“The coronavirus pandemic hit the Volkswagen Group at the start of 2020, in the middle of one of the largest transformation processes in the history of our Group. From the start, our focus has been on protecting our employees and our business against the threat of COVID-19. Despite this massive challenge, at the same time we further advanced the Group’s restructuring toward decarbonization and mobility for future generations. My express thanks go to everyone who successfully contributed to this, specifically to our 662,000 employees of the Volkswagen Group around the world and to our stakeholders.”

Gunnar Kilian
Member of the Board of Management of Volkswagen AG with responsibility for Human Resources and “Truck & Bus”
Head of the Volkswagen Crisis Team
A detailed description of the sustainability activities of our brands and regions and of the Volkswagen Group’s CC projects is available at:

www.volkswagenag.com > Sustainability > Reporting

NAVIGATION

> References to chapters in the sustainability report
> References to websites
> References to the Annual Report
> References to the nonfinancial report (highlighted in chapter color, see “About the Report”)

APPENDIX

81 About the Nonfinancial Report (NFR)
83 Tables and KPIs
94 Independent Auditor’s Limited Assurance Report
96 Contact Information
Ladies and gentlemen,
Dear colleagues,

Volkswagen has lived up to its corporate responsibility even in 2020, the year of the coronavirus. As one of the largest employers in the world, the Group coordinated and donated aid supplies internationally, conducted 25,000 coronavirus tests, organized employee projects and produced medical equipment. Thanks to the broad product portfolio and regional positioning, the Group has remained financially robust while navigating the crisis.

At the same time, addressing the consequences of the pandemic has provided an opportunity for sustainable economic restructuring: in 2020, three times more electric vehicles were sold than in the previous year. The Group has launched a unique e-model offensive with the Volkswagen ID.3 and ID.4, the Porsche Taycan, Audi e-tron and Skoda Enyaq iV as well as numerous hybrid models.

In 2020, we tripled our unit sales of e-vehicles in the Group and were able to reduce our CO₂ fleet average in the EU by around 20 percent. We are convinced that the battery-electric drive is, for the foreseeable future, the only solution for achieving the goals of the Paris Agreement. Within the Group we have also set the goal of attaining a climate-neutral footprint worldwide by 2050 at the latest – this includes our supply chains, plants and business divisions and our customers’ use of the vehicles.

On our path to climate-neutral mobility, we seek to collaborate with society and politicians. We believe that a reduction in CO₂ emissions within the scope of the EU Green Deal of at least 55% by 2030 compared to 1990 levels is attainable, if the appropriate measures are implemented across all sectors as part of a joint effort. As a member of the Europe-wide CEO Alliance, we are therefore working on the cross-sectoral decarbonization of the economy. Volkswagen sees itself as part of the solution, not the problem.

For Volkswagen, social sustainability is just as important as environmental. The focus on e-mobility will change employment at Volkswagen. A study carried out for Volkswagen by the Fraunhofer...
Institute has worked out exactly how. The experts say that in the next ten years, job creation, job improvement and job elimination will coexist. The findings show that Volkswagen’s employment needs are going to fall less sharply than previous studies had suggested due to e-mobility and digitalization.

We can sustainably manage the transformation of the workforce if the right measures are introduced. At Volkswagen, these primarily include additional training and retraining, the transformation of the components segment in the Group and the Digital Transformation Roadmap. Profitability is a prerequisite for job security.

The Fraunhofer study was commissioned by the Volkswagen’s Sustainability Council. It contributes external, international and cross-sectoral sustainability expertise to our strategies. In 2020, we extended collaboration with the Council by a further two years.

In addition to ad hoc management of the coronavirus crisis, Volkswagen has continued to focus on its competitiveness, securing jobs, the future viability of jobs, protecting health and enabling a work/life balance. Our Social Charter has also undergone revision.

We successfully completed the Monitorship in 2020 that was part of the agreements with the US authorities following the diesel issue. In collaboration with Larry Thompson and his monitor team, Volkswagen met its commitment to sustainably improve compliance within the Company. The change in structures, processes and systems has made us a stronger business. Together with our employees, we will continue work on the change in corporate culture in the future – integrity is not a project with a beginning and an end but an ongoing task.

As part of our sustainability strategy, we have succeeded in anchoring sustainability more firmly in the Group’s core business. We set ourselves strong, measurable targets for the four focus areas of decarbonization, circular economy, responsibility in the supply chain & business and transformation of the workforce. This ensures an effective operationalization of sustainability, with clear responsibilities and processes.

Sustainable business practices are also playing an increasingly important role for our investors. We are taking this into account by anchoring an ESG action plan in our Group strategy and in doing so, want to contribute to permanently increasing our Company’s value. The Volkswagen Group’s readmission to the UN Global Compact at the start of 2021 is another signal of confidence for our stakeholders and at the same time proof of our strategy’s effectiveness.

The “Shaping mobility – for generations to come” vision of our TOGETHER 2025+ Group strategy guides us in all our activities. It is our responsibility to contribute to the sustainability of environmental, social and economic systems for us and for generations to come. We are working on this every day.

Best regards,
Herbert Diess Bernd Osterloh
REPORT STRUCTURE

For the fourth time, this 2020 Group Sustainability Report includes a combined separate nonfinancial report that complies with sections 289b para. 3 and 315b para. 3 of the Handelsgesetzbuch (HGB – German Commercial Code), hereinafter referred to as the “nonfinancial report”. The nonfinancial report serves to meet the disclosure requirements of the CSR Richtlinie-Umsetzungsgesetz (CSR-RUG – German CSR Directive Implementation Act).

The requirements of the CSR-RUG on disclosing nonfinancial information in accordance with section 315c in conjunction with sections 289c to 289e HGB were taken into account in the materiality analysis process for the Volkswagen Group's sustainability narrative. The process also includes an analysis of the United Nations Sustainable Development Goals (SDGs). The nonfinancial report covers both the focus areas and the enablers of the materiality analysis.

In addition, the Sustainability Report takes account of additional GRI Standards of the Global Reporting Initiative (GRI) and sustainability rating requirements, stakeholder expectations and special issues.

SUSTAINABILITY COMMUNICATION AT VOLKSWAGEN GROUP

2020 NONFINANCIAL STATEMENT

For reporting year 2020, Volkswagen AG will for the fourth time issue a nonfinancial statement at company level and a nonfinancial Group declaration, which will be published together as a combined separate nonfinancial report in the sense of HGB sections 289b para. 3 and 315b para. 3 as part of the 2020 Group Sustainability Report. The nonfinancial report is drawn up in accordance with HGB section 315c in conjunction with sections 289c through 289e. Furthermore, the GRI Standards of the Global Reporting Initiative (GRI) were used as the framework for drawing up the nonfinancial report. In this nonfinancial report, Volkswagen has systematically used the GRI Standards as the underlying structure for reports on management approaches and the specific standard disclosures. In line with CSR-RUG, this nonfinancial report will concentrate on focus areas and enablers that are necessary for an understanding of the Volkswagen Group's business development, overall performance and position as well as the Volkswagen Group's influence on nonfinancial aspects.

The information in this report relates to the Volkswagen Group as a whole. Where information relates to individual Group divisions only, this is clearly indicated in the text. Unless indicated otherwise, any information provided for the Group also applies to Volkswagen AG.

In addition to Volkswagen AG, the Group includes all major subsidiaries inside and outside Germany that are directly or indirectly controlled by Volkswagen AG. Renk AG, which was sold on October 6, 2020, is not taken into account in this information. In the financial data, our joint ventures in China are reported using the equity accounting method. However, they are included in full (100%) in volume-related data (sales, production and workforce) and in production-related environmentally relevant data. The management approaches described in this report (e.g. the environmental compliance management system (ECMS) and the compliance management system for business and human rights (CMS BHR) etc.) apply to all the Volkswagen Group's controlled companies. With our noncontrolled companies, we work to the extent permitted by law toward implementation of the adjusted management approaches. The Chinese joint ventures are included in the information on the Volkswagen Group in the KPIs and the associated targets on the topics of the UEP (the reduction of the environmental impact of...
production), the DCI (the decarbonization index), the Opinion Survey, the diversity index, accident indices and accident figures. Except for the sites under construction, all the Chinese joint ventures’ sites have a certified environmental management system and all the Chinese joint ventures’ vehicle-producing sites have an occupational safety management system. The risks of the Chinese market are assessed by Volkswagen China Investment Company Ltd. In our whistleblower system, whistleblower information concerning our Chinese joint ventures is processed via the regional investigation office at Volkswagen (China) Investment Company Ltd.

In terms of content, the Group Sustainability Report was prepared in compliance with the GRI Standards of the Global Reporting Initiative (GRI), applying the “Core” option. The strategy chapter and the four following chapters on focus issues in the report consist of a text section; a consolidated KPI table for the entire report follows with a breakdown for the respective chapter on a focus issue in the appendix. At the same time, the separate GRI Content Index shows how we are implementing the requirements of the United Nations Global Compact (UNGC) and using the United Nations Sustainable Development Goals (SDGs) as guidance. The GRI Content Index has been separated from the 2020 Sustainability Report and can be found as a separate document in the Group portal at:

> www.volkswagenag.com > Sustainability > Reporting

The KPIs presented in this report build on the indicators presented in previous years. Any material changes to the methods used to collect and measure the data on our sustainability performance are explicitly disclosed by the respective KPIs. All figures shown in the report are rounded, so minor discrepancies may arise from addition of these amounts. All figures in this report on CO₂ except for the CO₂ fleet values correspond to CO₂ equivalents.

**Calculation of Fleet Emissions in Europe**

The CO₂ fleet values are determined for each calendar year in accordance with Regulation (EU) 2019/631 within the European Union (plus Norway and Iceland). They are initially provisionally calculated within the framework of the official monitoring of the European Commission (the Directorate-General for Climate Action (DG Climate)) with the involvement of the European Environment Agency (EEA) and are then published by way of implementing act following successful review, amendment where applicable, and confirmation. A manufacturer’s CO₂ fleet value is the volume-weighted average of the CO₂ emissions of all the manufacturer’s new cars (car fleet value) or new light commercial vehicles (LCV fleet value) that are registered for the first time in the respective calendar year. If several manufacturers join together in an emission pool (also known as a pool), a CO₂ fleet value is calculated for this emission pool from the average of the CO₂ emissions of all the new vehicle registrations (of cars or light commercial vehicles) of the manufacturers in this emission pool. The Group CO₂ fleet value is the value derived from the official monitoring for the Group brands that are members of the “VW-SAIC POOL (open)” emission pool. If the Group brands are in an emission pool with third-party manufacturers – as was the case in 2020 – the Group CO₂ fleet value is not derived directly from the published documents.

**Report Review**

Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft (EY) conducted a voluntary, limited assurance engagement in accordance with ISAE 3000 (Revised) on the combined separate nonfinancial report prepared in accordance with HGB sections 289b para. 3 and 315b para. 3 to verify that its disclosures comply with the relevant statutory requirements.

Further information on the engagement can be found in the independent practitioner’s report on a limited assurance engagement on the nonfinancial reporting.

**Additional Reporting within the Group**

The nonfinancial report is drawn up in accordance with HGB section 315c in conjunction with sections 289c through 289e. By referencing this combined separate nonfinancial report, all Group companies required by national legislation to disclose nonfinancial and diversity-related information pursuant to Directive 2014/95/EU are exempted from the obligation to submit their own nonfinancial reports.

More detailed insights into our environmental management approach can be found in the environmental statements published by numerous Group locations as part of their voluntary participation in the European Eco-Management and Audit Scheme (EMAS). The sustainability reports published by the Audi, MAN, Porsche, Scania and ŠKODA brands also bear testimony to the Group’s commitment to sustainability.

**Reporting Practices**

The nonfinancial report and Group Sustainability Report are published annually. In addition to information about the Group’s sustainability activities in the 2020 fiscal year (January 1 to December 31, 2020), the sustainability report also contains selected information from the 2021 fiscal year.

The editorial deadline was February 8, 2021. Both reports appear in German and English. Both the nonfinancial report and the Group Sustainability Report are expected to be published in the first quarter of 2021.
LEGAL INFORMATION

This sustainability report contains statements relating to the future business development of the Volkswagen Group. These statements are based on assumptions relating to the development of the economic, political and legal environment in individual countries, economic regions and markets, and in particular for the automotive industry, which we have made on the basis of the information available to us and which we consider to be realistic at the time of going to press. The estimates given involve a degree of risk, and the actual developments may differ from those forecast. Any changes in significant parameters relating to our key sales markets, any significant shifts in exchange rates or raw materials relevant to the Volkswagen Group or any difference between the actual impact of the COVID-19 pandemic and the scenario assumed in this report will have a corresponding effect on the development of our business. In addition, there may be departures from our expected business development if the assessments of the factors influencing sustainable value enhancement, and of risks and opportunities, presented in this sustainability report develop in a way other than we expect at the time of publication, or if additional risks and opportunities or other factors that affect the development of our business emerge. This version of the annual report is a translation of the German original. The German takes precedence.

NOTICE PURSUANT TO DIRECTIVE 1999 / 94 / EC

Further information on the official fuel consumption and official specific CO₂ emissions of new passenger cars can be found in the “Guide on the Fuel Economy, CO₂ Emissions and Power Consumption of All New Passenger Car Models Offered for Sale on the German Market”, which can be obtained free of charge from all sales outlets of and directly from DAT Deutsche Automobil Treuhand GmbH, Hellmuth-Hirth-Strasse 1, 73760 Ostfildern, Germany.

> www.dat.de
OUTLINE OF THE LEGAL STRUCTURE OF THE GROUP

Volkswagen AG is the parent company of the Volkswagen Group. The parent company’s head office is Wolfsburg. It develops vehicles and components for the Group’s brands, but also produces and sells vehicles – in particular passenger cars and light commercial vehicles – under the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands. In its capacity as parent company, Volkswagen AG holds direct or indirect interests in AUDI AG, SEAT S.A., ŠKODA AUTO a.s., Dr. Ing. h.c. F. Porsche AG, TRATON SE, Volkswagen Financial Services AG, Volkswagen Bank GmbH and a large number of other companies in Germany and abroad.

More detailed disclosures can be found in the list of shareholdings in accordance with sections 285 and 313 of the Handelsgesetzbuch (HGB – German Commercial Code) or accessed on our website: www.volkswagenag.com/en/InvestorRelations.html

Volkswagen AG is a vertically integrated energy supply company as defined by section 3 no. 38 of the Energiewirtschaftsgesetz (EnWG – German Energy Industry Act) and is therefore subject to the provisions of the EnWG. In the electricity sector, Volkswagen AG generates, sells and distributes electricity together with Group subsidiaries.

Volkswagen AG and the Volkswagen Group are managed by the Volkswagen AG Board of Management in accordance with the Volkswagen AG Articles of Association and the rules of procedure for Volkswagen AG’s Board of Management issued by the Supervisory Board.

ORGANIZATIONAL STRUCTURE OF THE GROUP

The Volkswagen Group is one of the leading multibrand groups in the automotive industry. The Group’s business activities comprise the Automotive and Financial Services divisions. All brands within the Automotive Division – with the exception of the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands – are independent legal entities.

The Automotive Division comprises the Passenger Cars, Commercial Vehicles and Power Engineering business areas. The Passenger Cars Business Area essentially consolidates the Volkswagen Group’s passenger car brands and the Volkswagen Commercial Vehicles brand. Activities focus on the development of vehicles and engines, the production and sale of passenger cars and light commercial vehicles, and the genuine parts business. The product portfolio extends from small cars through to luxury vehicles in the premium segment, and also includes motorcycles, and will be supplemented by mobility services as needed.

For further information, see the “Structure and Business Activities” chapter in the Annual Report.

LEGAL FACTORS INFLUENCING BUSINESS

With its brands, the Volkswagen Group is present in all relevant markets around the world. The key sales markets currently include Western Europe, China, the USA, Brazil, Russia, Poland, Turkey and Mexico.

Like other international companies, the business of the Volkswagen companies is affected by numerous laws in Germany and abroad. In particular, there are legal requirements relating to development, products, production and distribution as well as supervisory, data protection, financial, company, commercial, capital-market, anti-trust and tax regulations and regulations relating to labor, banking, state-aid, energy, environmental and insurance law.

In addition to the Finance & IT, Human Resources and Integrity & Legal Affairs divisions, the Volkswagen Group works together across six Group Board of Management business areas and the China region. Our management model means better use can be made of existing economies of scale, synergy effects can be boosted more systematically and decision-making can be accelerated. In addition, this prepares the Volkswagen Group for a management structure that is simpler, leaner and more effective, and strengthens the brands, giving them more autonomy. In line with the principle of subsidiarity, decisions will be taken at the lowest competent level, close to business operations.
For more information on the operating units and responsibilities, see the “Structure and Business Activities” chapter in the Annual Report.

THE CORPORATE GOVERNANCE CODE AS A BLUEPRINT FOR SUCCESSFUL CORPORATE GOVERNANCE

Corporate governance provides the regulatory framework for corporate management and supervision. This includes a company’s organization and values, and the principles and guidelines for its business policy. The German Corporate Governance Code (the Code) contains principles, recommendations and suggestions for corporate management and supervision. Its recommendations and suggestions were prepared by a dedicated government commission on the basis of the material provisions and nationally and internationally accepted standards of sound, responsible corporate governance. In line with best practice, the government commission regularly reviews these for relevance in light of current developments and updates them as necessary. The Board of Management and the Supervisory Board of Volkswagen AG base their work on the Code’s principles, recommendations and suggestions. The deviations from the recommendations can be found in our declaration of compliance. We consider good corporate governance to be a key prerequisite for achieving a lasting increase in the Company’s value. It helps strengthen the trust of our shareholders, customers, employees, business partners and investors in our work and enables us to meet the steadily increasing demand for information from national and international stakeholders. You can find our published Declaration of Conformity with the German Corporate Governance Code here:


THE VOLKSWAGEN VALUE CHAIN

RESEARCH & DEVELOPMENT
The Volkswagen Group is further advancing its transformation to a digital mobility group and will invest around €73 billion in capex and development costs for e-mobility, hybridization and digitalization in the next five years.

PROCUREMENT
Every year, the Volkswagen Group purchases a wide range of raw materials, components and other goods. A sustainable supply chain and environmentally compatible transportation are vital for fully assuming responsibility for human rights, environmental protection and the battle against corruption.

PRODUCTION
Every working day, the Volkswagen Group manufactures an average of around 36,000 vehicles globally. Efficient production ranks alongside environmental protection and employee health and safety as one of our core goals.

MARKETING & SALES
Business relationships with fleet customers are often long-term and stable partnerships. The Volkswagen Group’s share of commercial fleet customers is 42.1% in Germany and 26.5% in the rest of Europe.

AFTER-SALES & FINANCIAL SERVICES
Our service includes supporting dealerships to ensure they can provide quality advice and maintenance, managing our original parts business, and providing vehicle-related financial services.

RECYCLING
In addition to recycling vehicles at the end of their useful life, we pay close attention during the new-vehicle development stage to the recyclability of the required materials, the use of high-quality recycled materials, and the avoidance of pollutants.
OUR FUTURE-ORIENTED PROGRAM TOGETHER 2025+

With the future-oriented program TOGETHER – Strategy 2025 announced in 2016, we are seeking to make the Volkswagen Group more focused, efficient, innovative, customer-oriented and sustainable, and systematically geared toward generating profitable growth.

We at the Volkswagen Group have set ourselves the goal of continuing to excite our customers in future and meeting their diverse needs with an appealing product portfolio of impressive vehicles and forward-looking, tailor-made mobility solutions. Every day, we actively assume and exercise responsibility in relation to the environment, safety and society, and we aim to be a role model in these areas. Integrity, reliability, quality and passion thus form the basis for our work. Using this approach, we aim for technological leadership in the industry and competitive profitability while also striving to be an excellent employer.

The TOGETHER 2025+ Group strategy, which we further developed in 2019, steps up the pace at which we will achieve our strategic objectives and sharpens our focus. To this end, the strategic vision of the Volkswagen Group was also revised. With “Shaping mobility – for generations to come”, we aim to more actively shape the future of mobility while safeguarding it sustainably – for present and future generations.

With electric drives, digital connectivity and autonomous driving, we want to make the automobile cleaner, quieter, more intelligent and safer. At the same time, our core product will become more emotive and offer a completely new driving experience. In this way, the car can continue to be a cornerstone of sustainable, individual and affordable mobility in the future. In addition, we are committed to the Paris Agreement on climate protection and are one of the first companies in our industry to commit ourselves to becoming a company with a neutral carbon footprint by 2050. This includes our vehicles, our plants and all processes.

The automotive industry is being shaped particularly by the transformation to e-mobility and digitalization. We have positioned ourselves to successfully tackle this radical change: the transformation to e-mobility and digitalization. We want the Group to be perceived as efficiently managed, trustworthy, sustainable and transparent. To this end, we are intensifying the dialog with our key stakeholders and systematically reviewing whether we are still the best owner for our various brands and companies. In addition, we want to make our CO2 targets measurable and make our progress towards becoming carbon neutral in 2050 transparent. Within international ESG rankings (ESG = environment, social, governance), we strive for a leading position in our industry in the future.

The aim of the Best Performance module is to achieve a sustainable value enhancement in our enterprise by increasing efficiency, productivity and profitability. As a global company, our size enables us to make increased use of economies of scale. We remain firmly committed to our ambitious targets, work consistently on achieving them and strive to exceed them. This will lay the foundations for extensive investment in our Company, in our employees and in mobility for present and future generations.

In the Best Brand Equity module, the focus is on realigning and further refining the brand portfolio, making a significant increase in the value of our Group brands possible. We are defining the profiles, brand missions and core competitors of the Volkswagen Group brands in a more nuanced and distinctive way. This will enable the Group to better serve the market as a whole. Based on these optimizations, we will decide on the future design, product portfolio and services of each Group brand – using the needs of our customers as a starting point.
In the Software-enabled Car Company module, we are working to make software development one of the Volkswagen Group’s core competencies. To achieve this, we are pooling existing expertise, substantially strengthening our resources and establishing a dedicated organizational unit. Going forward, all new vehicle models across the Group will be based on our own cross-brand software platform. This approach will provide the opportunity to leverage synergies between the individual brands and vehicle projects. The aim is that the Volkswagen Group and its brands will stand not only for the best vehicles but in equal measure for exciting digital products and services.

The Excellent Leadership module is based on three main areas: communication, human resources development and collaboration. To remain competitive and fit for the future, we are shifting to a more open, more partnership-based and more value-based leadership culture. We are developing digital and dialog-oriented communication formats to achieve a quicker flow of information and even stronger connectivity across all brands and regions. We are completely restructuring management development and training and taking an even more systematic approach to succession planning so that, at our Group, the right talent is always in the right position at the right time. We are also defining clear expectations for the Group’s managers. These involve greater customer focus, more corporate responsibility, greater effectiveness and focus on results as well as a culture of constructive dissent and a positive approach in dealing with mistakes. Volkswagen also wants to increase diversity at all levels of the company and is pursuing clear, measurable targets for raising the proportion of female and international managers.

The five strategic modules describe how we want to achieve our vision of sustainable mobility for present and future generations. We are managing our project using four target dimensions, which are also reflected in the Volkswagen strategy rhombus. The four target dimensions are as follows: excited customers, excellent employer, role model for environment, safety and integrity, and competitive profitability. We want to grow sustainably by consistently pursuing these objectives.

The target dimensions apply throughout the whole Group. The strategic KPIs that we use to measure how well we have implemented our Group strategy depend on the respective business model, as the business model for our passenger car-producing brands is different from the business model for trucks and buses and also differs from the business model for our Power Engineering business area and our services business.

The strategic KPIs of the competitive profitability target dimension have been defined and standardized. As the Group strategy is currently being revised and specified in detail, the content of some strategic KPIs in the other target dimensions is still being determined. The relevance of the KPIs is reviewed at Group level and their focus is continuously monitored and adjusted as necessary.
We report on the defined nonfinancial strategic KPIs in the “Sustainable Value Enhancement” section of the Annual Report.

TARGET DIMENSION: EXCITED CUSTOMERS

This target dimension focuses on the diverse needs of our customers and on tailor-made mobility solutions. We aspire to exceed our customers’ expectations, thus generating maximum customer benefit. This requires not only the best products, the most efficient solutions and the best service, but also flawless quality and an outstanding image. We want to excite our existing customers, win over new ones and retain their loyalty in the long term – because only loyal and faithful customers will recommend us to others.

The strategic KPIs consist of the conquest rate and KPIs pertaining to loyalty, customer satisfaction and quality. These KPIs are explained in more detail in the “Sustainable Value Enhancement” section of the Annual Report.

TARGET DIMENSION: EXCELLENT EMPLOYER

To achieve sustainable success, we need skilled and dedicated employees. We aim to increase their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, and a forward-looking organization of work. An exemplary management and corporate culture forms the basis for this, allowing us to retain our core workforce and attract new talent.

The strategic KPIs of this target dimension cover internal employer attractiveness determined by means of the opinion survey, external employer attractiveness, an external employer ranking as well as the diversity index.

TARGET DIMENSION: ROLE MODEL FOR ENVIRONMENT, SAFETY AND INTEGRITY

Every day, we at the Volkswagen Group assume and exercise responsibility in issues relating to the environment, safety and society. This aspiration should be reflected in our thoughts and actions and in all our decisions. We pay particular attention to the use of resources and the emissions of our product portfolio, sites and plants. Our goal is to continuously reduce our carbon footprint and lower our pollutant emissions. Through innovations and outstanding quality, we aim for high product safety.

Our primary objectives in this process include complying with laws and regulations, establishing secure processes and dealing openly with mistakes so that they can be avoided or rectified in the future. In terms of integrity, Volkswagen aims to become a role model for a modern, transparent and successful enterprise.

The strategic KPIs of this target dimension consist of the decarbonization index and fleet CO₂ emissions figures, compliance, a culture of dealing openly with mistakes, and integrity.

TARGET DIMENSION: COMPETITIVE PROFITABILITY

Investors judge us by whether we are able to meet our obligations as regards interest payments and debt repayments. As equity holders, they expect appropriate dividends and a long-term value enhancement of their shares.

We make investments with a view to achieving profitable growth and strengthening our competitiveness, thus keeping the Volkswagen Group on a firm footing in the future and ensuring it remains an attractive investment option.

The goals we have set ourselves are operational excellence in all business processes and becoming the benchmark for the entire industry.

The strategic KPIs are operationalized for internal management purposes: target and actual data are derived from Volkswagen Group figures.

STRATEGIC KPIS: COMPETITIVE PROFITABILITY

<table>
<thead>
<tr>
<th>KPI</th>
<th>2015</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating return on sales</td>
<td>6.0%</td>
<td>7 to 8%</td>
</tr>
<tr>
<td>Research and development ratio (R&amp;D ratio) in the Automotive Division</td>
<td>7.4%</td>
<td>~ 6%</td>
</tr>
<tr>
<td>Ratio of capex in the Automotive Division</td>
<td>6.9%</td>
<td>~ 6%</td>
</tr>
<tr>
<td>Net cash flow in the Automotive Division</td>
<td>€8,887 million</td>
<td>&gt; €10 billion</td>
</tr>
<tr>
<td>Payout ratio</td>
<td>Negative</td>
<td>≥ 30%</td>
</tr>
<tr>
<td>Net liquidity in the Automotive Division</td>
<td>€24,522 million</td>
<td>~ 10% of Group sales revenue</td>
</tr>
<tr>
<td>Return on investment (ROI) in the Automotive Division</td>
<td>−0.2%</td>
<td>&gt; 14%</td>
</tr>
</tbody>
</table>

¹ 2015 before special items.
NEW MATERIALITY ANALYSIS RESULTS IN FOUR FOCUS AREAS

We continued revising our materiality analysis in 2020, having begun the process the previous year, and established a new strategic basis for sustainability with the creation of the sustainability narrative for the Volkswagen Group. Some 60 stakeholders were involved in this process, including decision-makers from various divisions and brands as well as representatives of the Group Sustainability Council.

The materiality process is used to identify and evaluate the most important sustainability issues for the Group.

The decisive factors here are the impact on the environment and society, stakeholder expectations, the Volkswagen AG business model and compliance with legal requirements and internationally established reporting standards.

The sustainability strategy developed on the basis of the materiality analysis focuses on the material sustainability topics within the TOGETHER 2025+ Group strategy, which is supported by the “Shaping mobility – for generations to come” vision and the seven Group Essentials. This is because a consistent sustainability narrative clearly illustrates for the first time how the Volkswagen Group intends to achieve its overarching strategic objective of sustainable growth by 2030. This should not only lay the foundation for managing and improving performance in the fields of environment, social and governance but also strengthen trust among stakeholders and on the financial market.

THE VOLKSWAGEN SUSTAINABILITY NARRATIVE
GRI 102-47

At the start of the materiality process, an analysis of the Group’s existing sustainability activities was made and a cross-sectoral list of relevant sustainability topics compiled. Subsequently, the order of priority of the topics for developing the narrative was worked out. This was based on an internationally oriented IT- and AI-supported data analysis of the key sustainability topics from an external perspective with an evaluation of media and stakeholder positions from several tens of thousands of sources. This enabled a benchmark survey that made it possible to measure the Volkswagen Group’s performance in various ESG areas in relation to its risk exposure and the development of its value. At the same time, internal trend analyses were carried out, including using ESG ratings, as were interviews with decision-makers and experts within the Group and with members of the Sustainability Council. The specially appointed Advisory Group in the Volkswagen Group, which consisted of representatives of the brands and central corporate functions, played a key role. The details of the narrative were worked out in expert workshops and with the cooperation of the Advisory Group before finally being adopted by the Group Board of Management. Four focus areas have been defined within this framework:

- Decarbonization
- Circular economy
- Responsibility in supply chains and business
- Workforce transformation

The sustainability narrative was adopted by the Group Board of Management as a binding sustainability strategy.
Volkswagen is actively driving the change toward emission-free and digitally connected mobility. The Volkswagen Group seeks to be a leader in sustainable growth taking account of its stakeholders’ interests. In order to achieve this, we pursue two transformation targets:

1. goTOzero: For all of our products and mobility solutions, we strive to minimize the environmental impacts in accordance with laws and standards and throughout the entire life cycle. We are committed to the Paris climate targets for 2050 and have launched a comprehensive decarbonization program. We want to give our entire group a neutral carbon footprint by no later than 2050. That is why we are electrifying our vehicle portfolio, increasing resource efficiency in manufacturing and driving the use of renewable energies.

2. Leading company for automotive software: We strive for technological leadership in the sector and also want to become a business that shapes the change in digitalization. Our vehicles will be fully connected in the future and integrate our customers’ digital world. To make this possible, we aim to transform ourselves into a software-driven company and develop a cross-brand platform able to set new industry standards with the Automotive Cloud.

By consistently focusing the entire Group on these transformation targets and doing business responsibly, we are developing clean, accessible and intelligent mobility solutions that do not just inspire our customers.

Our mobility pledges:

- **Clean**: Mobility that contributes to protecting climate, environment and people
- **Accessible**: Mobility that is affordable and enables individual freedom as well as societal participation
- **Intelligent**: Mobility that is an elementary part of people’s digital ecosystem – everywhere and anytime
- **Inspiring**: Mobility that satisfies different needs, enables safety and fascinates

We have prioritized the four focus areas that are essential for our core business and our performance on the financial market in order to transform the Group with a holistic approach and do business responsibly throughout the value chain. The focus areas are each underpinned by:

- an ambition to be achieved by 2030
- concrete, measurable objectives with deadlines
- indicators for measuring development progress in relation to the objectives
- measures for achieving the objectives
- the development and implementation of programs and initiatives

Five key internal processes and structures – which we call enablers – are necessary to strategically anchor and successfully implement the results-oriented focus areas in our Group in the long term. These are an integral component of the narrative and comprise processes and management approaches that support, promote and accelerate the implementation of the sustainability strategy.

These enablers include:

- **Stakeholder engagement**: a systematic and continuous dialog with all our internal and external stakeholders
- **Corporate citizenship**: responsibility as a good corporate citizen and commitment to social cohesion
- **Governance**: the highest integrity standards and good corporate governance structures as a key prerequisite for achieving a lasting increase in the Company’s value
- **Digitalization**: the understanding to act as an engine of the digital transformation in the economy and mobility
- **Culture change**: a culture change in the Group toward more openness with a focus on the “WE” at Volkswagen
The Volkswagen Group aims to link its sustainability strategy and the activities in the individual focus areas ever more closely with achievement of the United Nations Sustainable Development Goals. As a starting point for this, a survey of around 180 sustainability experts and managers in the Volkswagen Group was conducted in the reporting year in order to ascertain the current situation regarding SDG prioritization and implementation. As a result, SDG 13 (Climate action) was identified as the primary goal, followed by five further goals that were classified as priorities (12 Responsible consumption and production, 11 Sustainable cities and communities, 8 Decent work and economic growth, 9 Industry, innovation and infrastructure, and 7 Affordable and clean energy). These prioritized SDGs were assigned to the Group sustainability strategy’s focus areas. The focus areas thus constitute the strategic framework to address the key SDGs for the Group.

PRIORITIZED SDGS SUBSTANTIATE THE 4 FOCUS AREAS IDENTIFIED IN THE GROUP SUSTAINABILITY NARRATIVE

<table>
<thead>
<tr>
<th>SDG SURVEY PRIORITIZED 6 TOP SDGS FOR 2030</th>
<th>4 STRATEGIC FOCUS AREAS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 Affordable and clean energy</td>
<td>Decarbonization</td>
</tr>
<tr>
<td>11 Sustainable cities and communities</td>
<td>Circular Economy</td>
</tr>
<tr>
<td>13 Climate action</td>
<td>Responsibility in Supply Chains and Business</td>
</tr>
<tr>
<td>8 Decent work and economic growth</td>
<td>Workforce Transformation</td>
</tr>
<tr>
<td>9 Industry, innovation and infrastructure</td>
<td></td>
</tr>
<tr>
<td>12 Responsible consumption and production</td>
<td></td>
</tr>
</tbody>
</table>
SUSTAINABILITY MANAGEMENT

STRATEGY AND TASKS OF THE SUSTAINABILITY ORGANIZATION

Sustainability means maintaining intact environmental, social and economic systems with long-term viability at global, regional and local level. The Volkswagen Group can influence these systems in various ways and actively takes responsibility to help ensure they are sustainable. The Volkswagen Group has established consistent sustainability management. The related structures, processes and responsibilities are codified in a separate Group policy. We view sustainability management as a continuous improvement process (CIP).

The Chairman of the Board of Management of Volkswagen AG has cross-functional overall responsibility for sustainability. Additional responsibility is taken by members of the Board of Management with their responsibility for specific management systems relating to sustainability and by the Group Steering Committee for Sustainability. The members of this steering committee include managers from central Board of Management business areas and representatives of the brands and the Group Works Council. The Group Steering Committee for Sustainability defines concrete strategic targets and programs, sets out measures for uniform cross-business-area, cross-brand and cross-regional development of sustainability management and makes decisions on sustainability-related basic issues and positions in the Volkswagen Group.

The Group’s sustainability function (Group Sustainability) coordinates all sustainability-related activities and the Group-wide and cross-functional network for sustainability. Communication with Group functions, brands and companies is structured via defined core processes. They serve to create transparency on external requirements and translate these into corporate action. The core processes include the sustainability strategy and materiality analysis, stakeholder management, ratings and rankings, sustainability policies and sustainability reporting. Group Sustainability is allocated to the Office of the Corporate Secretary and to Group Strategy in order to ensure that sustainability is closely linked with the strategic corporate goals and the core business. It is also responsible for the office of the Group Steering Committee for Sustainability.

In addition to the Group Steering Committee for Sustainability, regular discussions within the Group-wide sustainability network take place through various formats, such as the annual Group Sustainability Summit. At brand level, the brand sustainability managers carry out the cross-functional coordination of sustainability topics, develop the sustainability strategy, are responsible for content and reporting on sustainability topics within the brand, represent the brand on sustainability topics externally and coordinate with Group Sustainability.

THE SUSTAINABILITY COUNCIL AS AN INDEPENDENT DRIVING FORCE AND PARTNER

At Group level, the Sustainability Council has a prominent position. The advisory committee created in 2016 supports the Volkswagen Group with important strategic sustainability topics and is made up of internationally renowned experts from the academic world, politics and society. The Council establishes its own working methods and areas of focus independently, has extensive rights for the purposes of exchanging information, consultation and initiating action, and consults regularly with the Board of Management, top management and the employee representatives.

SUSTAINABILITY IN THE VOLKSWAGEN GROUP

<table>
<thead>
<tr>
<th>Organizational structure</th>
<th>Committee structure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Board of Management level</strong></td>
<td><strong>Group Board of Management</strong></td>
</tr>
<tr>
<td>Sustainability Council</td>
<td><strong>Chairman of the Board of Management (CEO)</strong></td>
</tr>
<tr>
<td>Discussion/ advice</td>
<td><strong>Members of the Board of Management</strong></td>
</tr>
<tr>
<td><strong>Group level</strong></td>
<td><strong>GSC for Sustainability</strong> (Group Steering Committee for Sustainability)</td>
</tr>
<tr>
<td><strong>Brand level</strong></td>
<td><strong>Brand boards of management</strong></td>
</tr>
<tr>
<td><strong>Regional level</strong></td>
<td><strong>Brand committee</strong></td>
</tr>
<tr>
<td>Management of cross-functional topics</td>
<td>Management of function-specific topics</td>
</tr>
<tr>
<td>Discussion of core sustainability processes</td>
<td>Discussion of function-specific topics</td>
</tr>
<tr>
<td>Brand sustainability managers (Audi, Porsche)</td>
<td>Group function sustainability managers</td>
</tr>
</tbody>
</table>
In the reporting year, the Volkswagen Group extended its collaboration with the Sustainability Council by two more years. Furthermore, Rebecca Harms, former Member of the European Parliament, and Magdalena Gerger, CEO and President of the Swedish enterprise Systembolaget AB, became new members of the Council. In return, Gesche Joost and Yves Leterme are leaving the Council at the end of the first term of office.

The agenda for the intensified dialog between Volkswagen and the Sustainability Council in 2020 included the CEO Alliance for Europe’s Recovery, Reform and Resilience, which was jointly launched by the Chairman of the Board of Management of Volkswagen AG and the Council to support the EU Green Deal; aspects of corporate governance and integrity; decarbonization; employment in times of advancing digitalization and e-mobility; and sustainable action in international markets. The Volkswagen Sustainability Council also launched two new projects: a research project on distribution effects of climate-related fiscal and transport policy with the Mercator Research Institute on Global Commons and Climate Change (MCC), which builds on the earlier project on climate-conscious transport policy, and a study with the Fraunhofer IAO on the effects of digitalization and e-mobility on employment. The Open Source Lab on Sustainable Mobility concluded its work with the publication of the project results during the past year.

**ACTION PROGRAM FOR IMPROVING ESG PERFORMANCE**

A company’s sustainability performance increasingly often forms the basis of recommendations and investment decisions by analysts and investors. This has a significant impact on companies’ share prices and cost of capital.

In the TOGETHER 2025+ strategy, the Volkswagen Group aims to achieve a lasting increase in the value of the company. The Group’s shareholders also express specific implementation requirements with regard to ESG topics and expect verifiable integration of sustainability aspects in all areas of the Group’s activities. At the same time, changed regulations and frameworks require further action, e.g. the EU’s Taxonomy on Sustainable Activities and Nonfinancial Reporting Directive (NFRD) and the UN’s Principles for Responsible Investments (PRI).

Financial market players draw on various sources of sustainability information to evaluate a company’s environmental, social and governance performance. They use a combination of information from various rating agencies, their own methods and algorithms and the services of data analytics companies. As a result of the diesel issue, the Volkswagen Group remains significantly downgraded in numerous sustainability ratings and is therefore not represented in sustainability indices such as the Dow Jones Sustainability Index or the FTSE4Good Index. In fiscal year 2020, Volkswagen continued to have a score of A– in the CDP climate rating and had an A rating in the Water Disclosure Project (WDP).

In view of the increasing importance of sustainability ratings, we see the current ratings as a clear call for action and are targeting a significant improvement. To this end, we have incorporated an action plan in the Best Governance module of the TOGETHER 2025+ strategy. The aim is to successively improve our performance in selected sustainability ratings by 2025.

In order to achieve this, we identified the challenges for each ESG criterion and defined measures, responsibilities and timetables. These lean predominantly on the programs derived from the new sustainability narrative.

**GREEN FINANCE FRAMEWORK FOR INVESTMENTS IN SUSTAINABILITY**

Massive investment is needed to transform the Volkswagen Group. At the same time, investors are looking for sustainable investment options. Volkswagen published a Green Finance Framework for the first time during the reporting year. This document defines the framework for financial instruments geared to sustainability. The Green Finance Framework systematically links our corporate objective of carbon neutrality by 2050 with our financing strategy. At the same time, we will be able to diversify our investor base and offer existing investors further investment alternatives.

With the establishment of the Green Finance Framework, a new internal committee, the Green Finance Committee, was created. The committee is responsible for the selection process and the assessment of appropriate sustainable projects. The Green Finance Framework covers the following forms of financing: green bonds, green promissory note loans, green private placements and green loans.
In September 2020, the Volkswagen Group successfully placed its first green bonds with a volume of €2 billion on the market. The funds raised are specifically being used for refinancing projects relating to the modular electric drive matrix (MEB) and the new ID.3 and ID.4 electric vehicle models. These include investments and expenses for conception, infrastructure, development and construction of the MEB itself and for the aforementioned electric vehicles based on it and their production plants, supplier tools and supplier systems, and key components, such as batteries.

For Volkswagen’s Green Finance Framework, the independent rating institution Sustainalytics provided a second party opinion to confirm compliance with the International Capital Market Association (ICMA) Green Bond Principles and the Loan Market Association (LMA) Green Loan Principles. The green bonds issued in 2020 were certified by the Climate Bonds Initiative (CBI). The Group will annually publish a report on the projects financed and their environmental impact.

**IMPACT ASSESSMENT SIGNIFICANTLY EXPANDED**

The Volkswagen Group wants to measure the impact of its actions even more precisely in quantitative terms in the future and, if possible and reasonable, to monetize this. It is about positive and negative impacts that the Group has in all sustainability dimensions with its business, supply chains and products and services. This means we are not only taking on board impetus from regulatory developments set in motion by the EU CSR Directive or the EU Green Bond Standard, but also impetus from international initiatives and organizations such as the OECD and the WBCSD. At the same time, like other global companies, we are endeavoring to make even greater use of an impact assessment in our decision-making and management processes, risk management, reporting and communication with our stakeholders.

We have been running two pilot projects under the name of “Impact Valuation@VW Group” since 2019. At Volkswagen’s Kassel site, selected impacts on economic, environmental and social aspects were analyzed, monetized, quantified and summarized during the reporting year in a report on findings. The spectrum ranged from gross value added and jobs through decarbonization and biodiversity to employee diversity and accident frequency. The aspects were also reviewed for any possible interdependence in order to take a holistic perspective and make the project’s findings usable for the site’s strategic alignment. The pilot project at Dr. Ing. h.c. F. Porsche AG is also about identifying economic, social and environmental topics that allow impact to be measured. In the first step, selected sustainability indicators for the value chain from purchasing to our own business processes were taken into consideration.

Both projects will form an important foundation for intensified impact assessment in the entire Volkswagen Group in the future. This is backed by the active support of the Value Balancing Alliance (VBA). This initiative champions the development of uniform assessment standards for impact measurement and the financial balancing of sustainability impacts on an international level across sectors. In addition to the Volkswagen Group, the VBA’s members include numerous global players, such as Bosch, BASF, BMW, SAP, Mitsubishi Chemical Holdings and Novartis.
STAKEHOLDER MANAGEMENT

Our stakeholders are individuals, groups, or organizations who have a material influence on or are materially influenced by the way in which the Group reaches its corporate decisions and the implications of those decisions. We have identified ten stakeholder groups of equal value in our environment. Our customers and employees are at the center of our stakeholder network. Around this core, eight further groups were identified. The Group’s supervisory and advisory bodies, such as the Supervisory Board and the Works Council, and the Sustainability Council act as a special interface between internal and external stakeholders. The monitor appointed by the U.S. Department of Justice was also a key stakeholder of the Volkswagen Group until the end of his work in September 2020.

For us, stakeholder management means interacting with key stakeholder groups systematically, continuously and in line with our TOGETHER 2025+ Group strategy. Stakeholder management aims to record expectations and use feedback from our stakeholders to critically reflect strategic planning processes. Our brands and regions have their own stakeholder activities. The Group’s task is to bring together all of the activities in an integrated stakeholder activity framework.

This includes:
- Stakeholder activities on a Group level with specific committees, formats and a focus on stakeholders relevant across the Group
- Advising and coordinating the brands and regions and their activities
- Carrying out regular stakeholder analyses and stakeholder surveys
Efficient and internationally oriented stakeholder management is increasingly important for the Volkswagen Group. This is not only a foundation for determining the sustainability strategy’s key issues but also for fulfilling the increasing requirements and communication needs of our stakeholders, whose trust in the Volkswagen Group we want to continue to strengthen. We are pursuing the aim of open and transparent dialog with our stakeholders on the future issues of sustainability. This will be the basis for improving the Group’s reputation, acting flexibly and fast, and retaining our acceptance as a social actor even under changing conditions.

Our Group is a player in numerous networks of experts and decision-makers who have a significant influence on our business and the agenda in the politico-social environment. We want to intensify our dialog with them. In the reporting year, we further optimized stakeholder management and integrated it into relevant Group policies and management systems within the framework of the Best Governance module of the TOGETHER 2025+ Group strategy. This also includes determining clear responsibilities for the respective Group functions for relations with specific stakeholders of the Group.

REPUTATION KPI REFLECTS STAKEHOLDER TRUST

The reputation key performance indicator (KPI) makes a decisive contribution to anchoring stakeholder management in the strategy. The indicator is based on the responses by external stakeholders to the question in the annual Group reputation survey about the degree to which they trust the Volkswagen Group. The KPI affords a holistic view of attitudes and opinions on the Group and allows the identification of changes in evaluations over the course of time.

We further honed the reputation survey in the reporting year. The Audi, Porsche, SEAT and Volkswagen brands are now represented throughout. The survey data is based on personal telephone interviews that are conducted annually with selected representatives from the fields of politics and associations, scientific bodies, NGOs, investors, analysts and business partners in the four markets (Germany, the USA, China and Spain). The stakeholders to be surveyed are defined in a two-stage process: Volkswagen prioritizes organizations and institutions to be contacted in order to represent the relevant stakeholders from the Group’s perspective. The market research institution responsible chooses the remaining part regardless of any connection or business relationship with the Volkswagen Group in order to create a neutral sample. In principle, the highest possible level of the hierarchy is always surveyed within the organizations and institutions contacted. The Group obtained the following results in 2020: 57% of stakeholders in Germany stated that they trust the VW Group (2019: 34%). In the USA, the proportion was 78% (2019: 55%), in China 92% (2019: 93%) and in Spain 78% (Spain has only been surveyed since 2020).

Once a year, we produce a summary of our stakeholder feedback and the reaction of the Group in this regard. In the 2020 reporting year, our stakeholders submitted expectations to the Group across all committees and formats. These suggestions and remarks provide stimuli for further developing the Group strategy and sustainability management.

A summary is available on the Group’s corporate website.

STAKEHOLDER PANEL AS A CRITICAL COMPANION

In addition to the Sustainability Council, Volkswagen Group has established a Stakeholder Panel, which has overseen the Group’s sustainability activities for over 20 years. The aim is to critically question and continuously improve sustainability management and the sustainability strategy. The members of the panel receive invitations to dialog events and surveys at regular intervals and are our contacts for stakeholder analyses. The panel has more than 300 participants in the German-speaking region (Germany, Austria and Switzerland). The start of the pandemic meant the panel’s work was paused in 2020, and the planned creation of an international panel was postponed to 2021.

DIALOG AND INTERACTION OPPORTUNITIES

GRI 102-43

We also further developed our stakeholder dialog formats in this reporting year. The key events included the second Volkswagen Group Stakeholder Dialog in Wolfsburg in February 2020 as a continuation of the Group-wide dialog series started in the prior year. More than 150 participants, including stakeholders from NGOs, politics, academia, suppliers, investors and analysts as well as representatives of the Group’s central Group and brand functions, discussed the social aspects of the transformation.

The topics discussed include issues of job security, training workers, participation, and protection of human rights in a transparent supply chain. The choice of these topics underlines the fact that the transformation triggered by climate change and digitalization not only creates change in technologies, products and business models but also, particularly in the social field, an increased need for action.

The Volkswagen Group also continuously maintains close cooperation with external partners and organizations. A detailed overview of our activity formats can be found on our website.
The Volkswagen Group and its brands work in a complex and highly regulated environment. We consider it our responsibility to actively participate in shaping the framework for our economic activity in dialog with our stakeholders.

On a Group level, the representation of the Group’s political interests towards governments, parliaments, authorities, associations, institutions and society is coordinated worldwide and a coordinated approach is taken in order to ensure coordinated action and consistent communication of the brands and companies. The “Public Affairs” steering committee, which regularly reports to the Group’s Board of Management, is responsible for this.

Principles such as integrity, openness and verifiability and guidelines for contact with politicians as well as rules for transparency are set out in a Group-wide policy. For instance, Volkswagen AG’s entry in the European Union’s transparency register and the disclosure of our positions represented to politicians in the reporting year – e.g. on the topics of decarbonization, digitalization or human rights – are based on these principles.

The policy commits the Group’s policymakers in associations to contribute the Group’s positions to discussions without change within the framework of what is permitted under competition and antitrust law. For others who carry out the tasks of representing political interests in associations, a training strategy was introduced in the reporting year.

The Group does not make political donations as a matter of principle. Where other forms of financial support are permitted and desirable, we set rules for granting and disclosing this support, for example for parties in the democratic spectrum in Germany in the context of sponsoring. Figures for the support of party events and for the advertising budget for party-affiliated publications are disclosed annually.

Our positions toward politicians, the policy on representing political interests and further information on public affairs can be found online at:

www.volkswagenag.com > Sustainability > Policy
As a good corporate citizen, we would like to be a constant economic driver and contribute to structural development and equal opportunities in more (business) processes. We have always believed in the importance of recognizing our social responsibilities towards our stakeholders. The main focus of our corporate social engagement activities is on supporting future, educational and community projects at many of our sites across the world. We have not previously had a Group-wide corporate citizenship strategy but see this as necessary for reasons of transparency and manageability. That is why we are currently working on a strategic basis for this action area. In 2020, the brands and companies supported more than 700 projects and initiatives on a global scale.

Information on the individual topics and projects can be found on our website:

www.volkswagenag.com > Sustainability > Reporting > CC-Projects Worldwide

We select specific projects and develop them on our own or in partnership with local partner organizations and NGOs. We choose and carry out projects in accordance with our Group-wide guidelines:

- The projects are in line with the Group Essentials and address a specific issue of local relevance or a global challenge.
- They are an expression of diversity within the Group and the social environment in which the projects are carried out.
- They are the result of close dialog with the local stakeholders involved in implementation.
- Projects are managed locally under the responsibility of the competent units.

During the reporting year, we were involved in numerous projects to sustainably improve social structures. We give donations in cash and in kind to support activities and projects primarily devoted to education, culture, sports and social causes. Donations may only be given to recognized nonprofit organizations or ones specifically endorsed to receive donations. In the reporting period, Volkswagen AG made donations amounting to €42.2 million.

ASSISTANCE FOR HEALTHCARE IN THE PANDEMIC

Volkswagen has continued to provide support beyond the corporate environment during the coronavirus crisis: Volkswagen donated 7.9 million face masks as well as protective clothing, thermometers and disinfectants to healthcare facilities at a cost of around €40 million and supported the German federal government by procuring protective masks through the Group’s procurement channels. In addition, Volkswagen gave medically trained personnel paid leave to enable them to volunteer for work in public health services. Together with Siemens, Volkswagen supports healthcare provision in the Moria refugee camp. Volkswagen continues to support the construction of a makeshift hospital in South Africa.

The Volkswagen Group increasingly links sustainability with digitalization in its social engagement activities, relying on partnerships to do so. For example, in 2020 we agreed a long-term collaboration with Microsoft Germany to strengthen the companies’ social responsibility. The aim is to fund and jointly implement projects – for instance, in digital education and training. This is intended to give people access to digital technology, thus increasing participation in society and future opportunities.

At the Autostadt Wolfsburg, the two cooperation partners are comprehensively expanding digital training options aimed at school students, young people and adults. Important societal issues such as digitalization and the mobility of the future are presented in a practical way and also in innovative formats here.

The work at the memorial site in Auschwitz has now been a fixed part of the Volkswagen Group’s lived culture of remembrance for more than 30 years. The joint project with the International Auschwitz Committee (IAC) is supported by employee representatives and executive managers in equal measure. Trainees, managers, management trainees and foremen from Germany and Poland help maintain the memorial site in various programs there. This commitment promotes responsibility and imparts values such as tolerance and cultural openness. In September 2020, trainees and managers took part in a total of three projects on site.

The Volkswagen workforce has taken on social responsibility for people in need for decades: Volkswagen AG’s employees donated a total of €658,617.43 in 2020. Employees and the Group support disadvantaged people at the Volkswagen AG locations through these workforce donations. Support is given to specific projects, which, for example, improve the situation of people whose quality of life has been affected by illness, disability, or other circumstances. For example, the hospice foundation in Gifhorn was supported for another phase of construction with a donation of €30,000. Moreover, small organizations are supported with purchases of IT equipment, office furniture or therapy equipment. Likewise, leisure activities can be realized with socially disadvantaged families for which no funds would otherwise be available. Likewise, on the initiative of and led by the Group Works Council, the Group’s employees have supported the international children’s relief organization terre des hommes for more than 20 years. In 2020, the amount donated was more than €1,188,600. At the Volkswagen Group’s production locations in Argentina, Brazil, India, Mexico, South Africa, Thailand and Germany, a wide variety of projects for disadvantaged children and young people are funded from the donations. They are given protection, support, the opportunity for education and career prospects.
For the first time in the cooperation between the Group Works Council and the children’s relief organization terre des hommes, a joint call for donations for coronavirus emergency aid was made this year with the Group Board of Management. €693,581 was raised, showing great solidarity and extremely high willingness to donate – especially during the coronavirus crisis.

For example, it was possible to extensively support the Otomi people in Mexico. Employees of the project partner Postgrado en Ciencias del Desarrollo CIDES provided education about the consequences of COVID-19. They also distributed food packages and vitamin products. Moreover, the aid workers raised parents’ awareness regarding keeping a closer eye on symptoms of illness in their children and making use of medical help if necessary. A doctor, who the families can consult free of charge, was funded with the aid money from the coronavirus emergency aid.

In South Africa, employee donations have supported the Ubuntu Pathways organization for more than eleven years. This meant aid workers were able to implement numerous health measures locally for children, young people and their families in the township of Zwide in Port Elizabeth, where more than 400,000 people live. When the coronavirus pandemic started, Ubuntu Pathways transformed its head office in the township into a crisis management center. The people at most risk from COVID-19 are given immediate medical assistance there. This includes HIV treatment and medication supply for a total of 2,000 immunocompromised children and their families.

The donation of the cents after the decimal point in employees’ payslips also supplemented the long-term financing of projects at Group locations around the world.

SUPPORT FOR REFUGEES

The Volkswagen Group takes responsibility for refugees and the humanitarian consequences of global migration. We therefore set up the Volkswagen Group’s refugee aid program, a unit that coordinates cross-brand projects, initiates and implements measures and forms networks with other active companies, trade associations and relief organizations. Since 2015, we have thus created a large number of site-specific options for refugees in cooperation with the people responsible for sustainability of the Group brands. There were three areas of focus here: meeting, education and professional integration. In order to raise awareness regarding refugees and migration, all trainees visited a multimedia, mobile exhibition in their first year of apprenticeship. In the area of school education, our focus in the reporting year was on comprehensive career-related language acquisition because this is the key to additional career prospects for refugees in Germany. We also offered language courses lasting a number of months and have sponsored integration and vocational skills courses to obtain a high school diploma.

We have implemented career guidance and skills assessment measures at various Group sites. Our entry-level vocational qualification options, which combine theoretical and practical preparation for a career and an intensive language course and thus prepare refugees for an apprenticeship in Germany, were just as successful. There were also specialist internships for recognizing professional qualifications gained abroad. This moves refugees from the status of an assistant to that of a recognized specialist employee and means they have better labor market prospects. Apprenticeship options for refugees rounded off the offering.

In addition to the Group-wide involvement of the Audi, Porsche, MAN, Volkswagen Financial Services, Volkswagen Commercial Vehicles and Volkswagen Passenger Cars brands, many employees of the Volkswagen Group do voluntary work for refugees. Supporting them in this is also the Volkswagen Group’s refugee aid program’s task. From 2015 until the end of 2020, we reached more than 5,500 refugees through our projects.

In view of the state of emergency in the Mediterranean region, in 2020 we expanded our efforts for refugees beyond Germany. For example, the Volkswagen Group donated €3.5 million in emergency aid for people threatened by the coronavirus pandemic in refugee camps in Syria, Turkey and Greece. The funds were given to the German Red Cross, which organizes and implements the aid locally with the national organizations of the Red Cross and the Red Crescent. The donations were used for the procurement, transport and distribution of aid supplies and food and for medical and psychosocial emergency aid. The Volkswagen Group made a further donation of €5 million together with Siemens AG as humanitarian emergency aid for refugees in the Greek refugee camp in Moria on Lesbos. After the major fire there, the situation of the people there dramatically escalated. The funds also went to the German Red Cross and national partner organizations.
With digitalization, we want to become a business that shapes the change and are working at full speed to advance its development – not just in our vehicles and mobility services but also in manufacturing, in sales and in other administrative and technical processes. The plan is that all new vehicle models across the Group will be built on an in-house software platform by 2025. It has the potential to set standards in the industry. Furthermore, we will additionally invest €4 billion in developing our IT by 2023. We are thus on the way to establishing ourselves as a software-driven mobility company.

DIGITALIZATION AS AN ENabler OF THE GROUP’S TRANSFORMATION

For us, digitalization is not just an engine for tapping important future potential at the product level. It also permeates all the Group’s activities for implementing our sustainability strategy and thus works as an important enabler for achieving our ambitions and objectives in four focus areas and for the transformation of the Group. Digitalization is also connected with a number of challenges for the Volkswagen Group. For example, jobs previously involving manual work are going to disappear as a result of greater penetration of IT in manufacturing. On the other hand, we will need numerous new employees with digital skills, whose recruitment is made harder due to a significant IT skills shortage in the labor market. With modern recruitment processes, extensive training programs and the Digital Transformation Roadmap launched in 2019, we have set the direction in terms of HR policy in a way that meets changed requirements.

Workforce Transformation

The use of digital processes in products and manufacturing in turn relies on the exchange of large quantities of data. This requires efficient infrastructure and compliance with strict regulations that encompass a high level of IT security and the protection of customer, partner and employee data.

STRATEGIC REORIENTATION OF GROUP IT

Volkswagen Group IT manages IT processes and projects Group-wide across brands and regions, thus advancing digitalization. Organizationally, it is allocated to the Finance & IT operating unit and works closely with the IT units in the respective brand organizations. In the reporting year, Group IT thoroughly updated its strategic guidelines for the period until 2023. The creation of a clear distribution of tasks and competences on a global scale, the strategic advancement of digitalization in partnership with all the business areas and the establishment of universal platforms for achieving synergies and a high process speed are of key importance. To this end, we continuously modernize our IT systems, increase their efficiency and integrate systems and applications in new cloud platforms. We focus on digital key technologies such as artificial intelligence and the use of new IT technologies and products, services and corporate processes.

On an operating level, the Group IT Steering Committee has the task of creating synergies, managing the Group IT project portfolio and encouraging communication with departments on IT projects. Planning and managing the IT project portfolio at Group level will ensure the coordinated use of budgets and resources in the development, implementation and use of IT solutions. For digitalization in the Group, we also use our in-house IT labs, which act as centers of innovation and excellence. Group IT, research institutions, technology partners and policymakers are working closely together there on future trends in information technology. At the same time, the labs function as liaison offices for start-ups. In software development centers (SDC) we develop cross-brand software for digital ecosystems and for new business processes in the Group. We thereby maintain in-house expertise in the rapid, demand-oriented development of software and IT solutions.

RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

Artificial intelligence is increasingly gaining industrial relevance for the Volkswagen Group and is already a competitive factor. The Group has therefore already created the conditions to be able to develop and use powerful AI systems itself at an early stage. For example, around 110 Group IT experts work in Munich and Wolfsburg on research and development for applications of machine learning and data analytics. The potential of quantum computers for commercially viable areas of application is also being tapped. In the reporting year, this included projects for optimizing material design for the batteries used in electric vehicles, navigation systems for fleets of coaches, improved traffic planning and logistics processes and new training and learning methods.

Artificial intelligence is relevant for the Volkswagen Group in two major subject areas: in the vehicle and in business processes. The key is AI for autonomous driving that is based on the use of self-learning algorithms for environment and environmental recognition and for intelligent voice control, for example for navigation and convenience functions. In the Group itself, “cognitive ergonomics” is particularly important. This is what we call the use of self-learning algorithms that remove repetitive administrative work from employees and can prepare for the final decision. Other important application areas include enabling intelligent robots to work hand-in-hand with human specialist workers and predictive maintenance in manufacturing.
In close cooperation with the other Group IT labs, the machine learning research lab in Munich works on basic research for machine learning for Volkswagen in order to develop and test new methods. The aim is to use probabilistic approaches to develop and test methods that combine unsupervised learning, time series modeling, prior knowledge and optimum regulatory methods: the foundation of artificial general intelligence.

But we never forget the societal risks of using AI. We have therefore established an international consortium of industrial and university partners that develops and tests measurable criteria in cooperation with bodies at European level in order to use AI safely and transparently in products and processes.

**INDUSTRIAL CLOUD: DIGITALIZATION IN PRODUCTION**

The Volkswagen Group also consistently focuses on digital technologies of the future in production and is advancing the integration of its factories into the Industrial Cloud. One important aim is to further increase the plants’ efficiency and cut production costs. Following the connection of the first three plants in 2019, it was possible to integrate a further 16 production locations of the Audi, SEAT, SKODA, Volkswagen Passenger Cars, Volkswagen Commercial Vehicles and Porsche brands and of their components into the data cloud in 2020.

The “Industrial Computer Vision” image recognition and processing technology is one of the particularly innovative, efficiency-increasing digitalization applications in manufacturing. The process extracts information from optical data – for instance, the physical environment in the plant – and assesses this with the aid of artificial intelligence. This resembles the human ability to capture, process and analyze images. The application facilitates, for example, quality control and vehicle identification with country-specific information and language variants. In the reporting year, Porsche and Audi prepared two initial computer vision solutions for Group-wide rollout and connection to the Industrial Cloud.

Together with Amazon Web Services (AWS) and our integration partner Siemens, we are also opening up the Industrial Cloud for more companies with activities in mechanical engineering and technology. New partners can connect with the Volkswagen sites in the future and contribute their own software applications for optimizing manufacturing processes in the Industrial Cloud. This will result in a rapidly growing supply of industrial software applications for Volkswagen’s factories. Every site should obtain applications for its machines, tools and systems directly from the Industrial Cloud and therefore be able to produce even more efficiently. Eleven international pioneering partners are involved right from the start: ABB, ASCon Systems, BearingPoint, Celonis, Dürr, GROB-WERKE, MHP, NavVis, SYNAOS, Teradata and WAGO.

In the future, the Industrial Cloud is intended to include all Volkswagen’s factories around the world and the entire supply chain and will simplify the exchange of data across systems and plants. This is based on AWS technologies in the areas of the Internet of Things (IoT), machine learning, data analytics and computing services, which have been extended to the specific requirements of Volkswagen and the automotive sector.

**ESTABLISHMENT OF THE NEW GROUP UNIT CAR.SOFTWARE ORGANIZATION**

In the software-driven mobility company module, we are working to make software development one of the Volkswagen Group’s core competencies. To this end, we are pooling our existing expertise and enormously strengthening our workforce. Since January 1, 2020, we have pooled all our equity investments and subsidiaries that develop software for vehicles and for digital ecosystems in the Car.Software organization (CSO) – an independent company with Group responsibility. We plan to introduce the new uniform software platform with the full range of functions offered by the VW.OS operating system developed by the Car.Software organization for the first time in a flagship model from Audi in 2024. The vehicle will be created in the new agile “Artemis” unit, which should enormously accelerate the development process in close cooperation with the Car.Software organization. This agile project is intended to establish a closer connection with customers beyond the entire product life cycle. This approach will enable us to leverage synergies between the individual brands and vehicle projects. The aim is that the Volkswagen Group and its brands will stand not solely for high vehicle quality but in equal measure for exciting digital products and services.

In addition, the Car.Software organization will bundle the technological platform solutions for data-driven business models and innovations in the Group in the future. High investment by 2025 is budgeted for this size of task. It is decentralized in order to be close to the brands and markets and also present at attractive locations for software developers. Site locations include Ingolstadt, Wolfsburg, Stuttgart, Berlin and Munich. It also has sites in Europe, China, the USA, Israel and India.

The Car.Software organization evolved in leaps and bounds in 2020. The organization was launched with around 2,000 employees from the Volkswagen, Porsche and Audi brands plus new Car.Software organization employees. By the end of the year, the Car.Software organization was strengthened with 500 additional IT experts and has its sights on the 5,000 employee mark in 2021 with the integration of equity investments.

The boards of management of the Group and the Car.Software organization were restructured in July 2020. Markus Duesmann took charge of software development in the Volkswagen Group Board of Management within the scope of his responsibility for research
and development and is also the Chairman of the Supervisory Board of the Car.Software organization in this role. Dirk Hilgenberg, an established IT and transformation specialist, became the CEO of the Car.Software organization and leads the board of management team with CHRO, CFO and CTO. The aim is to continuously develop the Car.Software organization on the basis of five target areas – product, processes, people, structures and enterprise – and by means of agile work methods. A separate unit that will manage the topic of corporate social responsibility is planned.

Responsibility for Data Protection and Information Security

In connection with the entry into force of the EU-wide General Data Protection Regulation (GDPR), measures aimed at compliance with data protection requirements have been developed and implemented at Volkswagen. For example, numerous lawyers from Group Legal Affairs and Group data protection officers together with specialists from Group IT and data protection coordinators in the departments work closely together to meet the high requirements regarding data protection. In addition to establishing a sustainable data protection organization, a stringent data protection management system was developed and systematically expanded with the aim of achieving the required process security.

In addition, awareness of the privacy-related topic of data protection was raised in the Volkswagen Group in order, in particular, to support the success of the digitalization projects. The principle of checks and balances established in the Group with the distribution of various roles and rights in the context of processing processes relevant to data protection is also an essential prerequisite of reflective and responsible implementation of the tasks at a high level.

We particularly focus on maintaining information security and defending against cyber attacks. The Group Information Security Steering Committee (GISSC), which consists of the chief information security officers of the Group, the brands and the regions and representatives of Group Internal Audit, has overarching responsibility. It is supported in its operational work by the Group Information Security department.

The governance processes of the information security management system are certified in accordance with the internationally recognized ISO 27001 standard. Local and Group-wide TOP security incidents are reported to the GISSC once a quarter. The total number of all incidents detected is summarized in the annual information security report the Board of Management receives. Where damage is discovered, e.g. data loss or business interruptions, the Volkswagen Group’s cybersecurity insurance comes into play.

In the Group’s individual brands and regions, security operations centers (SOCs) were also established as separate units with IT security experts. These become active in the event of IT security incidents, for example, in the event of hacker attacks or the discovery of vulnerabilities in systems. The team also functions as a coordinating body and works on preventive measures to avoid IT security incidents.

The employees responsible can refer to regulations and guidelines for action that serve them as guidance and support in handling serious and business-critical IT security incidents in compliance with the rules. The aim is to restore the disrupted IT service as quickly as possible. Group Information Security runs penetration tests on behalf of the brands to identify and counteract vulnerabilities at an early stage – these tests are an integral component of the assessment of information security in the Group. In addition, Group Information Security offers and conducts various trainings and lectures on information and cybersecurity.

Strategy for Sustainable and Digitally Connected Mobility

We offer both innovative vehicle technologies and forward-looking mobility services, with which we want to meet our customers’ requirements, but can also help to solve local environmental and traffic problems in urban and rural areas and to protect the climate worldwide. The global cooperation with partners outside the Group plays an important role. We are guided here by the "Shaping mobility – for generations to come" vision underlying our TOGETHER 2025+ Group strategy. We have bundled our ambitions in our four mobility pledges and embedded them centrally in the sustainability narrative developed in the course of the materiality analysis.

Changed Mobility Requirements as a Framework for Action

Our global society today faces the major challenge of finding the right balance when shaping mobility. Both overloading and deficits exist concurrently: the limits for noise, traffic jams, accidents, parking space or poor air quality have been reached or exceeded in many major cities. At the same time, there are too few means of transportation for many people or the transport is too expensive for them, limiting people’s access to and participation in society. This is not only the case in the less developed countries around the world, but also in rural areas of industrialized countries and in suburbs.

New solutions must satisfy a large number of social requirements. It is important for companies to aim for transparency with regard
to the impact of their mobility offerings and also to evaluate these at an early stage. Conflicting objectives and undesirable side effects must be identified and addressed. Weighting the objectives, by contrast, is a task that can only be solved in constant dialog with society and politicians.

As an automotive manufacturer, we traditionally rely on infrastructure such as roads, gas stations, charging stations or parking spaces and on their providers. On our path to becoming a mobility provider with new solutions, the need for connection with other players and for cooperation continues to increase. Traffic-efficient driving, for example, only works in the coordinated interaction between vehicle and traffic lights or roadworks. Mobility services need “stops” to let passengers in and out. Car sharing services need reliable parking spaces. Integration into the structure of public transport services or connection with other private mobility services must also be taken into account here. On the way to new mobility concepts, various opportunities for and approaches to cooperation thus present themselves.

The COVID-19 pandemic has had a significant impact on user behavior and the provision of services in 2020. It should be noted that, firstly, the importance of means of transport that function in a stable way for the transportation of people and goods that are systematically important has become apparent. Secondly, the type of use of the means of transport has had to be adapted to avoid spreading the virus. The need for social distancing has especially hit public transport and mobility services, whose efficiency is based on passenger density. Public transport has had to deal with a steep decline in use due to increased infection risks and strict hygiene requirements. Ride hailing and other shared mobility formats have also declined, including because providers had ceased operations. By contrast, COVID-19 has increased the appeal of individual mobility – both with motorized vehicles and nonmotorized bicycles. During the pandemic, many major cities began to change their road traffic infrastructure in the short term to provide more room for bicycles and pedestrians, which should make complying with social distancing requirements easier in comparison with public transport. The Volkswagen Group continuously analyzes evolving challenges and trends in order to draw conclusions for our own business models and the services we offer.

**URBAN MOBILITY IN THE FOCUS OF INTERNATIONAL COOPERATION PROJECTS**

Shaping urban mobility plays a key role for the Volkswagen Group because many mobility options are primarily available in cities. According to the UN’s estimates, almost 70% of the global population will live in cities by 2050. The problems are the most urgent and at the same time the potential for change is the greatest here. As a member of the World Business Council for Sustainable Development (WBCSD) for many years, we seek a dialog with other transformative companies and stakeholders in order to identify our own scope for action.

In the reporting year, the Volkswagen Group continued its collaboration on the WBCSD’s Transforming Urban Mobility (TUM) project. In addition to decarbonization, a particular focus was the topic of mobility as a service (MaaS). In 2020, the WBCSD agreed a cooperation with the International Transport Forum (ITF) for preparing an analysis of the trends, criteria and design recommendations in the new mobility landscape. The ITF is the leading global body for dialog on transport policy and, as an intergovernmental organization with 60 member states, organizes the largest annual summit of transport ministers. The focus of the analysis in the field of MaaS is preparing policy recommendations for realizing sustainable mobility in cities. The project, which the Volkswagen Group is also involved in, underlines the importance of cross-sectoral dialog on connected, automated, shared and electric mobility. It is intended to help companies, associations and policymakers alike find routes to sustainability based on objective criteria in the changing mobility system and to support the development of innovative business models and strategies. The COVID-19 pandemic is having a major influence on this project, because it suddenly exposed the vulnerability of the transport system and thus the importance of the criterion regarding the resilience of transport and traffic: supplying society’s basic needs of food, healthcare services and much more requires fail-safe transport services for people and goods. People must also be able to travel by all means of transport without risk of infection.

**WORLDWIDE CITY PARTNERSHIPS**

The Volkswagen Group sees itself as a close and reliable partner to cities. A wide variety of projects is already being developed, tested and implemented in numerous collaborations around the world. The priority is the establishment of new technologies intended to reduce congestion and environmental pollution. Currently, our Group has initiated partnerships with numerous cities. These include Hamburg, Hanover, Dresden and Wolfsburg in Germany and cities such as Prague and Barcelona internationally.

Together with the city of Hanover, Volkswagen Commercial Vehicles manages and coordinates the urban logistics initiative. The goal is to realize clean, quiet, efficient and thus future-proof logistics concepts for cities. In 2020, the national funded projects USE-FUL (German Federal Ministry of Education and Research) and ZUKUNFT.DE (German Federal Ministry of Transport and Digital Infrastructure) were completed together with industrial and academic partners. Practical research findings on planning innovative logistics concepts in cities were produced, and it was shown that locally emission-free package delivery with light commercial vehicles is already practicable and expedient. Parcel delivery providers are testing emission-free package delivery with eCrafters and Cargo e-bikes in a pilot project in the Linden Nord district of Hanover.
Promoting electric mobility, innovative mobility services, the intelligent connection of transport and the use of self-driving vehicles are at the heart of the partnership with Hamburg. In 2019, the ride-pooling service MOIA was launched in all-electric operating mode in Hamburg. The launch of the all-electric car sharing service WeShare planned for 2020 could not be carried out in the Hanseatic city due to the pandemic and is now planned for 2021. The Intelligent Transport Systems (ITS) World Congress, which Hamburg is organizing in 2021, will be another milestone of the collaboration between Hamburg and the Volkswagen Group.

Under the “mobility of the future” mission statement, we advanced our collaboration with Dresden, the capital city of Saxony, in the areas of electric mobility, charging infrastructure and connected driving. Volkswagen opened its Gläserne Manufaktur, where visitors and customers can experience technologies of the future up close, in 2012. With the functional testing station, Volkswagen has brought a new research and development entity to Dresden, which focuses on testing driver assistance systems. Furthermore, innovative projects in mobility, industry, logistics and sustainability have been nurtured in the start-up incubator since 2017.

MOBILITY SOLUTIONS IMPACT ASSESSMENT

The complexity of the mobility system means it is not easy to predict whether new concepts will make a contribution to achieving sustainability goals and what underlying conditions need to exist for this. Volkswagen addresses this challenge with an impact assessment that digitally replicates mobility on the basis of real data. Political players or cities increasingly require the earliest possible proof that mobility solutions also have sustainability effects, and this proof can become a component of approvals or long-term operation.

Various KPIs that are not only scientifically acknowledged but also reflect the requirements of various players are used in the evaluation: for example, short journey times are important for customers, the reduction of CO₂ emissions is important for society, cities want to occupy as little space as possible with traffic and improve air quality, and good utilization of its services is important for the operator. The use of simulations means possible improvements – and also any undesirable side effects – can be discovered early.

Measures for increasing efficiency in road traffic continue to be important steps on the path to sustainable mobility for Volkswagen. Ride-pooling and urban traffic-light intersections remain focus topics for the impact assessment here. Pooling journeys – in public and in individual transport – is a key success factor for sustainability in transport. Mobility services face the additional challenge of keeping empty trips before or after transporting customers or relocations of rental vehicles to a minimum. The displacement of a private single journey to a commercial single journey by the same means of transport (e.g. ride hailing or car sharing instead of a private car) only has potential to improve the situation in parking and not in traffic. However, pooling like in the MOIA example means linking the transport needs of various customers as optimally as possible in order to balance detours and waiting times with capacity as well as possible. Modeling and impact assessment provide valuable services here in order to represent the high level of complexity. The methods and model approaches for mobility simulation are continuously adapted to the current state of research and science and further developed, in both cases in collaboration with universities. Moreover, real data and empirical figures from mobility providers are used for continuous improvement.

We have also further developed our impact assessment of urban traffic-light intersections, which represent a bottleneck in traffic capacity and quality in towns and cities. Optimum use of this traffic capacity potential will reduce the need for space for traffic in towns and cities. A vehicle approaching the traffic-light intersection can, for example, avoid the time- and energy-inefficient maneuvers of braking and starting the vehicle if it is informed when the traffic light will go green in advance. This reduces the consumption of fuel or energy and improves the flow of traffic.

In addition to these approaches to improving the individual vehicle, cooperative driving maneuvers with other vehicles due to increasing vehicle networking are becoming increasingly interesting – for example, a coordinated convoy start at the traffic light. If self-driving vehicles join the complex traffic at intersections in the future, certain effects should be expected. For example, an automatically driven vehicle must initially be enabled to drive in a traffic-efficient way based on its sensors and actuators by means of intelligent algorithms. This is particularly challenging in mixed traffic with other, non-automatic vehicles and pedestrians, cyclists or buses. Intelligent transport infrastructure, particularly the traffic lights, will ideally support this by providing vehicles with the necessary information. Key interactions are investigated in various scenarios of the impact assessment. Initial assessment findings show considerable potential for increasing capacity and reducing fuel consumption. Corresponding requirements for the development of automatic vehicles and traffic assistance systems are derived from this.
With WeShare, we want to participate in the still growing car-sharing and thus optimize the use of the fleet. "Driving efficiency" service available as part of this system also helps to clearly assess the economic use of vehicles in operation and compare individual vehicles’ long-term consumption. The "driving efficiency" service available as part of this system also helps to clearly assess the economic use of vehicles in operation and thus optimize the use of the fleet.

VOLKSWAGEN WE AS A DIGITAL ECOSYSTEM

"Volkswagen We" is a growing range of vehicle-related digital services and mobility solutions that can be used in the car or with a smartphone. The associated building blocks of We Connect and We Charge, among other things, enable our customers to plan routes efficiently in real time and give them effortless access to charging infrastructure.

We Connect connects users with their vehicle and enables many helpful features, such as unlocking and locking via the app or sending a digital key to another user of the vehicle. With We Charge, the customer benefits from the contracts with the operators of affiliated charging stations, central billing and simple management of tariffs, charging cards and wall boxes. Charging stations are easy to find using the app, as is real-time information, such as whether charging points are occupied. This motivates our customers to charge their environmentally friendly vehicles with green energy.

Volkswagen offers 100% electric car sharing in the city of Berlin with WeShare. This not only saves space in towns and cities but is also efficient for most users because customers only turn to their cars when they really need them.

Moreover, Volkswagen offers its business customers with small to medium-sized fleets an efficient fleet management system with We Connect-Fleet. The We Connect-Fleet analysis can quickly record and compare individual vehicles’ long-term consumption. The "driving efficiency" service available as part of this system also helps to clearly assess the economic use of vehicles in operation and thus optimize the use of the fleet.

MOIA: SHARED USE OF TRANSPORT SERVICES

MOIA launched regular operations in Hanover in 2018 and in Hamburg in 2019. In the reporting year, MOIA had more than 330 (2019: 100) all-electric vehicles on the road in Hamburg and around 50 in Hanover. The vehicle fleet is charged with 100% certified green energy. Hamburg is a global flagship project for MOIA. It is the first city with a population of more than a million where we have put our offering for innovative, shared mobility on the road. MOIA sees itself as part of the inner-city mobility offering and as a meaningful addition to local public transport. The Group is cooperating with Hamburg and the public transport operator Hamburger Hochbahn. For example, in June 2020 MOIA became the first mobility service provider to be integrated in Hamburger Verkehrsverbund’s hvv switch app. Volkswagen Commercial Vehicles also joined the MaaS Alliance through MOIA. The MaaS Alliance is a public-private partnership organization that has set itself the objective of creating an open platform for implementing MaaS projects.

In addition to its own charging infrastructure in its own depots, MOIA will also use B2B partners’ charging infrastructure in the future. The first cooperation with Vattenfall was agreed in August 2020. In September 2020, the third MOIA depot was opened in Wandsbek and is thus an important milestone in establishing MOIA in Hamburg.
EXPANSION OF MICROMOBILITY

In addition to valuable collaboration in partnerships, the Volkswagen Group already offers cities a large number of solutions especially for the urban area – for example e-micromobility vehicles both for transporting people and for transporting goods. SEAT, for instance, unites all the Group’s product-, service- and platform-based mobility solutions under one roof with its own Urban Mobility business unit. The company plays the role of a center of competence for micromobility for the Volkswagen Group and underlines this with a broad range of products, including the e-roller and the SEAT MÖ e-kick scooter, use of which is also offered as a sharing service. In Prague, ŠKODA operates BeRider, an innovative and emission-free sharing service with electric rollers. ŠKODA also operates the City-Move platform in Prague, which links the various private mobility services with public transport and other services such as parking. We use the number of registered customers and kilometers traveled as sustainability KPIs for our progress in shared micromobility for BeRider and SEAT MÖ. In the reporting year, 23,478 users were registered with BeRider, and they traveled a total of 798,000 kilometers with the vehicles; the SEAT MÖ app was downloaded 38,000 times. For CityMove, in addition to the number of customers, we also assess the number of business transactions. In the reporting year, 49,125 users were registered with CityMove, and they were responsible for a total of 175,947 transactions.

NEW CONCEPTS FOR EMPLOYEE MOBILITY

The Volkswagen Group will also provide solutions for sustainable employee mobility with We Move, ŠKODA Click and Respiro in the future. We Move will, for example, be part of the new comprehensive “Volkswagen Move by Service Factory” mobility initiative at the Wolfsburg site. In a first step, up to 35,000 employees will be able to digitally access a fleet of 315 vehicles for business use here. This service will permanently change business mobility at Volkswagen and replace the use of conventional department vehicles.

AUTONOMOUS DRIVING IS BECOMING REALITY

Autonomous driving is a key issue in our transformation from a traditional automotive manufacturer to a provider of sustainable mobility. A concept based on heavily used autonomous vehicles will not only require less space and energy in the future – it will also be much safer. We would like to make automated driving accessible to everyone, everywhere.

We are already starting series production of partly automated driver assistance systems. For example, the Travel Assist, which assists with longitudinal and latitudinal guidance so that the driver can drive more comfortably and also more safely. Innovative parking features also make day-to-day urban life easier. Certain features can even help to save lives in critical situations – for example, our Emergency Assist, which, as a “rescue assistant”, can stop the vehicle and make an automatic emergency call if driver activity ceases, particularly if there is a medical emergency.

Volkswagen Autonomy GmbH (VWAT) was founded in 2019 as a center of competence for autonomous driving based in Wolfsburg and Munich in order to develop the technology to market readiness. More sites in North America and China were planned for the next few years. When the decision was made to invest with Ford in Argo AI, a company that is working on the development of a system for autonomous driving, responsibility for Mobility-as-a-Service (MaaS), Transport-as-a-Service (Taas) and the autonomous driving needed for this was transferred to Volkswagen Commercial Vehicles at the end of 2020. The joint investment check allows both Ford and Volkswagen to independently integrate Argo AI’s self-driving system into their own vehicles and business models and particularly opens up new possibilities for ride-sharing providers and delivery services in urban areas. The former Volkswagen Group company AID was also contributed to Argo AI when Volkswagen acquired its stake.

For the area of ownership and own use of vehicles, the activities for developing assisted and automated features for all the Volkswagen Group’s brands were pooled in the Car.Software organization (CSO) in 2020. The aim is to be able to offer the customer a custom mobility solution for every need. Especially in the area of ownership, the Group is focusing on evolutionary development of the level of automation. Two major objectives are being pursued: increasingly relieving the customer of the task of driving with a continuous series of new solutions and, building on this, giving the customer the option of doing other things on selected journeys or sections of routes with an automated “chauffeur.”

The Volkswagen Group continues to work with partners on future technical challenges – from algorithms through sensor technology to cybersecurity. In strategic core fields, we at the same time continue to expand our own software expertise and are intensifying value creation. The acquisition of Hella GmbH & Co. KGaA’s image processing business area by the Car.Software organization (CSO) to strengthen the field of image processing was announced in October 2020. Good and valid environment recognition is one of the most important core competences for all automated driving functions.
In September 2020, the independent compliance monitor Larry D. Thompson certified that Volkswagen had met its commitment under its Plea Agreement with the U.S. Department of Justice to revise and strengthen its structures, processes and systems so that violations of anti-fraud and environmental laws are detected and prevented. This includes introducing a Group-wide uniform Code of Conduct, expanding the whistleblower system, establishing a Group Compliance Committee (later Integrity and Compliance Group Board of Management Committee) and HR Steering Committee in the Group, and a new role for Environment, Health & Safety at Volkswagen Group of America. Overall, Volkswagen implemented nearly 300 new or revised internal regulations and policies in the relevant legal entities during the Monitorship. The organization, structure and functions relating to the Compliance, Integrity Management, Risk Management and Legal departments were described with binding effect in the Group policy on “Governance and Integrity, Risk Management, Compliance and Legal Affairs (GRC+1). With the launch of T4I in spring 2018, all activities for establishing a comprehensive integrity and compliance management system and implementing it across the Group were bundled in this program.

The monitor’s certification applies to Volkswagen AG and its subsidiaries and affiliates with the exception of Dr. Ing. h.c. F. Porsche AG and Porsche Cars North America, which were not part of the Monitorship. The certification also confirms the successful implementation of the T4I program in the ten most important Group companies by size and risk profile and thus the effectiveness and sustainability of the Volkswagen Group’s comprehensive integrity and compliance management system. On September 2, 2019, Volkswagen additionally published the news that the Group had concluded a plea agreement with the U.S. Environmental Protection Agency (EPA), due to which a second auditor was engaged for the Volkswagen Group. This agreement was concluded so as not to be excluded from public-sector contracts in the USA. This second auditorship has been set up for three years and will run through August 2022.

INTEGRITY PROMOTES ETHICAL DECISION-MAKING

The Integrity Management department is a central pillar of holistic integrity and compliance management system at Group level. Its task is to emphasize integrity as an important strategic lever of success for the Volkswagen Group in all brands and companies. This includes incorporating integrity as a key performance indicator in decision-making processes and thus working towards decisions in the Group always being made according to ethical criteria. For example, every resolution proposal submitted to the Group Board of Management must highlight the way in which the intended decision and its consequences are in line with the Group’s integrity and compliance, and whether/what integrity or compliance risks are associated with it and how they can be lessened. In the same way, integrity is also laid down as a criterion for decisions by the boards of management of the individual Group brands and companies, as well as in the Group bodies to which the Board of Management has delegated decision-making powers.
Integrity Management makes the importance of integrity visible and tangible through communication, training and participation formats. It should motivate employees and managers to act with integrity even under external pressure and will particularly spur managers to act as role models for integrity and encourage their employees to act with integrity. For example, the topic of making decisions with integrity was integrated into a training for the Group’s senior managers and the topic of “integrity in advertising and communication” was included in a training and in principles for advertising and communication for employees from marketing and sales during the reporting year.

As a Group function, Integrity Management also helps the Group companies and brand companies to implement the integrity program’s measures within the framework of T4I and carries out the quality assurance for this.

COMPLIANCE MEANS ADHERENCE TO RULES

We are convinced that lasting economic success can only be achieved if each individual complies with laws, internal regulations and voluntary commitments. Compliant behavior must be a matter of course for all Group employees. The compliance organization provides support around the world with programs, guidelines for action, processes and practical advice and thus significantly contributes to the success of the T4I program. The compliance Information Point is a core element of this. Employees of the Group can contact it with their compliance questions at any time. The compliance Information Point team gives a direct recommendation on the situation or passes the question on to a competent body. The compliance Information Point received 1,482 inquiries in the reporting year (previous year: 1,761) (Volkswagen AG). This is equivalent to a change of –16% year-on-year. The decrease in monthly inquiries to the compliance Information Point correlates with the emergence of the COVID-19 pandemic.

Group Compliance also supports and advises the Group and brand companies, helping them to conduct their business activities in accordance with the rules and to consistently adhere to relevant laws and internal regulations. The focus of our compliance organization is on anti-corruption, breaches of trust, the prevention of money laundering and the topic of business and human rights. M&A compliance in M&A transactions and noncontrolled shareholdings was added to Compliance’s scope in the reporting year.

Our global compliance organization is headed by the Group Chief Compliance Officer, who reports directly to the Director of Integrity and Legal Affairs and the Audit Committee of the Volkswagen AG Supervisory Board. Furthermore, the compliance organization is organized by division in the Group, which ensures communication and harmonized implementation of processes across all relevant Group companies. The divisional compliance officers are generally responsible for several brands and define the compliance strategy and methods in their area of responsibility. Dr. Ing. h.c. F. Porsche AG is an exception: the divisional compliance officers there are only responsible for their own brand. The regional compliance officer is responsible for the activities of Volkswagen-controlled entities in China.
BUSINESS AND HUMAN RIGHTS IN THE COMPLIANCE MANAGEMENT SYSTEM

In the reporting year, we further advanced the integration of the topic of business and human rights into the compliance management system and gave the topic key strategic importance. The compliance management system for business and human rights (CMS BHR) is geared to the UN’s requirements and specifications regarding business and human rights due diligence. The key components comprise: 1) recognize risks (scoring), 2) mitigate risks, 3) track action implementation and 4) report on it. The fifth key element is the complaint mechanism, our whistleblower system.

In the reporting year, the human rights risks for the controlled entities of the Volkswagen Group that are within the scope of Compliance were scored. On this basis, each of the companies received a package of measures corresponding to their respective risk class, which must be implemented from January 1, 2022.

T4I BUNDLES THE ACTIVITIES OF ELEVEN KEY INITIATIVES

The Integrity and Compliance Management System defined standards for ensuring integrity and compliance for a total of 16 departments, including not only Integrity Management and Compliance but also Risk Management, Human Resources, Procurement and Production. Through T4I, these standards are being uniformly rolled out and implemented throughout the Group in the form of over 100 packages of measures. The packages of measures are thematically grouped in eleven key initiatives:

1) HR Compliance Policies and Procedures: The core topic of this key initiative is the integration of integrity and compliance into standard HR processes such as recruitment, training, promotion and remuneration (granting bonuses). For example, integrity and compliance have been criteria in the recruitment process and in staff development for managers since 2019. Employment contracts contain integrity and compliance clauses. Integrity and compliance have also been an obligatory topic in the annual employee appraisal since 2020. In addition, integrity and compliance have been introduced as a required component of performance-related remuneration from the Board of Management to management level. Training measures for current and newly recruited employees at different hierarchy levels include integrity and compliance as important components. Integrity and compliance are already anchored in around 20 HR core processes at Volkswagen AG. The measures of this key initiative also include anonymized statistics on misconduct for Volkswagen AG and other defined companies and the resulting sanctions being regularly communicated to employees.

2) Code of Conduct: The Volkswagen Group’s Code of Conduct is the key instrument for strengthening employees’ awareness of responsible conduct and decision-making, giving employees support and guidance, and finding the right contact persons in cases of doubt. The framework is available online to employees and also to external third parties.

A reference to the Code of Conduct and the obligation to comply with it are a fixed part of employment contracts. The Code of Conduct is also part of our employee appraisals and was thus taken into account when calculating their variable, performance-related remuneration. Members of the higher levels of management are annually certified on the Code of Conduct. They confirm that they will comply with the Code of Conduct and undertake to report any serious regulatory violations. This key initiative also includes regularly reviewing whether the Code of Conduct is up to date and adapting it as required.

Regularly training the workforce on the Code of Conduct is decisive for the effectiveness of all compliance activities. The training is regularly repeated with new and expanded content and documented in employees’ training history for relevant target groups. In the reporting year, 46,356 employees in Volkswagen AG had a valid qualification on the Code of Conduct. This is equivalent to 98.9% of the workforce at Volkswagen AG that has to be qualified. The international rollout of the Code of Conduct training continued within the Volkswagen Group in the reporting year. This will also be continued in 2021.

3) Integrity program: The integrity program aims to reinforce the culture of integrity. Its most important tools include numerous dia- log-oriented communication measures and event formats that convey the key importance of integrity for the Group to employees and should spur them to act with integrity even under extreme pressure. It is associated with encouraging the constructive handling of mistakes, increasing the transparency of reasons for decisions and strengthening willingness to also address aberrations and risks with managers. Managers are supported in regularly making integrity and compliance the topic of team meetings and living up to their role as role models.

Information about the integrity program is regularly provided at works meetings, in individual departments, to shop stewards or also vocational trainees. In addition, as the Director of Integrity and Legal Affairs, Hiltrud D. Werner regularly has direct discussions with employees about integrity-related challenges in day-to-day work. Multimedia communication activities that focus on issues surrounding the topic of integrity were also launched in 2020.

The integrity ambassadors – volunteers from various departments who advance the topic of integrity, carry it into the structures of the Group and engage in dialog – are also of key importance.
4) Risk management and internal control processes: This key initiative is about the operation of an effective risk management system. Transparent handling and appropriate management of risks that may arise in our business are regulated through defined structures and processes. This includes the regulation of standards and procedures of the annual GRC control process, which focuses on systemic risks; the QRP (quarterly risk process), which looks at acute risks; the standard ICS (internal control system), which aims to safeguard essential processes; and root-cause analysis in order to gain knowledge from the breaches identified so that these can be excluded as well as possible for the future. The risks identified and countermeasures taken to reduce the risks must be included in the regular reporting to the management of the relevant company. The introduction of the Risk Radar IT system and appropriate training of risk managers are also topics in this key initiative, as well as measures to strengthen a lived risk culture in which employees are called upon to openly talk about risks.

5) Internal Compliance risk assessment and Compliance organization: This key initiative concerns the organization and processes of the Compliance department at Group level and in the individual Group companies. It determines what the Volkswagen Group’s compliance strategy should be, what standards apply across the Group for the Internal Compliance Risk Assessment (ICRA) and how the compliance risks identified will be overcome and reduced – particularly corruption, money laundering and embezzlement. The Group-wide compliance analysis (ICRA) has been conducted since 2018. The Group companies are assigned to different risk categories on the basis of a comprehensive questionnaire. To reduce the potential risks, we have rolled out standardized compliance measures in the relevant business units. The scale of the measures varies depending on the risk situation of the business unit in question. The implementation status of the measures is reported on a regular basis, but at least once per year. The implementation of the measures – of which the Code of Conduct also forms an integral part – for all high-risk business units is additionally regularly checked by the divisional compliance officer or regional compliance officer. A wide range of channels is available for reporting serious breaches of rules across the Group (including China) at the aforementioned investigation offices or the regional investigation office has Group relevance, it can also take up this information. It monitors and coordinates the brand investigation offices and the regional investigation office. A wide range of channels is available for reporting information on misconduct by Volkswagen Group employees. There is a specially protected online reporting channel, which accepts written whistleblower information in any language, and an international 24-hour telephone hotline through which whistleblower information can be reported in a total of 17 languages. In addition, whistleblower information can also be reported via commissioned external attorneys (ombudsmen). Reports can also be made anonymously in all channels if preferred. In 2020, approximately 2,900 pieces of whistleblower information were registered across the Group (including China) at the aforementioned investigation offices (2019: approximately 3,200¹). In the reporting year, 20% of the whistleblower information was reported anonymously but with the option to contact the whistleblower and 11% was reported anonymously without the option to make contact. Around 88% of whistleblowers permitted the investigation office to contact them (2019: around 90%).

6) Whistleblower system: All measures that relate to the establishment and operation of the whistleblower system as a central point of contact for reporting serious breaches of rules in the Volkswagen Group are brought together in this key initiative. Examples of matters generally involving serious rule-breaking include economic, corruption-related, tax and environmental offenses, breaches of human rights, infringements of antitrust and competition law, money laundering and terrorist financing, infringements of rules on product safety and approval, and serious data protection breaches. The aim of the whistleblower system is to protect the Company and its employees through the use of binding principles and a clearly governed process. An investigation is only initiated after the information received has undergone a thorough examination and the latter has identified concrete indications of rule-breaking. Appropriate sanctions are applied where misconduct is proven. The affected parties are treated fairly: the presumption of innocence applies unless rule-breaking is proven. Their response is heard as soon as possible, and, if necessary, their names are cleared if they have been wrongly accused. Strict confidentiality and secrecy apply throughout the investigation process. Whistleblowers are also protected and their statements are treated confidentially. The whistleblower system is coordinated through the Central Investigation Office in Wolfsburg, which is also responsible for handling information from whistleblowers concerning Volkswagen AG and its subsidiaries. Audi AG, Dr. Ing. h.c. F. Porsche AG and TRATON SE each have separate investigative offices for themselves and their subsidiaries. Due to requirements under local law, there is also a regional investigation office at Volkswagen (China) Investment Company Ltd., which processes information concerning Volkswagen AG’s Chinese subsidiaries. If the Central Investigation Office establishes that whistleblower information received by the brand investigation offices or the regional investigation office has Group relevance, it can also take up this information. It monitors and coordinates the brand investigation offices and the regional investigation office. A wide range of channels is available for reporting information on misconduct by Volkswagen Group employees. There is a specially protected online reporting channel, which accepts written whistleblower information in any language, and an international 24-hour telephone hotline through which whistleblower information can be reported in a total of 17 languages. In addition, whistleblower information can also be reported via commissioned external attorneys (ombudsmen). Reports can also be made anonymously in all channels if preferred. In 2020, approximately 2,900 pieces of whistleblower information were registered across the Group (including China) at the aforementioned investigation offices (2019: approximately 3,200¹). In the reporting year, 20% of the whistleblower information was reported anonymously but with the option to contact the whistleblower and 11% was reported anonymously without the option to make contact. Around 88% of whistleblowers permitted the investigation office to contact them (2019: around 90%).

¹ Calculation basis changed compared to 2019: Regional Investigation Office China and the passing on of cases to other investigation offices taken into account.
7) M&A and NCS compliance: In the event of planned mergers and acquisitions, the compliance and integrity standards of the companies in question are checked. This should prevent a Group company from being confronted with unidentified integrity or compliance risks when acquiring another company. In addition, this key initiative also promotes compliance in noncontrolled shareholdings (NCS), i.e. companies that are not controlled by a company of the Volkswagen Group as the majority owner. Strategic, economic and ethical decision-making parameters are essential for the sustainability of investment decisions in M&A transactions and when supporting NCS.

8) Business partner due diligence: Business partner due diligence (BPDD) is an audit of the integrity and compliance systems of business partners and selected suppliers and service providers. This review of existing and potentially new business partners is carried out as part of a risk-based, transparent, documented process that is implemented worldwide using an IT-based tool. 6,000 BPDD reviews were carried out in the reporting year. More than 350 problematic cases have already been identified here and the companies excluded as business partners. Offering business partners support with meeting the necessary standards is also part of this key initiative. Companies who cannot meet the standards should not be given any new business.

9) Product compliance: The product compliance management system (PCMS) is intended to support our products in meeting the statutory and regulatory requirements of the exporting and importing countries, external standards and contractually agreed customer requirements, internal standards and externally communicated commitments over their entire service life. Our PCMS defines roles and responsibilities for design, implementation and monitoring. Product compliance should be taken into account in the relevant decisions through decision-making and reporting paths. The aims, tasks, roles and responsibilities within the PCMS are regularly communicated in order to create the greatest possible awareness of product compliance. We train workers and managers in product compliance with targeted trainings. We continuously review the effectiveness of our PCMS in order to detect deviations and derive countermeasures in the sense of a continuous improvement process. We have central points of contact to which our employees can address their questions about product compliance.

10) Environmental compliance: The Volkswagen Group has the clear goal of meeting the statutory environmental regulations and voluntary commitments at all sites and in all areas of business. The Group’s environmental policy and the environmental compliance management system (ECMS) stipulate that environmentally relevant aspects and requirements must be taken into account in all strategy, planning and decision-making processes of the brands and Group companies and define the responsibilities. This also includes a system of key performance indicators (KPIs) for measuring progress on reaching environmental targets, e.g. the use of renewable energies, the reduction of CO2 emissions and resource efficiency. We take account of the actual and potential environmental risks and opportunities along the entire life cycle of our products and prepare for dangerous situations in order to protect our employees, our customers, society and the environment. Our employees receive trainings on climate and environmental requirements in order to guarantee a sustainable impact.

11) Combating corruption: We stand for fairness in business dealings and advocate a clear zero tolerance policy regarding active and passive corruption that is anchored in Group guidelines on dealing with gifts and invitations and on granting donations and sponsoring. This key initiative also includes the development and implementation of trainings for employees in areas for companies with high risk exposure.

In the reporting year, the Group implemented two mandatory anti-corruption trainings, which are also being rolled out across the Group. Basic knowledge on the topic of anti-corruption is provided, but so is in-depth content on the topic of dealing with officeholders and mandate holders. This training was preceded by a comprehensive risk assessment to identify high-risk contacts with officeholders and mandate holders in order to specify the target audience. 45,717 employees at Volkswagen AG had a valid qualification on the topic of anti-corruption in the reporting year. This is equivalent to 97.5% of the workforce at Volkswagen AG that must be qualified. For the first time, training and raising awareness on the issue of anti-corruption is being aimed not only at specific groups within the Company but also at business partners from sales and procurement departments based on the level of risk.
As a result of whistleblower information, in the reporting year, the investigation offices discovered individual gifts that were not permitted according to internal rules for preventing corruption. The breaches were intensively dealt with and the employees in question were sanctioned. The prevention of corruption and the right conduct when dealing with conflicts of interest, officeholders and mandate holders are at the heart of continuous compliance communication. The practical “anti-corruption” guideline can be accessed at any time on internal and external websites for Group employees and external third parties. Employees and managers’ awareness of the issue is regularly raised with information documents, documentation, films, example cases and extensive communication activities, particularly around International Anti-Corruption Day.

The prohibition of corruption is additionally enshrined in the Code of Conduct for Business Partners. This code is communicated to partners via Sales and Procurement’s relevant platforms and communication channels. Employees and external third parties can also view it on the Group website at any time.

**VIGOROUSLY FURTHER DEVELOPING INTEGRITY CULTURE**

The holistic integrity and compliance management system that is being established Group-wide through T4I provides the sustainably anchored regulatory framework for acting with integrity and in compliance with the rules and strengthens uniform corporate governance throughout the Group in relation to integrity and compliance. In addition, the program also serves to vigorously further develop the culture of integrity. The aim is to inspire and motivate employees and strengthen their own drive to act with integrity in all situations. Both the standardized corporate governance and a developed culture of integrity support the effectiveness of the integrity and compliance management system as a key factor of the Volkswagen Group’s sustainability.

Volkswagen’s corporate culture is founded on the seven Group Essentials. These essentials define how we at Volkswagen want to work together and they supplement the Code of Conduct. The Group Essentials also form the frame of reference for the role model program for encouraging dialog-oriented and distance-reducing collaboration. The program focuses on managers in leadership functions, who are to be supported by the program to ensure a culture of open discussion in which questions, risks or conflicting objectives can be discussed without fear of sanctions.

In T4I, T4I launch events and T4I perception workshops are the main ways in which we want to inspire and motivate people. Both events are held in each Group or brand company at the start of the implementation of T4I and involve both employees and their managers across hierarchies as players in the change process. The joint design and implementation of these events increases awareness of each individual’s valuable contribution to the success of the change among participants. In addition, they offer the opportunity to openly ask critical questions and name problems. The perception workshops are primarily about the actual practice of integrity and compliance – measured by the perception of employees. Here, representatively selected employees and managers give their assessment and discuss opportunities for improvement. Afterwards, the results are analyzed and relevant insights are derived. We found that an average of 83% of participants know our corporate values. An average of 93% of those surveyed know that they are expected to conduct themselves in line with the Volkswagen Group’s values in the work environment.

In order to measure the respective company’s progress on integrity and compliance and possibly identify continuing need for action, the perception workshops will be repeated annually until T4I’s key initiatives have been completely implemented. These recurrent perception workshops also provide the opportunity to hone activities, deepen discussions and further reinforce awareness of the importance and objectives of the change process. All recurrent perception workshops demonstrated an improved result compared to the initial measurement. An average of 90% of participants now know our corporate values, and an average of 96% of those surveyed know that they are expected to conduct themselves in line with the Volkswagen Group’s values in the work environment.

Since the start of the T4I program, 86 launch events have been held in 50 countries, with more than 8,900 managers and workers in total taking part in them. In the same period, we held 136 perception workshops in 37 countries, of which 24 were recurring perception workshops that took place in ten countries. More than 10,600 people took part in total. Due to the coronavirus pandemic, it was only possible to hold a smaller number of these events in 2020 than planned. To make up for this, online formats were piloted in some cases.

In order to provide clarity about the comprehensive integrity and compliance management system and its use for the organization, but also for each individual, the program is supported by a number of communication measures and formats. These communication activities are also being rolled out within the T4I program.
MONITORING IMPLEMENTATION AND EFFECTIVENESS

Methods of monitoring impact in measuring progress are an integral part of the Volkswagen Group’s integrity and compliance management system.

In this way, the T4I program’s central planning and reporting system creates permanent transparency about the level of implementation of all packages of measures within the key initiatives. This serves as the basis both for reporting to the Board of Management and the boards of the Group and brand companies and for monitoring timely implementation and the initiation of measures in the event of significant delays.

In addition to the recurrent perception workshops already mentioned, our annual employee survey, the Opinion Survey, is our primary source of information about the progress of our culture of integrity. The possibility for each individual to act with integrity is an explicit aspect of this Group-wide survey: “In our organizational unit, is it possible for everyone to act with integrity?” If employees think this possibility is in doubt in a particular organizational unit, the relevant manager must identify and clear the possible obstacles together with their team. The question was asked in the opinion survey for the first time in 2017 and since then, including in the reporting period, has been one of the three questions with the highest level of agreement, with significant improvement in the figure. Employee agreement on average reached a level in the highest category of the underlying five-point scale in each case.

To measure developments in the Integrity and Legal operating unit, we defined the “compliance, culture of dealing openly with mistakes and acting with integrity” strategic indicator for the major brands that manufacture passenger cars. This is also based on the Opinion Survey, specifically on the evaluation of answers to three questions relating to compliance with regulations and processes, dealing with risks and errors, and whether it is possible to act with integrity. In the case of negative deviations, the affected departments develop and implement measures. In 2020, the key performance indicator continuously improved, coming from an already good starting point. Employee agreement was in the highest category of the underlying five-point scale on average in each case.

We use the integrity index as a further tool to measure our status and progress in integrity and compliance. This index comprehensively tracks an organization’s integrity and was started as a pilot project for Volkswagen Passenger Cars and Audi (in each case the German sites) in 2019. More than 100 measuring points in the compliance & infrastructure, working atmosphere & culture of integrity, product & customers, society and partners & markets categories were collected and evaluated by independent researchers from the field of business ethics. The researchers found that both of the brands examined exhibited a good integrity level overall. However, the detailed results signaled a need for action in various places.

Following a decision by the Group Board of Management, the findings were therefore used in a structured follow-up process in the reporting year in order to derive and implement improvement measures together with the departments. These improvement measures concern revisions of internal guidelines, for example in the area of procurement; a higher level of transparency in reporting, for example on the number and type of confirmed cases of corruption; or clearer commitments by the Volkswagen Group, for example on the topic of animal welfare. The aim is to raise the integrity level at the two pilot companies to the next level. Achievement of the target will be assessed with the planned follow-up integrity index survey at Volkswagen Passenger Cars and Audi AG in the second quarter of 2021.
The focus of our RMS/ICS is the three lines model – a basic element required by, among others, the European Confederation of Institutes of Internal Auditing (ECIIA). In line with this model, our RMS/ICS has three lines that are designed to protect us from the occurrence of material risks.

- The first line comprises the risk management and internal control systems at the individual Group companies and divisions. The RMS/ICS is an integral part of our Group’s organizational structures and processes.
- The second line is the Group Risk Management function, which sets standards for the RMS/ICS and coordinates the quarterly risk survey and annual governance, risk and compliance (GRC) control process. It reports to the Group Board of Management on any material risks, which are defined in terms of quantitative and qualitative assessment criteria and given probability ratings.
- The third line of defense is Group Internal Audit, which carries out regular checks on the structure and implementation of the RMS as part of its independent audit activities.

**SUSTAINABILITY AND COMPLIANCE RISKS**

The Volkswagen Group continuously develops its risk management in order to take account of increased internal and external requirements in the field of corporate responsibility. This particularly applies to the instrument of the list of risk focus areas used by the Group, which is divided into 18 different modules. In 2020, we made necessary updates in the three compliance/fraud, development and sustainability modules following reviews. The new focus areas were introduced and a change was made in the assignment of existing focus areas to the modules in particular for the purpose of better recording and preventing risks in the areas of product and environmental compliance.

The list of risk focus areas is to be used by all entities affected. The Group Risk Management function and the brand risk management units can declare selected areas of focus, such as on the aspects of sustainability and compliance, mandatory for the relevant units. Risks that could impact on our bottom line also include general environmental risks and climate-change risks. These include risks that could result from differing CO2 and emissions regulations, but also extreme weather, storms or floods with effects on production, infrastructure and supply chains. The risks relevant from the Volkswagen Group’s perspective are presented in the report on risks and opportunities in the management report. In fiscal year 2020, risks were identified with regard to compliance with regulations on fleet CO2 emissions in individual brands and markets. A more detailed description is available in the report on risks and opportunities in the Annual Report under the heading “Environmental Protection Regulations.”

Further information on financial consequences, risks and opportunities of climate change is provided in the TCFD reference table and in the report on risks and opportunities in the Annual Report.

**NONFINANCIAL RISKS**

The Group risk management processes also take account of the risks for nonfinancial matters in accordance with the CSR-Richtlinie-Umsetzungsgesetz (CSR-RUG – German CSR Directive Implementation Act). Here, we have assigned concrete risks from the list of focus areas to the individual matters as a priority. For example:

- **Environmental matters**
  - Environmentally relevant risks from operating processes/production in normal operation
  - Environmentally relevant risks from products
  - Environmentally relevant risks from disruption of operating processes/production
- **Employee matters**
  - Personnel risks with regard to occupational safety and health
  - Risks from the use of employees from outside companies within the framework of contracts for work and service contracts
- **Social matters**
  - Risks of noncompliance with social responsibility
  - Risks of violation of health and safety-related regulations
  - Adhering to human rights
  - Risks of non-compliance with human rights
- **Combatting corruption and bribery**
  - Risks of active corruption
  - Risks of passive corruption
  - Misappropriation and embezzlement risks

The Volkswagen Group generates significant negative effects with regard to the environment with its business and products due to CO2 emissions across the entire life cycle. We would like to make our contribution to achieving the two-degree target in the Paris Agreement by giving our whole Group a carbon-neutral footprint by 2050. To this end, the topic of decarbonization has been firmly anchored as a focus area in the TOGETHER 2025+ strategy. More information on the effects, targets and measures can be found in the ”Decarbonization” chapter. Beyond this, no further risks with very likely serious negative effects have been identified.

COMMITMENT TO AN UNDAMAGED ENVIRONMENT

As the largest automotive manufacturer in the world, we have to observe extensive legal requirements for all sites and markets and must live up to our stakeholders’ justifiably high expectations of the effectiveness of environmental management – including, and especially following, the diesel crisis. We also want to live up to our voluntary commitments on environmental matters and compliant behavior. The environmental compliance management system is therefore in particular a risk provision against breaches of regulations that may be associated with damage to the environment, our Group and society. The aim of effective environmental management at Volkswagen always includes the continuous improvement of environmental performance.

Environmental protection is not only a central goal of our TOGETHER 2025+ Group strategy: we want to be a “role model as regards environment”. At the same time, the environmental compatibility of our products, services and processes is one of our Group Essentials. With electric drives, digital connectivity and autonomous driving, we want to make the automobile clean, intelligent, quiet and safe. We use our innovative power in order to reduce our environmental footprint – over the entire life cycle of our products and mobility solutions. Our innovations are at the same time intended to help our customers be more environmentally friendly.

THE “GOTOZERO” MISSION STATEMENT: MINIMIZATION OF NEGATIVE EFFECTS ON THE ENVIRONMENT

The Volkswagen Group bundles all its measures in environmental protection under the “goTozero” environmental mission statement. This concept sets the agenda for a way of doing business that is as environmentally friendly as possible with a footprint that is as carbon-neutral as possible. The Volkswagen Group has set itself the goal of achieving this by 2050.

Literally the environmental Group mission statement says: “For all our products and mobility solutions we aspire to minimize environmental impacts along the entire life cycle – from raw material extraction to end-of-life – in order to keep ecosystems intact and to create positive impacts on society. Compliance with environmental regulations, standards and voluntary commitments is a basic prerequisite of our actions.” This Group environmental mission statement combines all strategic and compliance-related aspects of the Group’s environmental activities for the first time and forms the basis for linking targets, key performance indicators, programs and measures.

In its “goTozero” mission statement, the Volkswagen Group concentrates on four action areas.

• Climate change: Volkswagen is committed to complying with the United Nations’ Paris Agreement. The goal is to become a company with a carbon-neutral footprint by 2050. As early as by 2025, the Group plans to reduce the total life-cycle greenhouse gas emissions from passenger cars and light commercial vehicles by 30% compared to 2015. The Group will also actively drive the transition towards renewable energies along the entire life cycle.

• Resources: Volkswagen will further improve its resource efficiency and promote reuse and recycling approaches in the areas of materials, energy and water. By 2025, the Group plans to have reduced the production-related environmental impact with respect to energy, water, waste and volatile organic compounds by 45% per vehicle compared to 2010.

• Air quality: Volkswagen is also driving e-mobility forward to improve local air quality. To achieve the legal requirements for CO₂ fleet emissions, the plan is to increase the proportion of electric vehicles in the model portfolio in Europe to approximately 20%. The proportion of electric vehicles in the new passenger car fleet in Europe and China is to rise to at least 40% by 2030.

• Environmental compliance: With respect to integrity, Volkswagen aims to set an example for a modern, transparent and successful business by installing and monitoring effective management systems that cover the environmental impact of its mobility solutions across all life-cycle phases.

www.volkswagenag.com > Sustainability > Environment > Environmental Mission Statement

MANAGEMENT AND COMPLIANCE IN MATTERS OF THE ENVIRONMENT

Volkswagen has written an environmental policy for its environmental decision-making and for the management of projects and for its conduct in environmental protection. This specifies the action principles relevant for the achievement of the objectives. We have also implemented a Group policy for the environmental compliance management system describing requirements, tasks and responsibilities with regard to the environment and compliance. This policy provides the framework for implementing environmental compliance management systems across all phases of the business and the entire life cycle in our brands and companies. The policy defines the minimum requirements for operating organizations regarding implementing an environmental compliance management system and gives them the flexibility to implement this in a manner in line with their business activities.

Certification by third parties of environmental management systems in accordance with ISO 14001 or the Eco-Management and Audit Scheme (EMAS) has been a mandatory target for all production locations and for companies involved in product development.
since 2019. Because the standards do not, however, answer the question of how to avoid misconduct and how to respond appropriately to it, the Volkswagen Group has expanded the established environmental management system to include the important compliance aspect.

The Group Board of Management is the highest internal decision-making level for environmental matters. Both the Volkswagen AG Board of Management and the boards of management of the brands take account not just of economic, but also social and environmental aspects when making relevant business decisions. The Group-wide management of environmental protection is the responsibility of the Group Steering Committee for the Environment and Energy. It is the highest environmental committee in the Volkswagen Group and is responsible for reporting to the Group Board of Management or the environmental officer in the Group Board of Management. The Group Steering Committee for CO2 and the Group Steering Committee for Fleet Compliance and Exhaust Emissions manage important individual aspects for our products – such as CO2 and exhaust emissions. The Group Steering Committee for Sustainability is responsible for climate protection.

The Volkswagen Group coordinates the activities of the brands, which in turn manage measures in the individual regions. The brands and companies are organizationally responsible for themselves when it comes to environmental matters. They base their own environmental protection activities on the targets, guidelines and principles that apply throughout the Group. In order to prove that we have met our objectives, we disclose environmental key performance indicators annually and report transparently on the progress of our efforts.

Environmental officers and experts from throughout the Group meet regularly for the Group Environmental Talk in order to optimize the environmental focus along the entire value chain at national level. Good progress has been made on the process of external certification. In 2020, 107 of our 118 sites including the central development areas were certified in accordance with ISO 14001 or EMAS. In terms of employee numbers, this equates to approximately 99%. In addition, 59 production locations have certified their energy management systems in accordance with ISO 50001. Since 2009, the “Integration of Environmental Factors into the Volkswagen Brand’s Product Development” model used in the Volkswagen Passenger Cars brand’s technical development has also been certified to ISO/TR 14062. SEAT development is certified in accordance with ISO 14006.

We implement environmental compliance management systems to ensure that environmental compliance obligations are understood and achieved in our business operations. We consider disregard of these, fraud or misconduct to be a serious compliance breach.

Whether our actions conform to the requirements of our environmental policy and other environment-related Group specifications is evaluated annually and reported to the Group Board of Management, to the respective boards of management of the brands and to the managing directors of the companies.

CHECKING AND COMPLYING WITH LIMITS

In internal combustion engines, we adhere to national and international legal norms and limits. For example, the Euro 6d-TEMP standard has been obligatory for new registrations in the European Union since September 1, 2019. In addition to the use of the Worldwide Harmonized Light Vehicles Test Procedure (WLTP), it also requires measurement in accordance with the RDE (= Real Driving Emissions) standard. Unlike with WLTP, emissions are not measured on a test bench – they are measured in actual road traffic. The tests are carried out by external and independent test laboratories. As of January 1, 2021, the Euro 6d standard becomes obligatory for all new registrations. This is accompanied by a further reduction in emission limits under RDE conditions.

In order to comply with the legal requirement within the framework of the Euro 6 standard, our diesel vehicles come with an SCR catalytic converter as standard and all new TSI and TSFI gasoline engines have a particulate filter.

LIFE-CYCLE APPROACH DETERMINES ANALYSIS AND ACTIONS

We observe our environmental impact over the entire life cycle and all stages of the value chain. This includes the manufacturing process with the extraction of raw materials, the manufacture of materials for the production process, the processes at our suppliers and our own production at our sites, the use phase with vehicle emissions and the necessary provision of fuel and the ultimate recycling of the scrap vehicle at the end of its life cycle. For detailed, ISO-standardized life cycle assessments (LCAs), we use special LCA software with our own LCA database LEAD (Life Cycle Environmental Assessment Database), which makes the exchange of harmonized data throughout the Group and a standardized basis for calculating our environmental performance possible. In the next step, we identify hot spots in the life cycle and deduce suitable solutions to reduce the environmental impact. We call this life cycle engineering. In line with our life cycle approach, we involve our suppliers in our efforts to minimize our environmental impact early on.

- Decarbonization
- Responsibility in Supply Chains and Business
CONSERVATION OF NATURAL RESOURCES

Human interference in ecosystems, pollution, damage and the use of finite natural resources through economic activity make a rethink and a change of direction unavoidable. The production of vehicles also requires many raw materials. That is why the conservation of resources along the entire life cycle of our products and mobility solutions is a central pillar of our “goTOzero” concept. In this context, we want to maximize resource efficiency, promote circular economy approaches and set ourselves measurable targets.

Our targets in the areas of CO₂, energy, water, waste and volatile organic compounds – the reduction in environmental impact in production (UEP) – were defined within the production strategy and include objectives for the Group and its brands. Given their high environmental relevance, we focus particularly on energy and CO₂.

REDUCTION OF THE ENVIRONMENTAL IMPACT OF PRODUCTION (UEP)

On our way to achieving our targets regarding resource consumption in production, we have made significant progress in the Group in the last few years. By 2025, we plan to have reduced production-related environmental externalities (CO₂, energy, water, waste, volatile organic compounds) by 45% per vehicle compared to 2010. The following figures show the development of these values from 2010 to 2020 (data: 11+1 months).¹

• UEP: –32.8% (2019: –36.7%)

The following five indicators form the UEP KPI:

• Specific energy requirements in MWh/vehicle: – 13.1% (2019: – 20.4%)
• Specific CO₂ emissions in kg/vehicle: – 35.5% (2019: – 39.5%)
• Specific VOC emissions in kg/vehicle: – 61.5% (2019: – 59.4%)
• Specific water consumption in m³/vehicle: – 17.7% (2019: – 21.6%)
• Specific waste for disposal (production-specific volumes only) in tonnes/vehicle: – 57.5% (2019: – 59.5%)

In this reporting year too, many activities that have a positive influence on further reducing our factories’ environmental impact were carried out. However, the successes of these measures are not directly reflected in the environmental indicators of the UEP because the production quantities in this reporting year have fallen significantly due to the impact of the coronavirus pandemic. These lower production quantities mean there is an opposite effect in the UEP when calculating the specific environmental indicators that disguises the positive influence of the measures. This leads to lower values arithmetically compared to the previous year – with the exception of VOC emissions.

ZERO IMPACT FACTORY INITIATIVE

One element of the production strategy is the zero impact factory initiative. This is where the Volkswagen Group bundles its activities for greater resource efficiency. The aim of the initiative is production that has no negative impact on the environment. An assessment system checks how far removed a factory is from zero impact on the environment. As well as the criteria of climate protection and energy, emissions, water and waste, this also includes aspects such as the appearance of the factory, commitment to biodiversity, protecting the soil, avoidance of business disruptions, functioning environmental management, better resource efficiency towards a circular economy and environmentally neutral mobility management for employees and the transportation of goods.

Specifically, we are working on the following key issues:

• Setting and achieving ambitious environmental targets for production
• Developing a long-term vision for environmental targets in production and rolling it out across the Group
• Strengthening employees’ environmental awareness
• Integration of relevant environmental aspects into processes

Following the completion of a test phase for the evaluation methods at eight different sites, this is now being prepared for long-term and mandatory use in the production strategy. With the IT-supported “Massnahmen@web” system, we record environmental measures and encourage the Group-wide exchange of best practices. In the reporting year, around 1,500 implemented measures in the area of environment and energy were documented. They are aimed at improving infrastructure and production processes for passenger cars and light commercial vehicles.

The Group Steering Committee for the Environment and Energy and additional subject-specific Group steering committees are substantially responsible for implementing the resource-efficiency programs and monitoring target achievement.

Circular Economy

¹ The figures for December of the reporting year include an estimate. The 2019 estimates were replaced with the finalized figures for December in the 2020 data collection round.
Climate change is one of humanity’s key challenges. The speed of global warming has rapidly increased in the last three decades. Stopping it is an obligation for us all. According to the calculations of the Intergovernmental Panel on Climate Change (IPCC), the transport sector accounts for around 14% of global greenhouse gas emissions. As one of the world’s largest automotive manufacturers and mobility providers, we are aware of our responsibility. In concrete terms, over their entire life cycles, our products alone (passenger cars and light commercial vehicles) are responsible for approximately 1% of the total global CO2 emissions produced.

Taking responsibility for effective climate protection, we have defined the decarbonization of our Group and its products as a focus area and thus as a key element of our corporate strategy. Our ambition is:

*We are committed to the 2 °C target of the Paris Climate Agreement. By 2050, we want our whole Group to become net carbon neutral.*

This ambition for climate protection is also a core part of our “goTOzero” environmental mission statement, which stands for a net carbon-free way of doing business.

We have set important milestones and intermediate goals for ourselves along the way: we want to improve the total life-cycle carbon footprint of our passenger cars and light commercial vehicles by 30% compared to 2015 by as early as 2025. For this reason, we take a considerably broader perspective than the legal requirements regarding CO2 fleet compliance and want to take on a pioneering role in our industry.

The two levers with the greatest influence on emissions across the entire life cycle of Volkswagen products are the Group’s electric offensive and the Renewable Energies strategy. This strategy involves the integration of renewably generated electricity into the use phase of electric vehicles and plug-in hybrid electric vehicles and switching plants’ external power supply to renewable energy globally.

The consistent electrification of our vehicle fleet opens up the way to sustainable, emission-free mobility for our customers. To this end, we plan to invest around €35 billion in electric mobility across the Group by 2025. To achieve the legal requirements for CO2 fleet emissions, the plan is to increase the proportion of electric vehicles in the model portfolio in Europe to approximately 20%.

During the reporting year, we once again significantly honed and extended our climate protection goals: the Volkswagen Group wants to reduce its vehicles’ CO2 emissions in production and during the use phase by 30% between 2018 and 2030. The plan goes beyond the existing intermediate goals for 2025 because the new 2030 goal is to be achieved through pure CO2 reduction and includes not only a goal for passenger cars but also a target for heavy trucks and buses from Scania, which represents a sub-target for the Group. This new additional target for 2030 was verified by the independent Science-Based Targets Initiative (SBTi). The SBTi then confirmed to the Volkswagen Group that the Group meets the conditions for limiting global warming to “significantly below 2 °C” with its climate goal. The SBTi is a partnership between the Carbon Disclosure Project (CDP), the UN Global Compact, the World Resources Institute and the World Wide Fund for Nature (WWF).

The Group’s previous target of reducing CO2 emissions by 30% per vehicle between 2015 and 2025 remains an intermediate goal. Because this also includes climate projects offsetting carbon, it is not verified by the SBTi. On the path to net climate neutrality, over and above the target now verified by the SBTi, the Group will naturally also work with climate protection projects aimed at carbon offsetting.
In the reporting year, the Chairman of the Board of Management of the Volkswagen Group, together with the CEOs of ten further companies with their registered office in Europe, expressly acknowledged the EU’s Green Deal and the associated climate protection targets. The CEO Alliance is being shaped into an action alliance that brings together corporate strategies, sectors and companies on the path to a carbon-neutral Europe. The member companies represent all the important industrial sectors, annual revenue of more than €600 billion and 1.7 million employees. The companies involved have set themselves the target of investing more than €100 billion in their decarbonization roadmaps in the next few years and working together for climate protection across sectors.

**DECARBONIZATION PROGRAM TARGETS WHOLE LIFE CYCLE**

In order to achieve its targets, the Volkswagen Group is implementing a comprehensive and holistic decarbonization program, which includes the whole life cycle of the vehicles. It is based on three key principles, which at the same time represent a setting of priorities: the top priority is measures with which CO₂ emissions can be avoided or reduced. In second place follow measures with which we can gradually shift the energy supply in the entire value chain to renewable energy. Finally, we offset unavoidable CO₂ emissions through climate protection projects that meet the highest international standards.

The decarbonization of the Group not only means we are living up to our responsibility as one of the world’s leading mobility businesses but also opens up new business potential and competitive advantages for us. In this way, we meet the growing requirements of a wide variety of stakeholders and lay the foundation for a product portfolio fit for the future. This ensures our future and success. Decarbonization thus strengthens the value of our Group and is an important instrument for providing for climate-related risks that could threaten our business model.

The decisive factors for us are the guidelines of the Task Force on Climate-Related Financial Disclosure (TCFD), which was set up by the G20’s Financial Stability Board. These guidelines create a coherent framework for voluntary and consistent reporting of an entity’s climate-related financial risks and opportunities. The current Volkswagen Group Sustainability Report includes for the second time a reference table with the five topics recommended by the TCFD: governance, strategy, risk management, key indicators and targets.
## TCFD – RISKS AND OPPORTUNITIES DUE TO CLIMATE CHANGE

### Governance

**Disclosure of the Group's governance around climate-related risks and opportunities**

<table>
<thead>
<tr>
<th>TCFD recommendation</th>
<th>TCFD disclosure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Describe the board's oversight of climate-related risks and opportunities.</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Sustainability Management and Risk Management – and “Decarbonization” chapter</td>
<td>CDP questionnaire (C1.1, C1.1a, C1.1b)</td>
</tr>
<tr>
<td>b) Describe management's role in assessing and managing climate-related risks and opportunities.</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Sustainability Management, Integrity and Compliance and Risk Management – and “Decarbonization” chapter</td>
<td>CDP questionnaire (C1.2, C1.2a, C2.2, C2.2a, C2.2b)</td>
</tr>
</tbody>
</table>

### Strategy

**Disclosure of the actual and potential impacts of climate-related risks and opportunities on the Group's businesses, strategy and financial planning**

<table>
<thead>
<tr>
<th>TCFD recommendation</th>
<th>TCFD disclosure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</td>
<td>2020 Annual Report, “Report on Risks and Opportunities” chapter</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Sustainability Management, Materiality and Risk Management – and “Decarbonization” chapter</td>
</tr>
<tr>
<td>b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.</td>
<td>CDP questionnaire (C2.3, C2.3a, C2.4, C2.4a, C2.5, C2.6, C3.1, C3.1a, C3.1c, C3.1d, C3.1e, C3.1f)</td>
<td></td>
</tr>
<tr>
<td>c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2 °C or lower scenario.</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Environmental Management and Risk Management – and “Decarbonization” chapter</td>
<td>CDP questionnaire (C3.1c, C3.1d)</td>
</tr>
</tbody>
</table>

### Risk management

**Disclosure of how the Group identifies, assesses and manages climate-related risks**

<table>
<thead>
<tr>
<th>TCFD recommendation</th>
<th>TCFD disclosure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Describe the organization’s processes for managing climate-related risks.</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Risk Management – and “Decarbonization” chapter and “Responsibility in Supply Chains and Business” chapter – particularly Responsibility in Our Supply Chain</td>
<td>CDP questionnaire (C2.1, C2.2d, C2.3a)</td>
</tr>
<tr>
<td>c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization’s overall risk management.</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Risk Management – and “Decarbonization” chapter</td>
<td>CDP questionnaire (C1.2a, C2.2, C2.2b, C2.3a)</td>
</tr>
</tbody>
</table>

### Metrics and targets

**Disclosure of the metrics and targets used to assess and manage climate-related risks and opportunities**

<table>
<thead>
<tr>
<th>TCFD recommendation</th>
<th>TCFD disclosure</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.</td>
<td>2020 Annual Report, “Sustainable Value Enhancement” chapter</td>
<td>2020 Sustainability Report, “Decarbonization” chapter and “Circular Economy” chapter</td>
</tr>
<tr>
<td>b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.</td>
<td>Sustainability Report 2020, “Decarbonization” chapter</td>
<td>CDP questionnaire (C2.3a, C4.2, C5.1, C5.2, C5.2a, C6.1, C6.3, C6.5, C9.1)</td>
</tr>
<tr>
<td>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</td>
<td>2020 Annual Report, “Sustainable Value Enhancement” chapter</td>
<td>2020 Sustainability Report, “Strategy and Management” chapter – particularly Group Governance, Goals and TOGETHER 2025 “Strategy” – and “Decarbonization” chapter</td>
</tr>
</tbody>
</table>
MAKING DECARBONIZATION MEASURABLE

In the decarbonization index (DCI), we have a meaningful measuring instrument that makes our progress and interim results in this area public and verifiable. The DCI is calculated based on the CO₂ emissions over the entire life cycle of the brands of the Europe (EU 27, UK, Norway and Iceland), China and US regions that manufacture passenger cars and light commercial vehicles. This means the use phase is calculated on the basis of 200,000 km and with reference to region-specific fleet values without legal flexibilities. The intensity of the CO₂ emissions from the electricity used to charge the electric vehicles is also calculated on the basis of region-specific energy mixes. Maintenance of the vehicles is not taken into account here. Our vehicle life cycle assessments, which are used as the data basis for the calculation of the supply-chain and recycling emissions, are verified by an external and independent body in accordance with the ISO 14040 standard. The DCI calculation methodology is adjusted depending on internal and external requirements, such as new test cycles for fleet emissions. In order to present a methodologically consistent time series, published DCI values can therefore also be adjusted to the new methodology and thus changed. By 2025, the DCI is to be reduced by 30% compared with the base year 2015. The DCI value was 43.0 tonnes CO₂ per vehicle on average in the reporting year. In comparison to the value reported in 2019, this means an increase of 0.2 tonnes of CO₂ per vehicle, taking account of the new basis of the data – supply chain emissions in 2020 are calculated using a region-specific data set.

STEERING OF GROUP-WIDE CLIMATE PROTECTION ACTIVITIES

The Group Steering Committee for Sustainability bears the main responsibility for climate protection as the highest body below the Board of Management. Product and portfolio topics are managed by the Group Steering Committee for CO₂. The Group Board of Management is informed about Group- and product-related greenhouse gas emissions at least twice a year and makes key decisions on topics relevant to climate protection.

The program applies to the entire Group, to all brands and regions. The Group Steering Committee for Sustainability steers the program and objectives. The Decarbonization Project Center that we founded ourselves and which includes experts from all brands and departments is responsible for implementation. We use a pre-defined process overseen by the management of the Decarbonization Project Center to check measures with which we can achieve the objective of decarbonization. All production locations and the brands and regions have prepared decarbonization roadmaps. The degree of achievement of our targets is measured with a tracking system. If we miss the target, we will implement corrective measures.

We have also established an internal mechanism for financially steering decarbonization, in which we have so far operated with an abatement cost limit of €20 per tonne of CO₂. The abatement cost limit is reviewed annually on the basis of target achievement and adjusted by a resolution of the Board of Management.

The Volkswagen Group has an internal CO₂ fund that proportionally funds projects around the world that make a contribution to reducing greenhouse gas emissions and are transferable to as many sites, brands and companies as possible. €25 million per year is currently available for this. At the end of the 2020 reporting year, it was possible to report a number of successful projects. These included, for example, measures for efficient LED lighting, modernized heat supply and cooling at the sites or also optimized washing and drying processes in production and components. In other business areas, projects range from the use of renewable energies for rail transport by Logistics through supporting air capturing projects in Iceland to carrying out ReFood projects to make company restaurants more sustainable. New projects with a volume of over €13 million have already been decided for 2021 – for example, the use of machine learning in air conditioning or projects that address the reduction of CO₂ as early as in product creation.

TRANSPARENCY ON CO₂ EMISSIONS AND ENERGY CONSUMPTION

Every year, we calculate the Group’s carbon footprint with the Scope 1–3 inventory. On this basis, we can determine the success of our measures and identify other areas for action. In order to reduce Group-wide CO₂ emissions, we are beginning by making improvements at our own production locations (Scope 1–2). Our most effective lever for reducing our global carbon footprint is to optimize CO₂ emissions from our vehicle fleet.

Additional Group CO₂ offsetting projects are not shown. In the reporting year, these had a volume of around 1.24 million t CO₂.

In line with the Scope 3 standards published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), we are reporting CO₂ emissions for 13 out of a total of 15 Scope 3 categories in 2020. According to this, around 16.6% of all Scope 3 emissions are in the “Purchased goods and services” emissions category and 76.2% in the “Use phase” emissions categories (well to wheel). Fleet values without legal flexibilities are used to calculate the use-phase emissions in the DCI and in the Scope 3 GHG Inventory.

The calculation of CO₂ emissions in the use phase of the Scope 3 GHG Inventory is based on a Group fleet value representing the global passenger cars and light commercial vehicles fleet in the three major regions (Europe [EU 27, UK, Norway and Iceland], the USA and China). In order to provide a picture that is as complete as possible, we also collect data on emissions in this category that are produced during the production and transportation of fuels (“well to tank” emissions).
The Volkswagen Group's new passenger car fleet in the EU (excluding Lamborghini and Bentley) emitted an average of 99.9g CO₂/km¹ (New European Driving Cycle, NEDC) in the reporting year in accordance with the statutory measurement bases. This was about 20% below the prior-year figure. At 0.8g CO₂/km, the value fell just short of the CO₂ pool established together with other manufacturers. Owing to delays in product launches and contrary to the original planning, it was not possible to achieve the target despite significant improvements compared with 2019. As small-volume manufacturers, the Lamborghini and Bentley brands are each considered to have an independent fleet for the purposes of European CO₂ legislation, and each was above its individual target. The regulation of fleet emissions in the United States is different from regulation in Europe – for example, in terms of the underlying test process; the period of evaluation, which corresponds to the vehicles' model year rather than the calendar year; and the period for compensating for any CO₂ breaches, which is three model years. In fiscal year 2020, we complied with the regulations that apply to our greenhouse gas account in the United States, subject to any notification otherwise by the authorities.

DECARBONIZATION OF THE SUPPLY CHAIN AND CLIMATE-FRIENDLY BATTERY PRODUCTION

We are tackling the challenge that higher CO₂ emissions initially arise in the supply chain during the transition to electric mobility and the shares of the use phase shift to production. The CO₂ emissions in manufacturing an electric vehicle are – from raw material extraction to handover to the customer – roughly twice as high as with a vehicle with a combustion engine. This is because of the difficulty of raw material extraction and the energy-intensive processes in manufacturing batteries, which are also used in our supply chain.

To achieve our climate-protection targets, the procurement processes within the Group’s organizational structures and processes are currently under continuous development. In order to encourage measures for reducing greenhouse gases among suppliers, we systematically identify the biggest sources of emissions along the supply chain in a component-related way by means of life cycle assessments. In the reporting year, roadmaps were developed with our suppliers in numerous workshops in order to define measures for reducing CO₂. For example, the Volkswagen Group is in close communication with all the major steel manufacturers in order to accelerate the switch to carbon-neutral products. All suppliers of high-voltage batteries are contractually obliged to use certified energy from renewable sources in their production. Suppliers must provide proof of this before the award of the contract. CO₂ emissions in battery manufacturing are therefore falling significantly. Thus, in connection with improved battery technologies, the new ID.3, for example, manages to emit almost 50% less CO₂ per kilowatt hour (kWh) of battery capacity than the e-Golf.

We founded a 50/50 joint venture with Swedish company Northvolt AB in 2019 to set up a factory for the production of lithium-ion batteries. Production is due to begin at the start of 2024. The annual performance of the battery factory to begin with should be 16 gigawatt hours. So as to be able to calculate the potential of battery recycling, Volkswagen Group Components set up an initial pilot facility for battery recycling in Salzgitter that will begin operations at the start of 2021.

1 Subject to confirmation of the CO₂ data in the official publication by the European Commission.

E-MOBILITY AS A KEY FACTOR OF DECARBONIZATION

The Volkswagen Group has launched one of the biggest e-offensives in the automotive sector. In order to achieve the statutory requirements for CO₂ fleet emissions, in 2025 the Volkswagen brand wants, for example, to sell more than one million e-cars per year globally. The plan is also to increase the proportion of the fleet that is electric to at least 40% by 2030. The market launch of the completely newly developed, all-electric ID. model family took place in 2020. We now have attractive products for e-mobility with the ID.3 and ID.4 models, the Audi e-tron and the Porsche Taycan.

The new electric vehicles are manufactured at eight sites in Europe, China and the US. The modular electric drive matrix (MEB) serves as the technical backbone of the e-offensive and is used in many more of our electric models. Not only will the cost of e-mobility be...
significantly reduced with the associated economies of scale, the MEB will also enable the extensive decarbonization potential that is associated with this technology to be tapped for all brands and models.

Compared to vehicles with an internal combustion engine, electric vehicles have the environmental advantage that they produce no local emissions during use. Our calculations show that the current carbon footprint of electric vehicles is already better on average in Europe in most markets than comparable gasoline or diesel vehicles over the entire life cycle too.

**THE CLIMATE FOOTPRINT OF THE ID.3 OVER ITS ENTIRE LIFE CYCLE**

In order to underpin this in particular for our electric offensive’s flagship, the ID.3, we have produced a detailed climate footprint for this vehicle type in the reporting year and had it certified. The general framework for this is a detailed, ISO-standardized life cycle assessment, which we carry out on products as part of our environmental management. This means that we are able to identify serious environmental impacts (hotspots) in the respective stages of the life cycle and set about developing suitable improvement measures with the greatest possible effect.

We are currently particularly observing the climate effect in the impact categories. CO₂ and all other emissions relevant to the climate are recorded here and converted into CO₂ equivalents.

Volkswagen AG commissioned TÜV NORD CERT Umweltgutachter GmbH as an independent external body to carry out the critical review of this life cycle assessment study in accordance with the applicable standards DIN EN ISO 14040 and DIN EN ISO 14044. In accordance with the standard, the manufacturing phase from raw material extraction, the use phase comprising use for transporting passengers over 200,000 km in the WLTP driving cycle to the recycling of the Golf 8 and the ID.3 were used as the framework.

On the basis of the ISO-standardized methodology, around 5,000 components were analyzed and 40,000 processes in all life cycle phases were carefully examined. For each process step of a component, its emissions were calculated with special software on the basis of standardized average values. For particularly energy-intensive manufacturing steps, such as battery-cell production, for the ID.3 we used our respective suppliers’ specific data instead of average values.

The components and processes with the biggest carbon footprint included the battery cells, the steel for automotive bodies, production at the sites and logistics. Beyond the measures already implemented (e.g. the use of green energy for cell production), additional reduction potential can be seen in the use of aluminum, in the levels of the battery supply chain that are further upstream or with regard to the use of recycled material, such as in the form of secondary raw materials from the recycling of lithium ion batteries.

The bottom line shows the carbon footprint over the entire life cycle: even without offsetting the remaining CO₂ emissions in production, the ID.3 has a CO₂ advantage over a comparable model with an internal combustion engine – and not just when charged using green energy but even when charged with the usual European energy mix.

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### Carbon footprint across the life cycle (in g CO₂e/km)

<table>
<thead>
<tr>
<th></th>
<th>Production phase (incl. logistics)</th>
<th>Upstream fuel and electricity supply chains</th>
<th>Use emissions</th>
<th>Maintenance</th>
<th>Recycling</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Golf 8 TSI</strong></td>
<td>34</td>
<td>27</td>
<td>122</td>
<td>1</td>
<td>187</td>
</tr>
<tr>
<td><strong>Golf 8 TDI</strong></td>
<td>36</td>
<td>12</td>
<td>109</td>
<td>1</td>
<td>161</td>
</tr>
<tr>
<td><strong>ID.3</strong></td>
<td>66</td>
<td>66</td>
<td>1</td>
<td>136</td>
<td></td>
</tr>
<tr>
<td><strong>ID.3</strong></td>
<td>66</td>
<td>1</td>
<td>70</td>
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<tr>
<td><strong>ID.3</strong></td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Decarbonization

- Green Volkswagen site in Zwickau
- Electricity from renewable sources of energy at battery suppliers
- Offsetting measures for production
- Volkswagen Naturstrom

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DELIVERY PROMISE OF A CLIMATE-NEUTRAL FOOTPRINT

We give our ID.3 customers the delivery promise that we will deliver them a vehicle with a climate-neutral footprint. We also want to enable virtually carbon neutral individual mobility over the entire life cycle for them. We achieve this by means of various instruments: We reduce CO₂ emissions by increasing energy efficiency and using renewably generated energy at our Zwickau plant. We contractually obligate our battery suppliers for the ID.3 to only use electricity from renewable sources. We offset remaining emissions arising from production through comprehensive, certified climate protection measures. This includes a wind farm in India and a project to protect tropical forests on the Indonesian island of Borneo. All the climate protection projects meet the highest international standards.

In view of the fact that around half of the CO₂ emissions are accounted for by electricity used to charge the vehicle in the use phase, the provision of clean energy from renewable sources is of overriding importance for the ID.3’s climate footprint. By supplying energy from renewable sources via our subsidiary Elli (Electric Life), we can offer our customers the option of being emission-free in the use phase too.

RENEWABLE ENERGY FOR VEHICLE USE

Through the subsidiary Elli, Volkswagen offers 100% CO₂-free Volkswagen Naturstrom electricity to private households with or without electric vehicles in Germany. It is generated by wind, solar and hydroelectric power plants from Germany, Austria and Switzerland.

Since the market launch of the ID.3, the Volkswagen brand has offered a complete package for conveniently and sustainably charging e-vehicles. The ID.Charger is a wallbox for charging at home. The electric vehicle can be operated emission-free with certified Volkswagen Naturstrom® from renewable sources. All these services and products are distributed by Volkswagen’s subsidiary Elli, which accelerates the progress of the topic of charging within the Group.

This means Elli is tapping a completely new field of business for the Group, in which the energy and mobility focus areas grow closer together via electric mobility. Our aim is to make Elli the first provider on the market to offer drivers and fleet managers of electric vehicles charging both at home and at the workplace. In order to set up fast charging infrastructure, Volkswagen founded the joint venture IONITY with other OEMs, which is setting up around 400 fast charging stations on major highways across Europe.

In addition, the Volkswagen Group has adopted a pioneering strategy for renewably generated electricity in the use phase of electric vehicles. As a result, we connect the transportation and energy transformation. Through establishing strategic partnerships with energy suppliers and the targeted support of the expansion of renewable energy generation beyond existing expansion plans, we want to feed additional electricity from renewable sources into the grid. The Volkswagen Group thus has the clear objective that the consumption of electricity to charge its electric vehicles should be covered by renewable energy, irrespective of where and by means of which option the vehicle is charged. In this way, we want to enable our customers to be mobile with largely carbon-neutral electric vehicles.

CLIMATE PROTECTION IN MANUFACTURING

In the last ten years, Volkswagen has increased vehicle production from 7.3 million to 8.7 million vehicles (an increase of 19.7%). Although absolute energy consumption increased by 11.5%, at the same time, absolute greenhouse gas emissions reduced by 12%. Volkswagen wants to continue this trend and reduce greenhouse gas emissions in production by 30% in absolute terms compared to 2018 by 2030. Key to this is increasing energy efficiency and switching to an emission-free power supply. The strategy for renewable energy also covers the production sites. For example, we will gradually increase the proportion of renewable energy in the electricity purchased externally for production to 100% by 2030 – initially completely in the European Union in 2023, then worldwide in 2030 – with the exception of China. For China, the feasibility of the plan and the availability of green energy is currently being reviewed. Currently, the proportion of renewable energy in the Group as a whole is 45.6%. 100% of electricity is already obtained from renewable energy at 53 Group sites. We are also strengthening our approach with a sourcing strategy that provides for the undifferentiated sourcing of energy for all new contracts only with corresponding proof of origin (Energy Attribute Certificates) where the particular electricity market offers this option.

When supplying our own energy, we continue to focus on renewable energy. Most of the electricity for the Volkswagen Group’s German production sites that is not produced by the site itself is thus carbon-neutral Volkswagen Naturstrom electricity, i.e. renewable energy. Approval for building and operating certified wind power facilities producing 12.8 MW at the MAN Salzgitter site was granted in 2017 as part of a public procedure. The project was confirmed in the Federal Network Agency’s EEG Tendering Process 2018. The four wind turbines were ordered from the manufacturer. The commissioning of the plant began at the end of 2019. After delivery was taken of the equipment, it was put into permanent operation in 2020.
In addition, Volkswagen is working at full speed on advancing energy-efficiency projects in its 118 production facilities. Across the Group, 1,236 measures for saving energy were implemented in 2020 alone. For example, the conversion of the power plants in Wolfsburg from coal to gas begun in 2019 is expected to reduce emissions from operations by 60% from 2023, which is equivalent to an annual saving of 1.5 million tonnes of CO₂. This is being achieved through increased efficiency of the combined cycle gas turbine power plants and use of natural gas in the future instead of coal. The modernization reduces the CO₂ emissions of the Group’s production facilities by a total of about 15%.

**CARBON-NEUTRAL PLANTS**

Production in Brussels and Győr by Audi and at the Volkswagen ID.3 site in Zwickau has a carbon-neutral footprint. The electric energy for the production of the ID.3 is covered exclusively by our own highly efficient cogeneration via combined heat and power plants and Volkswagen Naturstrom. Efficiency measures in production include, for example, optimized thermal afterburning in the paint line, frequency-controlled fans and the use of energy-efficient air compressors. Production at the Porsche site at Zuffenhausen also has a carbon-neutral footprint and only uses energy from renewable sources. These are exclusively run on biogas, which is obtained from biodegradable waste and residual materials. The site also uses biogas in the manufacturing process. The Group’s head office and the main Bentley Motors plant in Crewe, England, also work in a climate-neutral way and have a corresponding certificate in accordance with the PAS 2060 Carbon Neutrality Standard. All of Bentley’s electrical power is either generated through solar panels on site or purchased as certified green energy. In addition, the sites in Dresden, Vrchlabí and Santa Agata also already operate with a carbon neutral footprint.

*GOTOZERO IMPACT LOGISTICS*

In order to achieve the climate targets and contribute to the decarbonization of the Group, Volkswagen Group Logistics is working together with colleagues from Brand Logistics in the gotoZero Impact Logistics initiative. Continuous optimization of the transport network and the logistics processes reduces environmental impacts such as emissions. In addition, the use of new, low-emission technologies in the transportation of production materials and finished vehicles is being reviewed and pushed.

The measures the Volkswagen Group has taken to achieve carbon-neutral logistics going forward include moving shipments from road to rail and almost complete avoidance of CO₂ through the use of green electricity in rail transport in Germany in collaboration with Deutsche Bahn AG.

Another example for the use of rail as a low-emission mode of transport is transporting battery systems from the Braunschweig component site to the Zwickau plant, which is the production location for the ID.3 and ID.4. The battery modules are also shipped by train from the supplier in Wroclaw, Poland, to Braunschweig.

In addition, Volkswagen Group Logistics has now put the world’s first two roll-on/roll-off (RoRo) ships of this size powered by liquefied natural gas into service for vehicle transport across the North Atlantic. Their main environmental advantage is the low-pollution drive system.

**OFFSETTING UNAVOIDABLE CO₂ EMISSIONS**

For as long as we cannot avoid CO₂ emissions in all locations and renewable energy cannot be used everywhere, we will offset the remaining greenhouse gas emissions from our supply chain, production and logistics for MEB vehicles in Europe. We offset unavoidable CO₂ emissions through climate protection projects with the highest certification standards, such as the Verified Carbon Standard (VCS), the Climate Community and Biodiversity Standards (CCB) or the Gold Standard. For the quality assurance of offsetting projects, we have developed a comprehensive scoring model and rate the projects with regard to compliance with standards, credibility, site selection, project size and the contribution to achieving the United Nations Sustainable Development Goals. One important criterion for this support: the CO₂ saving must be precisely quantified and provable. A committee of members of top management makes the decision on supporting the projects.

The Volkswagen Group will continue to systematically pursue the course it has adopted to offset unavoidable emissions in 2021 and beyond. To this end, we plan both to participate in existing transportation projects and to develop our own climate protection projects in order to make a contribution to overcoming the climate crisis.

**PARTICIPATING IN EMISSIONS TRADING AND CARBON PRICING**

Thirty-two of our Group locations participate in European emissions trading and thus comply with a legal requirement of the EU. For 2020, a total of 918,583 emissions certificates were allocated to the Volkswagen Group free of charge (83,591 fewer than in the previous year). The European Commission is already planning to make further changes to emissions trading when the fourth trading period begins (from 2021). These could lead to a tightening of the system and thus to price increases for the certificates. In addition to the EU member states, other countries in which the Volkswagen Group has production locations are also considering introducing an emissions trading system. Eight corresponding pilot projects are
running in China, for example, although they have not so far af-
fected the Volkswagen Group. The Chinese government plans to
convert the regional pilots into a national emissions trading sys-
tem by 2025. Initially, this affects only the power generation sector;
a gradual expansion is being planned.

The European CEO Alliance, which we co-founded, proposes that a
predictably growing minimum floor price and appropriate devel-
opment of the EU Emissions Trading System to cover all sectors
should be considered, maintaining competitiveness of European
companies. Revenues from the emissions trading system and na-
tional environmental taxes should be channeled toward sustain-
able innovation and industrial decarbonization. In this context, we
welcome the planned EU innovation fund. While price signals for
CO₂ should primarily be triggered by the ETS, a reform of energy
taxation and its directives should take the climate impact of all en-
ergy carriers into account to support decarbonization of the energy
market.
The finite nature of natural resources and the social and environmental consequences of mining raw materials make uncoupling economic growth from resource consumption and the development of a circular economy a key sustainability topic. On an international and national level, politicians have taken up these challenges and set themselves the goal of regulating markets more strictly in the future in order to drive the transformation toward resource efficiency and a circular economy. This is accompanied by ambitious programs and support measures. For example, the creation of a circular economy is a key component of the European Union’s Green Deal. This has already been concretized by an action plan that is intended to set the framework for a broad range of action areas in the years ahead: from electronics and IT through food, plastic and textiles to packaging and waste management. Sustainably manufactured products for sustainable use are intended to enable citizens to share in the advantages of the circular economy and make responsible consumption decisions. Growing awareness of circular economy issues is also shown by financial market players, who increasingly include companies’ performance in this area in their evaluations by using ratings and rankings.

Against this background, companies face increasing pressure as a result of their stakeholders’ expectations. They also recognize extensive opportunities to tap into new business models and markets or to give themselves an edge in the competition for limited resources with changed use concepts.

Production of vehicles requires many raw materials. The Volkswagen Group has already developed plans for recycling and reusing vehicle parts in order to reduce its own environmental footprint and cultivate circular business models. In particular, digitalization has recently further boosted these efforts. An additional driver of the circular economy is the ongoing decarbonization of the Volkswagen Group: the growing use of secondary materials and the establishment of closed materials loops help to significantly reduce our CO2 emissions.

Like with our decarbonization strategy, we are currently still working on a holistic strategic approach for the area of the circular economy. Conservation of resources along the entire life cycle of our products and mobility solutions is, however, already a key part of our strategy: in the “goTOzero” concept, the Volkswagen Group sets itself the target of further improving its resource efficiency and promoting approaches to reuse and recycling in the areas of materials, energy and water. By 2025, the Group plans to have reduced the production-related environmental impact with respect to CO2, energy, water, waste and volatile organic compounds by 45% per vehicle compared to 2010.

In 2020, we decided to intensify our efforts for a transition to a loop-oriented and resource-conserving way of doing business and to combine our projects and measures into a holistic approach. On the way to this, we are in close communication with our stakeholders and also with legislators and actors in politics and society. We also rely on alliances with various partners, such as suppliers, plant manufacturers or the recycling sector.

In the course of our materiality analysis, we defined the circular economy as a focus area of the sustainability narrative. We already have a broad foundation here with our “goTOzero” concept and a wide variety of activities at brand level. At the same time, we are aware that it requires a new consistent and strategic approach to be developed with ambitions, targets and KPIs and the implementation of corresponding structures and processes at Group level.

Similarly to our strategic approach to decarbonization, we want to anchor the circular economy action area uniformly throughout the Group and manage it over the entire life cycle of our products. In the reporting year, we started developing a strategy for a circular economy with the involvement of all the brands and the relevant business areas. The strategy is intended to include binding objectives, robust parameters and implementation measures. It has thus been decided to initially focus on achieving the following ambition by 2030:

Volkswagen is known for its particularly efficient use of resources and uses the principles of circular economy for its business models.

We are currently in the process of putting the objectives in concrete terms. The Volkswagen Group is planning to add further KPIs that indicate progress in the area of the circular economy to the existing KPIs (DCI, reduction of the environmental impact of production).

The most important measures that we want to take to implement the circular-economy strategy include further clarifying targets and indicators and also realizing circular business models for the most important components and materials, such as battery, steel, aluminum or plastics. We also want to strengthen communication around the topic of a circular economy.

We are currently developing our own working structure at Group level for managing the activities. This builds on the work of committees such as the Group Steering Committee for the Environment and Energy, the Group Steering Committee for Sustainability, the Group Steering Committee for Product Recycling and the Group Working Committee for Environment Product.

The reporting on the measures implemented in 2020 is still based on the established approach for resource efficiency in production and for use of sustainable and recycled materials. Nevertheless, we are already guided by the various stages of the life cycle of our products in the order of the topics and initiatives dealt with.
OUR GOAL: CLOSED MATERIAL LOOPS

We are stepping up efforts to use materials loops in our production processes. When selecting raw materials, we opt for recycled ones obtained from production waste or end-of-life products. When developing new vehicles, we pay attention to the recyclability of the required materials, using high-quality recycled material and avoiding pollutants. Under the European Directive on end-of-life vehicles, passenger cars and light commercial vehicles must be 85% recyclable and 95% recoverable at end of life. All our vehicles registered in Europe comply with these standards.

In order to calculate how much of a complete vehicle is recycled, we determine the materials of all relevant components in the vehicle and their recycled materials content and add these together. Reliable information straight from suppliers and sector-specific association data are essential for this.

The Aluminum Closed Loop Project, with which a closed loop for aluminum was achieved beyond Company boundaries for the first time in the Neckarsulm plant in 2017, is an example of our approach. The waste from aluminum sheet-metal parts from the press shop is delivered directly back to the suppliers, who can recycle the scrap and use it to produce new material that Audi then uses again in the press shop. In this way, Audi not only saves energy and avoids CO2 emissions, but also reduces the quantity of primary raw materials needed. In addition to the plant in Neckarsulm, the Ingolstadt plant joined the Aluminum Closed Loop process in January 2020; the plant in Győr is set to follow in 2021. The process itself and the resulting CO2 saving have been verified by independent third parties. This process has already made it possible to avoid more than 525,000 tonnes of CO2 in the Group’s carbon footprint since 2017.

USE OF RENEWABLE RAW MATERIALS AND MATERIALS PRODUCED WITH LOW EMISSIONS

In order to reduce our resource consumption, we rely on raw materials from renewable and nonrenewable sources when manufacturing our vehicles. Wherever possible, our Group brands use renewable raw materials such as the natural fibers flax, cotton, wood and cellulose. Such materials can be used if they comply with all the technical requirements and perform better than conventional materials over the life cycle. In addition, our strict sustainability standards naturally apply for our suppliers.

We take advantage of new opportunities in body construction where we improve existing products or design new ones in the interests of functionality, quality, safety and environmental compatibility. Intelligent lightweight construction is the guiding principle here. For volume models, we use hot-formed, high-strength steel. Although energy consumption in production is higher, the lighter vehicle body allows a reduction in CO2 emissions and thus an improvement in the overall environmental impact of the product.

PILOT PROJECT FOR BATTERY RECYCLING

The Volkswagen Group has bundled end-to-end responsibility for the battery – from cell development to recycling – in Volkswagen Group Components. The aim is to close the material loop for the battery, to help safeguard raw materials by doing this and to support sustainability goals. Specifically, the consumption of primary materials and a battery’s carbon footprint can both be reduced. To realize this closed loop, following the battery’s use phase in the customer’s vehicle, the battery is given a second life in order to extend its life, for example as an energy storage unit in stationary applications. After that, the battery materials should be reclaimed again through a specially developed recycling process.

The focus of the battery recycling is primarily on the metals nickel and cobalt. There are already established technologies here to reclaim these materials by furnace. By contrast, the Group Components recycling process uses low-energy, mechanical processing with subsequent hydrometallurgy. The battery is recycled in several process steps through mechanical crushing, sieving and filtering so that a partner can process the black powder into new cathode material by wet chemical processes in the next step. Significantly less energy is needed due to the lower temperatures. The mechanical crushing also enables more procedural freedom than current technologies, meaning that lithium and, in the future, also additional materials, such as battery electrolytes or graphite, can be specifically reclaimed. As part of dismantling the battery system, large quantities of aluminum, steel, copper and electronic components, which are fed into separate recycling channels, are also made available.

A pilot plant for battery recycling was started up at the Salzgitter site at the end of 2020 in order to test, validate and further develop these processes. Keeping in close communication with Battery Cell Development means we will be able to respond to future technological leaps. Experience from recycling, for example in the process for dismantling battery systems, can be used in the long term to influence the development of future batteries in such a way as to facilitate the later recycling process.
The pilot plant in Salzgitter should process and recycle the accruing batteries of all Group brands from launch. The largest volume comes from internal sources within the Group, for example, of prototype vehicles or test batteries. Higher volumes of battery returns are not expected until the end of the 2020s or the start of the 2030s, and any second life use may postpone this period. The work on the pilot plant means we will be prepared for recycling the batteries delivered at this point.

RESPONSIBLE USE OF WATER

The supply chain, in particular obtaining and processing raw materials, is responsible for the greater part of our water use. Because we cannot influence these aspects directly, we concentrate on our production sites. Of all freshwater that we use, 51.0% (around 16.7 million m³) is used by sites in risk zones, i.e. regions with water shortages, such as Mexico. The closed-loop circulation or recirculation of cooling and process water means the need for freshwater and the quantity of waste water can be reduced considerably. The San José Chiapa (Mexico) Audi site, which can be considered a waste-water-free site due to closed-loop circulation, provides a good example of this.

As part of our “goTOzero” concept, our sustainable water management focuses on the following areas of activity:

• Reduction of fresh water consumption and efficiency in water use, particularly in water stress areas
• Minimization of pollution and no worsening of the environmental and chemical status in the receiving waters (waters into which the treated waste water is introduced)
• Increased soil and groundwater protection when using water-polluting substances

We manage water-saving processes at our Group’s locations during production in line with Group-wide specifications. In addition, Volkswagen supports the CDP Water Disclosure Project (WDP) through the transparency of its water management. In 2020, we were given an A for our sustainable water management in the WDP ranking. Due to our growing production figures and the integration of new sites in recent years, our Group’s absolute freshwater use has increased in recent years. The amount of freshwater used per vehicle decreased by 17.7% per vehicle from 2010 to 2020 thanks to a range of recycling measures and the introduction of manufacturing processes requiring little water.

The amount of waste water produced is in line with the amount of freshwater that we use. Differences in quantities between fresh and waste water are the result of evaporation in cooling towers and during the manufacturing process.

SUSTAINABLE WASTE MANAGEMENT

Our waste strategy aims to reduce the quantity of waste per unit produced and to reuse unavoidable waste to create high-quality materials, i.e. to close loops. The focus is on:

• Avoiding waste creation by optimizing production and auxiliary processes and increasing material utilization levels (material efficiency)
• Reducing the quantity of waste produced by processing waste at sites
• Prioritizing the reuse of waste and reducing the quantity of waste that needs to be disposed of

In order to optimize our management of waste, we are increasingly using digital waste management systems in all German and a number of international production locations of the Volkswagen, Volkswagen Commercial Vehicles, Porsche, Audi and MAN brands. They make it easier to control waste management processes and facilitate state control of the disposal of hazardous waste (electronic government).

In order to monitor waste management and recycling processes, we carry out regular cross-site, cross-brand and cross-OEM waste disposal audits in Germany and the rest of Europe. In addition, the auditors receive further training and hold regular discussions to ensure that they have a common understanding of the quality requirements associated with waste disposal services, to carry out audits of consistently high quality and to allow other OEMs and suppliers to take advantage of the results.

We reuse waste from manufacturing, logistics, workshops and technical development to produce high-quality materials. Our Procurement Division has established a Group-wide system for recovering waste materials that can generate income, for example paper, plastics, wood or metal.

Under the umbrella of the Zero Impact Factory initiative, we are intensifying our efforts to avoid plastic waste with the Zero Plastic Waste project. Together with the Group brands and various departments from environmental protection, logistics and the production trades, a “roundtable” was created in mid-2020. This working group specifically looks for alternatives for the plastic packaging currently used. We test innovative options for avoiding plastics here and are guided, wherever possible, by the Group sites’ best practices.
VEHICLE QUALITY AND REPLACEMENT PARTS AS BUILDING BLOCKS OF RESOURCE EFFICIENCY

Overall, the aim of the high quality focus with a low need for repair is to give our vehicles long lives in the use phase, thus making an important contribution to resource efficiency.

Volkswagen, Volkswagen Commercial Vehicles, Audi, SEAT and ŠKODA also take back many used parts from engines, transmissions or electronics because they contain valuable raw materials. These car parts are industrially remanufactured and tested and can then be used in another car again. When they need a repair, our customers can decide whether the repair shop should install a completely new replacement part – or whether it is preferable to use a Genuine Remanufactured Part. These offer as-new quality but at a much lower price than new parts. Using these parts saves large amounts of raw materials, energy and CO₂. For a large number of car parts, we quantify these effects in a Life Cycle Assessment (LCA) carried out in accordance with ISO 14040. For example, we calculated the environmental impacts of a newly manufactured Volkswagen MQ 250 five-speed transmission and compared them with those of a Genuine Remanufactured Part. The LCA revealed a 33% reduction in energy consumption and a drop of approximately 28% in CO₂ emissions for the remanufactured part. Ozone impacts are also 28% lower compared with the new part. We also offer our commercial vehicle segment brands Scania and MAN additional services in the field of reuse. Customers can purchase tested and used Genuine Parts, particularly engines and transmissions. At MAN, customers can also have cabs from all the product lines remanufactured and repaired on request.
RESPONSIBILITY IN SUPPLY CHAINS AND BUSINESS

60 Responsibility in Our Group
64 Responsibility in Our Supply Chain
The Volkswagen Group pursues the vision of enabling sustainable mobility for generations to come. For us, living up to our legal, social and environmental responsibility not just in our own Group but also in our supply chains is therefore a given.

In 2020, the Volkswagen Group identified the topic of responsibility in supply chains and business as a focus area of the sustainability narrative and thus as a clear strategic focus of action. We have thus formulated a clear ambition that we want to translate into lived corporate practice by 2030:

**We are fully and entirely committed to our corporate responsibility in our business relationships and in our business units and at our sites. To this end, we are establishing a strong business and human rights management system.**

This ambition results in concrete objectives in the field of human rights: in our supply chain, we want to effectively avoid ESG-related risks, including human rights risks, and ensure that 85% of our direct business partners obtain an A in our sustainability rating by 2025. By 2023, all entities that fall within the scope of compliance should have incorporated the topic of business and human rights in the compliance management system. We will manage and measure target achievement here through KPIs and support the achievement of targets with suitable measures and programs.

**RESPONSIBILITY IN OUR GROUP**

Policymakers and civil society increasingly demand that international companies respect their duties of human rights due diligence. In numerous countries, these demands are leading to legislation: companies are required to comply with their duties of human rights due diligence within their sphere of influence – at their sites and in their business and supplier relationships. At the same time, investors and analysts are also using sustainability and compliance ratings to subject corporate actions in respect of human rights duties to a systematic and increasingly strict assessment.

Not least due to the Group’s history, i.e. the use of forced labor in the Wolfsburg plant during the period of National Socialism and Volkswagen do Brasil’s cooperation with the military regime in Brazil, the Volkswagen Group takes its duties of human rights due diligence seriously. The Volkswagen Group has anchored human rights in its processes and policies independently from external expectations and legislation and has set these out in an agreement with employees – the Social Charter.

**INTERNATIONAL CONVENTIONS AND OUR OWN PRIORITIES**

Our activities in the area of business and human rights are based on compliance with international frameworks and also efficient structures and management processes. Thus, we have oriented ourselves in particular on:

- the United Nations’ Universal Declaration of Human Rights, which is codified in the International Covenant on Civil and Political Rights and in the International Covenant on Economic, Social and Cultural Rights,
- the Core Labour Standards of the International Labour Organization (ILO),
- the UN Guiding Principles on Business and Human Rights,
- the OECD Guidelines for Multinational Enterprises and
- the principles of the UN Global Compact.

The aim of the Volkswagen Group's agreements with the Group European Works Council and Global Group Works Council is to shape cooperative labor relations characterized by social harmony. They are intended to offer our employees certainty as regards their employee and human rights. These particularly include the prohibition of discrimination at work, child labor and forced labor.
The Volkswagen Group has laid down the respective key focal points, the so-called Salient Business & Human Rights Issues, in the business and human rights focus area in the three categories of employment rights, tolerance and security in the sense of the UN Guiding Principles:

- Freedom of association and the right to collective bargaining
- No forced labor
- No child labor
- Good working conditions
- No involvement in any unlawful activities
- Guarantee of the security of people
- Tolerance towards different – ideological and religious – opinions and respectful expression of them
- No discrimination
- Diversity, protection of disadvantaged, particularly indigenous groups

Since 2019, the Volkswagen Group has had a coordinator for the business and human rights action area. The coordinator, who was appointed by the Group Board of Management, also manages the collaboration with the brands and regions.

CLEAR REQUIREMENTS IN THE CODE OF CONDUCT

Expectations of our employees and our Group-wide understanding of the observance of universal human rights are also set out in our Code of Conduct. The issue of human rights is covered in the chapter on “Our responsibilities as a member of society.”

Our Code of Conduct and additional topic-related Group policies apply to all the Volkswagen Group’s employees around the world.

Employees of the Volkswagen Group’s controlled companies are trained to this end as part of the mandatory Code of Conduct training. In addition, there is in-depth training for business units with increased risk exposure. The international rollout of the Code of Conduct training continued within the Volkswagen Group in the reporting year. This will also be continued in 2021. Over and above the Code of Conduct, our human rights responsibility does not end at the factory gate. We also enter into dialog with our stakeholders: at Volkswagen Group Sustainability’s stakeholder dialog in February 2020, we presented our measures in the area of business and human rights to critical stakeholder groups, such as NGOs and human rights representatives, and critically discussed our measures with these groups. On this basis, we can further develop our commitment in order to live up to our corporate responsibility for human rights even better.
INTEGRATION OF HUMAN RIGHTS INTO COMPLIANCE FURTHER BOOSTED

We implement our management approach throughout the Group: our controlled companies are included using the standardized internal compliance risk management processes (ICRA). In the case of noncontrolled companies (excluding Chinese joint ventures), an individual analysis is made in close cooperation with our respective company partners. We rely on the cooperation of these business partners here. The Volkswagen Group has integrated the topic of business and human rights into the Group’s established compliance management system. This is intended to achieve integration of the topic along the UN Elements of Human Rights Due Diligence.

USING THE EXISTING COMPLIANCE MANAGEMENT SYSTEM FOR BOOSTING BUSINESS & HUMAN RIGHTS ACCORDING TO UN PRINCIPLES

1) Strategy: definition of our work priorities, “salient business and human rights issues.”
2) Policies: integration of the topic into strategic documents and Group policies, for example in the Code of Conduct and the Social Charter.
4) Communication: reporting in the sustainability report, raising awareness of the topic through internal and external communication measures.
5) Training: basic training for all employees and extended training for employees from business units with increased risk exposure in the Volkswagen Group’s controlled companies.
6) Measuring impact & auditing: monitoring and continuous improvement.
7) Reporting: reporting and organizational feedback in the context of rankings.

**Group policies create more precise specifications**

With the revision of the “Participation Management of Noncontrolled Participations” Group policy and the adoption of the “Conducting Site Projects for Industrialization” Group policy, we also procedurally anchored the topic of business and human rights in site decisions and M&A projects.
In the last few years, a trend of also regulating the issue of business and human rights in national laws has been emerging in leading economic powers. Volkswagen, as a global business, also observes such national requirements that put international standards in concrete form. One example of this is the UK Modern Slavery Act 2015: we publish a corresponding Group statement on this annually on our website.

In the reporting year, we have publicly stated our position on the cornerstones of a planned due diligence law as follows:

As an international business, the Volkswagen Group argues in favor of an EU regulation for the protection of human rights by enterprises and their suppliers. Such a regulation should set a uniform standard that gives enterprises in the European Economic Area legal certainty in their action area. Based on these premises, we therefore advocate an initially national regulation that gives individual companies sufficient leeway for individual organization. In the interests of any due diligence law being as effective as possible, we favor the broadest scope possible: the more enterprises are directly obligated by law, the greater we think the chance of actual penetration of the entire supply chain is.

In addition, we think continuous dialog between those involved about principles and implementation issues is needed in differentiating between the state’s duty to protect human rights and corporate human rights responsibility. For businesses, it is often challenging to obtain concrete and objective information enabling a comprehensive assessment of human rights situations. Concrete political support in obtaining information can be provided here.

In order to achieve further progress, we also seek cooperation with international organizations. Our involvement with econsense, the sustainability association of German business, is key to our activities. Additionally, we communicate with numerous companies in other sectors on the implementation of human rights due diligence duties, management approaches, risk scenarios and good practice examples; the Global Business Initiative on Human Rights (GBI) is particularly noteworthy. We are represented there as the first, and so far only, automotive manufacturer.

In Germany, we actively participate in the German automotive industry’s sector dialog in the context of the National Action Plan for Business and Human Rights, in which manufacturers, suppliers, trade unions, NGOs and the German federal government are involved. Volkswagen AG, Audi and Porsche participate in the three working groups of the sector dialog.

Human rights risk analysis for the entire Group
The Volkswagen Group has 118 production sites worldwide, including the Chinese joint venture production facilities. These are mainly in countries with a medium or high human rights risk. For example, Group Compliance made detailed risk assessments for the field of human rights for 744 controlled companies of the Volkswagen Group around the world. 100% of our 744 controlled companies in a total of 83 countries were audited as a result. The human rights risk assessment is largely based on a correlation of country and business-area risks. The country risks are based on the Maplecroft index, a meta-index that draws on, among other things, more than 30 individual indices of international organizations – for example, the UN or the Business & Human Rights Resource Centre. The business-area risks include human-rights risks assessed internally within the Group and specific publicly available information, for example from the Corporate Human Rights Benchmark (CHRB).

The completion of this analysis means that we have assessed our business units’ gross human-rights risks and can allocate these to the low, medium and high categories. This means we are also aware of those with a high gross risk. We have agreed the results with the companies and had the companies confirm them. All companies were then sent risk-specific measures that they need to implement by the end of 2021. This will be audited by the group from 2022. In addition, the companies with a high gross risk will be assessed for their net risks in on-site audits from 2021.

We monitor the human rights situation in the markets in which we are active and refer in particular to the United Nations’ publicly available reports. The Volkswagen Group takes its responsibility as a business in the field of human rights very seriously. The work in our factories and sales companies around the world is based on our principles, such as respect for minorities, employee representation and social and labor standards. We also expect this of our local Chinese business partners.

POSITIONING IN THE POLITICAL AND SOCIAL ENVIRONMENT
In addition to our organizational and procedural measures and activities, we also create the necessary awareness for the topic of business and human rights. For a start, we communicate about the topic to our staff through our internal channels. Our Director of Integrity and Legal Affairs also makes her position known to the public and external stakeholders in interviews and media pieces.

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Due to the complexity of its products, the Volkswagen Group’s supply chain is highly complex, globally distributed and subject to constant change. It comprises more than 65,000 supplier sites around the world in more than 100 countries.

In the Sustainable Procurement 2025+ strategy adopted during the reporting year, we set the following goals as an aspiration:

1. Performance: We improve our direct and indirect suppliers’ sustainability performance through our activities.
2. Partnership: We work together with our suppliers and other stakeholders cooperatively, constructively and on an equal footing.
3. Transparency: We are committed to transparency in our activities and supply chains.

We will only be able to achieve these targets together with our suppliers. That is why we pursue systematic and continuous development of these suppliers founded on partnership-based cooperation. This is also reflected in the key figures by which we want to be measured by 2025. For example, 85% of direct suppliers (based on revenue) will have their awareness of sustainability topics raised and be trained on these. We also want to reach a point where 85% of suppliers audited (based on revenue) obtain a sustainability rating of A. In our own Group, we will train 100% of buyers around the world on sustainability topics.

MANAGEMENT APPROACH WITH THREE DIMENSIONS OF ACTION

We want to live up to our responsibility in our business relationships on a global level and act proactively beyond fulfilling legal requirements. In procurement, we follow a three-pronged approach. This step requires transparency about the supply relationships that go beyond the first tier (tier 1).

- Prevent: Sustainability requirements are enshrined in contracts and specifications, particularly the Code of Conduct for Business Partners. Suppliers’ awareness is raised and they are trained in a comprehensive program.
- Detect: The sustainability risks in the supply chain are systematically detected and prioritized. Sustainability is anchored in the material contract award decisions across the Group and a rating of potential suppliers’ sustainability performance ("S rating") is used. The basis for this is self-assessment and risk-based on-site audits.
- React: Various measures are available to react to the risks and impacts identified. These include a standardized process to review breaches by individual suppliers and action plans from on-site audits.

Implementation of this management approach is mandatory worldwide and is enshrined in corresponding policies for the Group’s brands and controlled companies. The Procurement Strategy department conducts the operational management. In order to identify current developments and long-term challenges in the individual countries, we also encourage dialog between our brands and regions through the Sustainability Procurement Network, in which more than 50 experts from five continents work together.

CLEAR REQUIREMENTS FOR SUPPLIERS (PREVENT)

The core element of our supplier management is the “Volkswagen requirements for sustainability in relations with business partners” – the Code of Conduct for Business Partners. The Code of Conduct applies to all the Volkswagen Group’s suppliers. It embeds our expectations of our business partners’ conduct with respect to key environmental, social and compliance standards in our contractual agreements. The requirements are based, among other things, on the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights and the relevant International Labour Organization conventions. The Code of Conduct is, however, not just based on international standards, but also objectives, rules and policies of the Volkswagen Group.

Before submitting a quotation, our suppliers must confirm that they acknowledge our sustainability requirements; this explicit acknowledgment must be repeated after 12 months have elapsed if they wish to submit new quotations. We also call on our tier 1 suppliers to pass our requirements set out in the Code of Conduct down along the supply chain.
In addition to the Code of Conduct for Business Partners, there are additional product-specific requirements for suppliers. These are set out in the specifications and stipulate the way in which certain products must be manufactured. The guidelines include, for example, only manufacturing battery cells with green energy and cooperating on full supplier disclosure for the cobalt supply chain. These requirements are also binding for the supplies in question.

**SYSTEMATIC DETECTION OF SUSTAINABILITY RISKS (DETECT)**

Our aim is to know and effectively address the material sustainability risks in our supply chain. A sustainability rating (S rating) was introduced as a key measure in 2019, and implementation of this is to be completed by the end of 2021. The S rating is used to audit the sustainability performance of relevant¹ suppliers and reveal opportunities for continuous improvement. It assesses the environmental performance of suppliers and their social sustainability and integrity.

The S rating is directly relevant to awarding contracts: if a supplier does not meet our requirements for compliance with sustainability standards, it is fundamentally not eligible for the award of contracts.

The check for the S rating takes place via a multistage process. In an initial step, the risk exposure is identified from a combination of country risk and the supplier’s corporate processes and policies. A specialist service provider is used for the identification of the country risk. The Group’s sustainability performance is analyzed by means of a standardized questionnaire for self-assessment. We developed the “SAQ” questionnaire in a joint project with other automotive corporations involved in the DRIVE Sustainability Working Group organized by CSR Europe. It was revised in 2020, including by adding the topics of grievance mechanisms, use of renewable energies and risk raw materials. The information and documents in the SAQ are rechecked and validated by a service provider via a central platform: if a supplier states that it has appropriate processes and policies, it must prove this with documents. Minimum requirements were drafted for the questionnaire. Every supplier that the S rating applies to must meet the requirements enshrined in the questionnaire in the areas of corporate governance, the environment, social issues, human rights, compliance and supplier management.

A total of more than 13,000 active suppliers submitted a sustainability questionnaire by the end of the reporting period. In the reporting period, 1,369 suppliers improved their sustainability performance through taking appropriate steps. Based on sales revenue, more than 65% of our production suppliers have documented that they have a certified environmental management system in accordance with ISO 14001 and/or EMAS. Our objective is for 100% of suppliers with a production location and more than 100 employees to have a certified environmental management system by 2025.

Following an initial analysis of the supplier data, in-depth audits are carried out on site, based on risk. 790 (2019: 1,331) on-site audits were carried out worldwide in 2020. On average, six breaches of our sustainability requirements were identified. Clear differences can be seen depending on the region. In the reporting period, an on-site check for logistics service providers that takes account of the decentralized nature of the service provision, for example through an increased proportion of interviews with employees, was additionally introduced and piloted.

**NUMBER OF BREACHES FOUND WORLDWIDE, PER ON-SITE CHECK PER REGION AND IDENTIFIED TOP RISKS PER REGION**

<table>
<thead>
<tr>
<th>Geographic region</th>
<th>Average breaches per region</th>
<th>The region’s top 3 risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>4</td>
<td>Occupational safety, fire safety, managing complaints</td>
</tr>
<tr>
<td>Asia*</td>
<td>6</td>
<td>Fire safety, occupational safety, working hours</td>
</tr>
<tr>
<td>Europe</td>
<td>5</td>
<td>Fire safety, occupational safety, handling of hazardous materials</td>
</tr>
<tr>
<td>Latin America</td>
<td>6</td>
<td>Fire safety, occupational safety, supply chain management</td>
</tr>
<tr>
<td>North America</td>
<td>4</td>
<td>Fire safety, occupational safety, environment</td>
</tr>
</tbody>
</table>

¹ The relevance of a business partner for the S rating results from factors including the size of the company or the risk exposure derived from the type of service.
in mind, every supplier has the option of undergoing a reassessment after taking improvement measures. By the end of the reporting year, there were 13,041 ratings for suppliers. The order volume with these suppliers represents 75.68% of total volume. Of these suppliers, 4,093 have an A rating, and 220 were rated C and are thus not currently eligible for the award of contracts.

MAKE IMPROVEMENTS ON SITE (REACT)

A series of measures are available to react to risks identified in the supply chain and concrete breaches by suppliers, and thus to actively bring about improvements.

Our supply chain grievance mechanism is an important component of sustainable supply chain management. We use it to investigate any suspected breaches of our sustainability requirements that suddenly occur. In 2020, the case management process was again revised and systematized and developed into a comprehensive grievance management system.

The channel is accessible via our website, an email address and an anonymized channel and is open to anyone potentially affected and stakeholders, e.g. employees of suppliers, civil society players or representatives of communities in the immediate vicinity of our production locations. The processing of cases is uniformly described in a binding policy and is managed by the Group. Cases are processed together with the brands and regions of the Volkswagen Group. If violations are identified, measures are introduced immediately. If there are particularly serious breaches, termination of the business relationship is also possible.

Employees and external parties can also report potential breaches of rules on the part of our suppliers to the Volkswagen Group’s employee representatives or the trade union associations and use the Volkswagen Group’s whistleblower system or the channel sustainability@vwgroupsupply.com. This applies to possible breaches on the part of our tier 1 suppliers as well as sub-suppliers in the supply chain. External ombudsmen are available as a further point of contact.

During the reporting period, in addition to 34 cases that were processed by Procurement, measures were also agreed with suppliers by Group Internal Audit. This concerned suppliers where behavior contravening the rules or contracts was identified as a result of information provided or audits carried out. The collaboration was ended or suppliers were blocked for new awards of contracts in the case of a total of 17 suppliers due to the activities of Procurement and Internal Audit.

### Cases from the Complaint Mechanism Worldwide

<table>
<thead>
<tr>
<th>Geographical distribution</th>
<th>Context</th>
<th>Type of supplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>Social</td>
<td>Direct supplier</td>
</tr>
<tr>
<td>Asia*</td>
<td>Compliance</td>
<td>Subcontractor</td>
</tr>
<tr>
<td>Africa</td>
<td>Environment</td>
<td></td>
</tr>
<tr>
<td>North America</td>
<td>Cross-topic</td>
<td></td>
</tr>
<tr>
<td>Latin America</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* In terms of geographical distribution, Russia and Turkey are allocated to Asia.

### Sustainability Training for Employees and Partners

Systematic training of our employees and suppliers is a central component of our strategy and essential for the improvement of sustainability in the supply chain. We currently use three different formats for this. Firstly, we regularly carry out classroom trainings around the world. However, because these were only able to take place to a very limited extent in 2020, secondly, we expanded our range of live online trainings. In addition, there is also e-learning that can be accessed and completed online at any time.

For all Procurement employees, the topic of sustainability is an established part of the skills profile. In 2020, more than 2,000 Procurement staff worldwide were given training in this area. Our training measures continue also to be geared to specific target groups. For example, buyers of components associated with higher sustainability risks were given an intensive training program in a separate format. Since 2017, we have trained our Procurement employees to deal with the special challenges found in battery supply chains. More detailed human rights training has been available since 2020. An e-learning option available to all employees in Procurement was also introduced in the reporting year. It particularly focuses on the Volkswagen Group’s sustainability requirements and their verification with the S rating.

In order to facilitate continuous supplier development, we usually conduct issue-specific sustainability training courses and workshops with our suppliers at selected locations. In the reporting period, this was only possible to a very limited extent. We therefore developed an online training option in order to train suppliers on our requirements and their implementation in shorter sessions. The format has been offered in English, German and Spanish from June 2020. More than 950 supplier employees made use of this opportunity in the reporting period. The supplier trainings in India, Argentina, France and Russia originally planned as part of the Drive Sustainability initiative, could not be held and will instead be run in 2021.
In addition to the trainings, we make an e-learning module on sustainability available to current suppliers in the nine languages of defined risk countries. The e-learning module was completely revised both technically and in terms of content in 2020. By the end of the reporting year, more than 11,992 suppliers — representing 17.4% of the sales revenue of suppliers of our procurement volume — had completed the e-learning module.

THEMATIC FOCUS AREAS

For the way we responsibly organize supply chains, the thematic focus areas of compliance, decarbonization and human rights are an indispensable part of our sustainability activities across the entire value creation process in the Volkswagen Group.

We audit the integrity and compliance systems of selected suppliers and service providers through our Business Partner Due Diligence (BPDD). This review of existing and potentially new business partners is carried out as part of a risk-based, transparent, documented process that is implemented worldwide using an IT-based tool. Business partners who we have identified as having an increased corruption risk due to their business and region are also subjected to a more in-depth corruption risk audit. All relevant business partners will then be continuously checked for any change in general conditions through a risk and news screening. So far, our database contains 1,136 Business Partner Due Diligence audits.

Strategy and Management > Integrity and Compliance

To achieve our climate-protection targets, the procurement processes within the Group’s organizational structures and processes are currently under continuous development. In order to encourage measures for reducing greenhouse gases among suppliers, we systematically identify the biggest sources of emissions along the supply chain in a component-related way by means of life cycle assessments, and we extend the responsibility for the environmental impact of our vehicles to our suppliers along the whole value chain. For example, all new suppliers of high-voltage batteries are contractually obliged to use certified energy from renewable sources in their production.

Decarbonization > Decarbonization of the Supply Chain and Climate-friendly Battery Production

PARTICULAR DUTY OF DUE DILIGENCE FOR HUMAN RIGHTS IN THE SUPPLY CHAIN

As part of our sustainable supplier management measures, we pay particular attention to protecting those groups of people who, along our supply chain, are at particularly high risk of human rights abuses. In order to comply with international frameworks and requirements, we launched a human rights due diligence management system in 2020, which we use to systematically analyze, prioritize and reduce our supply chain’s human rights risks.

Our raw material supply chains require particular attention here. A raw material due diligence management system has already been set up to effectively handle the, in some cases extensive, risks in these supply chains. This sets out in detail the prioritization and processing of the raw material supply chains that we classify as particularly high risk. Our current focus is on 16 raw materials. The way we organize the responsible sourcing of raw materials is driven by the requirements of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. This contains guidelines for management approaches, for risk identification and prevention, for checking smelters and for communication and reporting instruments.

Our current focus of action is battery materials, particularly cobalt. In close collaboration with our battery cell suppliers, we are pursuing the objective of creating supply chain transparency from mining the raw materials to manufacturing the finished product. This is the only way in which we can ultimately effectively prevent negative impacts. We have been passing the requirement for full transparency on to our direct battery suppliers in our contracts since 2020. An additional component of our strategy in this context is also cooperating directly with the mine operators, because the human rights risks are highest at the start of the supply chain and they can consequently be countered the most effectively here.

Therefore, the plan is to also audit the sustainability performance of the mines in our supply chains. No standard for this is currently available. Volkswagen has therefore joined the CERA project (CERA = Certification of Raw Materials). The project is dedicated to developing such a standard and has been testing this standard on selected raw materials in cooperation with a mining company since 2020.

With regard to the conflict minerals tin, tantalum, tungsten and gold, we require our suppliers’ management systems to exclude the use of minerals from smelters not certified in accordance with international standards. We check these by obtaining reports about all smelters in our upstream supply chain through the Responsible Minerals Initiative’s internationally recognized Conflict Mineral Reporting Template and evaluating the results. If we identify non-certified smelters in our supply chain, we take steps to certify these smelters.

Further information is reported separately in an OECD 5-Steps report.
Within the framework of the management system, we also work on our duty of human rights due diligence in other raw material supply chains. To this end, we closely cooperate with our direct suppliers and in suspected cases of noncompliance require our suppliers to disclose the sources of materials that may have some connection with human rights violations, such as child or compulsory labor as well as any other forms of modern slavery or human trafficking. This also applies to labor conditions in the extraction of raw materials such as mica or natural rubber. Because these processes are very time consuming as a result of the complexity of supply chains with up to eight tiers, we always proceed on the basis of risk.

If we discover human rights violations through on-site visits, an action plan to remedy the deficits is agreed with the supplier and must be carried out. If this is not effective, sanctions will take effect. Our complaints process is crucial for violations that are reported to us by other means or discovered by us. We enter into dialog with the supplier on a case-by-case basis and work toward improvement here. If no improvement occurs in the case of serious violations, this may lead to exclusion from the supply chain.

DIGITAL INNOVATIONS FOR MORE TRANSPARENCY AND SECURITY IN THE SUPPLY CHAIN

In order to increase transparency in the supply chain and to prevent risks in raw material procurement, the Volkswagen Group relies on disclosure of supply chains by direct suppliers and second-party supply-chain mapping audits. In addition, the Volkswagen Group is currently piloting the use of blockchain technology in certain global and complex supply chains.

For example, in 2019 the Volkswagen Group joined the Responsible Sourcing Blockchain Network (RSBN) for the responsible sourcing of strategic minerals using blockchain technology. Through this collaboration, we gained initial insight into the hurdles and potentials of the technology for digitally tracking cobalt, which is used in lithium-ion batteries for electric vehicles. Furthermore, the Group is working on possible approaches for tracking tin with partner company Minespider. Other minerals that are used for vehicle production can, where appropriate, also be better tracked using digital technologies.

Another approach that enables suppliers to be extensively audited using artificial intelligence has been pursued with one service provider since 2020. Here, constant real-time monitoring of freely available internet sources including social media provides us with indications of possible violations by suppliers.

INVolvEMENT IN INTERNATIONAL INITIATIVES

The work in the tiers of the supply chain further upstream and beyond contractual relations requires more far-reaching efforts from us. We will only achieve this through joint, industry-wide initiatives and partnership-based collaboration with suppliers. Therefore, our goal must be to work together with them on improving their sustainability performance. This refers both to those initiatives that serve the purpose of communication and setting standards and to mergers that have the aim of joint implementation of projects. In the former, we seek close cooperation with international organizations. For example, as part of our supplier management, we use the Responsible Minerals Initiative’s standardized reporting templates. As a member of the World Economic Forum’s Global Battery Alliance, we want to accelerate measures toward a socially responsible, environmentally sustainable and innovative battery value chain.

Our involvement in the industry-led initiative DRIVE Sustainability under the umbrella of CSR Europe is also key for our activities. The development of the common questionnaire standard for auditing sustainability aspects of suppliers was a milestone in this respect, as was the training approach for suppliers pursued jointly with other OEMs via training events in selected countries.

In Germany, we are involved in the German federal government’s National Action Plan industry dialog on business and human rights. In its working groups on raw materials and on the introduction of overarching complaint mechanisms, we are promoting, among other things, the piloting of a cross-company complaint mechanism.

In order to effect concrete changes on site through communication and dialog formats, we have additionally been participating in two projects in the countries of origin of our most important battery raw materials, cobalt and lithium, since 2020. We first joined the cross-sectoral Cobalt for Development project, which Deutsche Gesellschaft für Internationale Zusammenarbeit runs in the Democratic Republic of the Congo. It aims to improve the living conditions of local people and contribute to a professionalization of small-scale mining, which is the indispensable livelihood for the local population. An on-site project for another battery raw material was also commissioned at the end of the reporting year. Together with corporate partners and with the participation of the local population, work is to be carried out in Chile to create socially compatible and environmentally friendly conditions for mining lithium.
WORKFORCE TRANSFORMATION

70 Workforce Transformation

69
The Volkswagen Group is undergoing radical change and its workforce with it. The whole automotive world is facing an approximately ten-year transformation corridor, at the end of which the role of automotive manufacturers as employers and the qualifications needed in the industry will be radically different from at the start of the decade. In view of the economic importance of the automotive industry, successful transformation of this industrial sector is of interest for the whole of society. Our aim at Volkswagen is a successful and socially responsible transition of employees to the new era of sustainable mobility. We want to continue to employ as many employees as possible in attractive, promising professional fields, to pay them good salaries and to provide secure jobs. In the areas affected by the change, it is vital to retrain and make necessary adjustments to employment in a socially acceptable way.

The “workforce transformation” thus becomes the central concept and fundamental management approach for our current and future activities in HR. Its central importance extends beyond HR: the transformation of the workforce has been defined as one of four focus areas for the Volkswagen Group as a whole as part of its sustainability strategy. Our ambition is:

*In the comprehensive transformation of the automotive industry, we secure the employability of our employees and the technological excellence of our Group.*

We commenced the transformation of our workforce systematically at the start of 2020: with increased training budgets, with training for the whole workforce where conventional plants are transformed into plants for electric vehicles, with systematic research on the employment policy consequences of e-mobility and digitalization and with further expansion of strategic staff planning.

The workforce transformation also challenges the human resources function as a whole in many ways. The HR department must therefore review and strengthen its resources for moderating the change in employment. We have been radically restructuring Volkswagen AG’s HR with the “OneHR” program since 2018. Separate Group control units for the areas of HR principles and management, HR strategy and innovation, and diversity and the advancement of women were formed under the member of the Board of Management responsible for human resources and finance, was established by HR business partners in the future. In 2020, in addition to implementation, we primarily focused on informing managers and employees about this structure modernization using a wide range of analog and digital internal communication measures.

The Audi, Porsche and MAN brands began implementation of new HR management models modeled on “OneHR” in the 2020 fiscal year.

The outbreak of the COVID-19 pandemic in Europe did not come as a surprise to the Volkswagen Group in March 2020, because we had been gaining experience of the threat posed by the virus through our joint ventures in China since January. Protecting our employees throughout the Group and protecting our business nevertheless required an enormous effort.

The HR department faced a double challenge in 2020: firstly, a long-term strategy with all the necessary building blocks for the successful introduction of the transformation of the workforce needed to be developed. Secondly, the department faced the task of quickly establishing and rolling out the management system for dealing with the coronavirus pandemic under extreme pressure.

**RESPONSIBILITY FOR EMPLOYEES AND SOCIETY IN THE COVID-19 PANDEMIC**

The most important task of 2020 was dealing with the consequences of the COVID-19 pandemic and, in particular, preventing chains of infection from occurring at our plants. The Volkswagen Group has been taking extensive organizational and structural measures to protect against COVID-19 since December 2019. Overall, we were able to keep the number of cases among our employees significantly lower than the national average at all sites during 2020.

The central crisis team, headed by the members of the Group Board of Management responsible for human resources and finance, was responsible for global management and implementation of the measures. In addition, international task forces were formed for particular challenges, for example for transporting several thousand employees and their families back from high-risk areas by air.

As part of restarting its production, the Volkswagen Group took the measures needed for maximum protection of the health of its employees at its plants. More than 50 process and health experts from all brands developed Group-wide standards over a period of several weeks in order to protect employees from COVID-19 infection risks. Executive managers and the General Works Council laid down their rules and measures for protecting workers in a separate company agreement. The corresponding catalog of measures included around 100 topics.
The area of occupational safety and health, which provided advisory support in particular to risk groups through its company physicians and occupational safety specialists, took on an important role, including via a telephone hotline and by email. In addition, it had responsibility for implementing the operational action plan and risk assessments for restarting production. The Volkswagen Group also created and used its own test capacity and the infrastructure for this at the sites.

In order to also support its more than 40,000 suppliers and service providers and several hundred haulers around the world with restarting their production and logistics during the coronavirus crisis, the Group additionally made its ideas available to them. They were given access to the protective measures planned via the Volkswagen B2B platform www.vwgroupsupply.com.

Volkswagen Group China produces protective masks for Volkswagen employees in the European plants in the component plant in Tianjin. In addition to this, various Group companies – in some cases together with partners – produced their own face shield components using 3D printing. At the same time, Lamborghini, SEAT, ŠKODA and Volkswagen Passenger Cars worked on additional medical supplies.

But the experience from and need for regulation as a result of the coronavirus pandemic are not restricted to health protection. The coronavirus pandemic has set in motion fundamental changes to the way we work and collaborate with each other. Like in other companies, at Volkswagen the crisis particularly worked as a catalyst for the breakthrough of digitalization in knowledge work: virtual communication and collaboration, new formats for passing on knowledge and training, e.g. through podcasts or online tutorials, were quickly established and expanded. The Volkswagen Group’s steering entities were also kept working throughout lockdown with digital tools.

In compliance with all legal requirements and in keeping with process security, all steps necessary for an orderly shutdown of our plants were taken, even though these were in some cases staggered in different parts of the world and always took place with an eye to the state of the pandemic. In this context, the transition to mobile work formats and the use of HR instruments such as reduced working hours that were used at our sites are particularly noteworthy. The fact that COVID-19 developed in China before the rest of the world led to the advantage of having once already gone through both lockdown and the restart of plants in full. As a result, we gained elementary knowledge that contributed to an orderly and systematic approach in other regions of the world as well.

SHAPING THE TRANSFORMATION: SUCCESS FACTORS FOR SUCCESSFUL TRANSFORMATION

However much the coronavirus crisis continues to occupy us during 2021 and however much the world of the new normal may differ from the old reality, the major process of restructuring the automotive industry will continue, driven primarily by e-mobility, decarbonization and digitalization. We thus continued to work on our future-oriented program of transforming the workforce in 2020 despite all the exceptional conditions. An important foundation for this is the major research project “EMDi@VW – Impact of Electric Mobility and Digitalization on the Quality and Quantity of Employment at Volkswagen,” which we conducted together with the Fraunhofer Institute for Industrial Engineering IAO in Germany in 2019 and 2020. The project was financed by the Volkswagen Sustainability Council under the patronage of Michael Sommer, the long-standing president of the German Trade Union Confederation.

The Fraunhofer IAO’s task was to examine the quantitative and qualitative changes in employment at Volkswagen in the course of the change in the automotive industry and review the appropriateness of HR policy instruments for managing this change.

Our central question was, in particular, whether the Volkswagen Group may, as a result of the transformation, find itself in a situation in which employment must be reduced more quickly than we can do this in a socially acceptable way through early retirement programs.

The completion of the study gave us a clear picture of the areas in which we will be building up employment in the future, where we will have to reduce it in the next few years and which qualification-related changes must be expected. In this respect, the study serves us as a blueprint for the workforce transformation, on which we base our activities. We have deliberately chosen to publish the study publicly in order to make our approaches and analyses accessible to other companies in the transformation as well.

The restructuring of the Volkswagen Group will only be successful if we involve our employees, train them, prepare them for the forthcoming changes as well as possible, give them a clear perspective and allow them to participate.

http://publica.fraunhofer.de/dokumente/N-615480.html
We have thus defined five principles for the workforce transformation that are geared to our social and employment guidelines and our HR strategy:

- Transparency, responsibility and participation
- Fair and attractive employer
- Increase in diversity and inclusion
- Transformation-oriented training
- Expansion of preventive health and occupational safety

Tailored measures, which are described in more detail in the subsequent parts of this chapter, were taken in the reporting year to implement the ambition and targets for the workforce transformation focus area.

TRANSPARENCY, RESPONSIBILITY AND PARTICIPATION

The Volkswagen Group employs more than 662,000 people, of which 118,673 at Volkswagen AG. Around one sixth of our employees are women. We work in 36 countries in Europe and 37 countries in the Americas, Asia and Africa and operate 118 production locations around the world, of which six are Volkswagen AG production locations. In all these places, we assume responsibility for the employees and their families, but also for social and economic development around our sites. For every employee, we aim for an employment relationship that is characterized by fair and transparent pay, good development opportunities, participation and involvement in the work process and a high level of job security.

We are guided in our actions by clear values, especially in the transformation phase. The Volkswagen Group Essentials set out the common basic values for all brands and companies within the Group. Seven simple “We” statements describe what the Group stands for: “We take on responsibility for the environment and society”, “We are honest and speak up when something is wrong”, “We break new ground”, “We live diversity”, “We are proud of the work we do”, “We not me”, “We keep our word”.

OPINION SURVEY MEASURES EMPLOYEE SATISFACTION

We attach great importance to actively involving our employees in processes and to ensuring that their opinions, assessments and criticism are heard. In our Opinion Survey, an employee survey in 172 companies of the Group, we measure the status of our internal employer attractiveness with a targeted question. In addition, we are also interested in our employees’ views on the questions of where the Group stands on the topic of integrity and how they assess working relationships in the Group. The results of the Opinion Survey thus serve to identify possible improvements and inform managers of where action needs to be taken in their organizational units. In defined follow-up processes, managers take suitable measures in dialog with their employees and are supported in doing this by the Opinion Survey Group team, which provides various tools for this – such as a method toolbox.

In addition, a new, compulsory top-down approach has been developed, which was used for the first time following the discussions of results in January to July 2020. For the regular managers’ measures discussion, a discussion of the measures derived and their implementation status will take place with a top-down approach, beginning with the respective division manager/board member and proceeding to the lowest management level. The aim is to ensure the implementation of the measures derived from the organizational units in a lasting manner.

The 2020 Opinion Survey was carried out at 172 companies in 38 countries. 436,326 of the 540,051 employees in the companies surveyed responded. This is equivalent to a response rate of 81%. In 2020, the score on the employee satisfaction index – a principal indicator based on the Opinion Survey that is obtained from the sum of all responses to the survey – was 82.2 out of 100 possible index points and thus slightly above the score in the previous year (2019: 80.0 index points).

EMPLOYEE RIGHTS TO PARTICIPATION

When establishing cooperative labor relations marked by social harmony, we are guided by universally valid human rights and the standards of the International Labour Organization. Volkswagen is committed to global compliance with freedom of association and recognizes the basic right of all employees to form trade unions and workers’ representations. Employees’ right to negative freedom of association is also respected. The recognition of the right of all employees to form trade unions and workers’ representations also includes the entire value chain and all international Group sites and represents a key component of the Social Charter. The scope of the Social Charter extends to Volkswagen AG and the Volkswagen Group’s controlled companies. The principles of the Social Charter were also integrated as a component of the sustainability requirements in the supply chain and in the Volkswagen Code of Conduct for Business Partners. Due to different political and legal conditions, implementation of the OECD and ILO standards at all global production sites is not possible to the same extent as in the European Union. Freedom of association is realized in compliance with the laws applicable in the various countries and locations. A particular challenge therefore arises in states that have not signed the ILO Convention on Freedom of Association and Protection of the Right to Organize. In order to bridge the tension between the different national conditions and the interest in the greatest possible achievement of the right to organize, the Volkswagen Group relies on a long tradition of also organizing company labor relations in countries in which the ILO Convention on Freedom of Association and Protection of the Right to Organize has not been recognized. Concrete examples include Volkswagen do Brasil Indústria de Veículos Automotores Ltda., Škoda Auto Volkswagen India Pvt Ltd. and Ducati Motor (Thailand) Co., Ltd. Cases of discrimination due to membership of a trade union can be reported in the Volkswagen Group’s whistleblower system. These cases have, to date, not been separately statistically recorded because a statistical record of discrimination incidents does not differentiate between the causes of the discrimination.
The form of our working relationships is also managed through a number of charters and declarations that we have agreed with the Group European Works Council and Global Group Works Council. These give our employees security with regard to their collective rights at the workplace and set out the principles of the Volkswagen Group’s labor policy. Together with the codetermination committees or the employee representatives, we implement these agreements at the respective sites. They include:

- the Declaration on Social Rights and Industrial Relations at Volkswagen (Social Charter), which is geared to the relevant ILO conventions,
- the Charter on Labor Relations, which sets out additional information, consultation and co-determination rights for employee representatives of the brands, companies and locations represented by the Group European Works Council and the Global Group Works Council,
- the Charter on Temporary Work, in which Group management as well as the Group European Works Council and the Global Group Works Council have agreed on principles relating to temporary work, for example guide values for the ratio of temporary to permanent employees, equal pay (for equal work), training measures and the limitation of employment periods with a subsequent review as to whether to take on the employee permanently, and
- the Charter on Vocational Education and Training, in which professional training is established as a central part of labor relations.

In addition, there are a number of locally applicable agreements with the relevant responsible trade unions that stipulate, for example, standards for further training and for preventive healthcare measures. These fundamental standards and agreements underpin the rights of the employees and their elected representatives at Group level in the Group European Works Council and the Global Group Works Council. Executive managers and employee representatives meet regularly to consult on relevant issues. All members of the Group European Works Council and the Global Group Works Council attend at least one joint session of the two works councils every year. As well as discussing the current situation at the various sites, the respective HR managers and Group executive management also share information about product and workforce plans as well as social welfare and personnel standards.

We want to enable the most comprehensive representation of employee interests possible in our Group. We cooperate with the relevant trade unions all over the world. Many companies in the Group also have a supervisory board on which the workforce is represented.

The Charter on Labor Relations allows employee representatives around the world to conclude agreements with local management on specific rights to information, consultation and co-determination. This far-reaching form of participation has proved highly successful over many decades.

**EMPLOYEE IDEAS WANTED**

Through their creativity, their knowledge and their initiative, employees take on responsibility for improving processes and products and ultimately help us to achieve our sustainability goals. In 2020, more than 14,850 ideas were submitted as part of idea management and savings of €43,554,277 were achieved at Volkswagen AG’s sites.

Our own innovation fund also supports the development of business ideas fit for the future. The common goal is to make a contribution to job security or to expanding employment at Volkswagen sites through products and services along and outside of the automotive value chain. Under an agreement between IG Metall and Volkswagen AG, the Group makes a fund of €20 million available for projects in new areas of business each year.

**FAIR AND ATTRACTIVE EMPLOYER**

We believe that an attractive employer is first and foremost a fair employer. That is why we adhere to the relevant national legal standards when dealing with all matters that affect our personnel. However, in line with our tradition of social partnership and the balancing of interests, we go beyond these standards: we want to allow all our employees throughout the world to share in Volkswagen’s social achievements and its high work and social standards.

Participation, initiative and individual creative opportunities are particularly important when it comes to keeping our promise to be an excellent employer. We would like our employees to be responsible, competent and confident “Company citizens” who actively take part in company affairs and get involved in decision-making processes.

In many of our companies, we have guaranteed the existence of jobs through collective bargaining agreements. In Volkswagen AG in Germany, we have extended job security until 2029 through the Digital Transformation Roadmap, which underlines our appreciation for industrial work. Through 2023, and possibly beyond, the Volkswagen brand in Germany wants to invest up to €4 billion in major digitalization projects and efficient administration within this framework.
Agreements such as the Digital Transformation Roadmap provide the HR answers to various challenges at a national or international level. For example, Germany and other parts of Western Europe face not only risks resulting from demographic changes but continue to face shortages of skilled workers who we will need for cutting-edge areas of work. In order to fill jobs with experienced and creative IT, digitalization and electrification experts even more to the benefit of the candidates, we are strengthening our efforts in digitalizing the internal recruitment processes. Applicants are at the heart of our activities, and we are increasingly addressing them via digital formats due to the current situation. This also includes our “Hello Possible 2.0” recruitment campaign for the Volkswagen brand, which we ran exclusively in digital space and which is aimed at selected experts from the areas of intuitive operability, digital transformation and emission-free mobility.

EXTERNAL EMPLOYER ATTRACTIVENESS

One strategic indicator has been defined for the financial services business: external employer ranking. This involves taking part in external benchmarking, in general once every two years. The aim is to position ourselves as an attractive employer and derive appropriate measures to achieve a ranking among the top-20 employers by 2025, not just in Europe, but globally. Volkswagen Financial Services AG was represented in various national and international best-employer rankings the last time it participated in 2019. Coming in eleventh place, it was among the top European employers in the “Great Place to Work” employer competition.

The ability to recruit top talent is of decisive importance, particularly in view of the Company’s transformation into one of the world’s leading providers of sustainable mobility solutions and the associated development of new business fields. We use the external employer attractiveness strategic indicator to check the positioning of the major passenger car-producing brands on the labor markets once a year with regard to graduates. Rankings in surveys conducted by Universum, in which we aim to achieve top scores for the Volkswagen brand, which we ran exclusively in digital space and which is aimed at selected experts from the areas of intuitive operability, digital transformation and emission-free mobility.

CREATING A WORK/LIFE BALANCE

Volkswagen has recognized the need to be able to respond flexibly and at short notice in various life situations in order to give employees the opportunity to obtain leaves of absence. We are constantly working on improving our employees’ work/life balance through flexible working time models. For example, we would like to take into account the specific needs of parents, single parents or employees who are also carers. The rules and programs here vary from country to country and are determined by the legal framework and the results of collective negotiations.

In Germany, the large number of people who take advantage of their statutory parental leave entitlement proves how many employees wish for reconcilability of work and family life. In our Company regulations too, we endeavor to take into account the fact that many employees need greater flexibility as regards their working hours and place of work. Volkswagen AG, Audi, Porsche, SEAT and Bugatti have concluded far-reaching company agreements regarding working outside company premises (mobile working).

In particular, we help our employees to care for and look after close relatives. Employees can take up to ten days’ leave at short notice in order to organize care for sick relatives, for instance. Employees can take up to six months’ leave or reduce their working hours for the same period in order to care for a relative. Employees can work part-time for up to 24 months in order to care for their families. For certain groups of employees – for example, at Volkswagen AG and Audi – there is an annual option: a conversion to paid leave may be made in place of payment of additional remuneration in accordance with the collective agreement.

FAIR AND TRANSPARENT PAY

A fair and transparent pay system and payment of fair remuneration make a significant contribution to employees’ work satisfaction. In accordance with our Social Charter, the remuneration and fringe benefits for our employees correspond at least to the legally required minimum level which is to be guaranteed in the particular country. As they are collectively agreed with trade unions, our rates of pay are usually higher than the prevailing minimum levels. Our employees are generally selected, hired and promoted on the basis of their qualifications, experience and abilities. Individual pay is based on the job performed. In accordance with our values, matters of ethnic origin, skin color, gender, disability, ideology, faith, nationality, sexual orientation, social background or political beliefs – provided these are based on democratic principles and tolerance towards those who hold different views – play no part in classification.

Employees of Group companies enjoy further Company benefits. Depending on location, these may include subsidized transport and meals, employee terms at cooperation partners and discounts on certain leisure activities. Additional healthcare or supplementary pension benefits may round off the range of company benefits at specific sites. By offering occupational pension schemes, Volkswagen AG and many of its brands and subsidiaries make an important contribution towards securing their employees’ income in old age.
We also consider childcare during working hours highly important for enabling work/life balance for our employees. The Volkswagen Group in Germany and abroad therefore endeavors to offer childcare geared to specific groups of people. Additionally, we provide daycare centers near a number of our sites. Our reinstatement guarantee offers a high level of flexibility. For the past 20 years or so, Volkswagen AG employees have been able to take up to eight years’ leave of absence without having to give a reason. Regardless of whether this leave is for career development purposes or for parental leave, employees have a guaranteed right to re-employment on the same terms and conditions as before.

With these measures, we want to help not only meet the expectations of a modern working environment geared to human needs but also provide answers to many of the most urgent questions of the current transformation.

**INCREASE IN DIVERSITY AND INCLUSION**

We want to boost our employees’ satisfaction and motivation and their willingness to constructively participate in change processes through equal opportunities, an attractive and modern working environment and a work organization fit for the future. The basis for this is an open, positive and partnership-based culture, a high level of diversity in the workforce and exemplary and inspiring leadership. Diversity, respect, tolerance and equal opportunities are decisive factors here. Talented people of any age and gender contribute to the future of our Group with their various skills and experiences.

We regard the diversity of our employees with their broad range of experience, viewpoints and problem-solving ideas as a pillar of our ability to shape the workforce transformation fairly. Through our diversity management and the implementation of the Diversity Wins @Volkswagen program, we want to deliberately expand approaches for promoting diversity. The Group’s employees and diversity management founded the “We Drive Proud” LGBTIQ*_&-_friends network in 2019 with the support of Volkswagen AG’s Board of Management. The network not only represents the interests of lesbian, gay, bisexual, transgender*, intersex* and queer people, it first and foremost aims to help to shape cultural change in the Group. “We Drive Proud” sees itself as an open, Group-wide initiative that maintains dialog with existing networks, e.g. those at Audi or Porsche. The Volkswagen Group intends to support the formation of employee networks even more strongly in the future and thus to promote personal initiative and the willingness to take on responsibility. A similar network is currently being created at SEAT.

We have also codified the aim of diverse workforces in key documents. The declaration “We live diversity” as one of the seven Group Essentials is thus a firm part of the Volkswagen Group’s cultural DNA. The importance of equal opportunities and a high level of diversity in the workforce is also firmly anchored in the TOGETHER 2025* Group strategy. This is very important to us, because an open corporate culture increases employee motivation and performance and also customer satisfaction. This is because we are most likely to achieve customer satisfaction if all employees work creatively on innovative solutions with their different experiences and perspectives.

The key to a diverse corporate culture is the systematic pursuit of a holistic diversity management approach: we not only want to establish processes geared to equal opportunities but also set and pursue targets for measurement of the effectiveness of our programs and measures. We have enshrined minimum standards for sustainably promoting diversity and equal opportunities in the HR Compliance Group policy we adopted in 2019. Since then, each company of the Group has been required to have at least one contact for the topic of diversity and equal opportunities. In addition, we raise employee awareness and train employees on the importance of diversity and inclusiveness and use best practice examples and role models within the Group. This approach is intended to sustainably promote diversity and equal opportunities in our Group and helps us on the path of transformation.

**DIVERSITY INDEX AS STRATEGIC KPI**

Our diversity approach centers around quotas for women in managerial positions and targets for the internationality of our top management. These two figures are combined in our diversity index, which has been in force since January 1, 2017. The diversity index forms part of our HR strategy and applies throughout the Volkswagen Group (in all companies with more than 1,000 employees) with its active workforce. With this index, we manage measures and assess the extent to which they have been implemented. At 15.3% in 2020, the proportion of women in management (comprising managers, senior managers and top managers [including the members of the Group Board of Management]) was slightly higher than the previous year’s level. We want to increase the proportion of women in management to 20.2% by 2025. We aim to increase the level of internationalization in top management, the uppermost of our three management tiers, to 25.0% by 2025. In the past fiscal year this was 18.7% (2019: 18.4%). The figures for the proportion of women and internationalization are included with equal weighting in an index that was set to 100 in each case for 2016. Both indices were equally weighted when setting targets and were included in the compilation of the overall index (proportion of women figure and internationalization of top management figure). An increase in this index to 119 was planned for 2020. This target was narrowly missed with a figure of 118. These targets are decided by the Group Board of Management and apply to the whole organization (in companies with more than 1,000 employees).
PURSUING GOALS FOR INCREASING THE PROPORTION OF WOMEN IN ACCORDANCE WITH GERMAN LAW

We have also formulated goals as regards the proportion of women in management for Volkswagen AG in accordance with German law. In line with Germany’s law on equal participation for women and men in executive positions, Volkswagen AG has set itself targets for the proportion of women in management for the period to the end of 2021 of 13% on the first level of management (top managers and senior managers excluding the Group Board of Management) and 16.9% on the second level (non-senior managers) within the active workforce. As of December 31, 2020, the proportion of women in the active workforce at the first level of management was 10.3% and at the second level of management it was 16.7%. The Group’s Board of Management and Supervisory Board are regularly updated on the progress we are making towards these targets.

In the reporting year, the proportion of women in managerial roles, measured in terms of the total workforce, was already 11.4% in senior management and 16.5% in non-senior management in Volkswagen AG. The proportion of women in top management increased to 6.5% in the reporting year. The proportion of women in management generally in Volkswagen AG thus came to 13.9%, compared to 13.8% the year before.

SUPPORTING INCLUSION AT THE WORKPLACE

Our understanding of diversity extends beyond gender equality, sexual orientation and internationality. We also pay attention to the integration of employees with disabilities. On an international level, we operate five protected workshops and are setting up additional workstations for more than 300 people with disabilities at the ŠKODA production sites in the Czech Republic.

Our responsibility for keeping employees in valuable activities for their entire career if possible also extends to the needs of employees with a restricted working capacity. After all, individual forms of work organization can result in significantly higher performance and job satisfaction levels for these groups of employees. The Work2Work program provides a good example. Since 2001, Volkswagen AG has opened up new career opportunities within the business for employees with differing abilities. In Wolfsburg, nearly 700 employees are currently employed in Work2Work jobs in around 130 different areas.

TRANSFORMATION-ORIENTED TRAINING

As an employer, we want our employees to be able to work creating value at workplaces in our Group for their entire working lives. This requires not just for them to retain their health, but also adjusting skills and capabilities to the quickly changing environment. That is why training our employees and adjustment to new work and career profiles is a key action area in the workforce transformation.

This is because the comprehensive specialist qualifications of our employees remain the basis for the highest technological excellence. The electrification of the vehicle fleet, the transition towards connected, autonomous driving and the digital transformation of our Group mean that employees already need very different qualifications today. We handle these changes with our differentiated vocational and advanced training system with its tailored training measures.

DUAL VOCATIONAL TRAINING LAYS THE FOUNDATION

Dual vocational training at the Volkswagen Group supports the workforce transformation. With its flexible combination of practical activities and theoretical knowledge, vocational training prepares our young professionals for the forthcoming challenges. On an international level, we implement the high German training standards but also comply with the relevant national standards and regulations.

1 Subject to approval by the Group Board of Management. Basis: 62 companies, each with more than 1,000 employees.
In 2020, the Volkswagen Group trained 17,939 young people. We also support the career development of new entrants once they have completed their apprenticeship. For example, particularly talented young specialists are nurtured in talent groups.

**TRAINING SKILLED WORKERS AND MANAGERS**

At the Volkswagen Group Academy, which is responsible for vocational and advanced training, skilled workers can choose from a broad range of advanced training courses. These range from further training on topics of the future and occupational or cross-disciplinary areas of general interest to specific qualifications in vocational groups and even comprehensive personnel development programs. The range of learning opportunities is being expanded continuously. The global COVID-19 pandemic meant that only a restricted range of options was available in 2020, particularly in multidisciplinary areas. A greater shift from classroom seminars to online seminars is taking place. The establishment of a new learning ecosystem is also planned for 2021. The range of learning opportunities is being expanded continuously.

We ran the Senior Management Program as a remote learning program in 2020 following successful pilots in 2019. To this end, we are cooperating with the Hasso Plattner Institute (HPI) in Potsdam and the École des hautes études commerciales de Paris (HEC). A new management program for newly appointed managers was launched in collaboration with the company Malik St. Gallen.

The majority of our development programs and selection procedures for managers are standardized throughout the Group.

In view of the transformational challenges, the Volkswagen Group puts a special emphasis on employees’ ability to act agilely and entrepreneurially. Until recently, there has, however, been a lack of uniform standards that define concrete agile skills. We therefore developed a skills matrix for training in the area of agile business processes together with 30 major listed companies from Germany, Austria and Switzerland in the DACH30 initiative. In the course of this, the Volkswagen Group Academy established a comprehensive training portfolio on agility. 38 trainings were held in 2020. Together with the Agile Center of Excellence, which was founded in 2015, and other internal experts on agility, the Agile Challenge was published in 2020 as a digital self-learning program in order to make knowledge and experience on agile working available to more than 1,000 interested parties in the Group.

**INVESTMENT IN DEVELOPMENT OF SKILLS FOR NEW TECHNOLOGIES**

In the current upheaval of the automotive industry, the Volkswagen Group’s particular focus in education is on training employees on important future technologies and closely supporting them in the transformation process. For example, the Group implemented a comprehensive qualification program for around 8,000 employees for a ramp-up of the new electric models at the pilot site for e-mobility in Zwickau. In addition, more than 2,000 employees have passed through the e-mobility training center and completed its full-day training courses.

By 2023, Volkswagen AG wants to create at least 2,000 new jobs connected to digitalization at its traditional West German sites. For the HR transformation in the course of the digitalization drive, the Group is increasing its training budget relating to new technologies by €60 million to a total of around €160 million. In addition, an online university will be set up, learning will be strengthened via online platforms and vocational and advanced training will be adapted to new requirements. This includes, for example, the Faculty 73 program with which we broaden the knowledge basis for the digital transformation in the Group. We train 100 software developers each year here for our own needs. The AutoUni’s two-year training program is designed for employees and in-house and external candidates with an affinity for IT.

In this way, we open up career advancement opportunities to undiscovered talents. The future experts acquire all the necessary skills for a successful career as a software developer in the automotive industry within the training. This includes, for example, programming in Java, mathematics for software developers, technical and theoretical computer science, expertise in computer networks, databases and mobile app programming. Volkswagen plans to transfer the participants of the first academic year to the permanent workforce at the start of 2021 following intensive training. In March 2020, 100 people became the second year of students to begin the training program. This second year of students was even more diverse than the first generation of Faculty 73, with women totaling 9% of the students and participants coming from more than seven countries. The recruitment of two refugees who the Group’s refugee aid had previously supported with language courses is particularly noteworthy.

The Volkswagen Group is also supporting the establishment of an innovative programming school in Wolfsburg. The 42Wolfsburg e.V. Association is setting up the “42Wolfsburg” IT school in cooperation with the private and nonprofit École 42, whose head office is in France. The training institution is set to open in Wolfsburg’s Markthalle at the start of 2021. Up to 600 students will then be trained without a teacher or fixed lecture timetable using an innovative training concept. The school particularly promotes practice-oriented learning in line with the peer learning principle, in which the students learn from and with each other. Like at École 42 in Paris, the free training at 42Wolfsburg is also open to applicants who have not graduated high school or college, irrespective of their age, sex or origin.
EXPANSION OF PREVENTIVE HEALTH AND OCCUPATIONAL SAFETY

The coronavirus pandemic has shown how important employees and their health are. Against this background, we are further expanding preventive healthcare and occupational safety in the Volkswagen Group because physical well-being is a prerequisite for being able to perform professionally and cope with mental and physical strain that are typical of work in a manufacturing company undergoing transformation. In the area of health, sustainability means for us that we want to help every employee to retire healthy. This long-term approach also helps our Group to cope with demographic change in the form of an aging population, which is now typical of many industrial countries in which we operate.

Holistic health management at Volkswagen already goes beyond the statutory preventive healthcare and occupational health and safety requirements. It also includes aspects such as work organization, ergonomics, prevention, integration and rehabilitation, along with leadership culture.

GROUP POLICY SETS OUT PRINCIPLES FOR OCCUPATIONAL HEALTH AND SAFETY

Our employees receive medical care at all our sites in accordance with the relevant national legal regulations and internal rules and on the basis of Group guidelines on protecting and promoting health. All Group sites have at least one facility for dealing with medical emergencies. Most of them also offer medical care provided by a company doctor.

A Group policy regulates the responsibility for occupational health and safety uniformly for all the Group’s brands and companies. Healthcare is managed at Group level by the Head of Group Occupational Health and Safety, who is also Volkswagen AG’s senior physician. The senior physician reports directly to the Chief Human Resources Officer. In organizational terms, the management of occupational safety at Group level is assigned to Group Occupational Health and Safety. The Head of Occupational Safety also reports directly to the Chief Human Resources Officer.

The Group Steering Committee for Healthcare makes decisions on strategic direction and coordinates topics of fundamental importance across brands. The steering committee initiates projects, ensures the transparency of expert knowledge and organizes the leveraging of synergies in healthcare. Its participants are the Head of Group Healthcare and the brands’ heads of healthcare or their representatives. The Group Steering Committee for Occupational Safety prepares and coordinates decisions on the strategic direction and development of occupational safety within the framework of the governance model of occupational safety. Its participants are the Head of Group Occupational Safety and the brands’ heads of occupational safety or their representatives.

PREVENTION AND REHABILITATION PROGRAMS

In addition to meeting statutory requirements, Volkswagen’s Health department focuses to a large extent on preventive approaches. Employees are therefore offered regular checkups. In fiscal year 2020, 553 initial and 1,445 subsequent checkups were carried out by the Health Department. Since the introduction of the service in 2010, a total of 88,999 Volkswagen checkups have been completed (active permanent workforce). As part of the discussion of the checkup findings, employees are offered customized healthcare services. New scientific knowledge is piloted in this context and made available to employees as quickly as possible.

GREATER OCCUPATIONAL SAFETY THROUGH THE SAFETY FIRST STRATEGY

Like preventive healthcare and emergency health provision, the continuous improvement of occupational health and safety is vitally important to us. In 2004, the Volkswagen Group adopted an internationally valid occupational safety policy. Among other things, it is intended to ensure the development of concepts in Group companies for continually improving occupational safety at work. This policy is currently being revised.

In the area of occupational safety, sustainability means for us that employees do not suffer accidents when working. Volkswagen is supporting this objective through the introduction of the Safety First strategy. The vision of this strategy is to anchor occupational safety as a guiding principle in the actions of all managers and employees. All occupational safety processes are to be known and to be applied reliably. Workplaces are to be safe and the Occupational Safety department is to be involved in shaping them. All managers and employees are to be informed and trained and act in line with safety requirements.

The strategy requires all Volkswagen Group production sites to comply with the ISO 45001 standards and more specific Group requirements. The corresponding management systems will be introduced autonomously at the Group brands by the end of 2021. At the end of 2020, a total of 46 Group sites were certified in accordance with ISO 45001.

In addition to the number of certified management systems, the Volkswagen Group uses the accident frequency and accident severity for employees excluding temporary agency workers as a key performance indicator for reporting. The accident frequency index provides information on the number of accidents at work as a proportion of the total of all hours worked. It is calculated as the number of accidents at work reported x 1 million divided by total number of hours worked. The accident severity index shows the severity of the accidents reported by showing the total number of working days lost due to accidents reported in the fiscal year as a proportion of the total of all hours worked. It is calculated as the number of
working days lost through accidents reported in the fiscal year x 100,000 divided by the number of hours worked. The Group uses a Group process standard to provide cross-brand information in the event of serious or fatal accidents involving our own employees or workers from partner firms. On this basis, specific measures can be taken to prevent similar accidents across all our sites in the future. In 2020, the accident frequency was 3.5 (2019: 3.8) in the Volkswagen Group and 5.5 (2019: 5.4) in Volkswagen AG. Accident severity was 5.1 (2019: 5.5) in the Volkswagen Group and 7.4 (2019: 6.4) in Volkswagen AG. The Volkswagen Group and Volkswagen AG did not record any fatal accidents involving our own employees in the reporting year.

RETIENING THE ABILITY TO PERFORM AND HEALTH

Our employees’ physical performance and mental well-being are crucial for successfully and responsibly overcoming the challenges of the workforce transformation. We created the prerequisites here with the holistic health management system established across the Group and with the Safety First strategy. In close cooperation with executive managers and the Works Council, it has been possible to closely limit the health effects of COVID-19 and achieve maximum protection for employees, suppliers and service providers.

MANAGING THE WORKFORCE TRANSFORMATION AND MAKING IT MEASURABLE

With our five principles of action, we have established a holistic concept in order to support our workforce through the automotive industry’s approximately ten-year transformation corridor as well as possible and also make decisive contributions to the Volkswagen Group’s competitiveness. It is important to us that the workforce transformation is a stakeholder-oriented approach that also incorporates the local companies at our locations and the future viability of economies in which we operate and are frequently also the largest private employer.

We want to follow this path resolutely and to be measured by concrete progress with regard to reaching our targets. To this end, we use strategic key performance indicators that are partly anchored in the Group HR strategy and partly in a specific KPI: for internal employer attractiveness we conduct annual employee surveys and measure satisfaction using our Opinion Survey (2020: 88.2 in the Volkswagen Group; 86.9 in Volkswagen AG). The diversity index (2020: 118) is the key performance indicator for us regarding increasing the proportion of women in management and the level of internationalization in top management.
The following index provides an overview of the disclosures required for the nonfinancial report in accordance with HGB section 315c in conjunction with sections 289c through 289e, together with appropriate references to the sections of this Group Sustainability Report in which these disclosures may be found.

EY has conducted a voluntary limited assurance engagement in accordance with ISAE 3000 (Revised) on the elements of the Group Sustainability Report that make up the nonfinancial report.

All text passages, tables and graphics in the Group Sustainability Report that form part of the nonfinancial report are highlighted. References to disclosures outside the nonfinancial report are supplementary information and do not form part of the nonfinancial report.

In the course of evaluating the statutory reporting requirements, Volkswagen expanded its materiality analysis in 2017 and revised the action areas in terms of the requirements of the CSR Directive Implementation Act (CSR-RUG): in line with CSR-RUG, this nonfinancial report will concentrate on focus areas and enablers that are necessary for an understanding of the Volkswagen Group's business development, overall performance and position as well as the Volkswagen Group's impact on nonfinancial aspects.

The revision of the materiality analysis started the previous year was continued and the creation of a new sustainability narrative concluded in the 2020 reporting year. The sustainability narrative defines four focus areas and five enablers for the Volkswagen Group that establish a new strategic basis. Some 60 stakeholders were involved in this process, including decision-makers and disseminators from various divisions and brands as well as representatives of the Sustainability Council. The starting point for our materiality analysis has always been the Sustainable Development Goals formulated by the United Nations, which describe the social challenges facing companies.

### NONFINANCIAL REPORT INDEX

<table>
<thead>
<tr>
<th>Nonfinancial aspect</th>
<th>Focus area/enabler</th>
<th>Section of sustainability report</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-company topics affecting all nonfinancial aspects</td>
<td>Governance</td>
<td>- Sustainability and Materiality</td>
<td>15–17</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Sustainability Management</td>
<td>18–20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Integrity and Compliance</td>
<td>33–39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Stakeholder engagement</td>
<td>- Stakeholder Management</td>
<td>21–22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>83</td>
</tr>
<tr>
<td></td>
<td>Digitalization</td>
<td>- Digitalization</td>
<td>26–32</td>
</tr>
<tr>
<td>Environmental matters</td>
<td>Governance</td>
<td>- Environmental Management</td>
<td>41–43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>83–85</td>
</tr>
<tr>
<td></td>
<td>Decarbonization</td>
<td>- Decarbonization</td>
<td>45–46, 48–53</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>87–88</td>
</tr>
<tr>
<td></td>
<td>Circular economy</td>
<td>- Circular Economy</td>
<td>55–58</td>
</tr>
<tr>
<td></td>
<td>Responsibility in supply chains and business</td>
<td>- Responsibility in Our Supply Chain</td>
<td>64–68</td>
</tr>
</tbody>
</table>

---

APPENDIX
<table>
<thead>
<tr>
<th>Nonfinancial aspect</th>
<th>Focus area/enabler</th>
<th>Section of sustainability report</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee matters</td>
<td>Workforce transformation</td>
<td>- Workforce Transformation</td>
<td>70–79</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Workforce Transformation</td>
<td>90–93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td></td>
</tr>
<tr>
<td>Culture change</td>
<td></td>
<td>- Workforce Transformation</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td></td>
</tr>
<tr>
<td>Social matters</td>
<td>Corporate citizenship*</td>
<td>- Corporate Citizenship</td>
<td>24–25</td>
</tr>
<tr>
<td>Respect for human rights</td>
<td>Responsibility in supply chains and business</td>
<td>- Responsibility in Our Supply Chain</td>
<td>64–68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Responsibility in Our Group</td>
<td>60–63</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>89</td>
</tr>
<tr>
<td>Governance</td>
<td></td>
<td>- Integrity and Compliance</td>
<td>33–39</td>
</tr>
<tr>
<td>Combating corruption and bribery</td>
<td>Governance</td>
<td>- Integrity and Compliance</td>
<td>33–39</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>83</td>
</tr>
<tr>
<td>Responsibility in supply chains and business</td>
<td></td>
<td>- Responsibility in Our Supply Chain</td>
<td>64–68</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Tables and KPIs</td>
<td>89</td>
</tr>
</tbody>
</table>

* This action area relates to both environmental and social matters.

Reportable connections have been identified in this nonfinancial report to amounts reported in the 2020 annual or consolidated financial statements. In fiscal year 2020, negative special items in connection with the diesel issue amounting to €–0.9 (–2.3) billion affected operating profit in the Passenger Cars business area. These items resulted mainly from legal risks.

In response to the currently known legal risks related to the diesel issue, the provisions for litigation and legal risks as of December 31, 2020 included an amount of around €1.9 (2.9) billion based on existing information and current assessments. Insofar as these can be adequately measured at this stage, contingent liabilities relating to the diesel issue were disclosed in the notes to the consolidated financial statements in an aggregate amount of €4.2 (3.7) billion, whereby €3.5 (3.4) billion of this amount results from lawsuits filed by investors in Germany.

Depending on the jurisdiction concerned, the miscellaneous provisions include risk provisions for any noncompliance with legal emissions limits. Their measurement takes into account, among other things, the respective sales volume and the legally defined tax or the cost of acquiring emission rights from other manufacturers. Advantage has been taken of synergies between individual brands of the Volkswagen Group by establishing emission pools where possible. Additional information on this matter can be found in the Annual Report in the notes to the consolidated financial statements.
The following tables of key performance indicators give an overview of further selected Volkswagen Group KPIs. The tables are thematically assigned to the chapters. The figures in the tables for December of the preceding year may include an estimate if, for example, they are based on bills from power suppliers that were not yet available at the time of compilation. In the next data collection round, these estimates will be replaced with the finalized figures for December.

The following should be noted regarding the environmental key performance indicators: the scope of the report for the Scope 1 GHG emissions was expanded in 2020 in order to achieve harmonization with the Group objective of production in line with the Science Based Targets initiative. The CO₂ equivalents are no longer reported separately but included in the Scope 1 GHG emissions in the reporting years shown. In addition, the scope of the report for energy consumption was expanded to include energy consumption in the reporting years shown. In addition to the production sites’ energy consumption, energy supplies to third parties are also presented in the reporting years shown.

### STRATEGY AND MANAGEMENT

<table>
<thead>
<tr>
<th>KPI</th>
<th>Unit</th>
<th>2020</th>
<th>2019</th>
<th>Notes and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reputation index Germany</td>
<td>in %</td>
<td>57</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Reputation index USA</td>
<td>in %</td>
<td>78</td>
<td>55</td>
<td></td>
</tr>
<tr>
<td>Reputation index China</td>
<td>in %</td>
<td>92</td>
<td>93</td>
<td></td>
</tr>
<tr>
<td>Integrity index</td>
<td>Figures unchanged because survey for 2020 not conducted until 2021</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volkswagen Passenger Cars Germany</td>
<td>Value</td>
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<td>71</td>
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<td>Audi’s German sites</td>
<td>Value</td>
<td>72</td>
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<tr>
<td><strong>Reduction of environmental impact of production (UEP)</strong></td>
<td>Change compared to baseline of 2010 Cars and light commercial vehicles</td>
<td></td>
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<tr>
<td><strong>In the Volkswagen Group</strong></td>
<td>Change in %</td>
<td>–32.8</td>
<td>–36.7</td>
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<tr>
<td>Total reduction of environmental impact of production (UEP)</td>
<td>Change in %</td>
<td>–35.5</td>
<td>–39.5</td>
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<tr>
<td>Specific energy requirements</td>
<td>Change in %</td>
<td>–13.1</td>
<td>–20.4</td>
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</tr>
<tr>
<td>Specific CO₂ emissions</td>
<td>Change in %</td>
<td>–61.5</td>
<td>–59.4</td>
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</tr>
<tr>
<td>Specific water consumption</td>
<td>Change in %</td>
<td>–17.7</td>
<td>–21.6</td>
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</tr>
<tr>
<td>Specific waste for disposal</td>
<td>Change in %</td>
<td>–57.5</td>
<td>–59.5</td>
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<tr>
<td><em>(production-specific volumes only)</em></td>
<td>Change in %</td>
<td>–11.4</td>
<td>–24.4</td>
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<tr>
<td><strong>In Volkswagen AG</strong></td>
<td>Change in %</td>
<td>–7.3</td>
<td>–22.0</td>
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<tr>
<td>Total reduction of environmental impact of production (UEP)</td>
<td>Change in %</td>
<td>–6.4</td>
<td>–24.6</td>
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<tr>
<td>Specific energy requirements</td>
<td>Change in %</td>
<td>–18.6</td>
<td>–20.3</td>
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<tr>
<td>Specific CO₂ emissions</td>
<td>Change in %</td>
<td>4.7</td>
<td>–12.8</td>
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</tr>
<tr>
<td>Specific water consumption</td>
<td>Change in %</td>
<td>–40.5</td>
<td>–45.6</td>
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</tr>
<tr>
<td>Specific waste for disposal</td>
<td>Change in %</td>
<td>–10.0</td>
<td>–11.5</td>
<td></td>
</tr>
<tr>
<td><em>(production-specific volumes only)</em></td>
<td>Change in %</td>
<td>2.12</td>
<td>2.45</td>
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<tr>
<td><strong>Energy consumption of production (absolute)</strong></td>
<td>GRI 302–1, 302–4</td>
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<td><strong>Total (Group)</strong></td>
<td>in million MWh/year</td>
<td>21.59</td>
<td>24.26</td>
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<tr>
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<td>12.40</td>
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<td>in million MWh/year</td>
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<td>2.45</td>
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<tr>
<td>of which other divisions</td>
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<td>1.25</td>
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<tr>
<td>KPI</td>
<td>Unit</td>
<td>2020</td>
<td>2019</td>
<td>Notes and comments</td>
</tr>
<tr>
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<td>-----------------------------</td>
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</tr>
<tr>
<td>Heat</td>
<td>in million MWh/year</td>
<td>6.04</td>
<td>6.60</td>
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<td>of which cars and light commercial vehicles</td>
<td>in million MWh/year</td>
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<td>5.82</td>
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<tr>
<td>of which Volkswagen AG</td>
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<td>1.75</td>
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<tr>
<td>of which other divisions</td>
<td>in million MWh/year</td>
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<td>0.77</td>
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<td>Fuel gases for manufacturing processes</td>
<td>in million MWh/year</td>
<td>3.75</td>
<td>4.38</td>
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<tr>
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<td>in million MWh/year</td>
<td>3.68</td>
<td>4.30</td>
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<tr>
<td>of which Volkswagen AG</td>
<td>in million MWh/year</td>
<td>0.69</td>
<td>0.80</td>
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<tr>
<td>of which other divisions</td>
<td>in million MWh/year</td>
<td>0.07</td>
<td>0.09</td>
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<tr>
<td>Energy supplies to third parties</td>
<td>in million MWh/year</td>
<td>1.05</td>
<td>1.11</td>
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**Energy consumption (specific)**

<table>
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<th>2019</th>
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<tr>
<td>Total</td>
<td>in KWh/vehicle</td>
<td>2,189</td>
<td>2,006</td>
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<tr>
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<td>4,682</td>
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<td>in KWh/vehicle</td>
<td>1,157</td>
<td>1,052</td>
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<td>in KWh/vehicle</td>
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<td>2,293</td>
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<td>in KWh/vehicle</td>
<td>611</td>
<td>549</td>
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<tr>
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<td>in KWh/vehicle</td>
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<td>1,640</td>
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<tr>
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<td>in KWh/vehicle</td>
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<td>405</td>
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<tr>
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<td>in KWh/vehicle</td>
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<td>748</td>
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**VOC emissions**

<table>
<thead>
<tr>
<th></th>
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<th>2019</th>
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<tbody>
<tr>
<td>VOC emissions</td>
<td>in kg/vehicle</td>
<td>1.59</td>
<td>1.68</td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in kg/vehicle</td>
<td>1.70</td>
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**VOC emissions**

<table>
<thead>
<tr>
<th></th>
<th>in tonnes/year</th>
<th>2020</th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td>of which cars and light commercial vehicles</td>
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<td>15,042</td>
<td>19,081</td>
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<td>17,778</td>
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<td>of which other divisions</td>
<td>in tonnes/year</td>
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<td>1,303</td>
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**Fresh water and waste water**

<table>
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<tr>
<th></th>
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<th>2019</th>
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<td>Fresh water volume</td>
<td>in million m³/year</td>
<td>41.75</td>
<td>47.16</td>
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<td>of which cars and light commercial vehicles</td>
<td>in million m³/year</td>
<td>32.63</td>
<td>37.75</td>
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<tr>
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<td>in million m³/year</td>
<td>3.98</td>
<td>4.47</td>
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<tr>
<td>of which other divisions</td>
<td>in million m³/year</td>
<td>9.12</td>
<td>9.41</td>
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<td>Waste water volume</td>
<td>in million m³/year</td>
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<td>30.00</td>
</tr>
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<td>in million m³/year</td>
<td>24.34</td>
<td>28.29</td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in million m³/year</td>
<td>5.00</td>
<td>4.78</td>
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<td>of which other divisions</td>
<td>in million m³/year</td>
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<td>1.70</td>
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**Freshwater and waste water**

<table>
<thead>
<tr>
<th></th>
<th>in m³/vehicle</th>
<th>2020</th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td>Freshwater volume</td>
<td>in m³/vehicle</td>
<td>3.74</td>
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<td>in m³/vehicle</td>
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<td>4.18</td>
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<td>2.67</td>
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<td>in m³/vehicle</td>
<td>6.32</td>
<td>4.47</td>
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<tr>
<td>KPI</td>
<td>Unit</td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>-----------------------</td>
<td>--------</td>
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</tr>
<tr>
<td><strong>Waste for recycling</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nonhazardous waste</td>
<td>in tonnes/year</td>
<td>457,890</td>
<td>566,242</td>
</tr>
<tr>
<td>of which cars and light commercial vehicles</td>
<td>in tonnes/year</td>
<td>391,091</td>
<td>477,811</td>
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<td>of which Volkswagen AG</td>
<td>in tonnes/year</td>
<td>67,782</td>
<td>85,120</td>
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<tr>
<td>of which other divisions</td>
<td>in tonnes/year</td>
<td>66,799</td>
<td>88,431</td>
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<tr>
<td>Hazardous waste</td>
<td>in tonnes/year</td>
<td>150,150</td>
<td>171,163</td>
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<tr>
<td>of which cars and light commercial vehicles</td>
<td>in tonnes/year</td>
<td>133,002</td>
<td>149,594</td>
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<td>in tonnes/year</td>
<td>31,949</td>
<td>38,656</td>
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<td>of which other divisions</td>
<td>in tonnes/year</td>
<td>17,148</td>
<td>21,570</td>
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<tr>
<td>Metallic waste</td>
<td>in tonnes/year</td>
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<td>2,278,751</td>
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<tr>
<td>of which cars and light commercial vehicles</td>
<td>in tonnes/year</td>
<td>1,680,323</td>
<td>2,172,734</td>
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<td>of which Volkswagen AG</td>
<td>in tonnes/year</td>
<td>290,778</td>
<td>563,996</td>
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<td>of which other divisions</td>
<td>in tonnes/year</td>
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<td>106,017</td>
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<td><strong>Waste for recycling</strong></td>
<td>Cars and light commercial vehicles</td>
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<td>Nonhazardous waste</td>
<td>in kg/vehicle</td>
<td>44.81</td>
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<td>in kg/vehicle</td>
<td>85.54</td>
<td>79.62</td>
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<td>in kg/vehicle</td>
<td>15.24</td>
<td>14.11</td>
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<td>in kg/vehicle</td>
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<td>Metallic waste</td>
<td>in kg/vehicle</td>
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<td>in kg/vehicle</td>
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<td><strong>Waste for disposal</strong> (production-specific volumes only)</td>
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<tr>
<td>Nonhazardous waste</td>
<td>in tonnes/year</td>
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<td>48,683</td>
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<td>of which cars and light commercial vehicles</td>
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<td>in tonnes/year</td>
<td>1,311</td>
<td>1,796</td>
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<td>of which other divisions</td>
<td>in tonnes/year</td>
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<td>Hazardous waste</td>
<td>in tonnes/year</td>
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<td>of which cars and light commercial vehicles</td>
<td>in tonnes/year</td>
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<td>in tonnes/year</td>
<td>8,898</td>
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<td>of which other divisions</td>
<td>in tonnes/year</td>
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<td>9,072</td>
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<td><strong>Waste for disposal</strong> (production-specific volumes only)</td>
<td>Cars and light commercial vehicles</td>
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<td>Nonhazardous waste</td>
<td>in kg/vehicle</td>
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<td>in kg/vehicle</td>
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<td>1.68</td>
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<td>Hazardous waste</td>
<td>in kg/vehicle</td>
<td>6.38</td>
<td>5.82</td>
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<td>of which Volkswagen AG</td>
<td>in kg/vehicle</td>
<td>11.23</td>
<td>10.10</td>
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<tr>
<td><strong>Environmental protection costs</strong></td>
<td>German sites of Volkswagen AG</td>
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<tr>
<td>Investments</td>
<td>in € million/year</td>
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<td>9</td>
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<tr>
<td>Operating costs</td>
<td>in € million/year</td>
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<td>KPI</td>
<td>Unit</td>
<td>2020</td>
<td>2019</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-----------------</td>
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<tr>
<td><strong>Direct NOx and SO₂ emissions</strong></td>
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</tr>
<tr>
<td>Nitrogen oxides (NOx as NO₂)</td>
<td>in tonnes/year</td>
<td>4,135</td>
<td>4,209</td>
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<tr>
<td>of which cars and light commercial vehicles</td>
<td>in tonnes/year</td>
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<td>2,208</td>
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<td>in tonnes/year</td>
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<td>of which other divisions</td>
<td>in tonnes/year</td>
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<td>2,001</td>
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<td>Sulfur dioxide (SO₂)</td>
<td>in tonnes/year</td>
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<td>924</td>
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<td>in tonnes/year</td>
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<td>14</td>
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<td>of which Volkswagen AG</td>
<td>in tonnes/year</td>
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<td>1</td>
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<tr>
<td>of which other divisions</td>
<td>in tonnes/year</td>
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<td>910</td>
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<tr>
<td><strong>Direct NOx and SO₂ emissions</strong></td>
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<td></td>
</tr>
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<td>Nitrogen oxides (NOx as NO₂)</td>
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<td>in kg/vehicle</td>
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<td>Sulfur dioxide (SO₂)</td>
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<td>of which Volkswagen AG</td>
<td>in kg/vehicle</td>
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</tr>
<tr>
<td>Chemical oxygen demand</td>
<td>in tonnes/year</td>
<td>3,374</td>
<td>3,906</td>
</tr>
<tr>
<td>of which cars and light commercial vehicles</td>
<td>in tonnes/year</td>
<td>3,181</td>
<td>3,717</td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in tonnes/year</td>
<td>433</td>
<td>530</td>
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<tr>
<td>of which other divisions</td>
<td>in tonnes/year</td>
<td>193</td>
<td>189</td>
</tr>
<tr>
<td><strong>Chemical oxygen demand (COD)</strong></td>
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<tr>
<td>Chemical oxygen demand</td>
<td>in kg/vehicle</td>
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<td>351</td>
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<td>of which Volkswagen AG</td>
<td>in kg/vehicle</td>
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<td>496</td>
</tr>
<tr>
<td><strong>Particulate emissions</strong></td>
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</tr>
<tr>
<td>Particulate emissions of cars in Europe</td>
<td>in tonnes/year</td>
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<td>346</td>
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<td>of which Volkswagen AG</td>
<td>in tonnes/year</td>
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<td>100</td>
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<tr>
<td><strong>Particulate emissions</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Particulate emissions of cars in Europe</td>
<td>in kg/vehicle</td>
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<td>67</td>
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<tr>
<td>of which Volkswagen AG</td>
<td>in kg/vehicle</td>
<td>118</td>
<td>94</td>
</tr>
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<td><strong>Water withdrawal by source</strong></td>
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</tr>
<tr>
<td>Groundwater</td>
<td>in million m³/year</td>
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<tr>
<td>of which Volkswagen AG</td>
<td>in million m³/year</td>
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<td>1.32</td>
</tr>
<tr>
<td>Rainwater/surface water</td>
<td>in million m³/year</td>
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<td>1.08</td>
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<td>in million m³/year</td>
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<td>0.28</td>
</tr>
<tr>
<td>Purchased freshwater</td>
<td>in million m³/year</td>
<td>26.78</td>
<td>31.08</td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in million m³/year</td>
<td>2.40</td>
<td>2.87</td>
</tr>
</tbody>
</table>
### DECARBONIZATION

#### Waste water discharges

<table>
<thead>
<tr>
<th>KPI</th>
<th>Unit</th>
<th>2020</th>
<th>2019</th>
<th>Notes and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving stream</td>
<td>in million m³/year</td>
<td>6.73</td>
<td>8.75</td>
<td>Cars and light commercial vehicles</td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in million m³/year</td>
<td>3.79</td>
<td>4.13</td>
<td></td>
</tr>
<tr>
<td>Municipal effluent treatment plant</td>
<td>in million m³/year</td>
<td>16.03</td>
<td>19.55</td>
<td></td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in million m³/year</td>
<td>0.51</td>
<td>0.65</td>
<td></td>
</tr>
</tbody>
</table>

#### Decarbonization index (strategic KPI)

- **Decarbonization index**: 43.0 42.8
- Major passenger-car manufacturing brands and light commercial vehicles in the Europe (EU 27, United Kingdom, Norway and Iceland), China and USA regions. As a result of a more specific data set, the emissions recorded in the DCI reduced by 0.06 tonnes of CO₂/vehicle in 2020. In addition, projects in the supply chain (closed-loop management of aluminum scrap and renewable energy for battery cell production) led to a 0.04 t CO₂/vehicle reduction of total emissions in the DCI. The new basis was also taken into account in 2019.
- The DCI of 2019 and 2020 was calculated without taking into account additionally performed scopes of compensation.
- **GRI 305–5**

#### Average emissions of the new passenger car fleet in the EU (strategic KPI)

- Average emissions of the new passenger car fleet in the EU: 99.9 124
- Excluding Lamborghini and Bentley

#### Alternative drive technologies in the Group

- Volkswagen Group production: Volkswagen Passenger Cars, Audi, SKODA, SEAT, Volkswagen light commercial vehicles

##### Worldwide

- **Gas drives (natural gas and LPG)**
  - Number of vehicles produced/percentage change: 46,326/–61.0
  - 118,726

- **Hybrid drives**
  - Number of vehicles produced/percentage change: 201,852/+265.2
  - 55,268

- **All-electric drives**
  - Number of vehicles produced/percentage change: 201,675/+82.1
  - 110,721

- **Alternative drives (total)**
  - Number of vehicles produced/percentage change: 449,853/+57.7
  - 284,715

##### Europe (EU 27, United Kingdom, Norway and Iceland)

- **Gas drives (natural gas and LPG)**
  - Number of vehicles produced/percentage change: 45,700/–42.4
  - 79,299

- **Hybrid drives**
  - Number of vehicles produced/percentage change: 135,367/+383.7
  - 27,988
<table>
<thead>
<tr>
<th>KPI</th>
<th>Unit</th>
<th>2020</th>
<th>2019</th>
<th>Notes and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>All-electric drives</td>
<td>Number of vehicles produced/ percentage change</td>
<td>175,369/+165.9</td>
<td>65,962</td>
<td></td>
</tr>
<tr>
<td>Alternative drives (total)</td>
<td>Number of vehicles produced/ percentage change</td>
<td>356,436/+105.7</td>
<td>173,249</td>
<td></td>
</tr>
<tr>
<td>Scope 1 GHG emissions</td>
<td></td>
<td></td>
<td></td>
<td>Cars and light commercial vehicles Restatement of the figures for 2019 due to a reallocation of emissions from Scope 2 to Scope 1 at Škoda Auto a.s. This does not change the total emissions from Scope 1 and 2. GRI 305–1</td>
</tr>
<tr>
<td>GHG emissions (Scope 1)</td>
<td>in CO₂ equivalents kg/vehicle</td>
<td>436</td>
<td>396</td>
<td></td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in CO₂ equivalents kg/vehicle</td>
<td>2,798</td>
<td>2,265</td>
<td></td>
</tr>
<tr>
<td>Scope 1 GHG emissions</td>
<td></td>
<td></td>
<td></td>
<td>Restatement of the figures for 2019 due to a reallocation of emissions from Scope 2 to Scope 1 at Škoda Auto a.s. This does not change the total emissions from Scope 1 and 2.</td>
</tr>
<tr>
<td>GHG emissions (Scope 1)</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>4.34</td>
<td>4.40</td>
<td></td>
</tr>
<tr>
<td>of which cars and light commercial vehicles</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>3.80</td>
<td>4.20</td>
<td></td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>2.22</td>
<td>2.42</td>
<td></td>
</tr>
<tr>
<td>of which other divisions</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>0.53</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Scope 2 GHG emissions</td>
<td></td>
<td></td>
<td></td>
<td>Cars and light commercial vehicles Restatement of the figures for 2019 due to a reallocation of emissions from Scope 2 to Scope 1 at Škoda Auto a.s. This does not change the total emissions from Scope 1 and 2.</td>
</tr>
<tr>
<td>GHG emissions (Scope 2)</td>
<td>in CO₂ equivalents kg/vehicle</td>
<td>302</td>
<td>296</td>
<td></td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in CO₂ equivalents kg/vehicle</td>
<td>135</td>
<td>126</td>
<td></td>
</tr>
<tr>
<td>Scope 2 GHG emissions</td>
<td></td>
<td></td>
<td></td>
<td>Restatement of the figures for 2019 due to a reallocation of emissions from Scope 2 to Scope 1 at Škoda Auto a.s. This does not change the total emissions from Scope 1 and 2.</td>
</tr>
<tr>
<td>GHG emissions (Scope 2)</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>2.80</td>
<td>3.36</td>
<td></td>
</tr>
<tr>
<td>of which cars and light commercial vehicles</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>2.64</td>
<td>3.14</td>
<td></td>
</tr>
<tr>
<td>of which Volkswagen AG</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>0.11</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>of which other divisions</td>
<td>in CO₂ equivalents million tonnes/year</td>
<td>0.16</td>
<td>0.22</td>
<td></td>
</tr>
</tbody>
</table>
### Scope 3 GHG emissions in the Volkswagen Group

<table>
<thead>
<tr>
<th>KPI</th>
<th>Unit</th>
<th>2020</th>
<th>2019</th>
<th>Notes and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased goods and services</td>
<td>in tonnes of CO₂/in %</td>
<td>61,301,008/16.6</td>
<td>71,564,141/16.0</td>
<td>Emissions of the material supply chain of the major passenger-car manufacturing brands and light commercial vehicles (cradle-to-gate)</td>
</tr>
<tr>
<td>Capital goods</td>
<td>in tonnes of CO₂/in %</td>
<td>5,894,843/1.6</td>
<td>16,724,588/3.8</td>
<td></td>
</tr>
<tr>
<td>Fuel/energy</td>
<td>in tonnes of CO₂/in %</td>
<td>1,286,355/0.3</td>
<td>1,512,239/0.3</td>
<td></td>
</tr>
<tr>
<td>Transportation and distribution</td>
<td>in tonnes of CO₂/in %</td>
<td>4,622,584/1.3</td>
<td>4,817,890/1.0</td>
<td>Figure based on the 2019 CDP report – the figure for 2019 will appear in the 2020 CDP report.</td>
</tr>
<tr>
<td>Waste generated in operations</td>
<td>in tonnes of CO₂/in %</td>
<td>938,867/0.3</td>
<td>1,237,583/0.3</td>
<td></td>
</tr>
<tr>
<td>Business travel</td>
<td>in tonnes of CO₂/in %</td>
<td>718,681/0.2</td>
<td>721,168/0.2</td>
<td></td>
</tr>
<tr>
<td>Employee commuting</td>
<td>in tonnes of CO₂/in %</td>
<td>1,092,801/0.3</td>
<td>1,027,995/0.2</td>
<td></td>
</tr>
<tr>
<td>Leased assets</td>
<td>in tonnes of CO₂/in %</td>
<td>347,219/0.1</td>
<td>Not reported</td>
<td>Upstream</td>
</tr>
<tr>
<td>Transportation and distribution</td>
<td>in tonnes of CO₂/in %</td>
<td>Included in transporta-</td>
<td>Included in transporta-</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>tion and distribution</td>
<td>tion and distribution</td>
<td></td>
</tr>
<tr>
<td>Processing of intermediate products included in Scope 1</td>
<td>in tonnes of CO₂/in %</td>
<td>Included in Scope 1</td>
<td>Included in Scope 1</td>
<td></td>
</tr>
<tr>
<td>Use phase (200,000 km)</td>
<td>in tonnes of CO₂/in %</td>
<td>281,198,346/76.2</td>
<td>344,474,742/77.0</td>
<td>The calculation is based on an extrapolation of fleet values and electrical consumption for the passenger cars and light commercial vehicles sold in the three major regions (Europe [EU 27, United Kingdom, Norway and Iceland], USA, China) in 2020.</td>
</tr>
<tr>
<td>Recycling</td>
<td>in tonnes of CO₂/in %</td>
<td>941,698/0.3</td>
<td>1,187,992/0.3</td>
<td></td>
</tr>
<tr>
<td>Leased assets</td>
<td>in tonnes of CO₂/in %</td>
<td>9,043,718/2.5</td>
<td>2,602,402/0.6</td>
<td>Downstream</td>
</tr>
<tr>
<td>Franchises</td>
<td>in tonnes of CO₂/in %</td>
<td>1,550,000/0.4</td>
<td>1,550,000/0.4</td>
<td></td>
</tr>
<tr>
<td>Investments</td>
<td>in tonnes of CO₂/in %</td>
<td>Not reported</td>
<td>Not reported</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>in tonnes of CO₂/in %</td>
<td>368,936,120/100</td>
<td>447,420,740/100</td>
<td></td>
</tr>
</tbody>
</table>

**CIRCULAR ECONOMY**

Strategic KPIs for the circular economy focus area are currently under development. More information about the circular economy focus area can be found in the "Circular Economy" chapter earlier in this report. Additional circular economy KPIs can be found in the KPIs in the "Strategy and Management" chapter.
## WORKFORCE TRANSFORMATION

### KPI

<table>
<thead>
<tr>
<th>KPI</th>
<th>Unit</th>
<th>2020</th>
<th>2019</th>
<th>Notes and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diversity index</strong> (strategic KPI)</td>
<td>Value</td>
<td>118</td>
<td>113</td>
<td></td>
</tr>
<tr>
<td>in the Volkswagen Group</td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Internal employer attractiveness</strong> (strategic KPI)</td>
<td>Value</td>
<td>88.2</td>
<td>85.6</td>
<td></td>
</tr>
<tr>
<td>in the Volkswagen Group</td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in Volkswagen AG</td>
<td>Value</td>
<td>86.9</td>
<td>86.0</td>
<td></td>
</tr>
<tr>
<td><strong>Employee satisfaction index</strong></td>
<td>Value</td>
<td>82.2</td>
<td>80.0</td>
<td></td>
</tr>
<tr>
<td>in the Volkswagen Group</td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in Volkswagen AG</td>
<td>Value</td>
<td>74.3</td>
<td>72.3</td>
<td></td>
</tr>
<tr>
<td><strong>External employer attractiveness in the Volkswagen Group</strong></td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(strategic KPI)</td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major passenger car-producing brands</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The KPI does not yet include the joint ventures in China.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In fiscal year 2020, the Porsche and ŠKODA brands fully achieved their targets and exceeded them in some cases. Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, SEAT and Audi were only able to partly achieve their targets.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total workforce</strong></td>
<td>GRI 102–8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the Volkswagen Group</td>
<td>Number</td>
<td>662,575</td>
<td>671,205</td>
<td></td>
</tr>
<tr>
<td>in Volkswagen AG</td>
<td>Number</td>
<td>118,673</td>
<td>119,204</td>
<td></td>
</tr>
<tr>
<td><strong>Number of employees in the Volkswagen Group by region</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Europe</td>
<td>Number</td>
<td>492,907</td>
<td>498,162</td>
<td></td>
</tr>
<tr>
<td>The Americas</td>
<td>Number</td>
<td>56,914</td>
<td>56,889</td>
<td></td>
</tr>
<tr>
<td>Africa</td>
<td>Number</td>
<td>6,134</td>
<td>6,520</td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td>Number</td>
<td>105,173</td>
<td>108,276</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Number</td>
<td>1,447</td>
<td>1,358</td>
<td></td>
</tr>
</tbody>
</table>
### Number of employees in the Volkswagen Group by type of work

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production employees</td>
<td>311,054</td>
<td>317,440</td>
</tr>
<tr>
<td>Non-production employees</td>
<td>333,582</td>
<td>334,366</td>
</tr>
<tr>
<td>Apprentices</td>
<td>17,939</td>
<td>19,399</td>
</tr>
<tr>
<td><strong>Total workforce</strong></td>
<td>662,575</td>
<td>671,205</td>
</tr>
<tr>
<td><strong>of which: active workforce</strong></td>
<td>633,364</td>
<td>641,838</td>
</tr>
</tbody>
</table>

All employees with an active employment contract in the Group who participate in the value creation process.

### Employee age structure in the Volkswagen Group

<table>
<thead>
<tr>
<th>Age Group</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 20 years old</td>
<td>0.3/1.4</td>
<td>0.4/1.6</td>
</tr>
<tr>
<td>20–29 years old</td>
<td>3.4/14.4</td>
<td>3.6/16.2</td>
</tr>
<tr>
<td>30–39 years old</td>
<td>5.3/25.1</td>
<td>5.2/24.3</td>
</tr>
<tr>
<td>40–49 years old</td>
<td>4.4/20.9</td>
<td>4.3/20.7</td>
</tr>
<tr>
<td>50–59 years old</td>
<td>3.0/17.2</td>
<td>2.9/16.8</td>
</tr>
<tr>
<td>&gt; 60 years old</td>
<td>0.5/4.0</td>
<td>0.5/3.8</td>
</tr>
</tbody>
</table>

### Average age of employees in Volkswagen AG

<table>
<thead>
<tr>
<th>Gender</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>40.9</td>
<td>40.4</td>
</tr>
<tr>
<td>Men</td>
<td>45.3</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44.5</strong></td>
<td><strong>44.2</strong></td>
</tr>
</tbody>
</table>

### Parental leave in Volkswagen AG

<table>
<thead>
<tr>
<th>Gender</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>4,209</td>
<td>4,137</td>
</tr>
<tr>
<td>Men</td>
<td>1,059</td>
<td>999</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,150</strong></td>
<td><strong>3,198</strong></td>
</tr>
</tbody>
</table>

### Staff turnover at Volkswagen AG

<table>
<thead>
<tr>
<th>Gender</th>
<th>2020</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women</td>
<td>0.5</td>
<td>0.9</td>
</tr>
<tr>
<td>Men</td>
<td>0.8</td>
<td>1</td>
</tr>
</tbody>
</table>

### Apprentices in the Volkswagen Group in Germany

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Total (Germany/ rest of world)</th>
<th>Total (Germany/ rest of world)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volkswagen Passenger Cars</td>
<td>5,622 (4,866/756)</td>
<td>6,023 (5,045/978)</td>
</tr>
<tr>
<td>Audi</td>
<td>2,600 (2,508/92)</td>
<td>2,758 (2,681/77)</td>
</tr>
<tr>
<td>ŠKODA</td>
<td>1,253 (2/1,251)</td>
<td>1,250 (2/1,248)</td>
</tr>
<tr>
<td>KPI</td>
<td>Unit</td>
<td>2020</td>
</tr>
<tr>
<td>-----------------------------------------</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>Porsche</td>
<td>Number</td>
<td>798 (761/37)</td>
</tr>
<tr>
<td>Porsche Holding Salzburg</td>
<td>Number</td>
<td>1,914 (1,090/824)</td>
</tr>
<tr>
<td>SEAT</td>
<td>Number</td>
<td>171 (3/168)</td>
</tr>
<tr>
<td>Bentley</td>
<td>Number</td>
<td>112 (~112)</td>
</tr>
<tr>
<td>Volkswagen Commercial Vehicles</td>
<td>Number</td>
<td>854 (713/141)</td>
</tr>
<tr>
<td>Other</td>
<td>Number</td>
<td>337 (297/40)</td>
</tr>
<tr>
<td>Total apprentices in the Passenger Cars division</td>
<td>Number</td>
<td>13,661 (10,240/3,421)</td>
</tr>
<tr>
<td>MAN</td>
<td>Number</td>
<td>2,419 (1,573/846)</td>
</tr>
<tr>
<td>Scania</td>
<td>Number</td>
<td>1,069 (188/881)</td>
</tr>
<tr>
<td>Total apprentices in the Commercial Vehicles division/Power Engineering division</td>
<td>Number</td>
<td>3,488 (1,761/1,727)/583 (372/211)</td>
</tr>
<tr>
<td>Financial Services division</td>
<td>Number</td>
<td>207 (150/57)</td>
</tr>
<tr>
<td>Total apprentices in the Group</td>
<td>Number</td>
<td>17,939 (12,523/5,416)</td>
</tr>
<tr>
<td>Female employees in the Volkswagen Group</td>
<td>in %</td>
<td>17.0</td>
</tr>
</tbody>
</table>

Proportion of women in the Volkswagen Group Germany

| Total management                         | in %  | 12.6          | 12.1          |                    |
| Total apprentices                        | in %  | 22.9          | 24.1          | Excluding Scania   |
| Industrial apprentices                   | in %  | 17.3          | 18.5          | Excluding Scania   |
| Commercial apprentices                   | in %  | 47.9          | 49.8          | Excluding Scania   |
| Students on “dual system” courses        | in %  | 29.8          | 30.6          | Excluding Scania   |
| Female university graduates recruited    | in %  | 32.5          | 31.7          | Volkswagen AG      |
| Total Volkswagen Group in Germany        | in %  | 18.1          | 17.9          | Excluding Scania   |

Training

<p>| in the Volkswagen Group                  | Number| 75,596 | 118,000 |                    |
| Time                                    | Million hours | 7.8    | 16.3    |                    |
| Training hours per employee             | Average number of hours | 11.7   | 24.5    |                    |
| in Volkswagen AG                        | Number| 5,771  | 9,335   |                    |
| Time                                    | Hours | 401,291| 981,970 |                    |
| Training hours per employee             | Average number of hours | 3.4    | 8.3     |                    |</p>
<table>
<thead>
<tr>
<th>KPI</th>
<th>Unit</th>
<th>2020</th>
<th>2019</th>
<th>Notes and comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accidents reported. Temporary agency workers are not included in the KPI. Bugatti is included for the first time in this report. The inclusion of absence days is ending as of December 31 of the fiscal year. GRI 403–2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the Volkswagen Group</td>
<td>Accident frequency</td>
<td>Number</td>
<td>3.5</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td>Accident severity</td>
<td>Number</td>
<td>5.1</td>
<td>5.5</td>
</tr>
<tr>
<td>in Volkswagen AG</td>
<td>Accident frequency</td>
<td>Number</td>
<td>5.5</td>
<td>5.4</td>
</tr>
<tr>
<td></td>
<td>Accident severity</td>
<td>Number</td>
<td>7.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Accident indices of the Volkswagen Group’s production sites</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>in the Volkswagen Group</td>
<td>Working days lost</td>
<td>Number</td>
<td>36,756</td>
<td>43,303</td>
</tr>
<tr>
<td></td>
<td>Accidents at work</td>
<td>Number</td>
<td>2,687</td>
<td>3,157</td>
</tr>
<tr>
<td>in Volkswagen AG</td>
<td>Working days lost</td>
<td>Number</td>
<td>9,017</td>
<td>8,812</td>
</tr>
<tr>
<td></td>
<td>Accidents at work</td>
<td>Number</td>
<td>673</td>
<td>735</td>
</tr>
</tbody>
</table>
INDEPENDENT AUDITOR’S LIMITED ASSURANCE REPORT

The assurance engagement performed by Ernst & Young (EY) relates exclusively to the German version of the combined non-financial report 2020 of Volkswagen AG. The following text is a translation of the original German Independent Assurance Report.

TO VOLKSWAGEN AG, WOLFSBURG

We have performed a limited assurance engagement on the separate non-financial report of Volkswagen AG according to § 289b HGB (“Handelsgesetzbuch”: German Commercial Code), which is combined with the separate non-financial report of the group according to § 315b HGB, consisting of the disclosures in the Sustainability Report 2020 highlighted in color for the reporting period from 1 January 2020 to 31 December 2020 (hereafter combined non-financial report). Our engagement exclusively relates to the information highlighted in color as detailed above in the German PDF version of the Sustainability Report. Our engagement did not include any disclosures for prior years.

MANAGEMENT'S RESPONSIBILITY

The legal representatives of the Company are responsible for the preparation of the combined non-financial report in accordance with §§ 315c in conjunction with 289c to 289e HGB.

This responsibility includes the selection and application of appropriate methods to prepare the combined non-financial report as well as making assumptions and estimates related to individual disclosures, which are reasonable in the circumstances. Furthermore, the legal representatives are responsible for such internal controls that they have considered necessary to enable the preparation of a combined non-financial report that is free from material misstatement, whether due to fraud or error.

AUDITOR’S DECLARATION RELATING TO INDEPENDENCE AND QUALITY CONTROL

We are independent from the Company in accordance with the provisions under German commercial law and professional requirements, and we have fulfilled our other professional responsibilities in accordance with these requirements.

Our audit firm applies the national statutory regulations and professional pronouncements for quality control, in particular the by-laws regulating the rights and duties of Wirtschaftsprüfer and vereidigte Buchprüfer in the exercise of their profession [Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer] as well as the IDW Standard on Quality Control 1: Requirements for Quality Control in audit firms [IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis (IDW QS 1)].

AUDITOR’S RESPONSIBILITY

Our responsibility is to express a limited assurance conclusion on the combined non-financial report based on the assurance engagement we have performed.

We conducted our assurance engagement in accordance with 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). This Standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether the combined non-financial report of the Company has been prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB. In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the auditor’s professional judgment.

Within the scope of our assurance engagement, which has been conducted between September 2020 and February 2021, we performed amongst others the following assurance and other procedures:

• Inquiries of relevant managerial employees of the group regarding the conduction of the materiality analysis as well as the selection of topics for the combined non-financial report, the risk assessment and the concepts of Volkswagen for the topics that have been identified as material,
• Inquiries of relevant managerial employees responsible for data capture and consolidation as well as the preparation of the combined non-financial report, to evaluate the reporting processes, the data capture and compilation methods as well as internal controls to the extent relevant for the assurance of the combined non-financial report,
• Identification of likely risks of material misstatement in the combined non-financial report,
• Inspection of relevant documentation of the systems and processes for compiling, aggregating and validating data in the relevant areas in the reporting period,
• Analytical evaluation of disclosures in the combined non-financial report at parent company and group level,
• Inquiries and inspection of documents on a sample basis relating to the collection and reporting of selected data,
• Evaluation of the implementation of group management requirements, processes and specifications regarding data collection through onsite visits at selected sites of the Volkswagen Group.
- Audi AG (Ingolstadt, Germany)
- Dr. Ing. h.c. F. Porsche AG (Stuttgart-Zuffenhausen, Germany)
- FAW-Volkswagen Automotive Co. Ltd. (Changchun, China)
- SAIC Volkswagen Automotive Co. Ltd. Shanghai (Anting, China)
- Scania Latin America Ltda. (São Paulo, Brazil)
- SEAT S.A. (Martorell, Spain)
- ŠKODA AUTO a.s. (Mladá Boleslav, Czech Republic)
- Volkswagen AG (Wolfsburg, Germany)
- Volkswagen AG (Kassel, Germany)
- Volkswagen de México, S.A. de C.V. (Puebla, Mexico)

- Comparison of disclosures with corresponding data in the group management report, which is combined with the management report of Volkswagen AG,
- Evaluation of the presentation of disclosures in the combined non-financial report.

ASSURANCE CONCLUSION

Based on our assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the combined non-financial report of Volkswagen AG for the period from 1 January 2020 to 31 December 2020 has not been prepared, in all material respects, in accordance with §§ 315c in conjunction with 289c to 289e HGB.

INTENDED USE OF THE ASSURANCE REPORT

We issue this report on the basis of the engagement agreed with Volkswagen AG. The assurance engagement has been performed for the purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement and must not be used for purposes other than those intended. The report is not intended to provide third parties with support in making (financial) decisions.

ENGAGEMENT TERMS AND LIABILITY

The "General Engagement Terms for Wirtschaftsprüfer and Wirtschaftsprüfungsgesellschaften [German Public Auditors and Public Audit Firms]" dated 1 January 2017 are applicable to this engagement and also govern our relations with third parties in the context of this engagement (www.de.ey.com/general-engagement-terms). In addition, please refer to the liability provisions contained there in no. 9 and to the exclusion of liability towards third parties. We assume no responsibility, liability or other obligations towards third parties unless we have concluded a written agreement to the contrary with the respective third party or liability cannot effectively be precluded.

We make express reference to the fact that we do not update the assurance report to reflect events or circumstances arising after it was issued unless required to do so by law. It is the sole responsibility of anyone taking note of the result of our assurance engagement summarized in this assurance report to decide whether and in what way this result is useful or suitable for their purposes and to supplement, verify or update it by means of their own review procedures.

Hannover, 26 February 2021
Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Nicole Richter
Wirtschaftsprüferin
(German Public Auditor)
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Volkswagen Group and its Group brands

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DISCLAIMER
At the brands of the Volkswagen Group, work on all types and models never ceases, so please allow for the fact that changes in design, equipment and technical specifications may be made at any time. Consequently, the data and descriptions in this report cannot give rise to claims of any kind.

The German version of the nonfinancial report is binding. The English version is a convenience translation for information purposes only.

YOUR FEEDBACK
In the interests of improving and advancing our commitment to sustainability, we would be delighted to receive your feedback on our sustainability report. You can send us your views online under the above-mentioned e-mail address.