all levels for all senior executives worldwide.
- Selection of all new senior executives to be hired based on the Leadership Essentials.
- Introduction of upward feedback in which the senior executives see how well their employees live up to them.
- Alignment of all management trainings with the Leadership Essentials. The “Leadership Reflections” training course launched in 2018 is now available in all regions, and the training portfolio for senior executives was further revised in 2019.
- Assessment of senior executives in the annual Employee Development Interview based on the Leadership Essentials.
- Implementation of various modern online tools for senior executives, such as a development toolbox or the leadership simulation “Mission Possible”.

The “International Management Program” was also realigned based on the Leadership Essentials. It serves as a blueprint for all other qualification programs that are available in the regions for senior executives at various levels. These will be successively updated in 2020 and aligned to a common, cross-regional concept.

In addition, the “Employee Essentials” were developed in 2019 together with employees from different regions. These complement the Leadership Essentials and set the framework for all employees who have no management responsibility. Beginning in 2020, the essentials will be communicated and integrated into all relevant HR processes and training.

Focus on: “New Work”

At Schaeffler, “New Work” means open work areas and modular room concepts that enable flexible and open communication and promote cross-project work. These include multifunctional spaces that can be adapted to the users’ needs and “think tank” spaces where employees can retreat for concentrated work.

The “New Work” concept was tested at the Erlangen, Schweinfurt, and Nuremberg locations. In order to establish the concept internationally, the Executive Board adopted a global “New Work” strategy in 2018. Since then, the global strategy has been the basis for all upcoming pilot projects.

- In 2019, the pilot site with an area of approximately 12,000 m² was completed in Nuremberg.
- In the Shared Service Center in Wroclaw, “New Work” was also started in 2019 and is expected to be completed in 2020.
- In 2019, a “New Work Toolbox” was developed that provides project managers with the tools to carry out projects according to globally standardized process and task descriptions. The strategy details the goals of “New Work” for work organization, corporate culture, IT, and digitalization as well as architecture and space, and describes how these can be implemented, for example in furniture design, room concepts, and change management.
4.2 Occupational health and safety

**AT A GLANCE**

- The physical and mental performance and motivation of employees are key to the success of the company.
- Corporate health management (CHM) and occupational safety are the basis for this – even in countries where there are no government regulations.

**Actively promoting health**

CHM and occupational safety are the responsibility of the head of environment, health & safety, which is organizationally assigned to the the executive board level Human Resources. CHM is based on the framework guidelines of the Luxembourg Declaration on Workplace Health Promotion of the European Union.

Schaeffler’s health and safety policy aims at safe workplaces and health-promoting and health-maintaining conditions in the work environment and personal lifestyle. The starting points here are, for example, the personal care of employees in the form of preventive health programs, including raising awareness of health-conscious behavior at the workplace and the ergonomic design of workplaces. In addition, there is a wide range of health services, such as training, education and course opportunities, that all Schaeffler Group employees can take advantage of during and outside their working hours.

With its Corporate Health Management, Schaeffler sets standards across industries and assumes responsibility at its locations worldwide. Examples include the Health Week in China with around 5,500 participating employees at six locations and the Health & Ergo Scout project in Brasov. The positive ergonomic behavioral changes of the employees in Brasov confirm the positive results from the German pilot locations Herzogenaurach, Bühl, Sasbach, and Lahr.

In mid-2019, a program to improve attendance was launched at four pilot locations in Germany. The implementation was structured, integrating trainings, interviews, corporate health management as well as documenting measures. The program will be rolled out across Germany in 2020, after first successes have already been recorded.

**Reducing stress in the workplace**

The Schaeffler Group aims to effectively reduce stress at work through various measures:

- As part of “Agenda 4 plus One” with the “Factory for Tomorrow” initiative, the Schaeffler Group introduced a workplace register in 2018 that will be rolled out worldwide. This database is used to determine and visualize physical and organizational stress and stress from the working environment. Through a matching process, it is possible to find suitable jobs for employees whose abilities have changed in a more targeted manner, thereby positively promoting reintegration. In 2019, several locations in Europe and China already had the new management tool. The tool is scheduled to be available worldwide in 2021.
- The company gathers health-promoting measures for individual employees in the “Boxenstopp Rückenaktiv” (active back pit stop) program. This includes performing regular corrective exercises close to the workplace during working hours.
- The project “Health & Ergo Scout” aims at employee behavior in the workplace. Through a workshop, employees are made aware of the topic of ergonomic behavior and risk-related illnesses/complaints of the job and then receive individualized advice at the workplace.
- “Fit4Shift” is offered specifically for shift workers. In a day workshop, employees are made aware of shift-specific problems and how to prevent them.
- In addition, Schaeffler assigns ergonomics officers in the plants in order to build up a powerful network on the subject and to solve the challenges on site. Ergonomics assessment tools make the stress at workplaces transparent and quantifiable.

**Maintaining a balance**

Performance and time pressure as well as conflicts in the workplace can have a negative impact on employee health. Schaeffler wants to counteract these effects preventively and proactively. Managers can significantly contribute to this by helping their employees to better cope with stress. Therefore, the company offers the “Healthy leadership” seminar program especially for this target group. Participants are guided to reflect on how to deal with their own health. They also learn how leadership styles affect the motivation, ability to work, and commitment of employees and what they...
can do to align their needs and goals with the organization’s goals. The training “Staying balanced by recognizing and strengthening mental resources” is designed to help project and technical managers better survive stressful situations in everyday life. They learn to rethink their own behavior in stressful situations, to develop new coping strategies, and to correctly assess their options for action, including when it comes to their own health. Schaeffler successfully piloted both programs at selected locations in Germany in 2018. Beginning in 2020, a seminar on stress management will also be offered that will reflect on the consequences and causes of stress.

**Highlight**

Excellence class achieved for the Corporate Health Award

For its pioneering role in linking digital and analog offerings in corporate health management, Schaeffler achieved the excellence class for the Corporate Health Award in 2019. The innovative Schaeffler Health Coach is a unique concept on the market and received special attention. Since 2009, the Corporate Health Award has been the most prestigious award in German-speaking countries for exemplary corporate health management. The group has recognized the relevance of occupational health management and has a careful eye on the needs and demands of its employees. This is also clearly reflected in the results of the audit process, with 91% being well above the industry average.

In addition, Schaeffler provides its employees at German locations with the Schaeffler Health Coach, which is a comprehensive health portal. The portal, which can be used both as an app and as a desktop version, allows health management to reach all Schaeffler employees. All health offers, which are available to the employee for free registration, can be viewed in the Schaeffler Health Coach. Furthermore, current news on the topic of health and health tips are uploaded regularly. The tool has already been active since the end of 2018 and was expanded in April 2019 to include the important factor “telemedicine”. This gives employees access to medical advice around the clock.

Uniformly high occupational safety standards worldwide

In order to comply with legal requirements and to further develop internal processes and standards for occupational health and safety, the Schaeffler Group uses a comprehensive “Energy, Environment, Health & Safety” (EnEHS) management system. It takes into account international occupational safety standards among others. The coverage rate according to the ISO 45001 standard, which has replaced the OHSAS 18001 standard with a three-year transition period since 2018, is 99.0%.

**99.0%**

of Schaeffler production sites are OHSAS 18001/ISO 45001 certified

According to the EnEHS management system, all executives and employees are required to comply with occupational safety regulations. Executives are advised by specialists in occupational safety at the respective production sites when carrying out their responsibilities. The results of the discussions are reviewed regularly with the responsible members of the Executive Board. If necessary, further action will be taken. In this way, the EnEHS management system is being developed continuously. This is also demonstrated by the “Innovative safety concept for a forging plant” project at the Schweinfurt location, which was awarded the “Schlauer Fuchs” (smart fox) safety prize by the Employers’ Liability Insurance Association for Wood and Metal. Thanks to intensive cooperation between internal and external specialists from different departments, the workplaces at the forging plant have been made safer and more ergonomic. The developed safety concept has set new standards for the state of safety technology.
In the reporting period, the accident rate\(^3\) was reduced to 5.2 (prior year: 6.2) thus achieving the annual reduction target of 10% for the third year in a row.

---

**TARGET**

**Accident Rate**

10% average annual reduction of accident rate (LTIR) by 2024

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**4.3 Diversity and equal opportunity**

**AT A GLANCE**

- The main topics of the diversity concept are gender, internationality, age/generations, and people with disabilities
- Diversity Council established to anchor the topic more firmly in the company

**Strategically promoting diversity**

In 2019, the topic of diversity was more strongly integrated into existing HR processes such as employer branding, recruiting, and talent management and supported with measures. Diversity was also included in the onboarding process – from the first brochure to the Schaeffler Basics II introductory training. With the development of a diversity-sensitive recruiting process, the topic will also be given greater consideration when recruiting new employees. A pilot program for this will be launched in 2020.

Schaeffler signed the “Charta der Vielfalt” (Diversity Charter) in 2008. In 2018, Schaeffler joined the “Charta der Vielfalt” association. In 2019, the company actively participated in all general meetings, the diversity conference, and working groups for the internationalization of the initiative.

---

**HIGHLIGHT**

**Diversity Council established**

In implementing sustainable diversity management, Schaeffler focused on anchoring the topic at the highest management level in 2019. A Diversity Council was established for this purpose, consisting of members of the Executive Board and senior employees. The aim of the Council is to integrate the topic more strongly into the company and to prioritize measures. The kick-off was in November 2019.

**Promoting top female performers**

In 2018, measures were initiated for each of the four focus topics of the diversity concept. Particular attention was paid to the focus area of “Gender” in the reporting period. Among other things, Schaeffler has started to expand the global mentoring concept with women’s mentoring. A women’s mentoring pilot program in Europe targeted women, each of whom was assigned a mentor from the European Management Board.

In 2019, the proportion of women in the Schaeffler Group was 22.1% (prior year: 22.0%) and the proportion of female senior executives\(^4\) was 11.5% (prior year: 10.9%)\(^5\). As of June 30, 2017, target ratios for the proportion of women were set within Schaeffler AG. The target rates are an 8% proportion of women on the first and a 12% proportion of women on the second management level below the Executive Board. Schaeffler AG should reach these goals by June 30, 2022.

**The added value of a diverse workforce**

The Schaeffler Group employs workers from 113 different nations worldwide. Internationality is therefore one of the four focal topics of diversity management. In 2019, the focus was on the establishment of an international network that will be used to analyze diversity-related needs and identify diversity managers in the regions in the future.

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3) Measurement of Lost Time Injury Rate, LTIR = occupational accidents from one lost day per 1 million hours worked. Employees incl. temporary staff, apprentices, and interns.

4) Managers are defined as employees in a supervisory function.

5) Figures for 2018 have been adjusted retrospectively compared with the previous year’s report.
The diversity within the company is also reflected in the exchange between the generations. Four generations currently meet in the workplace with different expectations of work, values, standards, and priorities. To promote the exchange of experience between the generations, the “Reverse Mentoring” pilot program that was introduced in 2018 was further promoted in 2019.

The Schaeffler Group also focuses on the integration of people with disabilities. People with disabilities need individually tailored working conditions so that they can perform their work or continue their work after the onset of a disability. Schaeffler specifically identifies jobs that already meet these requirements or develops existing jobs as needed.

113 different nationalities are represented at Schaeffler

The regions depict the regional structure of the Schaeffler Group.

4.4 Corporate citizenship

AT A GLANCE

• The core areas of engagement are “Education and science”, “Health and social issues”, and “Sports and culture”
• Schaeffler initiated and implemented 112 CSR projects worldwide in 2019

Common good in view

Within the framework of a group-wide sponsoring guideline and an associated global management system, the Schaeffler Group ensures that funds provided are used in a targeted manner. Funding is provided to organizations and initiatives that work towards the common good, that are non-profit, and that comply with the Schaeffler Group’s Corporate Code of Conduct. Donations are monitored by the Compliance department, while sponsorships are managed by the Communications and Branding department.

In the year under review, a total of 112 CSR projects were initiated and implemented worldwide. Selected project examples are listed below.

CSR projects worldwide

Americas
Education and science: 21
Health and social issues: 10
Sports and culture: 7

Europe
Education and science: 13
Health and social issues: 10
Sports and culture: 45

Greater China
Education and science: 1
Health and social issues: 0
Sports and culture: 45

Asia/Pacific
Education and science: 4
Health and social issues: 1
Sports and culture: 0
Education and science

Education, training, and scientific research are key factors for success in the Schaeffler Group’s business model. The company is therefore active in education and science through strategic partnerships and collaborations.

A central issue for Schaeffler is to promote start-ups from the tech scene and to strengthen networks and knowledge transfer. Schaeffler is one of the founding partners of the “Zollhof Tech Incubator”. It combines entrepreneurial spirit, courage, exchange, and team spirit. IT start-ups have the opportunity here to further develop their ideas and build networks with science, business, and investors.

In 2019, Schaeffler participated in both “Hackbay” and the “Student Ideation Camp”. At the events, the participants developed ideas and concepts around the chainless drive in cooperation with Schaeffler mentors. For the first time, the partnership also included a three-month talent program. Students of the Friedrich Alexander University Erlangen Nuremberg designed a database for additive manufactured components together with a Schaeffler team. With this aid, it should be possible in the future to assess more quickly whether components can be manufactured using an additive process.

The Schaeffler FAG Foundation, established in 1983, is a major player in the Group’s involvement in education and science. The purpose of the foundation is to support science, research, and teaching in scientific and technical fields related to bearing technology. The foundation sees itself as a bridge between science and the economy that brings together people’s visions and goals in research, teaching, and the economy. Since its founding, the Schaeffler FAG Foundation has distributed over EUR 1 m in funding.

Health and social issues

Schaeffler wants to positively influence its environment and support people in need or in difficult living conditions.

Furthermore, Schaeffler has been working with AFB GmbH, Europe’s largest non-profit second-hand IT recycling company, for over ten years. Schaeffler supports the company’s efforts to provide people with disabilities employment opportunities in the primary labor market. As part of the cooperation with AFB, Schaeffler has so far saved a total of 3,100 tons of metals and minerals, 2,100 tons of greenhouse gases, and 6,700 megawatt hours of energy.

Already in its fifth year, Schaeffler India’s HOPE initiative supported regional projects in four defined priority areas. This included health care, protecting the national art and cultural heritage, strengthening social institutions, and improving

the employability of young people in the region through targeted training programs.

In the year under review, mobile health teams were again sent to Vadodara, Gujarat, where young women and girls could take part in medical check-ups. Children were also tested for malnutrition, and treated if necessary. Commercial, service, and technical skills were conveyed to women’s groups and mixed teams in various programs. With the ongoing project “Quest on Wheels”, trips to cultural sites, gardens, and exhibitions for 12,000 children from schools and children’s homes have been organized since 2016.

Sports and culture

Schaeffler also contributes to conveying values by supporting sports and cultural activities and thus generates momentum for positive social development.

Since the first season 2014/2015, Schaeffler has been one of the key actors in Formula E, also underscoring its position as an electromobility pioneer on the racetrack. Even after Audi’s entry in the 2017/2018 season, Schaeffler continues to participate in the work of the cooperation partners in the areas of electric motor, transmission, chassis suspension, and power electronics. In 2019, the Audi Sport ABT Schaeffler team was the runner-up of the team title.

Intercultural exchange is also one of Schaeffler’s focuses. From October 2018 to the end of 2019, the comprehensive information campaign “Germany Year USA 2018/19” was held to intensify the long-standing cooperation between the two countries. With a large number of projects, platforms for dialogue, exchange, and partnerships were created, and new momentum for diverse relationships in business, science, politics, and culture was gained, thus enabling new alliances for the future.
Appendix

CONTENTS

5.1 Key figures on sustainability 47
5.2 GNFK index and GRI content index 51
5.3 Sustainability targets 52
5.4 About the report 53
5.5 Report of the Independent Auditor 55
Contact information/Imprint 57
5.1 Key figures on sustainability

Financial and non-financial key figures that are important for measuring the sustainability performance of the Schaeffler Group are presented below.

If not otherwise indicated, the information refers to the Schaeffler Group. The reference period covers the business years from 2017 to 2019.

In the course of preparing the combined separate non-financial report of the Schaeffler Group, selected qualitative and quantitative details were submitted to an external business audit taking into consideration the International Standards on Assurance Engagements (ISAE) 3000 (Revised) for the purpose of obtaining a limited assurance engagement with respect to the information required by law as per Sections 315b and 315c in conjunction with Sections 289c to 289e HGB. Key figures audited in this context are marked with a ✓ sign. Key figures marked with ✓✓ were taken from the consolidated financial statements or the combined management report.

The figures are generally rounded, which can lead to slight deviations in the calculation of sums.

### Strategy and management

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</thead>
<tbody>
<tr>
<td>Total revenue EUR millions</td>
<td>14,427</td>
<td>14,241</td>
<td>14,021</td>
<td>1.3</td>
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<td>Revenue Automotive OEM¹) EUR millions</td>
<td>9,038</td>
<td>8,996</td>
<td>8,991</td>
<td>0.5</td>
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<tr>
<td>Of which revenue business division e-mobility²) EUR millions</td>
<td>676</td>
<td>493</td>
<td>416</td>
<td>37.1</td>
<td>✓✓</td>
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<tr>
<td>Revenue Industrial¹) EUR millions</td>
<td>3,541</td>
<td>3,383</td>
<td>3,150</td>
<td>4.7</td>
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<tr>
<td>Revenue Automotive Aftermarket¹) EUR millions</td>
<td>1,848</td>
<td>1,862</td>
<td>1,880</td>
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<tr>
<td>Schaeffler Value Added before special items EUR millions</td>
<td>284</td>
<td>557</td>
<td>787</td>
<td>-49.0</td>
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<tr>
<td>New suppliers reviewed in initial assessments²) Number</td>
<td>86</td>
<td>111</td>
<td>157</td>
<td>-22.5</td>
<td>✓</td>
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<td>Employees trained in face-to-face trainings and workshops on the topic of compliance Number</td>
<td>8,091</td>
<td>8,793</td>
<td>8,741</td>
<td>-8.0</td>
<td>✓</td>
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<tr>
<td>Web-based compliance training participants in the reporting year²) Number</td>
<td>6,461</td>
<td>9,578</td>
<td>8,160</td>
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<td>Response rate of surveyed suppliers on the use of conflict minerals²) %</td>
<td>93.8</td>
<td>94.3</td>
<td>91.2</td>
<td>-0.5</td>
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<td>Coverage rate of certified smelters in the supply chain²) %</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>0.0</td>
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<tr>
<td>Confirmed cases of human rights violations⁵) Number</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.0</td>
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## Customers and products

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<tr>
<td>Research and development (R&amp;D) expenses EUR millions</td>
<td>849</td>
<td>847</td>
<td>846</td>
<td>0.2</td>
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<tr>
<td>R&amp;D ratio %</td>
<td>5.9</td>
<td>6.0</td>
<td>6.0</td>
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<tr>
<td>R&amp;D employees 6) Number</td>
<td>7,784</td>
<td>7,991</td>
<td>7,790</td>
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<td>R&amp;D centers Number</td>
<td>20</td>
<td>20</td>
<td>18</td>
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<td>Internal inventions reported Number</td>
<td>3,298</td>
<td>3,452</td>
<td>3,294</td>
<td>-4.5</td>
<td>✓</td>
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<td>Patent applications 10) Number</td>
<td>2,057</td>
<td>2,417</td>
<td>2,383</td>
<td>-14.9</td>
<td>✓</td>
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<td>Awards for customer satisfaction/product quality Number</td>
<td>66</td>
<td>65</td>
<td>58</td>
<td>1.5</td>
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<tr>
<td>Coverage rate of quality management systems 11) %</td>
<td>100</td>
<td>100</td>
<td>100</td>
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## Environment and energy 12)

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<tr>
<td>Coverage rate for EMAS certification 13) %</td>
<td>98.1</td>
<td>98.1</td>
<td>98.2</td>
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<tr>
<td>Coverage rate for ISO 14001 certification 13) %</td>
<td>98.8</td>
<td>98.7</td>
<td>98.7</td>
<td>0.1</td>
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<tr>
<td>Coverage rate for ISO 50001 certification 13) %</td>
<td>98.0</td>
<td>97.9</td>
<td>98.0</td>
<td>0.1</td>
<td>✓</td>
</tr>
<tr>
<td>Total energy consumption 14) GWh</td>
<td>3,290</td>
<td>3,367</td>
<td>3,263</td>
<td>-2.3</td>
<td>✓</td>
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<tr>
<td>Electricity consumption 15) GWh</td>
<td>2,316</td>
<td>2,365</td>
<td>2,339</td>
<td>-2.1</td>
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<td>Natural gas consumption GWh</td>
<td>872</td>
<td>877</td>
<td>798</td>
<td>-9.6</td>
<td>✓</td>
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<tr>
<td>Fuel oil consumption GWh</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>-22.2</td>
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<tr>
<td>Propane/LPG consumption GWh</td>
<td>47</td>
<td>53</td>
<td>51</td>
<td>-11.3</td>
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<td>District heating consumption 16) GWh</td>
<td>48</td>
<td>63</td>
<td>67</td>
<td>-23.8</td>
<td>✓</td>
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<tr>
<td>Greenhouse gas emissions 17), total 18) tCO₂</td>
<td>1,026,057</td>
<td>1,045,627</td>
<td>1,008,985</td>
<td>-1.9</td>
<td>✓</td>
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<tr>
<td>Greenhouse gas emissions 17) (Scope 1) tCO₂</td>
<td>190,575</td>
<td>193,711</td>
<td>175,635</td>
<td>-1.6</td>
<td>✓</td>
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<tr>
<td>Greenhouse gas emissions 17) (Scope 2) market-based 19) tCO₂</td>
<td>835,482</td>
<td>851,916</td>
<td>833,350</td>
<td>-1.9</td>
<td>✓</td>
</tr>
<tr>
<td>Greenhouse gas emissions 17) (Scope 2) location-based tCO₂</td>
<td>1,179,534</td>
<td>1,268,082</td>
<td>1,233,752</td>
<td>-7.0</td>
<td>✓</td>
</tr>
<tr>
<td>Transport volume, outbound 20) 21) Mio.tkm</td>
<td>2,321</td>
<td>2,258</td>
<td>2,257</td>
<td>2.8</td>
<td>✓</td>
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<tr>
<td>CO₂ emissions, outbound 20) 21) tCO₂e</td>
<td>209,530</td>
<td>220,467</td>
<td>227,291</td>
<td>-5.0</td>
<td>✓</td>
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<tr>
<td>Nitrogen oxides (NOₓ) t</td>
<td>88</td>
<td>90</td>
<td>104</td>
<td>-2.2</td>
<td>✓</td>
</tr>
<tr>
<td>Sulfur dioxide (SO₂) 23) t</td>
<td>3</td>
<td>4</td>
<td>6</td>
<td>-25.0</td>
<td>✓</td>
</tr>
<tr>
<td>Fine particles 23) kg</td>
<td>98</td>
<td>100</td>
<td>90</td>
<td>-2.0</td>
<td>✓</td>
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<tr>
<td>Water consumption 24) m³</td>
<td>5,783,781</td>
<td>6,089,564</td>
<td>5,964,821</td>
<td>-5.0</td>
<td>✓</td>
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<td>Amount of waste, Germany t</td>
<td>284,558</td>
<td>312,383</td>
<td>302,969</td>
<td>-8.9</td>
<td>✓</td>
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<tr>
<td>Scrap and metals, Germany t</td>
<td>237,877</td>
<td>260,428</td>
<td>249,031</td>
<td>-8.7</td>
<td>✓</td>
</tr>
<tr>
<td>Waste for disposal, Germany t</td>
<td>3,267</td>
<td>4,493</td>
<td>2,761</td>
<td>-27.3</td>
<td>✓</td>
</tr>
<tr>
<td>Waste for recycling, Germany 25) t</td>
<td>43,915</td>
<td>47,463</td>
<td>51,177</td>
<td>-7.5</td>
<td>✓</td>
</tr>
<tr>
<td>Recycling rate, Germany 26) %</td>
<td>93.1</td>
<td>91.1</td>
<td>94.9</td>
<td>2.0</td>
<td>✓</td>
</tr>
</tbody>
</table>
### Employees and society

#### Number of employees, total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>87,748</td>
<td>92,478</td>
<td>90,151</td>
<td>-5.1</td>
</tr>
</tbody>
</table>

#### Distribution of employees by region

<table>
<thead>
<tr>
<th>Region</th>
<th>%</th>
<th>2018</th>
<th>2017</th>
<th>2018/2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>68.6</td>
<td>68.3</td>
<td>68.3</td>
<td>0.3</td>
</tr>
<tr>
<td>Americas</td>
<td>14.0</td>
<td>14.2</td>
<td>14.5</td>
<td>-0.2</td>
</tr>
<tr>
<td>Greater China</td>
<td>13.9</td>
<td>14.0</td>
<td>13.9</td>
<td>-0.1</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>3.6</td>
<td>3.5</td>
<td>3.3</td>
<td>0.1</td>
</tr>
</tbody>
</table>

#### New employees, total

<table>
<thead>
<tr>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Number</td>
<td>4,644</td>
<td>9,871</td>
<td>10,399</td>
<td>-53.0</td>
</tr>
</tbody>
</table>

#### Employee departures, total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>9,277</td>
<td>8,300</td>
<td>7,307</td>
<td>11.8</td>
</tr>
</tbody>
</table>

#### Labor turnover rate

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.4</td>
<td>4.8</td>
<td>3.9</td>
<td>-0.4</td>
<td></td>
</tr>
</tbody>
</table>

#### Average age

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Years</td>
<td>40.5</td>
<td>39.9</td>
<td>39.7</td>
<td>1.5</td>
</tr>
</tbody>
</table>

#### Permanent employees

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>91.5</td>
<td>90.7</td>
<td>90.1</td>
<td>0.8</td>
<td></td>
</tr>
</tbody>
</table>

#### Part-time ratio, Germany

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>7.1</td>
<td>6.3</td>
<td>6.5</td>
<td>0.8</td>
<td></td>
</tr>
</tbody>
</table>

#### Number of men/women on parental leave, Germany

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>426</td>
<td>360</td>
<td>337</td>
<td>18.3</td>
</tr>
</tbody>
</table>

#### Employees covered by collective bargaining agreements, Germany

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>95.0</td>
<td>94.6</td>
<td>78.0</td>
<td>0.4</td>
<td></td>
</tr>
</tbody>
</table>

#### Management positions

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>8,755</td>
<td>8,826</td>
<td>5,526</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

#### Proportion of female managers, total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>11.5</td>
<td>10.9</td>
<td>12.4</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female managers, Europe

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>9.0</td>
<td>8.5</td>
<td>8.9</td>
<td>0.5</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female managers, Americas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>16.2</td>
<td>13.9</td>
<td>15.3</td>
<td>2.3</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female managers, Greater China

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18.6</td>
<td>18.0</td>
<td>25.2</td>
<td>0.6</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female managers, Asia/Pacific

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>13.8</td>
<td>14.5</td>
<td>13.5</td>
<td>-0.7</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female employees, total

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22.1</td>
<td>22.0</td>
<td>21.7</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female employees, Europe

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>20.3</td>
<td>20.3</td>
<td>19.9</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

#### Proportion of female employees, Americas

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>25.9</td>
<td>25.9</td>
<td>25.6</td>
<td>0.0</td>
<td></td>
</tr>
</tbody>
</table>

---

27) Schaeffler Group I Sustainability Report 2019
1) Previous year’s figures according to the segment structure reported in 2019.
3) Employees incl. temporary staff, apprentices, interns, and contract workers.
4) Response rate of relevant suppliers surveyed on the use of conflict minerals as defined under the Responsible Minerals Initiative.
5) 2019 value checked in interim status in December 2019.
6) Survey period from March to February of the following year.
7) Risk areas as defined in the RCOI.
8) Contraventions of the prohibition on forced labor and child labor and cases of discrimination by origin, skin color, or gender.
9) The values reflect the workforce headcount at the end of the year.
10) The key environmental indicators of emissions and energy and water consumption are based on the consumption of the 77 production sites in 22 countries. The calculation is based on certification in accordance with ISO 14001, ISO 50001, and OHSAS 18001/ISO 45001 and entry in the EMAS site registry; reporting date December 31 of the respective year.
11) According to the scope of the Schaeffler Group’s management manual and valid certification rules.
12) Participations in face-to-face trainings, Germany:
13) Relative to employees on the production sites.
14) Energy sources included: Electricity, natural gas, district heating, propane, fuel oil, without the amount of electricity produced by the gas-powered CHP.
15) Only external electricity purchases since CHP electricity is recorded via gas consumption.
16) Consumption reduced in 2019 because the Wuppertal plant has been using natural gas for its heating requirements.
17) The calculation of greenhouse gas emissions is based on the emission factors of the VDA (2017) and the Probas database of the German Federal Environmental Agency. Emission sources covered: Scope 1 (natural gas, heating oil, propane) and Scope 2 (electricity, district heating).
18) As of 2018: Total of Scope 1 and Scope 2 (market-based).
19) 2019 value not included in the review scope.
20) Supplier-specific emission factors were used to determine Scope 2 (market-based).
21) Distribution of Schaeffler products to the end customer (last-mile transports). Not included are rail transports and special transports, such as machine movements during removal.
22) Subsequent adjustment of the 2018 figure due to a change in the calculation method. More precise assignment of the transport mode to the shipment data and expansion of the scope to include CEP shipments (courier, express, parcel shipments).
23) Subsequent adjustment of the 2018 figure due to a change in the calculation method.
24) Water consumption includes municipal and internal company water.
25) Excluding metals and scrap.
26) Recycled or recovered amount of total waste, excluding metals and scrap.
27) Unless otherwise indicated, the employee figures refer to the reporting date of December 31 of the respective year.
28) Initiated by employees; related to the average number of employees from 1/1 to 12/31 of the year.
29) The values as of 2018 include employees of Schaeffler Automotive Bühl GmbH & Co. KG for the first time.
30) Managers are defined as employees in a supervisory function.
31) Due to a new calculation basis (before 2018 pure A1 positions were considered as managers), since 2018 a manager is defined on the basis of the head position = “hat” in Organizational Management; there are different absolute figures and %-values compared to the previous year’s report.
32) Schaeffler Group Germany, without temporary workers.
33) Figures for 2018 were adjusted retrospectively compared with the previous year's report.
34) Dual students, Master’s degree, and "Two in One" students. The "Two in One" study program combines a bachelor’s degree with vocational training.
35) Compulsory e-learning was offered in 2018. For this reason, the number of participants in 2018 is significantly higher than in 2017 and 2019. The increased number of participants in 2019 compared to 2017 is due to an expanded e-learning offering.
36) Measurement of Lost Time Injury Rate, LTIR = occupational accidents from one lost day per 1 million hours worked.
37) Employees incl. temporary staff, apprentices, and interns.
38) Relating to employees, total.
5.2 GNFK index and GRI content index

Index to the combined separate non-financial report

The Schaeffler Group has prepared a combined separate non-financial report (GNFK) for 2019 that fulfills the Group’s obligation to declare non-financial information according to the CSR Directive Implementation Law in accordance with Sections 289, 315 of the German Commercial Code (HGB).

The GNFK includes a description of concepts and due diligence processes and their results for the five non-financial aspects “environmental concerns”, “employee matters”, “social matters”, “respect for human rights”, and “compliance”. Eleven essential issues that were previously determined as part of the materiality analysis are reported in detail. The index on the right provides an overview of the pages of the sustainability report on which this information can be found.

GRI Content Index

The Schaeffler Group’s sustainability reporting is conducted in accordance with the GRI standards of the Global Reporting Initiative according to the “core” option. The interactive index, which can be found online, shows the indicators that Schaeffler addresses in the report and leads the users to the report pages containing this information.

The Schaeffler Group is committed to the ten principles of the UN Global Compact in the areas of human rights, occupational standards, environmental protection, and anti-corruption measures. The GRI Content Index therefore also indicates which GRI indicators simultaneously cover one or more of the UN Global Compact principles. Reference will also be made to Schaeffler’s respective contribution to the United Nations Sustainable Development Goals (SDGs).

5.3 Sustainability targets

As part of the realignment and restructuring of its sustainability activities, Schaeffler has developed five management-related targets in the reporting period and will report on their progress from now on.

In addition to focusing on internal management, Schaeffler also wants to create greater clarity in external communication regarding the status of its sustainability performance. For this reason, the detailed targets at a departmental level will not be published this year.

The strategic objectives include measures that the company wants to use to apply in order to achieve positive environmental, social, and economic effects through its business activities and to create sustainable company value. Time frames are also defined within which Schaeffler intends to implement the measures.

<table>
<thead>
<tr>
<th>Strategic goal</th>
<th>Measures (extract)</th>
<th>Goal deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP Rating</td>
<td>• Increased transparency regarding climate-related data</td>
<td>2020/21</td>
</tr>
<tr>
<td></td>
<td>• Cooperation with customers and suppliers to reduce emissions in the value chain</td>
<td></td>
</tr>
<tr>
<td>Sustainable Suppliers</td>
<td>• Increase in the share of suppliers evaluated via self-assessments</td>
<td>2022</td>
</tr>
<tr>
<td>Renewable Energy</td>
<td>• Increase the share of purchased green electricity to 100%.</td>
<td>2024</td>
</tr>
<tr>
<td></td>
<td>• Increase in the share of self-generated renewable energy</td>
<td></td>
</tr>
<tr>
<td>Energy Efficiency</td>
<td>• Implementation of a comprehensive corpo-rate energy efficiency program, for example through heat recovery and optimized machine cooling</td>
<td>2024</td>
</tr>
<tr>
<td>Accident Rate</td>
<td>• Implementation of appropriate measures taking local conditions into account</td>
<td>2024</td>
</tr>
</tbody>
</table>

1) Lost Time Injury Rate, LTIR = occupational accidents from one lost day per 1 million hours worked.
5.4 About the report

- The reporting is in accordance with the standards of the Global Reporting Initiative (GRI) in the “Core” option
- For the first time, the report includes the combined separate non-financial report in accordance with the CSR Directive Implementation Act, which was previously published separately

The Schaeffler Group publishes an annual sustainability report. Last year’s Sustainability Report 2018 was published in July 2019. The current reporting period corresponds to the business year that runs from January 1, 2019, to December 31, 2019. The editorial deadline for this report was December 31, 2019. The information relates to the entire Schaeffler Group with its business fields. If the details and representations of concepts pertain to other entities, this is pointed out accordingly. The sustainability report with the combined separate non-financial report is publicly available on the company’s website. The sustainability report was written up by order of the Executive Board of the Schaeffler Group. The Board reviewed and released the report content.

Combined separate non-financial report

In this report, the Schaeffler Group discloses the required non-financial information for the 2019 fiscal year in accordance with Sections 289, 315 of the German Commercial Code (HGB) (in accordance with the CSR Directive Implementation Act). Schaeffler exercises the option, in accordance with Section 315b (3) HGB, to produce a combined separate non-financial report (GNFK) apart from the group management report. The separate non-financial report was thereby combined with the separate non-financial report of the parent company in accordance with Section 315b (1) (2) HGB and integrated into the sustainability report. The corresponding passages are marked with references to information outside of this icon. References to information outside of this icon are to be understood as additional information; these are not mandatory components of the GNFK.

The combined separate non-financial report for the 2019 fiscal year for the Schaeffler Group and Schaeffler AG was reviewed by the Supervisory Board of Schaeffler AG and by the auditing firm KPMG AG on behalf of the Supervisory Board with respect to the legally required information in accordance with Sections 315b 315c in conjunction with 289b to 289e HGB for the purpose of obtaining limited assurance engagement. This follows the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” issued by the International Auditing and Assurance Standards Board (IAASB).

Further information on the Independent Auditor’s Report on checking the combined separate non-financial report for the purpose of obtaining limited assurance engagement can be found at page 55.

Guidelines for data collection and presentation

The following guidelines on the key figures and data points are valid for the entire report unless otherwise stated: This report includes all major domestic and foreign subsidiaries that are directly or indirectly controlled by Schaeffler AG. The companies are included from the date on which the Schaeffler Group gains control until the date control is lost. The survey period is from January 1, 2019, to December 31, 2019.

When preparing the report, it is necessary in some instances to make appropriate estimates/projections, which are documented internally, to present the complete survey period. Actual values may differ from these estimates and will be corrected in the following year’s reporting. Methodical and structural changes are corrected in principle. Additional comments are provided for deviations greater than five percent. Differences may occur due to commercial rounding of amounts and percentages. Contrary to the above mentioned principles, the cutoff deadline for key figures and employee relationships is generally December 31, 2019. The persons referred to as employees in this report are members of the internally defined workforce category “workforce”. Temporary staff, apprentices, trainees, and contract workers as well as inactive employees are not included.
The scope of key figure consolidation for greenhouse gas emissions, total energy consumption, water consumption, waste generation, and recycling rates in the environmental area refers to the production sites defined as essential in the EnEHS Group manual. The majority of these production sites already have ISO 14001, ISO 50001, ISO 45001, OHSAS 18001, and EMAS site registrations; the reporting date is December 31, 2019.

Forward-looking statements

This document contains forward-looking statements that reflect management’s current views with respect to future events. Such statements are subject to risks and uncertainties that are beyond the Schaeffler Group’s ability to control or estimate precisely, such as future market and economic conditions, the behavior of other market participants, the ability to successfully integrate acquired businesses and achieve anticipated synergies, and the actions of government regulators. If any of these cases or other risks and uncertainties occur, or if the assumptions underlying any of these statements prove incorrect, then actual results may be materially different from those expressed or implied by such statements. The Schaeffler Group does not intend or assume any obligation to update any forward-looking statements to reflect events or circumstances after the date of this report.

The Schaeffler Group's sustainability report is available in German and English. In case of discrepancies, the German version is binding.

The company accepts questions and comments about responsible corporate management at the Schaeffler Group via the e-mail address sustainability@schaeffler.com.
5.5 Limited Assurance Report of the Independent Auditor regarding the Combined Separate Non-financial Report

To the Supervisory Board of Schaeffler AG, Herzogenaurach,

We have performed an independent limited assurance engagement on the combined non-financial report of Schaeffler AG, Herzogenaurach, (further “Schaeffler”) and the group as well as the by reference qualified part “1.1 Organizational structure and business activities” of the Combined Management Report (further: “Report”) according to §§ 315b and 315c in conjunction with 289b to 289e German Commercial Code (HGB) for the business year from January 1 to December 31, 2019.

Management’s Responsibility

The legal representatives of Schaeffler are responsible for the preparation of the Report in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB.

This responsibility of the legal representatives includes the selection and application of appropriate methods to prepare the Report and the use of assumptions and estimates for individual disclosures which are reasonable under the given circumstances. Furthermore, this responsibility includes designing, implementing and maintaining systems and processes relevant for the preparation of the Report in a way that is free of – intended or unintended – material misstatements.

Independence and quality assurance on the part of the auditing firm

We are independent from the entity in accordance with the requirements of independence and quality assurance set out in legal provisions and professional pronouncements and have fulfilled our additional professional obligations in accordance with these requirements.

Our audit firm applies the national statutory provisions and professional pronouncements for quality assurance, in particular the Professional Code for German Public Auditors and Chartered Accountants (in Germany) and the quality assurance standard of the German Institute of Public Auditors (Institut der Wirtschaftsprüfer, IDW) regarding quality assurance requirements in audit practice (IDWQS 1).

Practitioner’s Responsibility

Our responsibility is to express a conclusion on the Report based on our work performed within our limited assurance engagement.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): “Assurance Engagements other than Audits or Reviews of Historical Financial Information” published by IAASB. This Standard requires that we plan and perform the assurance engagement to obtain limited assurance whether any matters have come to our attention that cause us to believe that the Report of the entity for the business year January 1 to December 31, 2019 has not been prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB. We do not, however, provide a separate conclusion for each disclosure. In a limited assurance engagement the evidence gathering procedures are more limited than in a reasonable assurance engagement and therefore significantly less assurance is obtained than in a reasonable assurance engagement. The choice of audit procedures is subject to the auditor’s own judgement.

Within the scope of our engagement, we performed amongst others the following assurance procedures:

- Inquiries of personnel on group level, who are responsible for the materiality analysis, in order to gain an understanding of the processes for determining material sustainability topics and respective reporting boundaries of Schaeffler
- A risk analysis, including a media search, to identify relevant information on Schaeffler sustainability performance in the reporting period
- Reviewing the suitability of internally developed Reporting Criteria
- Evaluation of the design and implementation of the systems and processes for determining, processing and monitoring disclosures relating to environmental, employee and social matters, respect for human rights, and combating corruption and bribery, including data consolidation
- Inquiries of personnel on group level who are responsible for determining disclosures on concepts, due diligence processes, results and risks, for conducting internal controls and consolidation of the disclosures

1) Our engagement applied to the German version of the Report 2019. This text is a translation of the Independent Assurance Report issued in the German, whereas the German text is authoritative.
• Evaluation of selected internal and external documentation
• Analytical evaluation of data and trends of quantitative information which are reported by all sites for consolidation on group level
• Evaluation of local data collection, validation and reporting processes as well as the reliability of reported data based on a sample of the sites in Taicang and Suzhou (both China)
• Assessment of the overall presentation of the disclosures.

Conclusion

Based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the Report of Schaeffler for the business year from January 1 to December 31, 2019 is not prepared, in all material respects, in accordance with §§ 315b and 315c in conjunction with 289b to 289e HGB.

Restriction of Use/Clause on General Engagement Terms

This report is issued for purposes of the Supervisory Board of Schaeffler AG, Herzogenaurach, only. We assume no responsibility with regard to any third parties.


By reading and using the information contained in this report, each recipient confirms notice of provisions of the General Engagement Terms (including the limitation of our liability for negligence to EUR 4 million as stipulated in No. 9) and accepts the validity of the General Engagement Terms with respect to us.

Munich, February 18, 2020

KPMG AG
Wirtschaftsprüfungsgesellschaft

Koeplin
Wirtschaftsprüfer
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Publisher
Schaeffler AG
Industriestraße 1–3
91074 Herzogenaurach, Germany
Tel.: +49 (0) 9132 82-0 (Head Office)
Fax: +49 (0) 9132 82-49 50
www.schaeffler.com

Project manager
Tim Sharp
Schaeffler AG, Herzogenaurach, Germany
Email: sustainability@schaeffler.com

Editing and consulting
Schaeffler AG
akzente kommunikation und beratung GmbH, Munich

Concept and design
nexxar GmbH, Vienna

Photos
Andreas Pohlmann, Munich

Schaeffler on social media

This sustainability report is available in the following formats

PDF version for download:
www.schaeffler-sustainability-report.com/2019

Online Sustainability Report:
www.schaeffler-sustainability-report.com/2019

Navigation help

The following symbols indicate important information when reading:

Further information in the report
Further information on the internet