Dr. Herbert Diess,
Chairman of the Board of Management of Volkswagen AG

Daniela Cavallo,
Chairwoman of the General and Group Works Council of Volkswagen AG

Georg Kell,
Founding Director of the UN Global Compact and Spokesperson of the Volkswagen Sustainability Council

1. How is sustainability reflected in the new strategy, NEW AUTO?

Dr. Herbert Diess: The NEW AUTO world will be free of emissions, smarter and above all more sustainable. The key to making that happen is getting more electric cars on the road. This is what we achieved in 2021: we are the e-mobility market leader in Europe and the number two in the USA. We are expanding the charging infrastructure in Europe, China and the USA to 45,000 charging points by 2025. We are planning to build six battery factories by 2030 together with partners and deal with entire battery cycles. And electric drives bring economic advantages in the truck segment as well.

Only sustainable products will stand the test of time. E-mobility is increasingly paying off for customers. Calculated per kilometer, our electric vehicles are already cheaper to run than vehicles with internal combustion engines. We are driven by our commitment to the Paris climate goals and we at Volkswagen want to be carbon neutral by 2050. Furthermore, we have embedded the issues of ESG, decarbonization and integrity as points of strategic focus in NEW AUTO.

What is important for decarbonization is a shared consensus between politicians, industry, customers and society. A key milestone in 2021 was our readmission to the UN Global Compact, the world's largest sustainable corporate management initiative. We regard this as a sign that we are building stakeholders' trust in our strategy.

2. What progress has the Volkswagen Group made in 2021? Is sustainability becoming a business model?

Georg Kell: The NEW AUTO strategy signals Volkswagen's determination to advance electric mobility and establish new areas of business along the value chain. The associated investments and business decisions are obviously the most important development. By doing this, Volkswagen is positioning itself at the forefront of the transition from the fossil-driven approaches of the polluting industrial age to smart and clean processes. Implementing the strategy is causing an upturn in green electricity, efficiency and circular material flows and thus significantly contributes to reducing greenhouse gases.

We also made progress on the management of ESG data and on decarbonization approaches. Measures to promote compliance and integrity, particularly in supply chain management, are now firmly established across the Group. Herbert Diess has very clearly spoken out in favor of the energy transformation and higher carbon prices, and a new industrial collaboration has also been started. Volkswagen has become more innovative and more modern.

Sustainability is already a prerequisite for long-term business success. It's long been known how much mistakes cost companies. Volkswagen's recent diesel crisis is just one example of this. Legal changes, the shift in customer preferences and investor awareness of risks and opportunities in connection with sustainability topics mean sustainability will now also become a value driver. Companies will only be successful in the long term if they integrate these trends into their strategy and activities. The key word here is "integration" – i.e. that sustainability becomes completely matter of course in all roles and in the minds of all the Group's managers and employees. It is just as important to propagate and embed the concept of decarbonization and circular material flows within our business and at suppliers, so what matters is accelerating the transformation.

3. Where does the Volkswagen Group need to show even more engagement? Where are the sustainability challenges for a group that operates in 153 countries?

Daniela Cavallo: We support the Group's strategy of concentrating on electric drives and see our job as ensuring that profitability and job security are given equal consideration.

In addition to the technical shift to e-mobility, the area of socio-environmental change will also be one of the most pivotal points of the transformation. Here we need to help shape this change at an early stage. Rapid implementation of the transformation can only succeed if we reach the whole Group and every employee and get them on board. It's important to us as a works council that a topic such as employer attractiveness and the associated employee satisfaction are factored in. That's in line with our Volkswagen culture.

By implementing new business areas and as a result of employee training, we're on the right track to develop issues such as sustainability, transformation and employee satisfaction into a success.

The challenge for us is to create standards that conform to the goals of the Paris Agreement. We're confident that we can derive rules on the basis of these standards that our international partners will adopt. However, this also includes convincing people at sites that have to deliver sustainability promises under different political conditions.

Our society is becoming more and more conscious of sustainable action. Just like with a technological edge, the field of sustainability naturally still has a lot of potential, and Volkswagen can also be a pioneer here. The business model therefore not only needs to be measured by its monetary success but must also pursue social and environmental issues. The trend among rating agencies to prioritize the social area in addition to the environmental and governance areas is in line with the Works Council's principles.

ENVIRONMENTAL MANAGEMENT

COMMITMENT TO AN UNDAMAGED ENVIRONMENT

As one of the largest automotive manufacturers in the world, we have to observe extensive legal requirements for all sites and markets and aim to live up to our internal and external stakeholders' high expectations of the effectiveness of environmental management – including, and especially following, the diesel issue. 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 our environmental management is also to continuously improve our environmental performance and reduce our environmental impact.

One of the focuses of the NEW AUTO Group strategy is the Group's ESG performance. In environmental protection (E), decarbonization and circular economy are the focus issues. These are also core elements of the "goTOzero" Group environmental mission statement. 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 car cleaner, more intelligent, quieter and safer. 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 to 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.

To quote the environmental Group mission statement: "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 mission statement combines all strategic and compliance-related aspects of the Group's environmental activities and forms the basis for linking targets, key performance indicators, programs and measures. The mission statement is continuously reviewed and its objectives adjusted to new requirements and changes in conditions.

In its "goTOzero" mission statement, the Volkswagen Group concentrates on the following 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. In addition, the Group has set a decarbonization target confirmed by the Science Based Targets initiative (SBTi), which envisages a reduction of 30% from 2018 to 2030 without offsetting.

  > Decarbonization

  The transition to renewable energies is a key part of the objectives, and to this end, the Group aims to actively drive the transition towards renewable energies along the entire life cycle.

- Resources: Volkswagen wants to 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 by reducing emissions of nitrogen oxides and particulate matter.
- 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.

MANAGEMENT AND COMPLIANCE IN MATTERS OF THE ENVIRONMENT

The Volkswagen Group has created an environmental policy that calls on managers and the workforce to implement environmental goals with joint responsibility. In its environmental policy, the Group commits to protecting the environment, fulfilling binding obligations and continuously improving its environmental compliance management system and environmental performance.

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 of vehicles 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.

In 2019, we internally set ourselves the target that all production and development sites in the Group must obtain third-party certification of environmental management systems in accordance with ISO 14001 or the Eco-Management and Audit Scheme (EMAS). 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 systems to include important compliance aspects.

The intention of our environmental compliance management systems is to ensure that environmental aspects and obligations are taken into account in our business operations. We consider disregard of environmental obligations, 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.

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, including implementing the resource-efficiency programs and monitoring target achievement, 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 CO_2 and the Group Steering Committee for Fleet Compliance and Exhaust Emissions manage important individual aspects for our products – such as CO_2 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 achieved our targets, we disclose environmental key performance indicators annually and report transparently on the progress of the Group's efforts.

Good progress has been made as regards external certification. In 2021, 110 of our 120 sites, including the central development units were certified in accordance with ISO 14001 or EMAS. In terms of employee numbers, this equates to more than 99%. In addition, 65 production locations have certified their energy management systems in accordance with ISO 50001. Since 2009, the "Integration of Environmental Factors into 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.

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. As of January 1, 2021, the Euro 6d standard became 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.

Group-wide Communication and Networking on Environmental Issues

The Volkswagen Group has established the Group Environmental Talk as a format of internal communication for employees. Several members of the Group Board of Management and the spokesperson for the Volkswagen Group's Sustainability Council, Georg Kell, took part in the event in 2021. The focus of the discussion was on the European Green Deal and the Volkswagen Group's potential in the area of circular economy.

Furthermore, the Group held environmental weeks – "goTOzero weeks" – in the brands and regions for the first time in the reporting year. The aims of the Group-wide campaign were to provide information and facilitate employee networking in the Volkswagen Group so as to advance environmental protection activities across the Group. The focus was on participatory events, talks by experts, and many digital workshops and information programs on the topics of decarbonization, energy, environmental compliance, biodiversity, water, waste and circular economy.

LIFE-CYCLE APPROACH DETERMINES ANALYSIS AND ACTIONS

We consider the environmental impact we cause throughout the entire life cycle and at all stages of the value chain. This includes the manufacturing process with the associated extraction of raw materials, the production of materials, the processes at our suppliers and our own production operations at our sites, the use phase with the resulting vehicle emissions and the necessary supply of fuel, and ultimately the recycling of the 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.

For example, for the life-cycle analysis of the ID.3, in terms of impact categories we particularly consider the climate effect. CO_2 and all other emissions relevant to the climate are recorded here and converted into CO_2 equivalents. Here, Volkswagen AG commissioned TÜV NORD CERT Umweltgutachter GmbH as an independent external body to carry out the review of our own 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 starting with raw material extraction, the use phase over 200,000 km in the passenger transportation WLTP driving cycle and recycling of the Golf 8 and ID.3 were all used as the framework.

CONSERVATION OF NATURAL RESOURCES

Our targets in the areas of CO_2, 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 CO_2.

REDUCTION OF THE ENVIRONMENTAL IMPACT OF PRODUCTION (UEP)

By 2025, the production-related environmental impact with respect to energy, CO_2, water, waste and volatile organic compounds (VOC) ist to be reduced by 45% per vehicle compared to 2010. The following charts show the development of these figures from 2010 to 2021 (data: 11+1 months).[1]

- UEP: –29.0% (2020: –32.4%)[2]

The following five indicators form the UEP KPI:

- Energy requirements per vehicle: **–3.5%** (2020: –12.4%)
- CO_2 emissions per vehicle: **–33.3%** (2020: –35.2%)
- Water consumption per vehicle: **–11.6%** (2020: –17.1%)
- Waste for disposal per vehicle: **–61.6%** (2020: –57.3%)[3]
- VOC emissions per vehicle: **–62.0%** (2020: –61.7%)

In 2021, the production situation remained strained due to global supply bottlenecks and electronic components in addition to the challenges caused by the pandemic. Production stops at many sites and the resulting reduced production volume in many cases led to a rise in specific resource requirements and thus to the specific environmental KPIs per vehicle deviating from the targets.

UEP: –29.0%

(2020: –32.4%)

As a result, the successes of the measures and activities to further reduce our factories' adverse environmental impacts that were implemented this year are once again not directly reflected in the UEP environmental indicators.

[1] The figures for December of the reporting year include an estimate. The estimated figures for the prior year were replaced in the current data collection.
[2] Passenger Cars and Light Commercial Vehicles division, Bugatti included pro rata.
[3] Waste for disposal includes only production-specific volumes.

ANCHORING ENVIRONMENTAL PROTECTION IN MANUFACTURING: ZERO IMPACT FACTORY

We are planning the production of tomorrow with our one.PRODUCTION Group production strategy. Emissions levels and the use of resources at Volkswagen Group locations require particular attention. The "goTOzero – Zero Impact Factory" program is developing specific steps for more sustainable production. It is guided by the vision of creating a factory that has no adverse environmental impact. We have developed a checklist of currently 143 environmental criteria to help the sites determine their status on the way to becoming a Zero Impact Factory. 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.

We are working on the following key issues for further implementation:

- 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

We will present the Zero Impact Factory Award to recognize particularly innovative environmental projects and increase awareness of the initiative from 2022. For the coming year, the focus will be on measures for environmental improvement with measurable success in the areas of avoiding plastic and recycling.

Furthermore, we record environmental measures in the IT-supported "Massnahmen@web" system, thus encouraging the Group-wide exchange of best practices. In the reporting year, 1,544 implemented measures relating to the environment and energy were documented. They are aimed at improving infrastructure and production processes for passenger cars and light commercial vehicles.

COMMITMENT TO BIODIVERSITY

The manufacturing operation of our vehicles impacts biodiversity through emissions, land use and transportation – from raw material extraction through the use phase to recycling. Volkswagen is aware of its responsibility and has been involved in protecting and retaining biological diversity through conservation projects since 2007. As a founding member of Initiative Biodiversity in Good Company e. V., we have made a commitment to this. In this commitment, we also acknowledge the three goals of the international Convention on Biological Diversity (CBD) and have defined corresponding action areas to make our contribution to achieving these goals in the context of our business activities.

> www.volkswagenag.com > Sustainability > Strategy & Reporting > Policy

In addition to supporting conservation projects around the world, we have set ourselves the target of increasing biodiversity at our production sites as well. Steps such as creating wildflower meadows, planting trees and shrubs and installing nesting aids for bats, birds and insects have already been taken locally. To increase biodiversity at the production sites, we have introduced a rating tool, which is also integrated in the checklist. The effectiveness of the biodiversity measures is regularly reviewed through the environmental compliance management system. Another component of our commitment is raising employees' awareness of the topic of biodiversity by means of information, training and involvement in projects.

DECARBONIZATION

PARTICULAR RESPONSIBILITY FOR CLIMATE PROTECTION

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 a challenge for us all. According to the calculations of the Intergovernmental Panel on Climate Change (IPCC), the transport sector accounts for around a fifth of global greenhouse gas emissions. As one of the world's largest automotive manufacturers and mobility providers, we are aware of our responsibility and have defined the decarbonization of our Group and its products as a focus area and therefore a key element of our corporate strategy.

We are committed to the Paris Climate Agreement, which aims to keep the increase in global temperature by 2050 to well below two degrees Celsius. By 2050, we want our whole Group to become net carbon neutral. We have set important milestones and intermediate goals for ourselves along the way: by 2030, we want to reduce the CO_2 emissions of our passenger cars and light commercial vehicles by 30% per vehicle over their entire life cycles, compared with the base year of 2018. Alongside the Group's electric offensive, we are focusing to a greater extent on integrating renewably generated electricity in the use phase and switching our production plants' external power supply to renewable energy.

Decarbonization occupies a key position in the NEW AUTO Group strategy and is one of six focus topics in the Group initiative to improve ESG performance. The commitment to climate protection is also a core part of our "goTOzero" environmental mission statement, which stands for a net carbon-neutral way of doing business.

Reporting According to TCFD Recommendations

For the first time, we are reporting our activities on climate protection in detail in accordance with the guidelines of the Task Force on Climate Related Financial Disclosures (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. This chapter on decarbonization is structured accordingly.

CLIMATE PROTECTION CENTRALLY MANAGED

The Group Board of Management is the Group's highest sustainability body. The Chairman of the Board of Management has cross-functional overall responsibility for sustainability. The Group Steering Committee for Sustainability bears the main responsibility for climate protection along the value chain as the highest body below the Board of Management. Product and portfolio topics are managed by the Group Steering Committee for CO_2.

At least twice a year, the Group Steering Committee for Sustainability reports information about corporate-responsibility and sustainability topics – e.g. about handling the risks and opportunities of climate change – and the Group Steering Committee for CO_2 reports information about product-related greenhouse gas emissions to the Group Board of Management, which makes key decisions on topics relevant to climate protection. For example, the Group plans to invest around € 89 billion in cutting-edge areas such as hybridization, electric mobility and digitalization by 2026. This equates to around 55% of capital expenditure and all the Group's research and development costs in the planning period. € 52 billion alone is earmarked for investment in electric mobility.

The Group Board of Management is also the highest internal decision-making level for environmental issues. The relevant Group steering committees, such as the Group Steering Committee for Sustainability or for the Environment and Energy, are responsible for managing environmental protection issues throughout the Group. Other bodies oversee important individual aspects for our products – for example CO_2 and exhaust emissions. These include the Group Steering Committee for CO_2 and the Group Steering Committee for Fleet Compliance and Exhaust Emissions. They report to the Board of Management on various topics: the implementation of the NEW AUTO Group strategy, the decarbonization program, risk management, business plans, setting and pursuing targets, and requirements for handling climate-related topics. For Volkswagen, climate-related topics have an important strategic and operative significance – e.g. with respect to regulatory requirements and the corresponding performance of our products and also our Group's ongoing transformation process. In addition to having Group-wide responsibility for sustainability, the Board of Management regularly consults with Volkswagen's Sustainability Council on climate protection.

Remuneration of the Board of Management Linked to Decarbonization Progress

The Volkswagen Group has linked the remuneration of the members of its Board of Management to, among other things, the development of the decarbonization index as the core climate-protection-related key indicator in the Group. This serves as a measurement tool for the CO_2 emissions of the brands of the EU-27, China and US regions that manufacture passenger cars and light commercial vehicles over the entire life cycle. The Volkswagen Group's Remuneration Report provides further information on how key sustainability criteria are taken into account in the Board of Management's remuneration.

> www.volkswagenag.com > Investor Relations > Corporate Governance > Remuneration

MANAGEMENT OF GROUP-WIDE CLIMATE PROTECTION MEASURES

The Group Board of Management member responsible for production regularly informs the Group Board of Management on sustainability, environmental and energy-related topics. The member of the Board of Management is responsible for all production and environmental activities, including activities connected with climate-friendly mobility. The Group-wide management of environmental protection is the responsibility of the member of the Board of Management responsible for production and of the Group Steering Committee for the Environment and Energy, which is supported by numerous specialist bodies.

Climate-related topics are coordinated and managed by regular meetings of the Group steering committees, by internal and external stakeholder engagement and by continuous communication with the heads of the Group's and the brands' various research and development units and other Group functions.

Volkswagen's Group Head of Environment provides reports to the Group Board of Management on environment- and energy-related topics in their capacity as Head of the Group Steering Committee for the Environment and Energy. The Division Head of the Group Strategy and General Secretariat provides reports to the Chairman of the Group Board of Management in their capacity as Head of the Group Steering Committee for Sustainability and regularly informs the Group Board of Management on sustainability- and environment-related topics. The positions described have the task of coordinating and managing the sustainability, environmental and CO_2 activities decided by the Group Board of Management.

The Volkswagen Group's Climate-Related Risk and Opportunity Analysis

The Group identifies both risks resulting from climate change (physical risks) and risks and opportunities due to the shift toward a decarbonized economy (transitional risks and opportunities).

I. Transitional risks

a. Politics & law

Emissions standards
Compliance with fleet and exhaust-emission limits can be technically challenging and require significant investment. Breaches of limits may also result in significant financial penalties. The Volkswagen Group closely coordinates technology and product planning with its brands so as to implement existing legal requirements and avoid breaches of limits.

Carbon pricing
Volkswagen supports ambitious carbon pricing, as this promotes the transformation to climate-friendly electric mobility in line with Group strategy. An increasingly effective carbon price, particularly in Europe, may, however, also lead to additional costs in energy and material consumption. The Group is countering this risk by switching its energy supply to renewable energies in the long term and integrating corresponding quotas for the use of renewably generated electricity in supplier-side procurement requirements.

Additional costs or earnings losses may result from a mandatory tightening of emission reduction targets or early divestitures of the Group portfolio's high-emission products. The Group counters this risk through certification of the conformity of its self-imposed decarbonization targets in accordance with the Paris Climate Agreement by independent and internationally recognized organizations such as the Science Based Targets initiative.

b. Technology

Increasing model diversity
The increasing diversity of models as part of the electric offensive and shorter product life cycles come with a global increase in vehicle start-ups. The technical systems and processes involved are complex, which means there is a risk that vehicle start-ups may be delayed. The Group counters this risk by identifying weak points in product creation early and on the basis of experience, with the aim of protecting vehicle start-ups in respect of quantity, quality and timing.

c. Market

Emission-based vehicle taxation
Potential increases in vehicle taxes based on CO_2 emissions – as is already the case in many European countries – may lead to demand shifting in favor of smaller segments and engines and have an adverse financial impact for the Group. The Group counters this risk by constantly developing new and fuel-efficient vehicles and alternative drive technologies. The electrification of the portfolio and the Group's drive and fuel strategy form the basis for this.

d. Reputation

Reporting & communication
Critical media reports or defensive communication by the Group in relation to its CO_2 emissions, reduction targets and the decarbonization strategy might lead to reputational damage and, as a consequence, to reductions in the demand for the Group's products. The Group counters the risk through regular communication regarding its carbon footprint, emission reduction targets, and electrification and decarbonization strategy in the annual and sustainability reports and in its stakeholder management.

II. Physical risks

a. Acute

Extreme weather events
Potential disruptions of the supply of critical input factors, such as semiconductors, caused by the impact of weather events such as floods or winter storms may potentially lead to production downtime that has a financial impact for the Group. The Group counters the supply risk with strategic allocation of quantities available to the brands, prioritization of components and the intensification of business relationship management with suppliers.

b. Chronic

Water availability
If the climate impacts water availability, this can lead to a need for site-related investments or cause added costs as a result of any adjustment measures needed or alternative supply routes. The Group counters this risk by assessing the climate-related vulnerability of production sites and deriving appropriate countermeasures using environmental analyses.

III. Opportunities

a. Products

Sales potential
The transformation of transportation and the associated transition to lower-emission and electric mobility open up new sales potential for fuel-efficient vehicles, electric vehicles and other alternative drives. The Volkswagen Group is laying the groundwork to open up the sales potential of the transformation of transportation with its brands based on coordinated technology and product planning and the associated electric offensive.

b. Efficiency

Cost savings
Decarbonization measures can go hand in hand with tapping efficiency potential. These include, for example, measures for more efficient LED lighting, modernized heat supply and cooling at the sites or also optimized washing and drying processes in production. The Group identifies and taps such potential by systematically recording and assessing reduction measures to be implemented on the basis of various decision-making criteria as part of the decarbonization program. Furthermore, the Group has a tool that provides additional incentives for implementing efficiency measures in the form of its CO_2 fund.

c. Market

Capital market performance
A positive performance on CO_2 and reporting in line with capital market requirements may positively impact rating outcomes and the Group's capital market conditions. ESG criteria are therefore an integral component of the NEW AUTO Group strategy with the aim of achieving sustainable improvements in capital market performance. Furthermore, the Group is gearing its reporting even more systematically to capital market requirements (e.g. TCFD). Volkswagen published its first Green Finance Report during the reporting year. The Green Finance Framework systematically links our corporate objective of CO_2 neutrality by 2050 with our financing strategy.

> Sustainability Management

Scenario Analysis as a Decision-Making Basis for Climate Protection

Volkswagen is a member of the Mobility Multiple (MoMo) working group of the International Energy Agency (IEA). The Group helped develop the model itself and uses model data and assumptions in a variety of contexts. MoMo uses various IEA ETP (Energy Technology Perspectives) scenarios, including 2DS (2 °C Scenario) and B2DS (Beyond 2 °C Scenario). We have focused on the target years 2025 and 2030 here. These describe the milestones on the way to net carbon neutrality by 2050. We have conducted analyses up to 2050, as this was the maximum timeframe covered by the model. We have therefore concentrated the investigations on the relevant reference years of 2025 and 2030, as these represent reference years for internal KPIs.

The scenario analysis focused on the areas of production, sales and technology, the impact of products, and materials procurement. In respect of production-related emissions, the analysis showed that a significant reduction in emission intensity per vehicle will be needed to achieve the UN climate goals, particularly in view of increasing unit sales. With respect to the development of the vehicle sector, the analysis showed that electrification is going to grow considerably in importance; internal combustion engines will, however, retain a substantial market share in the next decade, even in a B2DS scenario. These results are necessary to make a well-founded decision regarding our sales planning and materials production. They are integrated into our decarbonization index scenarios to assess the reduction per vehicle over the entire life cycle. The market- and product-related results support and affirm our decision confirmed by the NEW AUTO Group strategy to invest massively in electric mobility and in increasing the efficiency of the internal combustion powertrain.

DECARBONIZATION PROGRAM TARGETS WHOLE LIFE CYCLE

In order to achieve its targets, the Volkswagen Group is implementing a comprehensive and holistic decarbonization program that covers the whole life cycle of the vehicles. It is built on three key principles, which at the same time represent a setting of priorities: the top priority is measures with which CO_2 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 CO_2 emissions through climate protection projects that meet the high international standards.

The electrification of our vehicle fleet and the associated cut in CO_2 emissions in the use phase mean that the relevance of the supply chain in the decarbonization of the Volkswagen Group is continuously increasing. The Volkswagen Group therefore systematically identifies the biggest drivers of CO_2 emissions in the supply chain and defines measures to reduce them.

One identified focus here is steel. The Volkswagen Group is therefore in close communication with selected steel manufacturers in order to accelerate the switch to carbon-neutral products. For example, the Group subsidiary Scania has entered into a cooperation with the start-up H2 Green Steel. For the ID. models, for example, the Volkswagen Passenger Cars brand is going to use additional sustainable components this year, including battery cases and wheel rims made of green aluminum and tires produced with low emissions. The ID. family's carbon footprint can be improved by around two metric tons per vehicle in the next few years through ten focus components. For new vehicle projects, Volkswagen wants to make CO_2 emissions a key contract-award criterion for relevant supplier contracts in the future.

We are tackling the challenge that higher CO_2 emissions initially arise in the supply chain during the transition to electric mobility and shares of the use phase are shifting to production. 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. All suppliers (new contract awards) of high-voltage batteries are already contractually obliged to use certified power from renewable sources in their production processes. This stipulation was expanded to include additional requirements in relevant lower levels of the value chain and has been integrated into our contract awards during the reporting year. CO_2 emissions in battery manufacturing are therefore falling.

More information on decarbonization measures in the upstream levels of the value chain can be found in the "Responsibility for supply chains and business" chapter.

On the key topic of battery cells, we want to take a pioneering role in Germany and worldwide and are making targeted investments in our own production capacity to this end. For example, Volkswagen Group Components has significantly expanded the production of battery systems for the latest generation of e-vehicles at its Braunschweig plant. Following the first stage of expansion with the maximum capacity of 250,000 battery systems, the second expansion stage with the same capacity started in 2021. In total, the site will now be able to install up to 500,000 batteries for models based on the modular electric drive matrix (MEB) each year following complete ramp-up. In addition, Volkswagen Group China started construction of a production plant for battery systems in Hefei (Anhui Province) in the reporting year. The plant will initially supply between 150,000 and 180,000 high-voltage battery systems for Volkswagen Anhui's all electric vehicles based on the Group's MAB platform.

Volkswagen Group Components opened a modern laboratory for cell research and development in Europe in 2021, located in Salzgitter. The new unified battery cell for the volume segment will roll off the production line at the gigafactory in Salzgitter from 2025. By 2030, the Volkswagen Group wants to operate six cell factories with a production output of 240 GWh in Europe together with partners and in this way guarantee supply security.

Volkswagen also owns a stake in Swedish battery company Northvolt AB, which is going to build a factory for the production of lithium ion batteries that should start production in 2024. We supported our partner with US$ 620 million in a financing round to expand capacity in the areas of production, recycling, and research and development in the Northvolt Ett gigafactory in Skellefteå in northern Sweden.

E-mobility as a Key Factor of Decarbonization

Compared to vehicles with an internal combustion engine, electric vehicles have less of an impact on the environment, as 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 as well.

The consistent electrification of our vehicle fleet opens up the path to sustainable, emission-neutral mobility for our customers. We plan to invest around € 52 billion in electric mobility across the Group by 2026. Electric vehicles' share in sales in our core markets of the EU, the US and China should rise to more than 50% by 2030. In the EU alone, the Group wants to achieve a share of sales of least 60% at this time and for the Volkswagen Passenger Cars brand 70%. As a result, the Group would substantially exceed EU Green Deal targets aimed at tightening fleet emission threshold values. 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. We saw the market launch of additional e-models from different brands in 2021, including the Volkswagen ID.4, Volkswagen ID.6 (China), ŠKODA ENYAQ iV, Audi Q4 e-tron, Audi Q4 Sportback e-tron, Audi e-tron GT and Porsche Taycan Cross Turismo.

Renewable Energy for Vehicle Use

Around 75% of a car's CO_2 emissions arise in the use phase ("well to tank" and "tank to wheel"). A key factor in achieving carbon-neutral e-mobility is consistently charging vehicles with 100 % renewably generated electricity. This is the only way that almost half of all CO_2 emissions can be avoided compared with the normal EU electricity mix.

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. Volkswagen Naturstrom, which is almost 100% carbon neutral, is generated by wind, solar and hydroelectric power plants in Germany, Austria and Switzerland. In order to set up fast charging infrastructure, Volkswagen founded the joint venture IONITY with other OEMs. IONITY had set up 400 fast charging stations on major highways across Europe by 2020. Along with its partners, the Group wants to operate around 18,000 public fast charging points in Europe by 2025. This represents a fivefold expansion of the fast charging network compared to today and corresponds to about one third of the total demand predicted for 2025 on the continent.

This will be achieved through a series of strategic partnerships in addition to IONITY. For example, BP wants to construct around 8,000 fast charging points across Europe together with Volkswagen. In cooperation with Iberdrola, Volkswagen will, in particular, cover main traffic routes in Spain. In Italy, Volkswagen wants to collaborate with Enel to expand the fast charging network both along freeways and in urban areas. Volkswagen wants to spend about € 400 million for the European program as a whole by 2025. Volkswagen wants to expand the public fast charging network in the US and China too. Electrify America is planning around 3,500 fast charging points in North America by the end of the reporting year. In China, Volkswagen is planning a total of 17,000 fast charging points by 2025 through the CAMS joint venture.

Volkswagen supports the construction of wind farms and solar parks

In addition, the Volkswagen Group is the first car maker to directly support the expansion of renewable energy on an industrial scale in the future. New wind farms and solar parks are to be constructed in several regions of Europe by 2025. Contracts for the first projects were already signed with energy company RWE in the reporting year. In Germany, Volkswagen supported the construction of a solar plant with a total capacity of 170 million kWh each year. This was completed in Tramm-Göthen in Mecklenburg in northeastern Germany by the end of 2021 and was constructed entirely without any state subsidies. Incorporating around 420,000 solar modules, it is the largest independent solar project in Germany. It is planned that all projects together will generate around 7 terawatt hours (TWh) of additional green electricity by 2025. This should even better cover the electricity needs of the electric vehicles brought to market and mean a net carbon neutral use phase can be achieved for the electric fleet. In addition, in the reporting year, the supply of around 1 TWh was contractually agreed through entering into partnerships with electricity suppliers.

E-cars will be part of energy systems in the future

Volkswagen will integrate the electric car in private, commercial and public energy systems in the future. This will allow green electricity from the solar plant to be stored in the vehicle and fed back into the home network if needed. Not only will customers be more independent of the public power grid, they will also save money and reduce CO_2 emissions. Models based on Volkswagen's own MEB platform will support this technology from 2022 onwards. Volkswagen also plans to offer a complete package with all technical modules and digital services for bidirectional charging. The technology is soon to be used on a larger scale – for example in residential buildings, businesses or in the general power grid.

Climate Protection in Manufacturing

Since 2010, Volkswagen has increased vehicle production from 7.3 million to 8.0 million vehicles (an increase of 10%). Although absolute energy consumption increased by 6%, at the same time absolute greenhouse gas emissions reduced by 27%. Volkswagen wants to continue this trend and reduce greenhouse gas emissions in production by 50.4% in absolute terms compared to 2018 by 2030, which corresponds to a 1.5 °C trajectory. By 2021, absolute greenhouse gas emissions had already been decreased by 20.7%. Key to this are increasing energy efficiency and switching to a renewable power supply as important components of the decarbonization strategy. Nine production sites are already operated on a carbon-neutral basis, including compensation measures: Brussels and Győr (Audi), Zwickau and Dresden (Volkswagen), Zuffenhausen and Leipzig (Porsche), Crewe (Bentley Motors), Vrchlabí (ŠKODA) and Santa Agata (Lamborghini).

The Volkswagen Group has made progress in supplying its plants with electricity from renewable energies since 2019. The percentage of electricity purchased externally rose from 95 to 96% at EU production sites within one year. By 2023, all EU sites are to be supplied with 100% electricity from renewable sources. By 2030, the same target is planned for all global sites outside China.

A total of 43 production sites within the EU and ten additional sites outside the EU were fully converted to an external electricity supply generated from renewable energies. This meant that 100% renewably generated electricity was used at 53 Group sites in 2021.

In 2021, 49% of the Group's total global electricity consumption (including China) at its production sites was accounted for by renewable electricity – an increase of 9% compared with the previous year. The Volkswagen Group is currently working with its Chinese partners to develop its own targets for its Chinese production sites. The high proportion of coal-fired power in the Chinese electricity mix and the highly regulated electricity market make this project particularly challenging.

Volkswagen is also paying particular attention to converting its own electricity generation. The conversion of the power plants in Wolfsburg from coal to gas, which commenced in 2019, is expected to reduce operational emissions by 60% from 2023 onwards, which equates to annual savings of 1.5 million metric tons of CO_2.

In 2021, greenhouse gas emissions by the Group decreased by 20,000 metric tons CO_2 compared with the previous year. The increased percentage of renewable energies used to supply production sites played a key role in achieving this decrease.

In addition, Volkswagen is working at full speed on advancing energy-efficiency projects in its 120 production facilities. Across the Group, 1,544 measures for saving energy were implemented in 2021 alone.

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 logistics processes can reduce 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 the complete avoidance of CO_2 through the use of green electricity on electric railroad lines in Germany in collaboration with Deutsche Bahn AG.

Volkswagen is one of the first carmakers to transport most of its new vehicles on the North Atlantic using low-emission LNG ships (LNG – liquefied natural gas). After the first two LNG car carriers entered service in 2020, Volkswagen Group Logistics is going to use four more ships with dual fuel engines that can be powered with liquid gas from the end of 2023 and run using renewably generated fuels in the future. By using liquid gas, Volkswagen aims to reduce the ships' CO_2 emissions. In European ship transportation, the Group already operates two car carriers with biofuel produced from plant-based waste material – such as waste oil from the food industry.

Volkswagen also plans to tap potential for cutting emissions in internal mobility processes in the future. For example, for planning and organizing business travel by air and rail, a carbon calculator is to be trialed for the Board of Management and top management in a pilot project.

CO_2 Fund Funds Decarbonization of the Group's Own Processes

The Volkswagen Group has an internal CO_2 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. Up to € 25 million per year is available for this. At the end of the 2021 reporting year, a number of successful projects were completed. These included measures for decarbonizing the sales network as part of the Sustainability@Retail initiative. In other areas of business, projects range from the construction of a biogas plant for the ŠKODA brand in India to supporting technologies to increase the proportion of recycled plastics for vehicle components. New projects have already been decided for 2022 as well.

Carbon-Neutral Handover of Electric Vehicles

For a number of the Group's electric vehicles, Volkswagen has decided to make their handover to customers net carbon neutral. For as long as we cannot avoid CO_2 emissions and cannot use renewable energies everywhere, we will do this by voluntarily offsetting the remaining greenhouse gas emissions from the supply chain, production and logistics of MEB vehicles from the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, SEAT and ŠKODA brands in Europe and of selected vehicle types from the Porsche and Audi brands based on the PPE platform (Premium Platform Electric). We expect electrification and the associated net carbon-neutral delivery in Europe to increase the need for offsetting for the next years, which totaled 6.1 million metric tons of CO_2 for the Group (excluding China) in 2021.

Offset projects in line with high international standards

We offset unavoidable emissions from the life cycle phases, such as from the supply chain, production, etc., through climate protection projects with high certification standards, such as the Verified Carbon Standard (VCS) in combination with the Climate Community and Biodiversity Standards (CCB) or the Gold Standard. For the quality assurance of offsetting projects, we assess the projects with regard to compliance with standards, credibility, site selection, project size and the contribution to achieving the United Nations Sustainable Development Goals. To underpin our commitment to climate protection projects and be able to develop our own projects in accordance with the highest standards, we established a joint venture for offset projects during the reporting year.

Use of technical carbon sinks and carbon removal from the atmosphere

We recognize the need to tap additional potential by creating technical carbon sinks and associated projects for carbon dioxide removal to achieve the decarbonization goals. And we are running our own research projects to this end. Among other things, Volkswagen Group Innovation's "Climate Engineering" technology building bundles all the Group's initiatives on carbon dioxide removal approaches to leverage synergies for all the brands, the entire Group and our customers. One key focus is activities for evaluating direct-air-capture technologies and their industrialization to establish broad access to affordable negative emissions for industry and society in the short to medium term. For the acceleration of previous efforts on the way to decarbonization, the Group has signed a memorandum of understanding for the development of relevant projects to permanently remove CO_2

from the atmosphere with its Icelandic project partner Carbfix, which turns CO_2 into natural stone through mineralization in a certified process.

European Commitment in the CEO Alliance

The Chairman of the Board of Management of the Volkswagen Group, together with the CEOs of ten further companies with their registered offices in Europe, expressly acknowledged the EU's Green Deal and the associated climate protection targets. The CEO Alliance for Europe's Recovery, Reform and Resilience supports the goal of making the EU the leading region in the world in climate protection, accelerating investment, driving innovation and thus creating future-proof jobs. The members of the alliance see themselves as an "Action Tank" and collaborate on a range of concrete joint projects: an EU-wide charging infrastructure, integration of EU energy systems, a digital Carbon Footprint Tracking system, sustainable buildings, electric buses for Europe, a value chain for green hydrogen and the establishment of European battery production. The alliance consists of companies from various sectors and European nations.

On the occasion of the European Commission's presentation of the Fit for 55 legislative package, the CEO Alliance issued policy recommendations for a progressive and ambitious approach. The CEOs' proposals particularly include strong carbon price signals, rapid measures for decarbonizing mobility and transport, the transformation of the building sector and a rapid restructuring and renewal of the energy system and all EU member states.

In 2021, the CEO Alliance also expressed support for carbon pricing across industries and countries and called for political decision-makers in Europe to set a strong price signal. Another proposal is a European carbon pricing system that would include measures to simultaneously achieve a social balance and emissions reduction. In a contribution to the debate in 2021, the Chairman of the Board of Management of the Volkswagen Group proposed a minimum price of € 60 per metric ton of CO_2 from 2023 in Europe. This figure should rise to € 100 by 2026. The alliance is also calling for a change to the EU Emissions Trading System ETS (for electricity and heavy industries) and additional sector-specific emission trading systems for the areas of mobility, transportation and buildings. These systems could then converge from 2030.

THE MANAGEMENT OF CLIMATE-RELATED RISKS

The quarterly risk process is used at all Group brands, key Group companies and Volkswagen Financial Services AG and Volkswagen Bank GmbH to identify and manage acute risks. The risks and management measures are documented in the Risk Radar risk management IT tool.

As part of the risk assessment, a score is calculated for each risk by multiplying the likelihood of occurrence by the potential extent of the damage. This enables comparison of the risks. The extent of the damage is calculated from the criteria of financial loss and reputational damage and the potential threat to adherence to external legal requirements. A score between 0 and 10 is assigned to each of these criteria. The measures implemented to manage and control risk are taken into account in the risk assessment (net perspective).

The score for a likelihood of occurrence of more than 50% in the analysis period is classified as high; for a medium classification, the likelihood of occurrence is at least 25%. For the criterion of financial loss, the score rises in line with the loss; the highest score of 10 is reached when the potential loss is upwards of € 1 billion. The criterion of reputational damage can have characteristics ranging from local erosion of confidence and loss of trust at local level to loss of reputation at regional or international level. The potential threat to adherence to external legal requirements is classified based on the influence on the local company, the brand or the Group.

The result is a risk score of between 0 and 200 as an expression of the risk assessment. A score of 0–10 for the likelihood of occurrence is multiplied with a score of 0–20 for the extent of the damage.

Risk reporting to the committees of Volkswagen AG takes place quarterly depending on materiality thresholds. Acute risks from a risk score of 40 or potential financial loss of € 1 billion or more are presented to the Board of Management and the Audit Committee of the Supervisory Board of Volkswagen AG. The quarterly risk process covers acute risks for our business including risks for the achievement of our sustainability goals and thus also risks associated with climate change. The focus is on acute risks for the next 24 months (short and medium term). In addition, long-term risks requiring short- and medium-term countermeasures are identified and managed using the quarterly risk process. We also use competition, environmental and market studies to identify risks.

DEFINITION AND PURSUIT OF AMBITIOUS DECARBONIZATION TARGETS

The Volkswagen Group wants to become a net carbon neutral company by 2050. Compared to 2015, the company wants to reduce the carbon footprint of its passenger cars and light commercial vehicles by 30% per vehicle by as early as 2025. To achieve this goal, offset action is also planned alongside carbon reduction measures and converting to renewable energies.

In 2021, the Group intensified its decarbonization targets, significantly strengthening its ambitions: the Volkswagen Group is aiming to reduce the CO_2 emissions of its passenger cars and light vehicles by 30% in production and the use phase between 2018 and 2030. The plan goes beyond the existing intermediate goals for 2025 because the goal for 2030 is to be achieved through pure CO_2 reduction. The Science Based Targets initiative (SBTi) has confirmed to the Volkswagen Group that the Company fulfills the conditions for limiting global warming to "well below two degrees Celsius" with its decarbonization target. Furthermore, during the reporting period Volkswagen committed to increase the level of its ambition to 1.5 degrees Celsius, and the SBTi is currently assessing this.

The decarbonization target for 2030 covers not only passenger cars and light commercial vehicles but also a target for heavy trucks and buses from Scania, which represents a sub-target for the Group. Scania is committed to reducing absolute Scope 1 and Scope 2 greenhouse gas emissions by 50% by 2025 compared with the base year of 2015. The Scope 3 greenhouse gas emissions from the use of vehicles sold are to be reduced by 20% per vehicle kilometer by 2025, also compared with a 2015 baseline. The SBTi confirmed to Scania that these targets are at a level that allow global warming to be limited to 1.5 °C. MAN also adopted a commitment in the reporting year and is aiming for SBTi certification of the decarbonization target.

The Group's previous target of reducing CO_2 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.

The level of ambition for the decarbonization targets is considered a minimum requirement for the Group brands, which are also free to set higher targets themselves. For example, Volkswagen wants to reduce its CO_2 emissions per vehicle in the EU by 40% and significantly exceed the Group-wide target of 30% by 2030 (base year of 2018). Porsche aims to become a net carbon-neutral company by 2030.

Decarbonization Index for Target Achievement Measurability

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 CO_2 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. In this index, the use phase is calculated over 200,000 km and with reference to region-specific fleet values without legal flexibilities. The intensity of the CO_2 emissions from the electricity used to charge 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 calculating supply chain and recycling emissions, have been verified externally and independently in accordance with the ISO 14040 standard. During the reporting period, luxury brands Bentley, Lamborghini and Bugatti were added to the DCI calculation process.

The DCI calculation methodology is regularly 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. The DCI computational logic changed during the 2020 reporting period as a result of the testing methodology for fleet values being changed. Given the fleet regulation rules in force, in 2021 the test cycle for measuring consumption and exhaust gas data was changed from NEDC (New European Driving Cycle) to WLTP (Worldwide Harmonized Light-Duty Vehicles Test Procedure). As a result of the more realistic test cycle, higher consumption is reported and emissions recorded in the use phase increase accordingly.

The DCI is to be decreased by 30% by 2030 compared with the base year of 2018.

In the reporting year, the DCI value averaged 45.9 metric tons of CO_2 per vehicle. Compared to the WLTP-adjusted value for 2020, that represents a reduction of 1.7 metric tons of CO_2 per vehicle. The electrification of the portfolio combined with the use of renewable energies in production and the use phase is showing a significant impact.

TRANSPARENCY ON CO_2 EMISSIONS AS A BASIS FOR IMPROVEMENTS

Every year, we calculate the Group's carbon footprint using the Scope 1 to 3 inventory, in line with the requirements of the internationally accepted Greenhouse Gas Protocol (GHG). On this basis, we can determine the success of the measures we have put in place and identify other areas where we can take action.

Not shown are additional CO_2 compensation projects, e.g. for the carbon-neutral delivery of electric vehicles. The compensation volume in the reporting period ran to 6.1 million metric tons of CO_2.

This equates to 0.9 metric tons of CO_2 per vehicle for all vehicles included in the Decarbonization Index.

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 CO_2 emissions for 13 out of a total of 15 Scope 3 categories in 2021. According to this, around 16% of all Scope 3 emissions are in the "Purchased goods and services" emissions category, while 76.7% are in the "Use phase" emissions category (well to wheel). To calculate use-phase emissions in the DCI and in the Scope 3 GHG inventory, fleet values not including any legal flexibilities are used.

The calculation of CO_2 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).

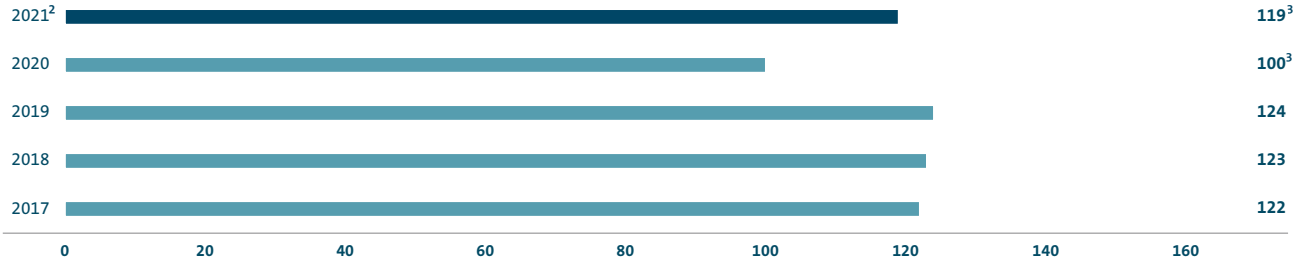
Fleet CO_2 emissions in Europe (EU27+2)[1]
In the reporting period, the Volkswagen Group's EU (EU27+2) passenger car fleet (not including Lamborghini and Bentley) emitted an average of 119 g CO_2/km (WLTP)[2] in line with statutory measurement bases, compared with a statutory target of 121 g CO_2/km (WLTP)[2]. This means that the Volkswagen Group exceeded the EU's fleet CO_2 target.

As small volume manufacturers with an independent fleet, the Lamborghini and Bentley brands are assessed under European CO_2 legislation and both exceeded their individual targets.

Bentley and Lamborghini will be incorporated in the Volkswagen Group's new passenger car fleet in the EU from 2022 onwards. The European Commission is pursuing a target of a 15% reduction in CO_2 by 2025, which corresponds to a CO_2 target of less than 105 g CO_2/km for our EU new passenger car fleet. A 55% reduction is proposed for 2030, which corresponds to a CO_2 target of less than 60 g CO_2/km. We expect our EU new passenger car fleet to be able to meet the target for 2025 and outperform the target for 2030.

The Volkswagen Group's new light commercial vehicles fleet in the EU emitted an average of 202 g CO_2/km (WLTP) in the 2021 reporting period as per statutory measurements bases,[2] compared with a statutory target of 198 g CO_2/km (WLTP)[2]. Contrary to what was originally planned, the target was missed due to the shortage of semiconductors and the resultant limited availability of vehicles. The target for the CO_2 pool established with other manufacturers was reached. All the figures mentioned are subject to confirmation of the CO_2 data in the context of official publication by the European Commission. The European Commission is pursuing a target of a 15% reduction in CO_2 by 2025, which corresponds to a CO_2 target of less than 175 g CO_2/km for our EU new light commercial vehicle fleet. A 50% reduction is proposed for 2030, which corresponds to a CO_2 target of less than 115 g CO_2/km. We expect our EU new light commercial vehicle fleet to be able to meet the target for 2025 and outperform the target for 2030.

CO_2 EMISSIONS OF THE VOLKSWAGEN GROUP'S EUROPEAN (EU27+2) NEW PASSENGER CAR FLEET
in grams per kilometer (WLTP)



[1] Belgium, Malta, Bulgaria, the Netherlands, Denmark, Austria, Germany, Poland, Estonia, Portugal, Finland, Romania, France, Slovakia, Greece, Slovenia, Ireland, Spain, Italy, Sweden, Croatia, the Czech Republic, Latvia, Hungary, Lithuania, Luxembourg, Cyprus + Iceland, Norway.
[2] The European Commission switched its calculation of CO_2 fleet emissions from NEDC to WLTP in 2021.
[3] Subject to confirmation of the CO_2 data in the context of official publication by the European Commission.

In the United Kingdom and Switzerland/Liechtenstein markets, the Volkswagen Group's fleets narrowly missed the statutory targets for the 2021 reporting period.

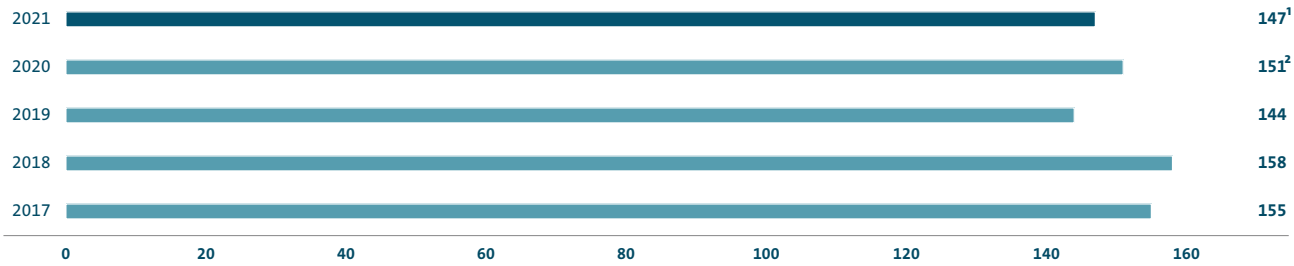
CO_2 fleet emissions in the USA

In the USA, the emissions community – consisting of Group brands Volkswagen Passenger Cars, Audi, Lamborghini, Bentley, Porsche and Bugatti – undertakes to comply with both the Greenhouse Gas (GHG) and Corporate Average Fuel Economy (CAFE) regulations, which every manufacturer has to comply with in relation to passenger cars and light commercial vehicles, factoring in credits for "air conditioning" and "off cycle credits". Due to the delay in the confirmation by the authorities of model years differing from the calendar year, internal calculations are used to determine the figures for the current and preceding model year. The passenger car and light commercial vehicle fleet's GHG CO_2 figure for model year 2021 (internal data as of September 2021) is an average of 147 g CO_2/km (model year 2020: 151 g CO_2/km) compared with a statutory target of 142 g CO_2/km (model year 2020: 139 g CO_2/km). By applying the statutory flexibility provided for regarding GHG and in CAFE as well as externally acquired credits, the Volkswagen Group succeeded in complying with applicable requirements – subject to confirmation by the authorities – for model year 2021. The figure mentioned for model year 2020 is subject to confirmation by the EPA and CARB authorities.

We anticipate a CO_2 target of around 110 g CO_2/km in the USA for 2025 and therefore expect to be able to achieve this target. We will increase the electric vehicle proportion of our new vehicle fleet to well over 40% by 2030 and are therefore within the current Administration's target range.

VOLKSWAGEN GROUP CO_2 EMISSIONS ACCORDING TO THE GHG PROTOCOL FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES IN THE USA

in grams per kilometer by model year



[1] Subject to the submission of the MY21 final MY report and the subsequent confirmation by the EPA and the CARB (internal data as of September 2021).
[2] Subject to confirmation by the EPA and the CARB (MY20 final MY report submitted but not yet confirmed).

MANAGING TARGET ACHIEVEMENT IN DECARBONIZATION

The two levers with the greatest influence on greenhouse gas 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. Around 90% of the decarbonization targeted by the Group can be realized through electrification of the fleet and switching to green energy.

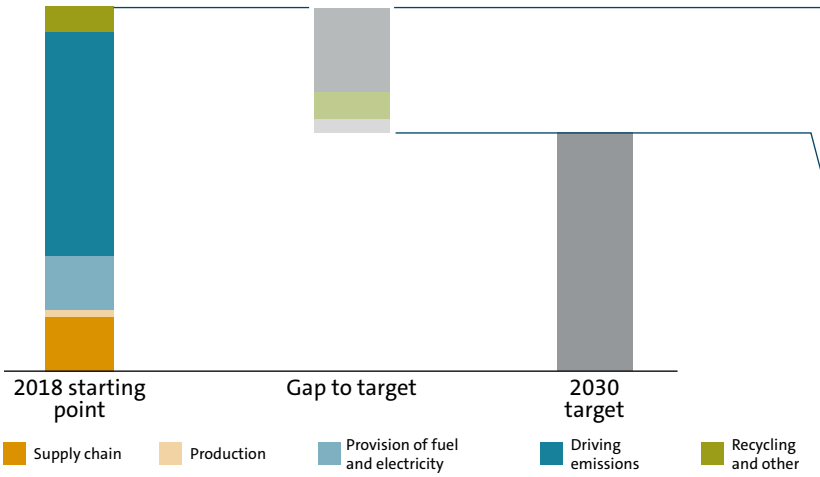
Measures will be implemented and managed through a decarbonization program that is being rolled out for the entire Group, for all brands and regions. The Group Steering Committee for Sustainability is responsible for the program and target achievement. The Decarbonization Project Center that we founded ourselves and which includes experts from all brands and departments is responsible for strategy and target development and also for implementation. We use a predefined 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.

In the reporting year, TRATON SE launched its own decarbonization program that is connected with the existing decarbonization program for passenger cars and light commercial vehicles via interfaces. The considerable CO_2 footprint of heavy commercial vehicles means the Volkswagen Group expects this step and the associated measures to result in significant progress in reducing greenhouse gas emissions.

Internal carbon pricing tools are an integral component of our decarbonization controlling. When managing the portfolio, we work with shadow prices to integrate emission-related risks into decision-making processes and with internal emissions trading to optimize reduction paths of CO_2 fleet compliance. In the decarbonization program, we assess the efficiency of reduction measures using abatement costs and aggregate these in an abatement cost curve. In the course of this, we work with an internal carbon price or abatement costs of up to € 20 per metric ton of CO_2, which is reviewed annually based on target achievement and adjusted by a resolution of the Board of Management.

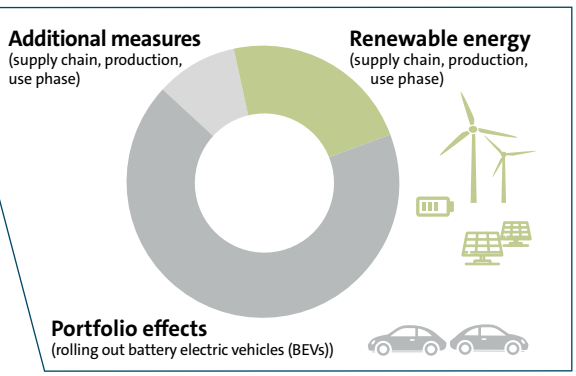
RENEWABLE ENERGY IS A KEY LEVER FOR GROUP'S DECARBONIZATION TARGET

Roadmap for the DCI reduction measures [metric tons of CO_2e per vehicle]



Source: Volkswagen AG

Measures to close the gap to the target



Schematic illustration

DECARBONIZATION KPIS

KPI	Unit	2021	2020	Notes and comments
Decarbonization Index WLTP (NEDC) (strategic KPI)	metric tons of CO_2/vehicle	45.9	47.6 (43.0)	Passenger-car manufacturing brands and light-commercial-vehicle-producing brands 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 decreased by 0.6 metric tons of CO_2/vehicle in 2021. Projects in the supply chain (closed-loop management of aluminum scrap and renewable energy for battery cell production) and our green electricity measures in the use phase led to a reduction of total emissions in the DCI by 0.5 metric tons of CO_2/vehicle. The DCI for 2020 and 2021 is reported without taking offset measures into account. To enable comparability, the DCI reported in 2020 was adjusted in line with the new calculation assumptions (WLTP).
Average emissions of the new passenger car fleet (strategic KPI)				
EU[1]	g CO_2/km	119	99.9	Excluding Lamborghini and Bentley
USA	g CO_2/km	147	151	
Alternative drive technologies in the Group				Volkswagen Group production: Volkswagen Passenger Cars, Audi, ŠKODA, SEAT, Volkswagen light commercial vehicles
Worldwide				
Gas drives (natural gas and LPG)	Number of vehicles produced/percentage change	35,192/ –24.0	46,326/ –61.0	
Hybrid drives	Number of vehicles produced/percentage change	239,998/ +18.9	201,852/ +265.2	
All-electric drives	Number of vehicles produced/percentage change	427,946/ +112.2	201,675/ +82.1	
Alternative drives (total)	**Number of vehicles produced/percentage change**	**703,136/ +56.3**	**449,853/ +57.7**	
Europe				EU 27, United Kingdom, Norway and Iceland
Gas drives (natural gas and LPG)	**Number of vehicles** produced/percentage change	34,917/ –23.6	45,700/ –42.4	
Hybrid drives	Number of vehicles produced/percentage change	198,550/ +46.7	135,367/ +383.7	
All-electric drives	Number of vehicles produced/percentage change	289,389/ +65.0	175,369/ +165.9	
Alternative drives (total)	**Number of vehicles produced/percentage change**	**522,856/ +46.7**	**356,436/ +105.7**	
Product carbon footprint (DCI)	metric tons of CO_2/vehicle	45.9	47.6 (43.0)	

[1] The European Commission switched its calculation of CO_2 fleet emissions from NEDC to WLTP in 2021.

KPI	Unit	2021	2020	Notes and comments
Scope 1 GHG emissions	in million metric tons of CO_2	4.74	4.34	
of which Volkswagen AG	in million metric tons of CO_2	2,21	2,22	
Scope 1 GHG emissions	in kg of CO_2/vehicle	476	438	
of which Volkswagen AG	in kg of CO_2/vehicle	3,51	2,8	
Scope 2 GHG emissions	in million metric tons of CO_2	2.42	2.80	
of which Volkswagen AG	in million metric tons of CO_2	0.14	0.11	
Scope 2 GHG emissions	in kg of CO_2/vehicle	290	304	
of which Volkswagen AG	in kg of CO_2/vehicle	221	136	
Scope 3 GHG emissions[1]	in million metric tons of CO_2	364.14	411.13 (368.94)	WLTP (NEDC)
Scope 3 GHG emissions in the Volkswagen Group				
Purchased goods and services	in metric tons of CO_2/ in %	58,092,388/ 16.0	61,301,008/ 16.6	

[1] In the Scope 3 GHG inventory, the methodology used in the "Franchise" category was enhanced in 2021. This is expected to result in an increase in reported emissions in this category. Validated actual figures for the reporting year will be reported from the 2022 reporting year onwards.

EU TAXONOMY

Doing business in an environmentally sustainable way is one of the central challenges of our time. The EU has defined criteria for determining the corporate degree of environmental sustainability. With our taxonomy-aligned investments in development activities and in property, plant and equipment, we are today already shaping our future in an environ-mentally sustainable way as envisaged by the EU taxonomy.

BACKGROUND AND OBJECTIVES

As part of the European Green Deal, the European Union (EU) has placed the topics of climate protection, the environment and sustainability at the heart of its political agenda in order to achieve climate neutrality by the year 2050. To this end, the EU Action Plan on financing sustainable growth was developed that aims to reorient capital flows towards sustainable investment, to mainstream sustainability in risk management and to foster transparency and longtermism in financial and economic activity. The Action Plan comprises ten measures and centres around the EU taxonomy (Regulation (EU) 2020/852 and associated delegated acts).

The EU taxonomy is a classification system for sustainable economic activities. An economic activity is considered taxonomy-eligible if it is listed in the EU taxonomy and can potentially contribute to realizing at least one of the following six environmental objectives:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems.

An activity is only considered environmentally sustainable, i.e. taxonomy-aligned, if it meets all three of the following conditions:

- The activity makes a substantial contribution to one of the environmental objectives by meeting the screening criteria defined for this economic activity, e.g. level of CO_2 emissions for the climate change mitigation environmental objective.
- The activity meets the Do-No-Significant-Harm (DNSH) criteria defined for this economic activity. These are designed to prevent significant harm to one or more of the other environmental objectives, e.g. from the production process or by the product.
- The activity is carried out in compliance with the minimum safeguards, which apply to all economic activities and relate primarily to human rights and social and labor standards.

FIRST-TIME REPORTING FOR FISCAL YEAR 2021

Under the EU taxonomy, the Volkswagen Group is required to report on the climate change mitigation and climate change adaptation environmental objectives for the first time for fiscal year 2021; the disclosure requirements extend to the share of economic activities that are taxonomy-eligible and that are not taxonomy-eligible in sales revenue, capital expenditure and operating expenditure. The figures reported relate to the consolidated companies included in the Volkswagen Group's financial statements. Volumes and financial data for our Chinese joint ventures are therefore excluded. As the EU taxonomy is being applied for the first time, prior-year figures are not provided.

The wording and terminology used in the EU taxonomy are currently subject to some uncertainty in interpretation. Our interpretation is set out below.

In addition to the current disclosure obligations, we have voluntarily assessed our business activities for taxonomy alignment. We already report the relevant figures for passenger cars and light commercial vehicles, and for our hydrogen activities in the Power Engineering Business Area.

ECONOMIC ACTIVITIES OF THE VOLKSWAGEN GROUP

In its Group strategy NEW AUTO – Mobility for Generations to Come, the Volkswagen Group is driving its transformation towards becoming one of the world's leading providers of sustainable mobility. We pay particular attention here to the use of resources and the emissions of our product portfolio, as well as those of our sites and plants.

The Volkswagen Group's activities in its vehicle-related business with passenger cars, light commercial vehicles, trucks, buses and motorcycles cover the development, production and sale of vehicles and extend to our financial services and other vehicle-related products and services. Activities in these areas are suited under the EU taxonomy to making a substantial contribution to the environmental objective of climate change mitigation by increasing clean or climate-neutral mobility.

The Volkswagen Group's activities in the Power Engineering Business Area comprise the development, design, production, sale and servicing of machinery and equipment. These activities also fall under the environmental objective of climate change mitigation.

The analysis of the economic activities in the context of the EU taxonomy has not revealed any activities that contribute specifically to the environmental objective of climate change adaptation.

The table below sets out the allocation of our activities in the vehicle-related business and in Power Engineering to the economic activities listed in the EU taxonomy under the environmental objective of climate change mitigation. Changes may be made to the economic activities in future as the rules around the EU taxonomy dynamically evolve.

Economic activity in accordance with the EU taxonomy	Description of economic activity	Allocation in the Volkswagen Group
Environmental objective: mitigating climate change		
3. Manufacturing		
3.2 Manufacture of equipment for the production and use of hydrogen	Manufacture of equipment for the production and use of hydrogen.	Power Engineering
3.3 Manufacture of low-carbon technologies for transport	Manufacture, repair, maintenance, retrofitting, repurposing and upgrade of low-carbon vehicles, rolling stock and vessels.	Vehicle-related business
3.6 Manufacture of other low-carbon technologies	Manufacture of technologies aimed at substantial greenhouse gas emission reductions in other sectors of the economy, where those technologies are not covered by other economic activities in the manufacturing sector.	Power Engineering
9. Professional, scientific and technical activities		
9.1 Close to market research, development and innovation	Research, applied research and experimental development of solutions, processes, technologies, business models and other products dedicated to the reduction, avoidance or removal of greenhouse gas emissions for which the ability to reduce, remove or avoid greenhouse gas emissions in the target economic activities has at least been demonstrated in a relevant environment, corresponding to at least Technology Readiness Level 6.	Power Engineering

Economic activities in vehicle-related business

Economic activity 3.3 Manufacture of low-carbon technologies for transport

We allocate all activities in our vehicle-related business associated with the development, production, sale (including financial services), operation and servicing of vehicles to this economic activity. This includes all passenger cars, light commercial vehicles, trucks, buses and motorcycles manufactured by us, irrespective of their powertrain technology, and also includes genuine parts.

In our vehicle-related business, we have detailed the vehicles manufactured by us by model and powertrain technology and analyzed the CO_2 emissions associated with them in accordance with the WLTP. In this way, we have identified those vehicles among all of our taxonomy-eligible vehicles that meet the screening criteria and with which the substantial contribution to climate change mitigation is measured. These include all of the Volkswagen Group's all-electric vehicles. Until December 31, 2025, they also include passenger cars and light commercial vehicles with CO_2 emissions of less than 50 g/km. This encompasses the majority of our plug-in hybrids. Buses meeting the EURO VI standard (Stage E) are also included until December 31, 2022.

At this stage, other activities that are directly associated with the primary vehicle-related business and that in our view should also be allocated to this economic activity have not yet been included or have been interpreted as not yet being taxonomy-eligible. This is because, as the rules of the EU taxonomy currently stand, it is still unclear where to record them in accordance with the EU taxonomy. These activities particularly include the sale of engines and power-trains, as well as parts deliveries, the sale of non-Group products and production under license by third parties. Hedging transactions and individual activities that we present primarily under Other sales revenue in the consolidated financial statements do not conform to the descriptions of economic activities in the EU taxonomy, and we have therefore initially classified them as not being taxonomy-eligible.

Economic activities in Power Engineering

In the Power Engineering Business Area, we have analyzed our activities with respect to their classification under the EU taxonomy and, with the exception of the heavy fuel oil engine new building business and individual components for the extraction and processing of fossil fuels, have identified them as taxonomy-eligible.

Economic activity 3.2 Manufacture of equipment for the production and use of hydrogen

Our activities relating to the manufacture of equipment for the production and use of hydrogen that meet the screening criteria and make a substantial contribution to the climate change objective are taxonomy-eligible. One example is the use of green hydrogen. At Volkswagen, these include the power-to-X technology for the production of low-carbon or carbon-neutral synthetic fuels, as well as components for the storage of hydrogen.

Economic activity 3.6 Manufacture of other low-carbon technologies

The description of this economic activity means that only those technologies manufactured for the purpose of reducing greenhouse gas emissions substantially in other sectors of the economy are taxonomy-eligible. At Volkswagen, this comprises all new-build activities that enable the use of gas and climate-neutral synthetic fuels (e.g. manufacturing of gas and dual-fuel engines),

all industrial solutions for energy storage and sector coupling (e.g. heat pumps) and all solutions for carbon capture, storage and usage; it also includes subsea compression (subsea compression close to the wellhead for the extraction of natural gas). These activities are rounded off by the service and after-sales business, comprising the upgrading and modernization of existing equipment. For example, we retrofit existing maritime fleets with technology that makes it possible to reduce CO_2 emissions.

Economic activity 9.1 Close to market research, development and innovation
The description of this economic activity includes applied research in technologies for the reduction or avoidance of greenhouse gas emissions. We allocate our licensing business to this economic activity. This business provides our development services in the form of production documents, based on which our licensees are authorized to manufacture corresponding gas and/or dual-fuel engines.

For economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, we meet the screening criteria that are a requirement for the substantial contribution to the climate change mitigation objective. Given that the new reporting obligations and the requirements specified therein have only very recently been introduced, it was not yet possible to provide corresponding proof of economic activities covered by 3.6 Manufacture of other low-carbon technologies and 9.1 Close to market research, development and innovation.

DO NO SIGNIFICANT HARM (DNSH)

The DNSH criteria were analyzed in the reporting year for economic activities covered by 3.3 Manufacture of low-carbon technologies for transport and 3.2 Manufacture of equipment for the production and use of hydrogen.

In the vehicle-related business, an analysis was performed for each vehicle production site where passenger cars, light commercial vehicles, trucks and buses are or will be produced that meet the screening criteria for the substantial contribution of economic activity 3.3 Manufacture of low-carbon technologies for transport, or that are to meet them in future according to our five-year planning. Of the approximately 30 sites included, the majority are located in the EU, with some in the United Kingdom, Turkey, the USA, Mexico, Brazil and China.

For the Power Engineering Business Area, an analysis was performed for each site that produces relevant components for systems or is responsible for supply chains that meet the screening criteria for the substantial contribution of economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, or that are to meet them in future according to our five-year planning. There are two such sites, located in Germany and Sweden.

Below, we set out our interpretation and describe the main analyses we used to examine whether there was any substantial harm to the other environmental objectives. The assessments confirm that we meet the requirements of the DNSH criteria in the reporting year for the sites producing passenger cars and light commercial vehicles. The outcome of the evaluation of the two Power Engineering sites was also positive.

Climate change adaptation
We performed a climate risk and vulnerability assessment to identify which production sites may be affected by physical climate risks. The physical climate risks we identified were assessed on the basis of the lifetime of the relevant fixed asset.

Volkswagen's climate-based DNSH assessment is based on Representative Concentration Pathway (RCP) scenario 8.5 to the year 2050 and thus assumes the highest concentration of CO_2 according to the Intergovernmental Panel on Climate Change (IPCC). The relevance of the identified threats was assessed for the local environment and, if ap-propriate, the measures needed to mitigate the risk were developed.

Sustainable use and protection of water and marine resources
We evaluated our economic activities with respect to the sustainable use and protection of water and marine resources looking at the three following criteria: preserving water quality, avoiding water stress, and an environmental impact assessment (EIA) looking at the impact on water, or a similar process. We based the analysis primarily on ISO 14001 certificates, the findings of official approval procedures and other external data sources in relation to regions exposed to increased risks.

Transition to a circular economy
Environmentally compatible waste management in the manufacturing process, reuse and use of secondary raw materials and a long product lifespan are a major part of Volkswagen's environmental management system. Volkswagen defines clear and unambiguous guidelines on the circular economy in its environmental principles, in its overall factory white paper and in its goTOzero strategy.

The product-related requirements for passenger cars and light commercial vehicles are reflected in the implementation of the statutory end-of-life vehicle requirements in conjunction with the type approval of the vehicle models. In addition to this, each brand has targets and measures for the use of recycled materials in new vehicles.

Pollution prevention and control
The DNSH criteria for this environmental objective require that the economic activity in question does not lead to substances listed in a variety of EU chemical regulations and directives being manufactured, placed on the market or used. Approval and monitoring processes are implemented with the aim of ensuring compliance with the legislation specified in the DNSH criteria.

Protection and restoration of biodiversity and ecosystems

In order to verify adherence to the requirements on biodiversity and ecosystems, the relevant areas were identified. Where biodiversity-sensitive areas are located close to a production site, we checked whether a nature conservation assessment had been performed and whether nature conservation measures had been defined in the environmental approvals and subsequently implemented.

MINIMUM SAFEGUARDS

The minimum safeguards consist of the OECD Guidelines for Multinational Enterprises, the United Nations Guiding Principles on Business and Human Rights, the Fundamental Conventions of the International Labour Organisation (ILO) and the International Bill of Human Rights. Below, we describe the main analyses we used to examine whether the minimum safeguards are adhered to.

The Volkswagen Group has 120 production sites in 83 countries, including those of the Chinese joint ventures. We conducted human rights risk assessments for 782 controlled Group companies worldwide; this included all sites that were also examined under the DNSH criteria.

For the risks identified in the analysis, the companies received risk-specific measures to be implemented by the end of 2021.

Key Performance Indicators in accordance with the EU Taxonomy regulation

The EU taxonomy defines sales revenue, capital expenditure and operating expenditure as the key performance indicators that must be reported on. Disclosures on taxonomy eligibility are mandatory for fiscal year 2021. We have voluntarily assessed our business activities for taxonomy alignment and already report the relevant figures for passenger cars and light commercial vehicles, and for our hydrogen activities in the Power Engineering Business Area.

The financial figures relevant for the Volkswagen Group are based on the IFRS consolidated financial statements for fiscal year 2021. Where possible, the figures have been directly assigned to an economic activity. In our vehicle-related business, for example, we compiled the financial figures based on the vehicle model and powertrain technology. This applies both to the vehicles themselves and to the corresponding financial services and other services and activities. Only where this was not possible for capital expenditure and operating expenditure, the figures were broken down using allocation formulas. In the vehicle-related business, we based the allocation formulas on the long-term sales plan and the capacity and utilization planning at the individual sites. In the Power Engineering Business Area, we used allocation formulas based on planned sales revenue. This data and planning form part of the medium-term financial planning for the next five years, on which the Board of Management and Supervisory Board have passed a resolution.

Sales revenue

The definition of turnover in the EU taxonomy corresponds to sales revenue as reported in the IFRS consolidated financial statements, which amounted to € 250.2 billion in fiscal year 2021 (see also note 1 "Sales revenue" in the notes to the consolidated financial statements).

Of this total, € 225.4 billion, or 90.1% of Group sales, was attributable to economic activity 3.3 Manufacture of low-carbon technologies for transport and classified as taxonomy-eligible. This includes sales revenue after sales allowances from new and used vehicles, including motorcycles, from genuine parts, from the rental and lease business, and from interest and similar income, as well as sales revenue directly related to vehicles, such as workshop and other services.

Of the taxonomy-eligible sales revenue, € 21.3 billion meet the screening criteria used to measure the substantial contribution to climate change mitigation. This includes all of our all-electric vehicles, the majority of the plug-in hybrids, and the buses meeting the EURO VI standard (Stage E).

Taking into account the DNSH criteria and minimum safeguards, sales revenue of € 21.1 billion attributable to our passenger cars and light commercial vehicles, accounting for 8.5% of consolidated sales revenue, was taxonomy-aligned. Of this amount, € 14.6 billion, or 5.8% of consolidated sales revenue, was attributable to our all-electric models (BEVs).

In the Power Engineering Business Area, the majority of our taxonomy-eligible sales revenue was attributable to economic activity 3.6 Manufacture of other low-carbon technologies (€ 2.4 billion). A further € 13 million was contributed by economic activity 9.1 Close to market research, development and innovation. Our activities that fall under economic activity 3.2 Manufacture of equipment for the production and use of hydrogen recorded taxonomy-aligned sales revenue of € 5 million, taking into account the DNSH criteria and minimum safeguards.

Of the Volkswagen Group's total sales revenue in fiscal year 2021,

- € 227.8 billion, or 91.0%, was taxonomy-eligible sales revenue and
- € 21.2 billion, or 8.5%, was taxonomy-aligned sales revenue.

SALES REVENUE

Economic activities	Sales Revenue		Substantial Contribution to Climate Change Mitigation		Compliance with DNSH Criteria	Compliance with minimum Safeguards	Taxonomy-aligned Sales Revenue	
	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	227,787	91.0	21,268	8.5	Y/N	Y	21,152	8.5
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	225,380	90.1	21,264	8.5	Y/N	Y	21,147	8.5
of which taxonomy-aligned BEVs (passenger cars and light commercial vehicles)	–	–	–	–	Y	Y	14,579	5.8
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	5	0.0	5	0.0	Y	Y	5	0.0
3.6 Manufacture of other low-carbon technologies	2,390	1.0	–	–	–	–	–	–
9.1 Close to market research, development and innovation	13	0.0	–	–	–	–	–	–
B. Taxonomy-non-eligible activities	22,413	9.0						
Total (A + B)	250,200							

[1] All percentages relate to the Group's total sales revenue.

Capital expenditure

Capital expenditure for the purposes of the EU taxonomy refers to the following items in the IFRS consolidated financial statements: additions to intangible assets, additions to property, plant and equipment, and additions to lease assets and investment property. These are reported in the notes to the 2021 consolidated financial statements in note 12 "Intangible assets", note 13 "Property, plant and equipment" and note 14 "Lease assets and investment property". Additions from business combinations, each of which is reported under "Changes in consolidated Group", are also included. By contrast, additions to goodwill are not included in the calculation.

In fiscal year 2021, additions in the Volkswagen Group as defined above amounted to

- € 9.1 billion from intangible assets,
- € 10.7 billion from property, plant and equipment and
- € 29.1 billion from lease assets (mainly vehicle leasing business) and investment property.

Additions from changes in the consolidated Group, which amounted to € 5.1 billion in fiscal year 2021, can also be added to this figure. These mostly related to Navistar. Total capital expenditure to be included in accordance with the EU taxonomy therefore came to € 54.0 billion.

All capital expenditure attributable to our vehicle-related business is associated with economic activity 3.3 Manufacture of low-carbon technologies for transport. Taxonomy-eligible capital expenditure for the vehicle-related business amounted to € 53.5 billion, or 99.1% of the Group's capital expenditure.

To determine the substantial contribution in the vehicle-related business, we compiled the financial figures based on the vehicle model and powertrain technology, in the same way as for sales revenue. Where possible, capital expenditure was directly attributed to vehicles. It was included, if the vehicles in question make a substantial contribution to the climate change mitigation objective. We did not include any capital expenditure directly attributable to vehicles that do not meet the screening criteria. Capital expenditure that was not clearly attributable to a particular vehicle was taken into account on a proportionate basis using allocation formulas. In our vehicle-related business, we used model- and brand-specific allocation formulas based on the long-term sales plan and the capacity and utilization planning for the Group companies. Depending on the primary business activity, allocation formulas from the long-term sales plan were used for sales companies, for example, and allocation formulas based on the capacity and utilization planning were used for production companies. This means that capital expenditure on sites that according to our medium-term planning will only produce vehicles meeting the screening criteria for the substantial contribution in the next five years was counted in full via the allocation formula. In contrast, capital expenditure on sites that only produce vehicles not meeting the screening criteria was not counted under the allocation formula. Calculated in this way, capital expenditure relating to vehicles that meet the screening criteria for the substantial contribution amounted to € 14.4 billion.

Taking into account the DNSH criteria and minimum safeguards, capital expenditure of € 14.2 billion on our passenger cars and light commercial vehicles was taxonomy-aligned. This represented 26.2% of the Group's total capital expenditure. This figure includes additions to capitalized development costs of € 3.5 billion and additions to property, plant and equipment of € 3.8 billion for our all-electric passenger cars and light commercial vehicles (BEVs).

Taxonomy-eligible capital expenditure in the Power Engineering Business Area has been allocated to economic activity 3.6 Manufacture of other low-carbon technologies. Capital expenditure was broken down based on planned sales revenue. Taxonomy-eligible capital expenditure amounted to € 65 million.

Of the Volkswagen Group's total capital expenditure in fiscal year 2021,

- € 53.6 billion, or 99.2%, was taxonomy-eligible capital expenditure and
- € 14.2 billion, or 26.2%, was taxonomy-aligned capital expenditure.

CAPITAL EXPENDITURE

Economic activities	Capital Expenditure		Substantial Contribution to Climate Change Mitigation		Compliance with DNSH Criteria	Compliance with minimum Safeguards	Taxonomy-aligned Capital Expenditures	
	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	53,596	99.2	14,437	26.7	Y/N	Y	14,165	26.2
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	53,531	99.1	14,437	26.7	Y/N	Y	14,165	26.2
of which additions to capitalized development costs for BEVs (passenger cars and light commercial vehicles)	–	–	–	–	Y	Y	3,504	6.5
of which additions to property, plant and equipment for BEVs (passenger cars and light commercial vehicles)	–	–	–	–	Y	Y	3,760	7.0
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	–	–	–	–	–	–	–	–
3.6 Manufacture of other low-carbon technologies	65	0.1	–	–	–	–	–	–
9.1 Close to market research, development and innovation	–	–	–	–	–	–	–	–
B. Taxonomy-non-eligible activities	443	0.8						
Total (A + B)	54,039							

[1] All percentages relate to the Group's total capital expenditure.

Operating expenditure

The operating expenditure reported by us for the purposes of the EU taxonomy comprises non-capitalized research and development costs, which can be taken from note 12 "Intangible assets". We also include the expenditure for short-term leases recognised in our consolidated financial statements, which can be found in note 33 "IFRS 16 (Leases)", and expenditure for maintenance and repairs.

The allocation of operating expenditure to the economic activities followed the same logic as that described for capital expenditure.

All operating expenditure attributable to the vehicle-related business is associated with economic activity 3.3 Manufacture of low-carbon technologies for transport and has been classified as taxonomy-eligible.

Where possible, non-capitalized research and development costs were directly attributed to vehicles. It was included, if the vehicles in question make a substantial contribution to the climate change mitigation objective. We did not include any non-capitalized research and development costs directly attributable to vehicles that do not meet the screening criteria. Non-capitalized research and development costs that were not clearly attributable to a particular vehicle were taken into account on a proportionate basis using allocation formulas. For these and other operating expenses, the same allocation formulas were used as for capital expenditure.

Taxonomy-eligible operating expenditure in the Power Engineering Business Area falls under economic activity 3.6 Manufacture of other low-carbon technologies. As with capital expenditure, operating expenditure was broken down on the basis of planned sales revenue.

OPERATING EXPENDITURE

Economic activities	Operating Expenditures		Substantial Contribution to Climate Change Mitigation		Compliance with DNSH Criteria	Compliance with minimum Safeguards	Taxonomy-aligned Operating Expenditures	
	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	9,911	99.2	3,463	34.7	Y/N	Y	3,265	32.7
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	9,702	97.1	3,463	34.7	Y/N	Y	3,265	32.7
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	–	–	–	–	–	–	–	–
3.6 Manufacture of other low-carbon technologies	209	2.1	–	–	–	–	–	–
9.1 Close to market research, development and innovation	–	–	–	–	–	–	–	–
B. Taxonomy-non-eligible activities	81	0.8						
Total (A + B)	9,992							

[1] All percentages relate to the Group's total operating expenditure.

CIRCULAR ECONOMY

60

STRENGTHENING THE CIRCULAR ECONOMY

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 key sustainability topics. Against this background, businesses such as the Volkswagen Group face tighter legal regulation and increasing pressure from 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.

The Volkswagen Group created concepts for the reconditioning and recycling of vehicle components early on. One important driver of the circular economy is the ongoing decarbonization of the Volkswagen Group. The growing use of secondary materials and the establishment of closed loops of materials help to significantly reduce our CO_2 emissions.

In the NEW AUTO Group strategy, the circular economy has been defined as a focus topic within the central Group initiatives on sustainability. In the strategic design of this action area, we orient ourselves on the existing "goTOzero" mission statement. With this the Volkswagen Group is setting itself the target of, among other things, further improving its resource efficiency and promoting reuse and recycling approaches in the areas of materials, energy and water.

> Environmental Management

MANAGEMENT APPROACH TO THE CIRCULAR ECONOMY

We want 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 and the implementation of joint projects with various partners, such as suppliers, plant manufacturers or the recycling sector.

Circular economy is a key issue in Group Initiative 6 of the "NEW AUTO – Mobility for Generations to Come" Group strategy. Oliver Blume, member of the Board of Management of Volkswagen AG, "Sport & Luxury" brand group, and Dr. Manfred Döss, member of the Board of Management responsible for Integrity and Legal Affairs, are responsible for Group Initiative 6 as the Board tandem. 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 batteries, steel, aluminum or plastics.

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. In terms of measures, in production we focus on creating the most closed material loops possible with innovative recycling approaches and on using renewable raw materials and materials produced with low emissions.

OUR GOAL: CLOSED MATERIAL LOOPS

We are stepping up efforts to use material 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.

Aluminum Closed Loop at Audi

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. Compared with using primary aluminum, recycling aluminum waste can save up to 95% of the energy used in manufacturing. In this way, Audi avoids CO_2 emissions and reduces the quantity of primary raw materials needed. In addition to the plant in Neckarsulm, the Audi plants in Ingolstadt and Győr have now also joined the Aluminum Closed Loop process. The process itself and the resultant CO_2 savings of more than 720,000 metric tons of CO_2 since 2017 have been verified by independent third parties.

In-House Expertise in Battery Recycling

Volkswagen Group Components opened the Group's first facility for recycling high-voltage vehicle batteries at the Salzgitter site at the start of 2021. The objective is industrialized recovery of valuable raw materials such as lithium, nickel, manganese and cobalt in a closed loop and also of aluminum, copper and plastic, with a recycling rate of more than 90% in the future. Batteries are only recycled if they can no longer be used in other ways – for example, in reconditioned form in mobile energy storage systems such as flexible fast charging stations or charging robots. The facility has been initially designed to recycle up to 3,600 battery systems per year in pilot operation.

The innovative and CO_2-saving recycling process does not require energy-intensive melting in a blast furnace. The used battery systems are delivered, deep discharged, and dismantled. The individual parts are ground into granules in the shredder and then dried. In addition to aluminum, copper and plastics, the process mainly yields valuable "black powder" containing lithium, nickel, manganese, cobalt, and graphite, which are important raw materials for batteries. The separation and processing of the individual substances by hydrometallurgical processes – using water and chemical agents – is subsequently carried out by specialized partners. As a consequence, essential components of old battery cells can be used to produce new cathode material. The material recovered can be used to support battery cell production in the future. The CO_2 savings are calculated to be approximately 1.3 metric tons per 62-KWh battery manufactured using cathodes made from recycled material and green electricity. That is more CO_2 emissions than are generated during the production and logistics processes of a new ID.3.

Tapping the Potential of Chemical Waste Management

Numerous components in cars are made of plastics. Quality requirements mean that up to now, these can only be made from petroleum-based materials and usually cannot be recycled. This is because recycling of mixed plastic waste poses a major challenge, while plastics of the same type can often be mechanically recycled. Audi and the Karlsruhe Institute of Technology (KIT) have therefore set up a pilot project for chemical recycling as part of the Industrial Resource Strategies THINKTANK in order to feed such mixed plastic fractions back into a resource-conserving circular system. The plastic components are processed into pyrolysis oil by chemical recycling. This oil is of equivalent quality to petroleum products, and materials made from it are just as high quality as virgin material. In the medium term, components made from pyrolysis oil can be used again in automobiles and thus increase the proportion of sustainably manufactured components in cars.

Moreover, in the "SyKuRA" project (systematic recycling of plastics from end-of-life vehicles) Volkswagen is working on feeding the plastic components from shredder residues from end-of-life vehicles into high-quality recycling. Here, too, in addition to improved sourcing technology, it is essential to explore the possibilities of chemical recycling in the form of pyrolysis for fractions that are not mechanically recyclable. In addition to Volkswagen, the Öko-Institut, the chemical company BASF, processing specialist SICON, and the Clausthal University of Technology are also involved in the project, which is supported by the Federal Ministry of Research.

Recycling Production Waste

Any waste with recyclable content generated in production is also always systematically included in our closed-loop processes. For example, in the Volkswagen Group Components foundry in Kassel, all aluminum chips generated on the site are returned to the casting process. Around 20 metric tons of aluminum chips are produced here each day and melted down in the plant. According to forecasts, this alternative to regular aluminum production reduces the energy requirements by around 3,250 MWh per year and reduces CO_2 emissions by more than 1,400 metric tons per year. In the medium term, the foundry wants to melt down a further 40 metric tons of material from other European Volkswagen plants per day. In the long term, the quantity is set to rise to up to 80 metric tons of chips per day.

At the Volkswagen plant in Wolfsburg, plastic waste produced in the process of manufacturing tanks will in the future be prepared and used again for the production of tanks. As a result, around 1,600 metric tons of material that would otherwise be disposed of can be used in plastic tanks in this way each year. This can save the plant 2,500 metric tons of CO_2 and € 2 million in costs of materials each year.

Use of Recycled Materials in Vehicle Interiors

Using the highest possible proportion of recyclable materials is very important for us. In a flagship project for a special ID. family model, ceiling headliner, fabrics, carpets, seats, door trim and decorative inlays, for example, are being made from sustainable material, which consists of up to 100% recycled materials, for instance PET bottles. An ID.4, for example, contains material equivalent to 140 1.5-liter PET bottles or 380 0.5-liter bottles.

USE OF RENEWABLE RAW MATERIALS

To reduce our resource consumption, we rely on raw materials from renewable 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 sustainability standards apply to our suppliers. The following examples illustrate our approach.

> Responsibility for Supply Chains and Business

In collaboration with the Technical University of Liberec, ŠKODA has developed a sustainable, ecological material made from sugar beet pulp, which is used in dyed form in the interior of vehicles to create certain design accents. In addition, ŠKODA is working on another material based on the miscanthus reed, which will also be used in the interior of models in the future. In addition, the Group is investigating the use of other ecologically sourced materials, such as materials based on coconut fibers or rice husks.

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 – despite our sustainability requirements for suppliers – we concentrate on our production sites. Of all the freshwater that we use, 49.3% (around 15.8 million m^3) is used by sites located in risk zones,

i.e. regions experiencing water shortages, such as Mexico. The closed-loop circulation or recirculation of cooling and process water mean 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 freshwater 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 2021, we were given the top grade of A in the WDP ranking for our sustainable water management and are thus back in the leadership index. Given our growing production figures and the integration of new sites, our Group's absolute freshwater use has increased in recent years. From 2010 to 2021, the quantity of freshwater used per vehicle decreased by 11.6% per vehicle, thanks to a wide range of recycling measures and to 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 we produce 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.

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 findings.

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, electronic components 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. This includes not only the aforementioned project for recycling plastic waste in diesel tank production but also the future recognition of initiatives for reducing plastic waste in the Volkswagen Group's Zero Impact Factory Award. Together with the Group brands and various departments from environmental protection, logistics and the production trades, a "roundtable" has also been created. This interdisciplinary working group develops targeted strategies for minimizing the use of plastic packaging. Group-wide regulations that stipulate that any remaining plastic packaging should be recyclable were developed for this. We test innovative options for avoiding plastics here and are guided, wherever possible, by the Group sites' best practices.

RECYCLING OF VEHICLE PARTS AND TOOLS

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.

The brands in the Volkswagen Group also take back many used parts from the repair shops, such as engines, transmissions or electronics, because these 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 an original part – or whether it is preferable to use a Genuine Remanufactured Part. These are comparable to an original part in terms of quality but are much lower in price than new parts. Using these parts saves large amounts of raw materials, energy and CO_2. It is not just vehicle parts that are reconditioned at Volkswagen to conserve resources and save costs; production tools are too. This is what, for instance, the center of excellence for tools at the Salzgitter site is for. An average of 160,000 tools have been processed here each year since 2009 to make them suitable to return to use. This includes rotary-broaching tools, drills or cutters for manufacturing battery anodes and cathodes.