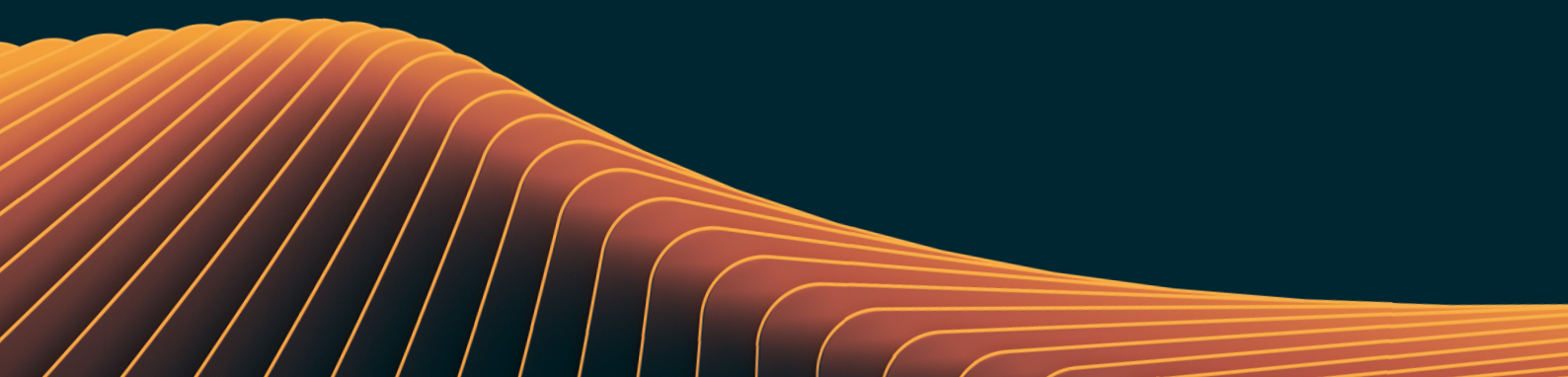
5

Sustainability Report

(Combined non-financial statement of the Volkswagen Group and Volkswagen AG.
Part of the combined Management Report)

229 General information
255 Environmental information
255 Introduction to environmental management
264 Climate change
298 Pollution
311 Water
318 Biodiversity and ecosystems
327 Resource use and circular economy
345 EU Taxonomy
362 Social informationen
362 Employees and non-employees
392 Workers in the value chain
411 Corporate Citizenship
416 Customers
426 Business conduct information
444 Annex to the sustainability report
467 2024 non-financial indicators of Volkswagen AG



General information

Sustainability is deeply rooted in the Volkswagen Group and an integral part of our Group strategy. We are providing important and goal-oriented new impetus with our Group sustainability strategy regenerate+ and take a broad and comprehensive approach to sustainability – environmentally, socially and economically.

ABOUT THIS SUSTAINABILITY REPORT

For the reporting year 2024, Volkswagen AG is issuing acombined, non-financial statement (sustainability report) for the Volkswagen Group and Volkswagen AG. The combined, non-financial report is drawn up in accordance with sections 315c, in conjunction with sections 289c through 289e of the *Handelsgesetzbuch* (HGB – German Commercial Code). For the reporting year 2024, the European Sustainability Reporting Standards (ESRS) were applied in full for the first time as a framework for the sustainability report (sustainability statement) as they provide the basis for the provisions on sustainability reporting in accordance with the European Union's Corporate Sustainability Reporting Directive (CSRD).

Notes on use of the ESRS

General explanations on the standards.

The ESRS currently comprises 12 standards, two of which are overarching standards setting out general requirements (ESRS 1) and general disclosures (ESRS 2). An additional ten topical standards address environmental, social and governance topics:

- Environmental information (Environment, E standards): climate change (ESRS E1), pollution (ESRS E2), water and marine resources (ESRS E3), biodiversity and ecosystems (ESRS E4), resource use and circular economy (ESRS E5);
- Social information (Social, S standards): own workforce (ESRS S1), workers in the value chain (ESRS S2), affected communities (ESRS S3), consumers and end-users (ESRS S4);
- Governance information (Governance, G standard): business conduct (ESRS G1).

Each standard is based on disclosure requirements containing specific datapoint requirements. The disclosure requirements relevant to the Volkswagen Group were determined by means of a double materiality assessment. The Annex to the Sustainability Report contains a detailed index indicating which ESRS disclosures can be found in which section of the report.

Scope of the report

Volkswagen AG's sustainability report was prepared on a consolidated basis. The scope of consolidation was identified using the consolidated financial statements as a basis. The report generally covers all fully consolidated companies within the Volkswagen Group. The following adjustments were made for the gathering of data related to environmental information and information on business conduct:

- E standards: Data is gathered primarily for the fully consolidated production companies. In addition, the two controlled, but not fully consolidated companies Volkswagen Sarajevo d.o.o., Vogosca/Bosnia and Herzegovina and Audi Formula Racing GmbH/Neuburg an der Donau are also included in this scope. Furthermore,

the Chinese vehicle and component production joint ventures, over which the Group has operational control, are primarily taken into account for certain disclosures pertaining to greenhouse gas emissions and energy, emissions to air and water, and biodiversity-sensitive areas.

- G standard: The disclosures under corruption and bribery in the chapter on "Business conduct information" take all controlled companies into account. The controlled companies also represent the scope of application for awareness-raising and training measures, depending on their individual risk profiles pursuant to the internal compliance risk assessment (ICRA).

Both the upstream and downstream value chain is taken into account in the assessment of impacts, risks and opportunities. The option of a gradual introduction was taken in selecting datapoints.

Methodological specifications

Methodological specifications were used in the preparation of the sustainability report.

- The following time horizons were applied in reporting unless otherwise indicated:
  The short-term time horizon corresponds to a period of less than one year after the end of the reporting year.
  The medium-term time horizon is the period from the end of the short-term reporting period up to a period of five years.
  The long-term time horizon comprises all periods in excess of five years.
- Where disclosures are required in relation to specific circumstances within the meaning of ESRS 2, this is clearly indicated for the relevant datapoints.
- The sustainability report also contains an index for ESRS datapoints that derive from other EU legislation. This can be found in the Annex to the Sustainability Report.

BUSINESS MODEL, VALUE CHAIN AND STRATEGY

Business model and Group structure

Volkswagen AG is the parent company of the Volkswagen Group. It develops vehicles and components for the Group brands, and also produces and sells vehicles, in particular passenger cars and light commercial vehicles for the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands. In its capacity as parent company, Volkswagen AG holds direct or indirect interests in AUDI AG, SEAT S.A., Škoda Auto a.s., Dr. Ing. h.c. F. Porsche AG, TRATON SE, Volkswagen Financial Services AG, Volkswagen Financial Services Overseas AG and a large number of other companies in Germany and abroad. More detailed disclosures are contained in the list of shareholdings in accordance with sections 285 and 313 of the HGB, which can be accessed at www.volkswagen-group.com/investor-relations and is part of the annual financial statements.

Volkswagen AG is a vertically integrated energy supply company as defined by section 3 no. 38 of the *Energiewirtschaftsgesetz* (EnWG – German Energy Industry Act) and is therefore subject to the provisions of the EnWG. In the electricity sector, Volkswagen AG generates, sells and distributes electricity as a group together with its subsidiaries. As a result of the power plant at the Volkswagen factory in Wolfsburg ceasing to use coal-fired power generation, sales revenue of €2.4 million was generated through the sale of coal in the fiscal year 2024.

A total of 614,082 employees were employed at the Volkswagen Group at the end of the 2024 reporting year. A comprehensive list broken down by region can be found in the "Employees and non-employees" chapter.

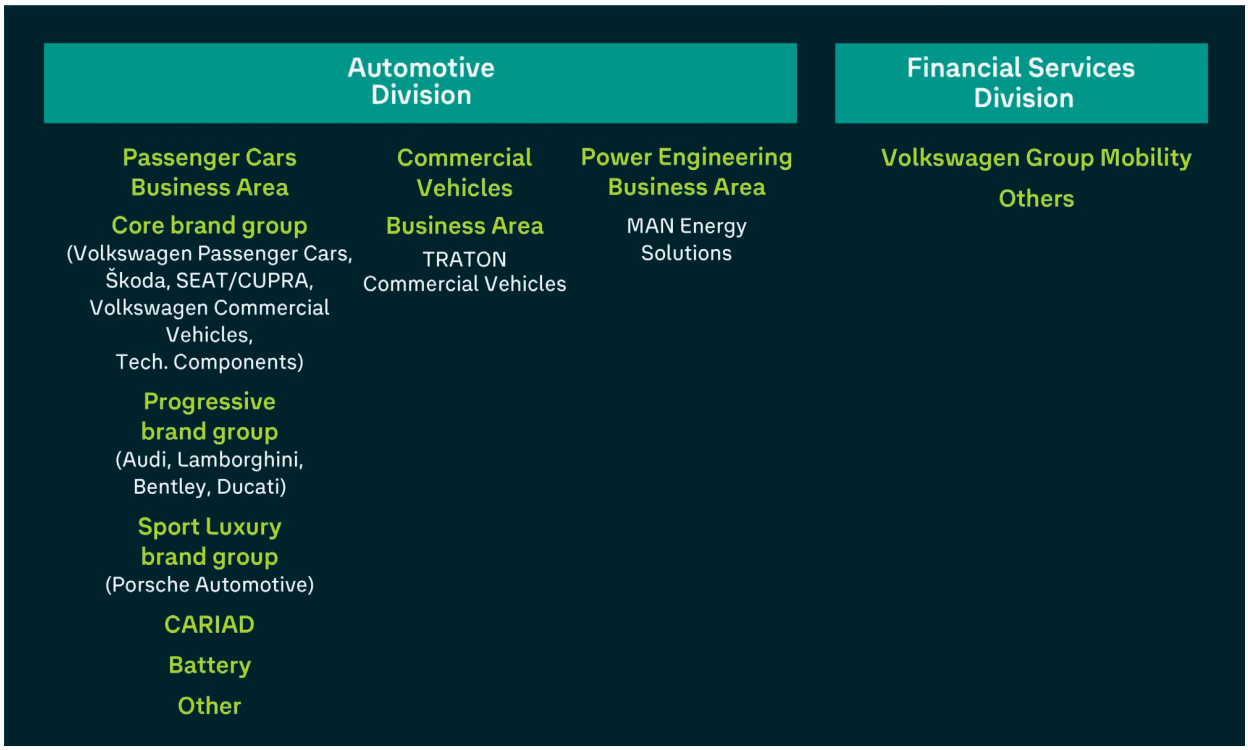
The Volkswagen Group is one of the leading multibrand groups in the automotive industry. The company's business activities comprise the Automotive and Financial Services divisions. The Volkswagen Group's significant products comprise passenger cars, commercial vehicles, and power engineering in the Automotive Division, as well as financial services.

Our core brands within the Automotive Division – with the exception of the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands – are independent legal entities.

The Automotive Division comprises the Passenger Cars, Commercial Vehicles and Power Engineering business areas.

The Passenger Cars Business Area primarily consolidates the Volkswagen Group's passenger car brands and the Volkswagen Commercial Vehicles brand. Activities focus on the development of vehicles, engines, motors,

vehicle software and batteries, the production and sale of passenger cars and light commercial vehicles, and the genuine parts business. The product portfolio ranges from compact cars to luxury vehicles and also includes motorcycles, and is supplemented by mobility solutions.



The Commercial Vehicles Business Area primarily comprises the development of vehicles, engines, motors, the production and sale of trucks and buses, the genuine parts business and related services. The commercial vehicles portfolio ranges from light vans to heavy trucks and buses. The collaboration between the commercial vehicle brands is coordinated within TRATON SE.

The Power Engineering Business Area combines the large-bore diesel engines, turbomachinery and propulsion components businesses.

The activities of the Financial Services Division comprise dealership and customer financing, leasing, direct banking and insurance activities, fleet management and mobility services.

With its brands, the Volkswagen Group mainly serves individual, corporate and fleet customers in all markets around the world that are relevant for the Group, including Europe and other markets, North America, South America and Asia-Pacific.

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

Accordingly, responsibilities in the Board of Management are currently divided among ten Board functions. In addition to the "Chair of the Board of Management" function, the other Board functions are "Technology", "Finance and Operations", "Human Resources and Trucks brand group", "Integrity and Legal Affairs", "Progressive brand group", "Sport Luxury brand group", "China", "IT" and "Core brand group". The Chair of the Board of Management is also responsible for the "Sport Luxury brand group" Board function.

Directly attached to the Board are a number of Group Management functions that act as an extension to the Board functions. These comprise the "Group Sales", "Group Production", "Group Procurement" and "Group Research and Development" functions.

The allocation of responsibilities on the Board of Management is based on the rules of procedure decided by the Supervisory Board. The way this is structured is intended to help the Board of Management to focus on key tasks such as strategy, central decisions on the Company's direction, capital allocation and financial require-

ments. The task of the extended board-level management functions is to leverage synergies in the Group and to connect the brands and divisions. Board of Management committees exist at Group level for the following areas: products, technologies, investments, digital transformation, integrity and compliance, risk management and management issues. In addition to the responsible Board of Management members, the committees include representatives of the departments relevant to the subject, and of the brands, brand groups and companies involved. We are continually revising and optimizing these and other top management committees in the Group in order to verify that they still align with our Group strategy and to further increase the efficiency of their decision making. This reduces complexity and reinforces governance within the Group.

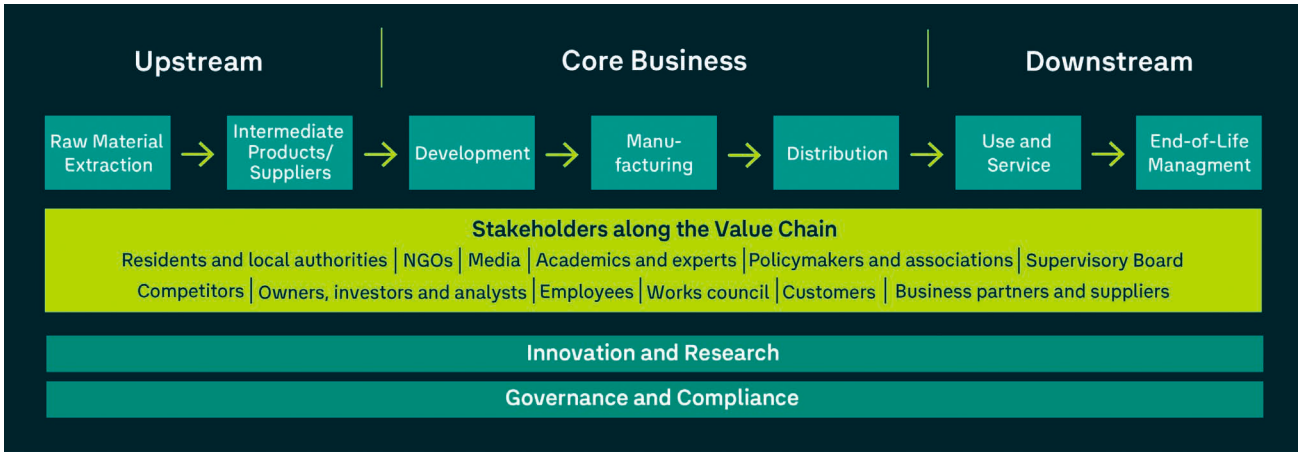
Each brand within the Volkswagen Group is managed by a brand board of management, which is responsible for the brand's independent and self-contained development and business operations. To the extent permitted by law, the board adheres to the Group targets and requirements laid down by the Board of Management of Volkswagen AG, as well as to the agreements in the brand groups. This allows Group-wide interests to be pursued, while at the same time safeguarding and reinforcing each brand's specific characteristics. Matters that are of importance to the Group as a whole are submitted to the Volkswagen AG Board of Management to enable synergetic implementation, to the extent permitted by law. Group policies decided by the Group Board of Management are an important instrument in this regard. Volkswagen AG employs Group policies as steering instruments to communicate its requirements, such as uniform standards and frameworks for action, to the Group companies. The rights and obligations of the statutory bodies of the relevant brand company thereby remain unaffected.

The Volkswagen Group companies are managed solely by their respective managements. The management of each individual company takes into account not only the interest of its own company but also the interests of the Group, the relevant brand group and the individual brands in accordance with the framework laid down by law.

We are convinced that our corporate structure, which connects not only the brand groups but also the technology platforms, will enable us to make better use of existing expertise and economies of scale, leverage synergies more systematically and accelerate decision making. In our view, clear responsibilities and a high degree of business responsibility in the brand groups and technology platforms form the basis for our sustainable success.

The Volkswagen Group value chain

To safeguard the Volkswagen Group's business, the Group has a broadly distributed and complex value chain. Both upstream and downstream process steps in this value chain are increasingly vertically integrated into the Group's own business activities.



Upstream value chain

The upstream segment of the value chain comprises the extraction of raw materials and the production of components and parts. The Volkswagen Group maintains close relationships with a large number of suppliers who play a key role in the provision of raw materials and intermediates.

It also operates its own production facilities and plants in which key components such as engines, motors, transmissions and suspensions are made. Its control of these key production steps means Volkswagen can ensure high quality standards and also directly implement innovative technologies and processes.

The Volkswagen Group also works closely with a large number of suppliers that provide specialized components and services to further improve the efficiency and quality of production.

Core business

The core business comprises the following central activities: the development of vehicles, engines, motors and vehicle software, the production and sale of passenger cars, light commercial vehicles, trucks, buses and motorcycles, as well as businesses for genuine parts, large-bore diesel engines, turbomachinery and components. The particularly relevant stakeholders in this regard are employees and the Works Council.

In the development phase, the Volkswagen Group invests in advanced technologies and innovative designs with the aim of producing state-of-the-art and environmentally friendly vehicles. Production takes place in globally distributed production facilities, which focus on efficiency and quality. Efficient logistics processes are designed to ensure seamless integration of all steps, from production to delivery, and also to help to reduce emissions and costs. Distribution takes place via a global network of authorized Volkswagen dealers and distributors who promptly and reliably make the vehicles available to customers.

This is where the value chain of Volkswagen Group Mobility comes in, with its range of services including vehicle leasing and financing, insurance and other vehicle-related mobility products – for private and individual commercial buyers as well as for fleet customers. In addition, the authorized dealers and business partners also offer maintenance contracts.

Downstream value chain

The downstream segment of the value chain covers the vehicle's use phase and end-of-life management. The use of the vehicles and associated services play a key role in this phase. The authorized dealers and service facilities offer comprehensive servicing and repair services, and ensure that customers always have access to high-quality replacement parts. On top of this, the growing mobility services segment addresses customers' needs in terms of flexibility and comfort. This includes offering vehicles as needed, such as through leasing, rental and car subscriptions, as well as mobility on demand such as ride pooling and ride hailing – in the future also in autonomous form.

Over the next few years, the Group is planning to consolidate the entire ecosystem of its brands' mobility services and offer it to customers across up to three vehicle lifecycles. On the one hand, this will generate additional income over the lifecycle of a vehicle. On the other hand, within the context of circular materials, it encourages the use of raw materials from used vehicles that are kept on the Group's books.

End-of-life management is an integral part of the Volkswagen Group's sustainability strategy. The focus here is on product and battery recycling.

The rapid expansion of charging infrastructure is and remains an important prerequisite for ramping up e-mobility. In light of this, the Volkswagen Group is driving the expansion of charging infrastructure with its partners Elli in Europe, CAMS in China and Electrify America in North America. Furthermore, the Group and its partner Elli are also active within the energy sector with the aim of transitioning Elli from a provider of charging infrastructure into a full energy service provider.

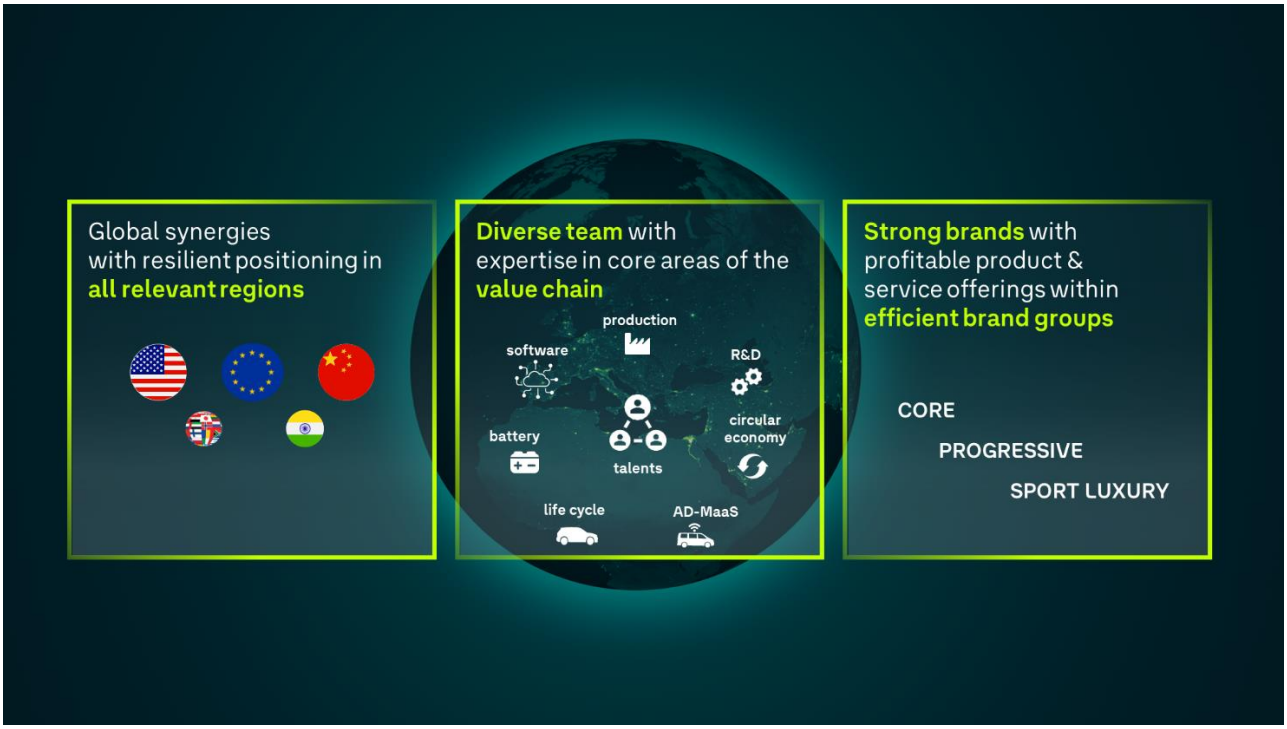
Group strategy

Fast-moving global megatrends, rapid technological advances, changes in customer requirements and, last but not least, the macroeconomic and political climate and regulatory framework are presenting the automotive industry with historic challenges. Artificial intelligence is creating opportunities that were not even conceivable until recently and bringing about change in nearly all industries and walks of life. Society and its values are also in a state of flux. Awareness of our planet and how our way of life is impacting on it is becoming increasingly important.

Against this backdrop, we scrutinized our own direction in fiscal year 2024 and developed The Group Strategy – Mobility for generations. This new Group strategy addresses important topics from previous strategies and takes these to the next level.

The first step entailed formulating the main requirements and overarching targets for the strategy. They include resilience, so that we position our global business robustly in times of geopolitical tensions; adaptivity, so that we have the capacity to respond quickly to changes in the course of the transformation of the mobility industry; and financial robustness, so that we can finance the necessary investments in product innovations.

REQUIREMENTS AND OVERARCHING TARGETS OF THE GROUP STRATEGY



From these we derive our strategic vision of being the global automotive tech driver. This aggregates the material areas for action for the Volkswagen Group in three fields:

- resilient positioning in all relevant regions in order to leverage global synergies;
- refocusing areas of expertise within the value chain, also increasingly in conjunction with partners; and
- strong brands with profitable product and service offerings, to be managed by the Group in efficient brand groups.

CORE TOPICS AND IMPERATIVES OF THE GROUP STRATEGY

To realize our vision of becoming the global automotive tech driver, we defined clearly delineated corporate goals in the form of nine imperatives as part of the Group strategy assigned to three core topics:

- Excite customers globally:
  We aim to excite customers globally by offering a strong product portfolio, an attractive range of services throughout the entire customer and product life cycle and competitive technologies.
- Unleash our full potential:
  We intend to unleash our full business potential by consciously deciding between synergies and implementation speed, making our Company more attractive to talented individuals and unlocking the opportunities provided by artificial intelligence.
- Focus on fundamentals:
  We are focusing on creating a robust company base with reduced cost structures and resilient structures, and we see sustainability as a basic maxim for our actions.

Our regenerate+ sustainability strategy is enshrined in the Group strategy within the core "Focus on fundamentals" issue in the "Elevate sustainability" imperative.

Group sustainability strategy

Sustainability is deeply rooted in the Volkswagen Group and an integral part of our Group strategy. We are providing important and goal-oriented new impetus with our regenerate+ Group sustainability strategy presented in the 2024 Annual Report. Society needs engagement that generates positive added value in order to help our planet to regenerate and to shape a future worth living in for current and future generations. We want to contribute to this and take a broad and comprehensive approach to sustainability – environmentally, socially and economically. Our vision is to become a mobility provider with positive added value for nature and society. To this end, we will seek to work in partnership with all our stakeholders in order to learn and further improve.

The Group sustainability strategy regenerate+ applies to the entire Volkswagen Group – i.e. to the Group departments, to all the brands, and to subsidiaries. This is how we comprehensively address our products, services, and stakeholders, who at brand level also include our customers. We want to use regenerate+ to differentiate ourselves as the Volkswagen Group and, at the same time, enable our brands to position themselves in their specific market environment.

Together, we follow a vision for the Volkswagen Group and drive sustainable value creation. Transformation is a process, and we are constantly in motion. We review our ambitious targets and continuously adapt them. We will continue along this path by systematically implementing our new Group sustainability strategy regenerate+, which features clear measures in four dimensions: nature, our people, society, and business.

The dimensions of regenerate+

Nature

As a mobility provider, the Volkswagen Group has an impact on nature and the environment throughout its entire value chain. A core objective of the Group sustainability strategy is therefore to achieve more than simply cutting emissions. Our vision is to have a positive impact on people and the environment, and to contribute to restoration and improvement of ecosystems and living conditions by means of regenerative actions.

Climate protection: The Volkswagen Group wants to achieve net carbon neutrality

The Volkswagen Group is committed to the Paris Agreement and aligns its own activities with the 1.5 degree goal. We aim to achieve net carbon neutrality by 2050. The intermediate target: To reduce the carbon footprint per kilometer traveled during the use phase of our passenger cars and light commercial vehicles by 30% by 2030 (compared to 2018).

A further goal is for global production sites to achieve net carbon neutrality by 2040 – ten years earlier than originally planned. To this end, greenhouse gas emissions are due to be reduced by 90% by 2040 compared to 2018, among other measures. In order to achieve this, the Volkswagen Group wants to change its energy supply, for example, and increase energy efficiency. The objective is to be procuring 100% of external electricity from carbon-neutral sources at all sites by 2030. The external electricity supply at our European sites is already 100% from renewable sources.

Our specific objective in the context of the "Zero Impact Factory" initiative is to gradually reduce the absolute negative environmental impacts of our production sites for passenger cars, light commercial vehicles and components by 37.5% by 2030, by 68.8% by 2040, and ultimately towards achieving net neutrality by 2050, all compared to 2018 levels. In the comparative period from 2010 to 2024, CO_2 emissions and energy consumption per vehicle produced were reduced by 62.8% and 21.5%, respectively. Furthermore, per vehicle, water consumption has been reduced by 27.1%, waste by 79.4% and VOC emissions by 67.5%.

Resources: The Volkswagen Group is working to continuously reduce its demand for primary raw materials

The finite nature of natural resources and the social and environmental consequences of mining raw materials make the development of a circular economy a key sustainability topic. The focus here is primarily on conserving resources. In this context, the Volkswagen Group has set itself Group-wide ambitions for the first time. We are also aiming for 40% of the materials in our products to be made from recycled products by 2040.

Throughout the ID. family, headliners, fabrics, carpets, seats, door trim panels and decorative inlays are already made of recycled materials (e.g., seat covers with yarn made of ocean plastics and recycled PET bottles).

Ecosystem: The Volkswagen Group promotes biodiversity

The production and operation of our vehicles impact biodiversity through emissions, land use, and transportation. We want to minimize this impact by working to reduce our land use and thus add value to nature and improve biodiversity. We are working to increase biodiversity at our production sites and within the supply chain.

The Volkswagen Group is aware of its responsibility. We support conservation projects worldwide and have been involved in protecting and preserving biodiversity since 2007. As a founding member of the Biodiversity in Good Company e.V. initiative, we acknowledge the three goals of the international Convention on Biological Diversity (CBD). Moreover, we have defined corresponding action areas to make our contribution to achieving these goals within the framework of our business activities. We report on this every two years in our progress report.

We also want to support biodiversity by establishing a Biodiversity Fund with an annual allocation of up to €25 million for external projects starting in 2025. These projects will be carefully selected by an independent decision-making body.

Our people

The Volkswagen Group is a social employer. We stand for a diverse, inclusive, and non-discriminatory culture. By paying fair wages, we help to secure our employees' standard of living at our locations. We invest extensively in the qualification, safety and health of our employees.

Culture: The Volkswagen Group promotes a diverse, inclusive, and non-discriminatory culture

At the Volkswagen Group, we reject discrimination in any form. We promote cooperative behavior in the workplace and are committed to inclusion. We are convinced that integrity and compliance can only be practiced in a culture free of fear, and we create the conditions for this. We are particularly focused on increasing the proportion of women at all levels of the workforce. As a company traditionally dominated by engineers and technical workers, we face special challenges, as do all automotive companies. By 2025, the proportion of women in management is to be increased to over 20%.

Diversity is also important to us with regard to culture, origin, and native language. Every year, we measure the degree of internationalization in the top management of the Volkswagen Group and our goal is to continuously increase it.

Workforce: The Volkswagen Group wants to be a unique employer and lead teams to success

The transformation of the automotive industry is making work at a company like the Volkswagen Group more diverse and interesting. Coding is taking its place alongside traditional engineering, artificial intelligence is relieving employees of routine tasks, and digital business models are increasingly taking their place alongside physical products. At the Volkswagen Group, we want to capitalize on these advantages to provide all employees with a unique working experience. It is important to us that everyone can keep pace with change. That is why we are investing heavily in training. We are aiming for 30 hours of training per employee per year by 2030.

Occupational health and safety: The Volkswagen Group is known for its excellent occupational health and safety

Ensuring a safe and healthy working environment is not only a key component of sustainable corporate management but also the basis for individual well-being, good work results, and effective collaboration. We will further expand our prevention programs for employees in the coming years. The Volkswagen Group favors preventive approaches to promote the physical and mental health and well-being of its employees. In the area of accident statistics, our goal is also to establish an accident frequency rate at a leading level for all brands and companies. For the systematic management and quality assurance of our health and safety activities, all Volkswagen Group production sites with more than 1,000 employees are to be certified in accordance with ISO 45001 by 2026.

Society

As one of the world's largest automotive manufacturers, the Volkswagen Group has a great responsibility toward its partners, stakeholders and society. The aim is not only to live up to this responsibility and role but, above and beyond this, to have a positive impact. The holistic approach of our regenerate+ sustainability strategy provides the basis for advancing sustainability together with our partners and stakeholders.

Supply chain: The Volkswagen Group creates responsible and sustainable supply chains

The Volkswagen Group is committed to enabling sustainable mobility for future generations. This entails meeting our legal, social, and environmental responsibilities not only within the Group but also in our supply chain. This includes more than 63,000 supplier locations in 96 countries around the world, which will be organized responsibly, not only to minimize risks, but also to ensure a positive contribution for all partners.

The aim is to be able to show by 2040 that, in terms of sales revenue, over 95% of suppliers have a positive sustainability rating (S-Rating).

Customers & stakeholders: The Volkswagen Group is a reliable partner

The Volkswagen Group prides itself on being a trustworthy partner, both now and in the future. Our reputation is based not only on our rich heritage but also on our clear commitment to shaping the sustainable mobility landscape of tomorrow.

As a globally active company, our business activities impact the lives of an array of different people. We consider it our responsibility to actively shape the framework for our business activities in dialog with all stakeholders. To this end, we participate in ongoing dialog characterized by openness, structure, and constructive and critical engagement with all stakeholders. Central to this approach is the cultivation of relationships, understanding various needs, and working together for mutual benefit. Our goal is to cultivate meaningful connections, build trust, and forge lasting partnerships through this dialog.

Social engagement: The Volkswagen Group is increasing its positive social impact

Society and the Volkswagen Group are inextricably linked, each shaping and influencing the other. With this interconnectedness comes a profound responsibility to promote positive change – within our own locations and beyond. To achieve this goal, the Volkswagen Group supports various projects through donations. Our employees' direct involvement in voluntary work also contributes to this goal. Through the Group sustainability strategy regenerate+, we consolidate and harmonize these efforts under the banner of Societal Impact, integrating them into our holistic approach to sustainability.

At the heart of our Societal Impact efforts is the promotion of Corporate Citizenship projects in the form of forward-looking initiatives that prioritize environmental protection, education and community development at many of our locations around the world. In addition to donations made by the Group, our companies and our employees, the Volkswagen Group is planning to establish a new Sustainability Impact Fund with an annual allocation of up to €20 million starting in 2025. This fund will be specifically dedicated to sustainability projects. In this way, we want to improve our social impact.

Business

The Volkswagen Group is advancing its business model through the holistic approach of regenerate+, driving innovation in new business areas, products, services, and financing models. The Volkswagen Group also gears its operations to its sustainability approach with investors on the capital market.

Sales Revenue: The Volkswagen Group uses and promotes sustainability-oriented business areas.

Sustainability and climate-friendly business practices are of central strategic and operative importance to the Volkswagen Group and represent a key pillar of the Group's ambitious Group sustainability strategy. The impact on all investment decisions is therefore large.

Sustainability remains fundamental for our business and will continue to become even more relevant. The escalating perceptible impact of climate change, growing consumer awareness of sustainable living and voluntary frameworks such as the Paris Agreement are key drivers in this context.

Electric mobility plays a key role in reducing emissions from road traffic. In 2024, the share of BEVs in the Volkswagen Group was 8.3% (previous year: 8.3%). The global share is due to reach 50% by 2030. Production ramp-up is a process that the Volkswagen Group continuously reviews and adapts.

Through MAN Energy Solutions, we also offer technologies (e.g. for carbon capture and storage, heat pumps, and large engines powered by future fuels) that play a key role in the decarbonization of critical industries.

Since 2023, the Volkswagen Group has also been investing in decarbonization efforts both internally and externally through a venture capital fund. Established with an initial anchor investment of USD 300 million, this fund aims to accelerate the development of innovative decarbonization technologies and solutions across the mobility value chain.

Financing: The Volkswagen Group is strengthening and intensifying its sustainable financing.

Positioned as one of the leaders in the global automotive sector, our goal is to actively shape sustainability-oriented financing.

By 2030, the Volkswagen Group aims to finance at least 30% of its outstanding bond volume through green bonds, with the aim to increase this figure to 50% by 2040. In order to achieve these goals, the majority of our annual euro bond issues are already structured as green bonds or comply with the EU taxonomy classification system.

INTERESTS AND VIEWS OF STAKEHOLDERS

As an international company, our business activities impact the lives of a large number of different people. Appropriately aligned stakeholder engagement is essential so as to determine the Group sustainability strategy's material areas for action and become aware of stakeholders' increasing and changing expectations at an early stage. The Volkswagen Group understands its obligations with regard to stakeholder engagement to include systematic and continuous interaction with our key interest and stakeholder groups within society, actively listening to them, and taking account of their input when developing our strategies. The goal is an open, constructive and also critical exchange with the stakeholder groups shown in the chart. We endeavor to understand their requirements and expectations of us, to discuss key topics from the Group sustainability strategy regenerate+ with them and to explain how these tie in with the Group strategy and its implementation.

Our stakeholders are defined as individuals, groups or organizations who have an influence on or are influenced by the course or the result of corporate decisions. The Volkswagen Group has identified ten groups as the most important stakeholder groups. Our employees and customers are at the center of the stakeholder network. Based on continuous stakeholder analysis, we also identified eight more groups. Continuous communication between internal and external stakeholder groups is important to the Volkswagen Group. In this context, the Supervisory Board and the Works Council act not only as supervisory and advisory bodies but also as interfaces between internal and external stakeholders. As the supervisory body, the Supervisory Board of the Volkswagen Group is regularly informed of the views and interests of the affected stakeholders with respect to the sustainability-related impacts in accordance with both statutory and its own reporting requirements. Due to the fact that the Supervisory Board is required to provide its consent, it is directly involved in the decision-making process, especially in decisions of fundamental importance. It has equal numbers of shareholder and employee representatives. so as to achieve a balance of interests, views and rights of employees at the highest level of the Group.

The Volkswagen Group builds the interests of its customers into its strategy and business model by focusing its brands on customer centricity, innovation and sustainability. The brands and regions have their own stakeholder engagement strategies and strive to ensure through customer surveys and market research that their products and services meet customers' expectations.

The Volkswagen Group's task is to bring together and coordinate the activities in an integrated framework. This framework includes:

- Stakeholder engagement on a Group level with specific formats and a focus on stakeholders relevant across the Group
- Advising and coordinating the brands and regions on the implementation of their stakeholder engagement activities
- Carrying out regular stakeholder analyses and stakeholder surveys

In the reporting year, the Volkswagen Group developed the stakeholder engagement strategy into a relationship strategy. To this end, we introduced new formats intended to create the opportunity for even more interactive and transparent communication on important sustainability issues relevant to corporate strategy and society so that stakeholders' suggestions and recommendations can be even better incorporated in future. The Volkswagen

Group's stakeholder engagement is primarily guided by our Group strategy. In addition, stakeholder interests concerning topics relevant to sustainability are taken into account by the specialist functions responsible. Further details on this can be found in the relevant topical standards, particularly in the chapters on social information.

In accordance with the requirements of the ESRS, the Volkswagen Group performed a double materiality assessment, which is also referred to as a materiality assessment in the following. A detailed description is provided under "Procedure for and results of the double materiality assessment". As part of developing the regenerate+ Group sustainability strategy, content and topics from the materiality assessment were routinely incorporated into the focus of our dialog activities and into other formats such as the reputation study. This annual study was performed between 2017 and 2023 in order to regularly identify potential impacts on stakeholder interests and Group strategy and take these into account during strategy development. Due to the changing economic, social, and regulatory framework conditions, both the reputation indicator and the study were fundamentally revised in 2024 and redesigned for the collection of new data in 2025. It makes a decisive contribution to anchoring stakeholder engagement in the Group sustainability strategy and, from 2025, will be measured using the Global Reputation metric for the Group and reported to the Board of Management and Supervisory Board in connection with additional regenerate+ metrics. Eliciting this KPI allows us to gain a holistic view of attitudes and opinions on the company and enables us to identify whether and how evaluations change over the course of time.

Communication formats are geared toward the interest groups in question. These range from annual stakeholder dialogs on strategic orientation and the Group's development to event-related communication formats on current topics from business, society, and politics.

The publication of the regenerate+ Group sustainability strategy was accompanied by a stakeholder engagement campaign in order to enter into direct dialog with target groups. This also comprises the employee stakeholder group, which is informed about the content of the new strategy via a specific information platform on the intranet, by means of published articles and presentations, and through digital information events. In addition, employees were able to ask their questions or express interest through emails, contact forms or direct responses at the events.

The interests and views of value chain workers and Corporate Citizenship policies are also integrated into the entire Group through the Group sustainability strategy regenerate+. Project and stakeholder management relating to the topic of Societal Impact, including the subtopics of Corporate Citizenship and donations, takes place on site and is the responsibility of each unit concerned. This also includes the views and interests of affected communities.

A description of the integration of the topic of human rights throughout the Volkswagen Group is provided within the framework of the compliance management system, which regulates compliance with human rights due diligence, in the "Employees and non-employees" chapter and within the framework of the responsible supply chain system (ReSC system) in the "Workers in the value chain" chapter.

"The Group Sustainability Forum" was held in Berlin in October 2024. An intensive dialog on the Group sustainability strategy and stakeholder interests took place with representatives from the science community, NGOs and industry and other stakeholders.

As part of the dialog event and in the context of the revision of stakeholder engagement, we reorganized the independent Group Sustainability Council in terms of both its nature and its composition. The Sustainability Council's first two terms of office were focused largely on the topics of reputation and the company's holistic strategic direction. The new concept now aims to challenge and jointly further develop the relevant topics in the Group sustainability strategy that were identified in the materiality assessment. The new Sustainability Council is comprised of one group of experts per dimension of regenerate+. Three selected and independent external experts work together with three internal representatives from the Group in Sustainability Practice Groups and jointly further develop the strategic topics. This new format allows us to ensure that feedback for and ideas on the Volkswagen Group's strategy and initiatives are used in their continuous further development. The new Sustainability Council also has the opportunity to share the results of its work and ideas with the Group Board of Management at regular intervals in meetings and dialog formats.

The council's twelve external members were spread among the four dimensions of regenerate+ as follows:

NATURE

DR. FRAUKE FISCHER
Agentur Auf!
University of Würzburg
Specialist area: Biodiversity
Regional focus: Germany and Africa

REBECCA TAUER
WWF Deutschland
Specialist area: Circular economy
Regional focus: Germany

DR. JULIAN ZUBER
GermanZero e. V.
Specialist area: Climate legislation
Regional focus: Germany

OUR PEOPLE

DR. JOEL HARTTER
Parallel Labs
University of Colorado
Specialist area: Human-centered strategies
Regional focus: USA

CHRISTINA SCHILDMANN
Hans-Böckler Foundation
Specialist area: Work of the future
Regional focus: Germany

HANNAH ZOLLER
University of Labour
Specialist area: Continuing professional development
Regional focus: Germany

SOCIETY

ARON CRAMER
BSR
Specialist area: Corporate responsibility
Regional focus: USA

LAURA-KRISTINE KRAUSE
Yale University
More in Common e. V.
Specialist area: Social cohesion
Regional focus: Germany

MARCIN PIERSIAK
Alliance for Responsible Mining
Specialist area: Sustainable procurement
Regional focus: Colombia, Europe and Africa

BUSINESS

ROSALINE MAY LEE
Rensselaer Polytechnic Institute
Specialist area: Transformation and innovation
Regional focus: USA and China

WILLIAM TODTS
Transport & Environment
Specialist area: Sustainable mobility
Regional focus: Belgium and Europe

JEAN-LOUIS WARNHOLZ
Future Inc.
Specialist area: Future strategies and financial technology
Regional focus: USA

INFORMATION ON THE BOARD OF MANAGEMENT AND SUPERVISORY BOARD

Composition and diversity of the Board of Management

Pursuant to article 6 of the Volkswagen AG Articles of Association, the Board of Management consists of at least three persons. As of December 31, 2024, there were nine members of the Board of Management.

When appointing the Board of Management, the Supervisory Board takes a variety of aspects, including diversity, into account. The Supervisory Board understands diversity, as an assessment criterion, to mean in particular different yet complementary specialist profiles and professional and general experience, also in the international domain, with all genders being appropriately represented. The Supervisory Board also pays particular attention to the following aspects in this regard:

- Members of the Board of Management should have many years of management experience.
- Members of the Board of Management should, if possible, have experience based on different training and professional backgrounds.
- The Board of Management as a whole should have technical expertise, especially knowledge of and experience in the manufacture and sale of vehicles and motor and engines of all kinds as well as other technical products, in addition to experience in the international domain.
- The Board of Management as a whole should have many years of experience in research and development, production, sales, finance and human resources management, as well as legal affairs and compliance.
- There should also be a sufficient mix of ages on the Board of Management.
- Efforts are made to achieve a higher proportion of women than the statutory minimum. In line with the Gesetz zur Ergänzung und Änderung der Regelungen für die gleichberechtigte Teilhabe von Frauen an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst (Führungspositionen-Gesetz II, FüPoG II – Second Act on Equal Participation of Women and Men in Leadership Positions in the Private and Public Sector), Volkswagen AG is subject to a mandatory participation requirement under which there must be at least one woman and at least one man on the Board of Management. The proportion of women in the Board of Management is currently 11.1%.

The aim of the diversity concept is for the Board of Management members to embody a range of expertise, experience, perspectives, gender and age. This diversity promotes a good understanding of Volkswagen AG's organizational and business affairs. In particular, it enables the members of the Board of Management to be open to new ideas by avoiding groupthink. It will thus contribute to the successful management of the company. The reasoning behind the aforementioned requirements for the Board of Management's composition is to ensure that it has experience relevant for the divisions, products, and geographical locations of the Volkswagen Group.

Composition and diversity of the Supervisory Board

The Supervisory Board of Volkswagen AG consists of 20 members, half of whom are shareholder representatives. In accordance with Article 11(1) of the Articles of Association of Volkswagen AG, the State of Lower Saxony is entitled to appoint two of these shareholder representatives for as long as it directly or indirectly holds at least 15% of the Company's ordinary shares. The remaining shareholder representatives on the Supervisory Board are elected by the General Meeting. The other half of the Supervisory Board consists of employee representatives. These are elected by the employees in accordance with the *Mitbestimmungsgesetz* (MitbestG – German Codetermination Act). A total of seven of these employee representatives are employees elected by the workforce. The other three employee representatives are trade union representatives elected by the workforce.

To properly perform its supervisory and advisory duties, the Supervisory Board as a whole must collectively have the required expertise, i.e. knowledge, skills and professional experience. For this, the members of the Supervisory Board must collectively be familiar with the sector in which the Company operates – i.e. the automotive industry – and be able to assess the business conducted by the Company. This includes in particular knowledge, skills and professional experience relating to the transformation of the automotive sector, for example where e-mobility and mobility services are concerned. In addition, the Supervisory Board members as a whole must collectively have expertise relating to sustainability issues relevant to the company. This relates, for instance, to knowledge, skills and professional experience relating to resources, supply chains, energy supply, corporate social responsibility, sustainable technologies and corresponding business models. The Supervisory

Board and its committees may decide to call upon experts and other appropriate individuals to advise on individual matters and also on ESG issues as needed. Further information on the qualification of the Supervisory Board can be found in the qualification matrix in the chapter "Group Corporate Governance Declaration". The allocation of competencies is based on a self-assessment by the respective Supervisory Board member

Attention is paid to diversity when seeking qualified individuals to best strengthen the specialist and managerial expertise of the Supervisory Board as a whole. The Supervisory Board and Nomination Committee, in particular, are called upon to implement the profile of skills and expertise and the diversity concept within the context of their candidate proposals to the Annual General Meeting. In preparing such proposals, the extent to which the work of the Supervisory Board will benefit from a diversity of expertise and perspectives among its members, from professional profiles that complement one another, from professional and general experience (including in the international domain) and from an appropriate gender balance should be considered for each case. A wide range of experience and specialist knowledge should be represented on the Supervisory Board. In addition, the Supervisory Board as a whole should have an extensive diversity of opinions and knowledge so as to enable it to develop a good understanding of the status quo and the longer-term opportunities and risks in connection with the company's business activities. The Supervisory Board also recommends that the employee representatives and unions (which have the right to submit proposals in employee representative elections) and the State of Lower Saxony (which has a right to appoint Supervisory Board members) take into account the requirements of the Supervisory Board regarding its composition. The same applies to individuals entitled to make proposals should a court-appointed replacement be necessary. The aforementioned requirements for the composition of the Supervisory Board are intended to ensure that the full Board has relevant experience in the business activity and geographical locations of the Volkswagen Group. Attention is also paid to members' independence when appointments are made to the Supervisory Board. According to the definition under the ESRS, the ten workers' representatives and five shareholder representatives in the Supervisory Board's current composition are independent, which is equivalent to 75%.

The statutory quota of at least 30% women and at least 30% men applies to the Supervisory Board under the *Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst* (*Führungspositionen-Gesetz*, FüPoG – German Act on the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors). In total, 40% of the members of the Supervisory Board of Volkswagen AG are currently women.

Sustainability-related aspects of the remuneration system for members of the Board of Management of Volkswagen AG

The remuneration of the Board of Management is based on the remuneration system adopted by the Supervisory Board on December 14, 2020 with effect from January 1, 2021, which the Supervisory Board most recently revised in December 2023 and April 2024 with effect from January 1, 2024 in order to better reflect the interests of the capital market in particular. The remuneration system for the members of the Board of Management is clear and transparent. It implements the requirements of the AktG as amended by the *Gesetz zur Umsetzung der zweiten Aktionärsrechterichtlinie* (ARUG II – German Act on the Implementation of the Second Shareholder Rights Directive) and takes into account the recommendations of the German Corporate Governance Code.

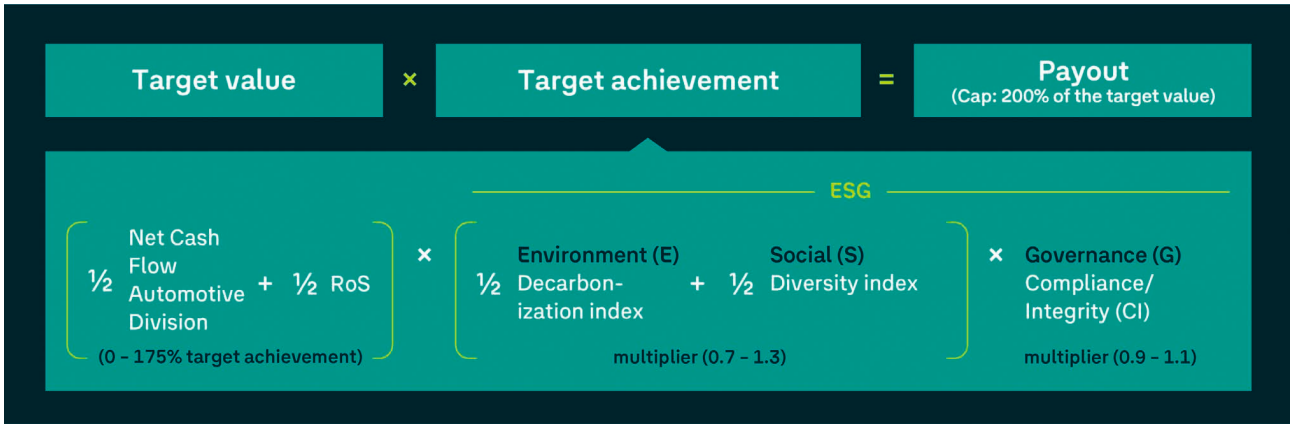
The remuneration of the members of the Board of Management comprises fixed and variable components. The fixed components are the base salary, fringe benefits and occupational retirement provision. The variable components are the annual bonus with a one-year assessment period, and the performance share plan with a four-year assessment period (long-term incentive). The remuneration of the Board of Management and Supervisory Board members appointed in fiscal year 2024 can be found in the remuneration report.

The long-term incentive serves to align the remuneration of the Board of Management members with the Company's long-term performance. The earnings per share financial performance target in conjunction with share price performance and the dividends paid, measured over four years, is to ensure the long-term effect of the behavioral incentives and supports the strategic target of achieving competitive profitability.

The annual bonus is tied to the financial performance targets Net cash flow in the Automotive Division ("net cash flow in the Automotive Division") and Operating return on sales of the Volkswagen Group ("RoS") as well as to

achievement of the sustainability objectives (environmental, social, governance, "ESG"), each of which is taken into account using a multiplier ("ESG factor"). Integration of the ESG factor takes the importance the sustainability targets into account. In this context, the decarbonization, sentiment and diversity index and the governance factor provide extensive cover for various sustainability aspects.

The Supervisory Board used the option provided to apply the diversity index only and suspend the opinion survey as an ESG criterion with respect to the social subtarget for 2024, as the measurement method for the opinion survey is currently being revised. The decarbonization index measures the emissions of CO_2 and CO_2 equivalents by the passenger car- and light commercial vehicle-producing brands over the entire life cycle and documents the progress in improving our carbon footprint. The decarbonization index operationalizes the Volkswagen Group's climate change mitigation targets and is therefore the core parameter in the Group related to climate change mitigation. Further information on the greenhouse gas emission reduction targets (Scope 1, 2 and 3) is provided in the "Climate change" chapter. The diversity index is used worldwide to determine the development of the proportion of women in management and the internationalization of top management. The indicator provides incentives for an exemplary leadership and corporate culture. The governance factor is a means for the Supervisory Board to express its satisfaction with the expected and actual conduct of the Board of Management with regard to the criteria of integrity and compliance.



The ESG factors underlying the remuneration system are described in the Group management report and Group sustainability report. They are included in the strategic non-financial key performance indicators and allocated to the topics identified as material in the double materiality assessment of the Volkswagen Group conducted for this reporting year for the first time.

The following overview shows the minimum values, target values and maximum values set by the Supervisory Board for fiscal year 2024 for the environmental (decarbonization index) and social (diversity index) subtargets along with the actual figures and target achievement levels in fiscal year 2024.

	ENVIRONMENT		SOCIAL
	Decarbonization index		Diversity index
in t CO_2e/vehicle	2024	Points	2024
Maximum value	42.5	Maximum value	157.0
100% target level	44.3	100% target level	150.0
Minimum value	47.1	Minimum value	143.0
Actual	46.4	Actual	168.0
Target achievement (factor)	0.8	Target achievement (factor)	1.3

As a rule, the governance factor should be 1.0 and may only be reduced to 0.9 or raised to 1.1 in exceptional circumstances based on the professional judgment of the Supervisory Board. For fiscal year 2024, the Supervisory Board set the governance factor at the standard value of 1.0 for all members of the Board of Management; this takes into account and assesses the collective performance of the Board of Management as a whole and the performance of each Management Board member individually.

The remuneration of the members of the Supervisory Board consists of fixed remuneration and the meeting attendance fee, and if applicable, fixed remuneration for work in the committees.

SUSTAINABILITY MANAGEMENT

Sustainability means maintaining intact environmental, social and economic systems with long-term viability at global, regional and local level. The Volkswagen Group can influence these systems in various ways and actively takes responsibility to help preserve their sustainability. The vision is to become a mobility provider with positive added value for nature and society. Our sustainability management is an important pillar for the continuous improvement of our sustainability performance. The related structures, processes, and responsibilities are codified in a dedicated Group policy on sustainability management.

The Chairman of the Board of Management of Volkswagen AG has cross-functional overall responsibility for sustainability. Members of the Board of Management take on additional responsibilities in line with their responsibility for specific management systems relating to sustainability, and further responsibility is also taken on at Group level by the Chief Sustainability Officer. The Group Sustainability department is part of Group and Product Strategy and the Office of the Corporate Secretary, which belongs to the board-level management function of the CEO. Strategically anchoring sustainability in the company in this way will help improve its resilience because it creates solid foundations for sustainable development and resistance to external influences.

Sustainability and the newly created Group sustainability strategy regenerate+ are part of the Group's TOP 10 program and are managed through the strategic management structure of the Group strategy. In order to make progress on our dimensions and focus topics as transparent as possible - in line with the Group strategy and the objectives of the Group's TOP 10 program valid for the fiscal year - the strategic goals/targets and milestones are structured and regularly measured using the OKR (Objectives and Key Results) method. Accordingly, strategic objectives and targeted key results are defined for all regenerate+ dimensions and focus topics. These are to be realized largely through time-limited projects and work packages, each of which is measured by the metrics and other key performance indicators. The level of achievement is monitored on an ongoing basis, and the overall situation presented three times a year (bi-annually from 2025) to the Board of Management, among others. In this way, the relevance of the focus topics, and their objectives, milestones, projects and work packages, are regularly reviewed at Group level. Their focus is continuously monitored and adjusted as necessary.

Metrics have been defined for regenerate+ to aid its systematic implementation and to make progress transparent. The metrics and targets of the Group sustainability strategy are not only used for internal management but are also repeatedly discussed with partners, society, and the capital market.

Furthermore, the Group Sustainability department coordinates all sustainability-related activities and the Group-wide, cross-functional network for sustainability. Communication with Group functions, brands and companies is structured via clearly defined core processes. The objective is to create transparency regarding external

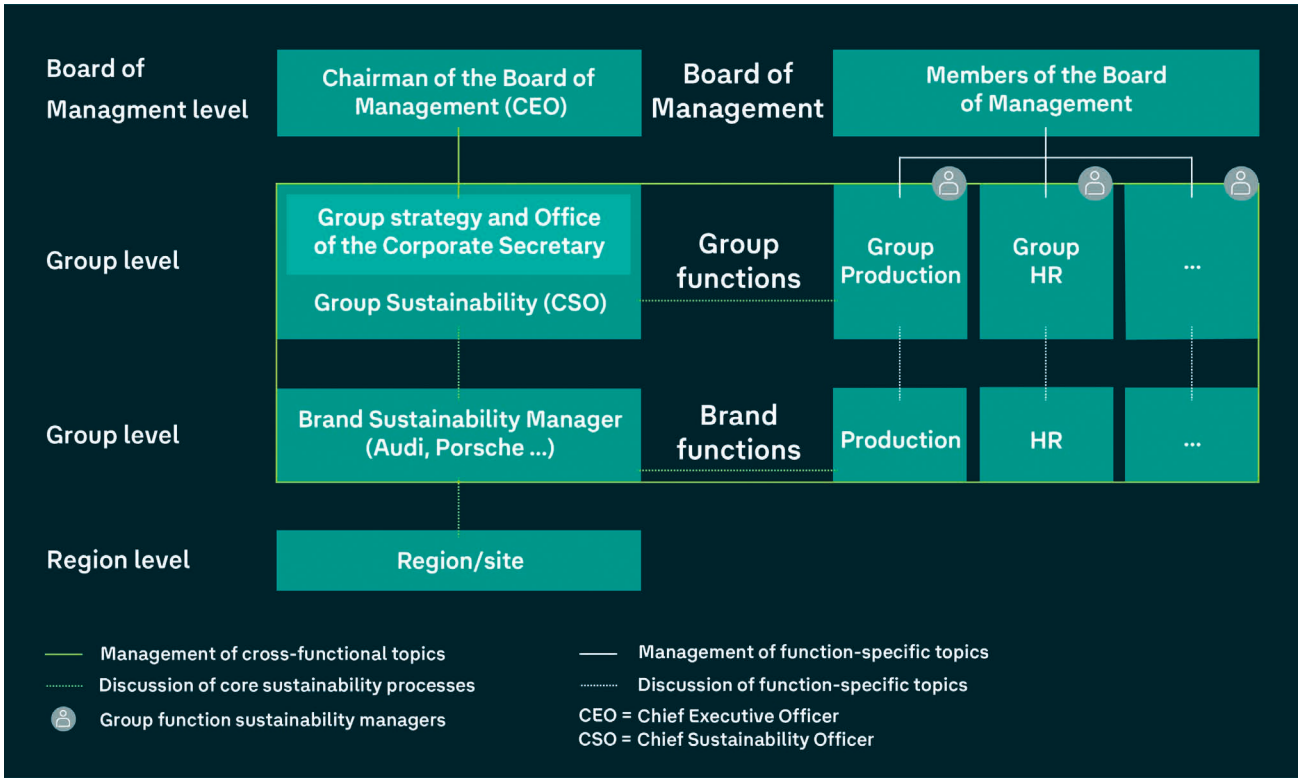
requirements and translate these into corporate action with the aim of continual improvement of the Group's sustainability performance.

The central core processes include development of the Group sustainability strategy and materiality assessment, stakeholder management, ESG ratings, sustainability policies and reporting on sustainability matters.

In addition, the individual board-level management functions are responsible for and manage the function-specific sustainability topics. The relevant Group function is responsible for implementing policies in order to address impacts, risks, and opportunities. If resolutions on topics relevant to sustainability are recommended to the Board of Management, their impact on sustainability strategy issues must be assessed and agreed in advance with the Chief Sustainability Officer.

The Supervisory Board of Volkswagen AG supervises and advises the Board of Management in the management of the company and is directly involved in the decision-making process, in particular in decisions of fundamental importance to the enterprise, by virtue of the fact that its consent is required. Supervision and advice by the Supervisory Board also cover sustainability topics. For example, the Audit Committee deals with matters such as the audit of the sustainability report and the monitoring of processes relating to the sustainability report. The Supervisory Board also considers the sustainability report within the scope of its examination of the management report, based on the prior examination by the Audit Committee and the findings of the audit of the sustainability report by the auditor commissioned for the purpose. In addition, the Supervisory Board has appointed an ESG officer. This role is currently performed by Mr. Hans Dieter Pötsch. Ms. Marianne Heiß, Mr. Mansoor Al-Mahmoud, Mr. Hans Dieter Pötsch and Mr. Ferdinand Oliver Porsche track and monitor the latest developments in the area of sustainability reporting and the auditing and assurance thereof, and bring this expertise to the work of the Supervisory Board and Audit Committee of Volkswagen AG. Regular status reports in accordance with the statutory requirements of the Board of Management, as well as the requirements stipulated by the Supervisory Board, ensure that the Supervisory Board is informed at all times about all developments and changes relevant for its duties. When necessary, the Supervisory Board consults renowned external experts who support the Supervisory Board with their specialized knowledge and objective assessments.

At brand and company level, the brand sustainability managers carry out the cross-functional coordination of sustainability topics. They refine the brand-specific sustainability strategy and are solely responsible for its content, implementation and management, as well as for reporting on sustainability matters within the brand. In addition, they are outward representatives for their brand on the subject of sustainability and liaise with the Group Sustainability department.



The Board of Management of Volkswagen AG regularly concerns itself with the results of the interdisciplinary core sustainability processes to obtain an overview of the company's sustainability performance. In the 2024 reporting year, for example, the results of the double materiality assessment were confirmed by the Group Board of Management in this context. The Audit Committee of the Supervisory Board also considered the results of the materiality assessment.

In addition, these results were compared with the objectives of the Group sustainability strategy regenerate+, where they served as input for reviewing the general resilience of the strategy and ensuring that identified impacts, risks and opportunities are adequately taken into account.

The review initially focused on a quantitative assessment of the coverage of the identified impacts, risks and opportunities related to regenerate+. With their time horizon of 10 years and more, the strategic targets and ambitions of regenerate+ are consistent with the definition of a long-term time horizon pursuant to the ESRS. In addition, the realization of short and medium-term (intermediate) targets and actions is the responsibility of the respective specialist functions and is reported in the topical standards.

This comparison demonstrated that regenerate+ covers all sustainability-specific topics in the long term that are of relevance for the strategic development of holistic sustainability performance. The only exceptions are a small number of topic-specific impacts, risks and opportunities, for example in the customers and end-users, and political engagement and lobbying activities topic areas, which are covered by the specific activities in the relevant departments or brands. The identified risks are also considered indirectly in the review process in accordance with the core process. Risks are mitigated in this context via the policies in the Group functions. Established management tools, such as the risk management system, are available to identify potential risks at an early stage.

In addition to the analysis described above of the coverage with respect to regenerate+, a resilience analysis was carried out in the reporting year regarding the material impacts, risks, and opportunities in the areas Climate change (ESRS E1) and Biodiversity and ecosystems (ESRS E4). These analyses deem the business and operating models to be resilient in the short, medium and long term. Details on the approach and findings of the respective resilience analysis are provided in the "Climate change" and "Biodiversity and ecosystems" chapters.

RISK MANAGEMENT AND INTERNAL CONTROLS OVER SUSTAINABILITY REPORTING

The aim of the Volkswagen Group's risk management system (RMS) and standardized internal control system (ICS) is to identify potential risks at an early stage so that suitable countermeasures can be taken to avert the threat of loss to the company, and any risks that might jeopardize its continued existence can be ruled out. In recent years, the standardized ICS was developed to better protect against process risks and was introduced in key companies. In 26 catalogs of controls, the Group companies within its scope are presented with requirements in respect of the process risks and control objectives to be covered in order to protect the value chain in a standardized manner. In addition to financial reporting issues, they address matters such as process risks in development or production, as well as in the areas of compliance and sustainability. A risk-driven review of the companies to be included in the standardized ICS is performed annually. The catalogs of controls are checked at regular intervals to verify that they are up to date and are regularly expanded.

To meet the sustainability reporting requirements and to safeguard the associated reporting process, material risks along the reporting process were identified in a risk analysis in the reporting year and mitigating internal controls were implemented in the standardized ICS using a catalog of controls for the sustainability reporting process.

In this context, the components of the reporting process – from ensuring that the scope is complete and correct, through the materiality assessment and the opportunities, risks, and impacts identified, to the completeness and accuracy of the presentation in the external reporting – were identified as risks and included in full in the catalog of controls as process risks to be covered.

A risk-oriented policy was created to meet the risk of incorrect calculation, recording or processing of datapoints. This takes into account aspects such as the complexity of the data generation. Depending on the risk classification of the datapoints, these are included in the standardized ICS central approach or are documented decentrally.

The standardized ICS covers the regular review of the material risks identified along the reporting process, the associated controls, the identification of potential control weaknesses and their rectification, and the corresponding reporting. Reports are submitted each quarter to the Group Board of Management and the Audit Committee of the Supervisory Board regarding the degree to which rectification work has been completed on the control weaknesses identified. Further information on the risk management approach can be found under "Procedure for and results of the double materiality assessment"

PROCEDURE FOR AND RESULTS OF THE DOUBLE MATERIALITY ASSESSMENT

For the purpose of determining which topics must be reported in the sustainability report, the ESRS stipulate that a double materiality assessment be performed in the respective standards. This process involves identifying and evaluating the Volkswagen Group's material impacts, risks and opportunities in relation to sustainability matters. In 2023, a methodology was established within the Volkswagen Group, intended to provide both the Volkswagen Group and Volkswagen Group companies that will be subject to reporting requirements in future with guidance on implementing the materiality assessment in the reporting year 2024. The aim of this approach was to ensure that the assessment is carried out in accordance with standardized steps and criteria. As such, separate double materiality assessments pursuant to the defined assessment methodology were performed both for the Volkswagen Group and for the subgroup comprised of Volkswagen Financial Services AG (including Volkswagen Bank GmbH and Volkswagen Leasing GmbH) and Volkswagen Financial Services Overseas AG, Porsche AG Group and TRATON Group for fiscal year 2024. The intention is to update the materiality assessment annually.

Methodology, assumptions and input parameters

The materiality assessment covered both the Volkswagen Group's own operations and the upstream and downstream value chain process steps described under "Business model, value chain and strategy". Assets were included in the analysis in individual cases.

As we are a global Group, we took a global view of impacts, risks and opportunities. Experts from Volkswagen AG carried out the identification and assessment for the Group as a whole based on a standardized

assessment scale. Selected experts from Group companies were involved in the case of certain impacts. The aim of this approach was to lower uncertainties in the assessment process and validate assumptions. Existing analyses and classifications were used where available to ensure that the assessment was based on data. This included analyses from other ESG due diligence processes, such as the *Lieferkettensorgfaltspflichtengesetz* (German Supply Chain Due Diligence Act) for the S-Standards, life cycle assessments for ESRS E1 and ESRS E5, SCIP chemical analysis for ESRS E2, water footprint for ESRS E3 and location analysis for ESRS E4. Where there was uncertainty about impacts (particularly in the case of impacts on business relationships and further along the value chain), conservative assumptions that had been harmonized across the Group were used. In addition, a climate risk analysis (see "Climate change" chapter) and an analysis of impacts on biodiversity (see "Biodiversity and ecosystems" chapter) were carried out.

Process steps in detail

The process within the Volkswagen Group is divided into four fundamental steps.

> 1. Analysis of context
> 2. Collection of impacts, risks, and opportunities
> 3. Assessment of impacts, risks, and opportunities
> 4. Validation of the results of the double materiality assessment

Analysis of context

As part of a context analysis, the Volkswagen Group defined its relevant stakeholder groups, business model and value chain in relation to the ESRS requirements. As a binding basis for the materiality assessment topic list, the 37 subtopics of the ESRS were defined, with sub-subtopics also taken into account. In addition, entity-specific characteristics were analyzed. The Group perspective was covered by means of a comparison with the materiality assessment for the previous year's sustainability report, which met the requirements of the Global Reporting Initiative (GRI), and the Group sustainability strategy regenerate+. In addition, a comparison was made with topics applied by Group companies, competitors, external ESG frameworks and ESG ratings. Corporate Citizenship was defined as an additional entity-specific subtopic of the Affected communities (ESRS S3) topical standard. This is set out in the "Corporate Citizenship" chapter. Consequently, 38 topics were used for the materiality assessments in the Volkswagen Group.

Collection of impacts, risks, and opportunities

The 38 topics were used to collect positive and negative impacts, risks and opportunities. In particular the Group's identified impacts, risks and opportunities, including the Report on Risks and Opportunities, formed the basis for this, supplemented by additional information supplied by the Group companies. The ESRS sub-subtopics were applied in order to hone the impacts, risks and opportunities at subtopic level. These granular impacts, risks and opportunities were each combined into clusters at a level considered appropriate for the reporting of a global Group. Some of these were further honed in expert discussions and modified on the basis of the Volkswagen Group's existing ESG due diligence processes. The Group companies also used the clusters as the basis for their materiality assessment and added entity-specific matters in selected cases.

Assessment of impacts, risks, and opportunities

The materiality assessment was conducted at the level of the clusters identified. The assessment method for financial and impact materiality was developed centrally. The impact assessment focused on the Volkswagen Group's impact on the environment and society, whereas the financial materiality assessment took account of the sustainability-related risks and opportunities to which the Group is exposed. The assessment of financial materiality was conducted after the impact assessment so that interdependencies between impacts and risks or opportunities could be taken into account. Dependence on aspects such as natural resources or other ecosystem services was also considered in this way when assessing the financial effects. The assessment methodology is binding.

The impacts, risks and opportunities were evaluated in workshops with experts on the topics from a variety of departments using the assessment methods described above. The materiality threshold was determined after the assessment.

Validation of the results of the double materiality assessment

In a final step, the Volkswagen Group's materiality assessment was validated. The harmonization of the results of the Group companies' materiality assessments was a key part of this validation. Each company subject to the reporting requirements in the future documented its results and made them available for consolidation at Group level. The consistency of the assessments was reviewed, discrepancies were discussed for appropriateness, and assessments were adjusted in some cases.

Another part of the harmonization took the form of a validation from a human rights perspective. Here, the severity of negative human rights impacts was considered and a comparison with the prioritized risks according to the German Supply Chain Due Diligence Act was conducted.

Furthermore, the results of the double materiality assessment were compared with the risks and opportunities identified by Group Risk Management and analyzed in more detail.

Finally, the results of the materiality assessment were compared with the strategic direction of the regenerate+ strategy, discussed and agreed in a cross-departmental validation process and approved by the Board of Management. The process described is protected by corresponding controls in the standard ICS. To facilitate the collection and assessment of impacts, risks and opportunities relevant for the materiality process in the remainder of the fiscal year, existing stakeholder formats and the findings from the risk management system were checked for material changes.

Stakeholder involvement

The Volkswagen Group indirectly integrated the concerns of its relevant stakeholder groups in the materiality assessment; direct consultations did not take place. In-house experts were involved in the materiality assessment. As such, we were able to leverage the knowledge of our own departments regarding relationships between the sustainability topics and the relevant stakeholders affected – for example from analyses and ESG ratings. Feedback from individual dialogs between departments and stakeholders was also integrated into the process. The members of the validation committee include further departments that also take the stakeholder group perspective into account, for example Sustainability, Investor Relations, the Works Council, External Relations, and Procurement.

Assessment methodology in detail

Impact materiality

In accordance with the ESRS, both positive and negative impacts were used to assess the materiality of the impacts. The positive and negative impacts were assessed separately in the two categories of actual impacts and potential impacts. Actual impacts in the context of the materiality assessment are impacts that are actually happening now or have already happened. This time horizon applies for all actual impacts named in the sustainability report. Potential impacts are impacts that are sufficiently likely to occur. The most relevant time horizon for potential impacts is described in the text as short term (less than 1 year), medium term (1–5 years) or long term (more than 5 years).

To determine the negative impacts, the parameters of scale, scope and irremediable character were evaluated separately and then consolidated as an average to give the severity of the impact. Scale and scope were assessed to evaluate the positive impacts. The average of these two criteria also expresses the severity.

In the case of potential impacts, the likelihood of occurrence was assessed for both positive and negative impacts. A likelihood of occurrence of 100% was assumed for actual impacts.

The impacts were divided into severity categories on the basis of scale and scope, as well as irremediable character for negative impacts. The materiality of the impacts is assessed by multiplying the factors for severity with the likelihood of occurrence. In terms of impact materiality, impacts are classed as material if their risk score is 50 or above on a scale of 1 to 100.

Financial materiality

The Report on Risks and Opportunities in the Group management report describes the Volkswagen Group's risk management processes. The quarterly risk process covers all acute situations irrespective of the type of risk, e.g., sales risks, environmental risks, or personnel risks. An additional risk and opportunities identification process was created to meet the requirements of the ESRS. The process to identify and assess risks and opportunities for the sustainability report is based on the quarterly risk process already established in the Group. A score is determined based on the ESRS requirements for each risk and opportunity in the area of sustainability. The score is calculated by multiplying the likelihood of occurrence by the potential severity and makes the risks and opportunities comparable. The severity is calculated by combining the weighted criteria of financial effect and reputational effect. A score between 0 and 10 is assigned to each of these criteria. The management and control measures taken are included in the assessment on the basis of the ESRS requirements.

The score for the likelihood of occurrence increases as the probability increases until it reaches the highest score of 10 for a likelihood of greater than 90% in the period under review. For the criterion of financial effects, the score rises in line with the scale of the loss; the highest score of 10 is reached when the potential loss is upwards of €1 billion. The criterion of reputational effects can have characteristics ranging from local erosion/building of confidence and loss/gain of trust at local level to loss/gain of reputation at regional or international level.

The assessment is carried out for each risk or opportunity in terms of the financial impact on the operating result in the relevant time horizon in which it may occur. A distinction is made here between short term (less than 1 year), medium term (1–5 years) and long term (more than 5 years). Acute sustainability risks are also identified, assessed, and managed in the quarterly risk process. Sustainability risks are addressed with the same importance as other identified risk types.

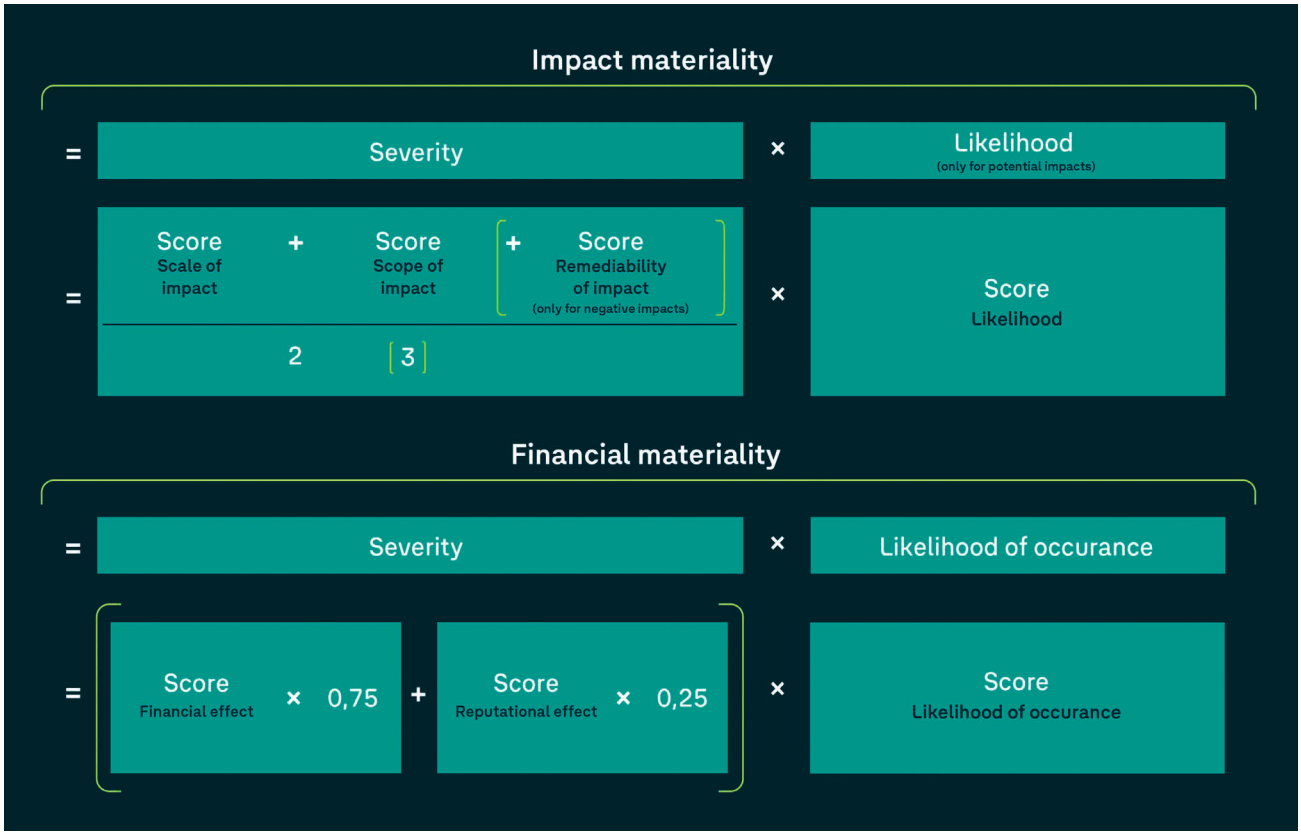
Sustainability risks/opportunities are assessed to be material in the sense of financial materiality if their risk score is 50 or above or their potential financial effect is €1 billion or more. This process is similar to the quarterly risk process's established reporting requirements.

The assessments were discussed at Group level with the relevant departments in a process based on the materiality assessment, and the material risks and opportunities are presented in the respective ESRS chapters.

The RMS and ICS are regularly optimized as part of the continuous monitoring and improvement process, with equal consideration being given to internal and external requirements, in particular the requirements of the ESRS. External experts assist in the continuous enhancement of our RMS and ICS on a case-by-case basis.

Materiality threshold

In accordance with the ESRS requirements, the materiality threshold was set for both the impacts and the financial materiality following the completion of the assessment phase. On a five-point scale ranging from informative to critical, a topic becomes material for the Volkswagen Group when it crosses the threshold to the second-highest category of significant. For a subtopic to be defined as material, it is sufficient if either an impact or a risk or an opportunity is considered material. In the event of a financial effect of more than €1 billion, the risk or opportunity is classified as material irrespective of the overall assessment.



Procedure for identifying material information

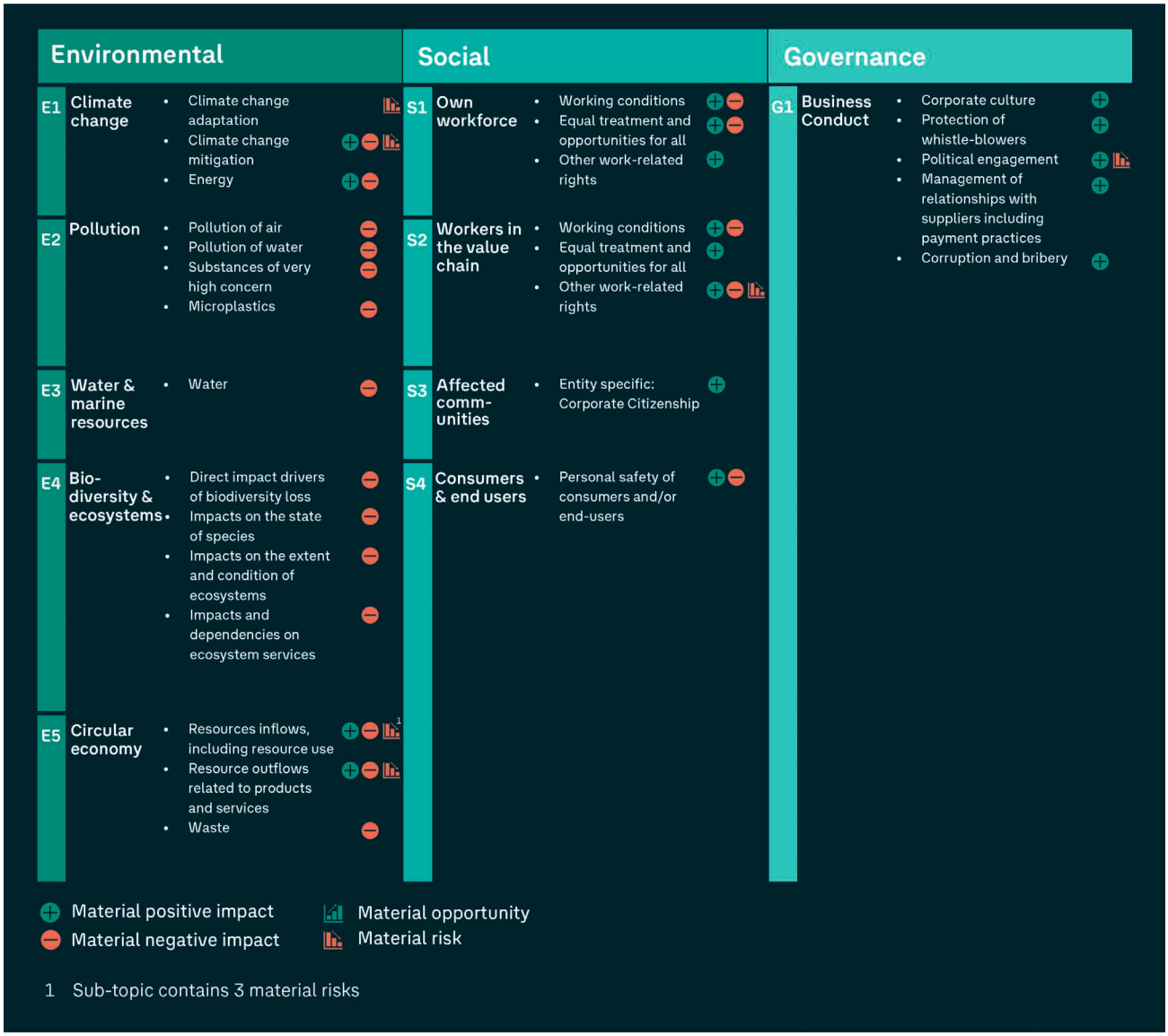
The relevant disclosure requirements from the ESRS were identified on the basis of the material impacts, risks and opportunities for the report in fiscal year 2024.

To determine which information is to be reported, the Volkswagen Group first allocated the datapoints to one or more of the 38 topics. Datapoints relating exclusively to immaterial topics were then excluded from the reporting process. Voluntary datapoints with phased-in Disclosure Requirements considered to have no relevance for the report were eliminated in a subsequent step. Finally, metrics that were allocated to a material topic but were not categorized as relevant were excluded for various reasons. These reasons were clearly documented.

Results of the materiality assessment

In the context of the double materiality assessment, 28 of the 38 topics considered were identified as material. A total of 17 positive impacts, 19 negative impacts, 8 risks and no opportunities were categorized as material. Further impacts, risks and opportunities that have not reached the threshold for reporting were also identified in all topical standards. Inherent risks are described in the management report. It was possible to assign the material impacts, risks and opportunities to the subtopics of the ESRS (see chart). Only the impact of the topic of Corporate Citizenship is covered by additional entity-specific information. The option to present the material impacts, risks and opportunities under the respective topical standards was applied for the reporting year 2024. Current financial effects – where they are both material and recorded – are described in the chapters on the topical standards. The double materiality assessment was conducted in accordance with the requirements of the

ESRS for the first time, meaning that there is no change to report compared with previous years. It will be updated for the next sustainability report.



Introduction to environmental management

The Volkswagen Group is pursuing the goal of achieving more than simply cutting emissions. Our vision is to have a positive impact on people and the environment, and to contribute to restoration and improvement of ecosystems and living conditions by means of regenerative actions.

OVERARCHING POLICIES

Five policies are involved in the ESRS environmental standards:

- "Policy: Decarbonization"
- "Policy: Pollution prevention"
- "Policy: Sustainable water management"
- "Policy: Biodiversity"
- "Policy: Resource use and circular economy"

These policies are based on our Group policies on the environmental compliance management system (ECMS), which plays a major role in corporate governance. Also important are the Code of Conduct, our Group strategy, our Group sustainability strategy regenerate+, the Code of Conduct for Business Partners, our environmental mission statement goTOzero, the environmental policy, our decarbonization strategy and the Biodiversity Commitment. They address the environmental compatibility of products, services and processes, as well as the Volkswagen Group's environmental footprint.

The relevant documents, which are applicable Group-wide, are available both publicly (with the exclusion of Group Policies) and internally. The relevant content of these documents is set out in the following chapters. Thematic specifications are provided in the relevant "Policy" section in the chapters under Environmental information.

Environmental protection is entrenched in the Code of Conduct as a key corporate principle. As a globally active company, the Volkswagen Group is responsible for the environmental compatibility and sustainability of its products, sites and services. Its mission is to be a global provider of sustainable mobility and a role model in environmental protection. The Volkswagen Group is committed to using environmentally compatible, advanced and efficient technologies and implements them throughout the life cycle of its products. As early as the development and production stage, the Group pays attention to the sustainable use of natural resources, works continuously to mitigate environmental impacts and ensures compliance with environmental legislations and regulations. In addition, the environmental compatibility of products and manufacturing processes is continually assessed and optimized as necessary.

The topics of climate change mitigation and energy are key elements of the Group strategy relating to the decarbonization of the Group's business activities. Climate change mitigation is also an important aspect of regenerate+. By using electric drives, digital connectivity and autonomous driving, the Volkswagen Group aims to make its cars cleaner, smarter, quieter and safer. The Group harnesses its innovative power to reduce its

environmental footprint – over the entire life cycle of its products and mobility solutions. The innovations are also intended to help customers to be more environmentally friendly.

In addition, the Volkswagen Group aligns its activities with the principles of environmental protection and enhancement in accordance with regenerate+. Decarbonization, establishing a circular economy, and preserving biodiversity are focal points within this framework. The nature dimension is a material element of the regenerate+ supporting program. The Volkswagen Group strives is to shape the positive impact of its actions in this area in a way that is quantifiable and transparent. Consequently, one of the core objectives of the nature dimension is to achieve more than just reducing emissions. The vision is to have a positive impact on people and the environment, as well as to contribute to the restoration and improvement of ecosystems and living conditions through regenerative actions.

The Code of Conduct for Business Partners contributes to Group-wide sustainability progress. In order also to extend the requirements of the Code of Conduct for Business Partners to lower levels of the supply chain, the Volkswagen Group requires its suppliers to pass the requirements on to their direct business partners. Above and beyond statutory requirements, the Volkswagen Group is committed to being a responsible member of society and a partner to policymakers, with whom the Group seeks dialog on the mobility concepts of the future and the design of environmentally sustainable development. The environmental issues addressed in the Code of Conduct for Business Partners include sustainability requirements in environmental protection, and responsible supply chains.

Our goTOzero environmental mission statement serves as the framework for all the Volkswagen Group's environmental activities. With this mission statement, we aspire to reduce the environmental impact throughout the life cycle – from raw material extraction until end-of-life – for all our products and mobility solutions. Compliance with environmental regulations, standards and voluntary commitments is a prerequisite of our actions. The mission statement forms the basis for linking our targets, metrics, programs and actions. It places the focus of our activity on four central fields for action and their underlying objectives (see illustration).

In addition to the commitment to environmental protection, the Volkswagen Group has also made environmental compliance a focal point. This concerns not only adherence to legislation and internal requirements, but also close dialog and cooperation with stakeholders. The Volkswagen Group places emphasis on involving its employees, customers, suppliers, legislators, authorities, neighboring communities and other stakeholders. The Group aims to enhance its understanding of their expectations and requirements in relation to the environment. Their suggestions are entered in the ECMS, carefully assessed, and subsequently reflected in the Group's processes, products and services.

The Volkswagen Group has created an environmental policy that sets out guidelines for environmental decision-making, for the management of projects and for the Group's environmental stewardship. This policy actualizes the overarching environmental mission statement and sets parameters for the conduct and working methods of management and employees in five areas: management behavior, compliance, environmental protection, collaboration with stakeholders and continuous improvement. The environmental policy highlights, for example, the integration of renewable energies, decarbonization, sustainable supply chains and energy efficiency. The Volkswagen Group also intends to reduce the environmental impacts of its processes, products and services, and to continuously improve its ECMS and environmental performance.

Based on the environmental mission statement and the environmental policy, environmental protection is firmly entrenched in the Volkswagen Group divisions including Production, Logistics and Sales. As part of the strategic vision of the Zero Impact Factory initiative, the Volkswagen Group is developing specific steps towards more sustainable production. The vision is an idealized factory which employs manufacturing methods that are as climate, resource and environmentally friendly as possible, thereby reducing any environmental impacts of vehicle and component production. The brands and locations have been using the measurement methods and management tools developed for this purpose. Further information on this is provided in the "Overarching targets and metrics" section. These measurement methods and management tools enable the quantitative environmental impact of the production sites to be recorded and reduced, particularly in the action areas: climate change mitigation and energy, emissions, water and waste. We are also focusing on qualitative aspects such as the appearance of the factories, the commitment to biodiversity, protection of the soil, a functioning environmental compliance management system, improvement of resource efficiency, and environmentally friendly mobility management for employee and goods transport.

As part of the Zero Impact Logistics initiative, all of the Group logistics departments are working to support the realization of the Volkswagen Group's environmental mission statement. By continually optimizing the transport network and logistics processes – for example by means of digitalization – unnecessary shipments are avoided and emissions reduced. In addition, the use of new low-emission technologies and energy sources for transporting production materials and vehicles is examined, piloted and expedited.

The Volkswagen Group's sales network extends globally to more than 150 markets with over 17,000 dealer and service locations. In addition to the broad range of all-electric vehicles and hybrid models, we kicked off the goTOzero retail project that is focused on decarbonizing our entire sales network and increasing its ESG performance, helping our sales partners to move over to a climate-neutral business model.

A Group policy for the ECMS sets out the requirements, tasks and responsibilities with regard to the environment and compliance. It provides the framework for implementing ECMS across all phases of the business and the entire life cycle of vehicles in the brands and companies. The policy defines the minimum requirements for the companies and gives them the flexibility to implement them in a way that suits their business activities. The systematic implementation of requirements from the Group Policy on the ECMS reinforces the effectiveness and robustness of the environmental compliance management systems at the Volkswagen Group sites. Defined roles and responsibilities allow for clear allocation of tasks and competencies. In addition to internal audits, external certifications enable objective assessments of these management systems and ensure their continual enhancement. The ECMS is also used to regularly check the effectiveness of the actions. A detailed explanation can be found in the "Actions and resources" section in each of the chapters under Environmental information. The Volkswagen Group provides regular training for its employees on environmental protection and environmental compliance. In line with the Group Policy, all production and development sites in the Group are also requested

to have their environmental management systems certified to ISO 14001 or validated by the Eco-Management and Audit Scheme (EMAS).

The Volkswagen Group implemented a responsible supply chain system in 2022 to comply with international frameworks and requirements. The system aims to identify particularly high risks in the supply chain in connection with human rights violations and the environment and to manage these appropriately.

The Volkswagen Group's environmental responsibilities are clearly defined. The Group-wide management of operational environmental protection is the responsibility of the Chief Executive Officer of the Volkswagen Passenger Cars brand and of the Group Steering Committee Environment and Energy, which is supported by numerous specialist bodies. The Group Steering Committee Environment and Energy regularly informs the Group Board of Management on environmental and energy-related topics. It coordinates Group-wide dialog and makes decisions on environmental and energy issues. Its tasks include implementing resource efficiency programs and monitoring target achievement. As the highest environmental body in the Volkswagen Group, the Group Steering Committee Environment and Energy plays a key role in decision-making concerning environmental matters. Other bodies are responsible for managing important individual aspects, such as the Group Steering Committee for Fleet Compliance. Climate-related topics are coordinated and managed by regular meetings of the Group steering committees (at least six meetings per year) and by continuous communication with the heads of the Group's and the brands' various research and development units and other Group functions. Cross-divisional and cross-brand working structures have been developed at Group level to support this coordination process. These structures build on the work of committees such as the Group Steering Committee for the Environment and Energy, the Group Steering Committee for Product Recycling and the Group Platform Sustainability Product. Group Regulation Management is the key contact for Group policies and monitors the entire Group Policy process. A responsible division must verify at least once a year that the Group Policies and annexes it manages are up to date, and revise them if necessary.

OVERARCHING TARGETS AND METRICS

Reduction of specific environmental impact of production

The Volkswagen Group aims to improve its own *Umweltentlastung Produktion* (UEP – environmental improvement production) metric in the area of passenger cars and light commercial vehicles by 45% per vehicle or component part by 2025 as compared with 2010. The UEP is derived from the weighted average of five metrics: energy consumption, CO_2 emissions, water consumption, solvent emissions or volatile organic compounds (VOCs) – and waste for disposal.

In base year 2010, energy consumption was 2,519 kilowatt hours (kWh) per vehicle, CO_2 emissions 1,096 kilograms per vehicle, water consumption 4.54 m^3 per vehicle, production-specific waste for disposal 23.3 kilograms per vehicle, and VOC emissions 4.13 kilograms per vehicle.

The targeted reduction of the environmental impacts follows a trajectory from 2010 to 2025 with annual intermediate targets. Progress is monitored, reviewed and publicly communicated on an annual basis.

In 2024, many successfully implemented actions continued to have a positive impact on the specific environmental indicators per vehicle. The UEP improved from -44.2% in 2023 to -48.5% in 2024. The target of a 45% improvement by 2025 was thus already achieved in 2024. The table below shows the changes in specific environmental indicators per vehicle, and illustrates the changes compared to base year 2010.

ENVIRONMENTAL IMPROVEMENT PRODUCTION

Metric per vehicle	Unit	2024	2023
Environmental improvement production	%	-48.5	-44.2
Specific energy requirement	%	-21.5	-21.0
Specific CO_2 emissions	%	-62.8	-51.0
Specific VOC emissions	%	-67.5	-68.7
Specific water consumption	%	-27.1	-24.7
Specific waste for disposal*	%	-79.4	-75.9

*only production-specific volumes
The information for 2023 is provided voluntarily and has not been externally validated.

The UEP target is in line with the environmental mission statement goTOzero and supports the achievement of climate targets and improvement of energy and resource efficiency. The target also contributes to achievement of the United Nations' Sustainable Development Goals (SDGs), in particular SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure), SDG 12 (responsible consumption and production), SDG 13 (climate action) and SDG 15 (life on land).

The UEP metric is directly connected with the environmental standards ESRS E1, E2, E3 and E5. The metrics energy consumption and CO_2 emissions per vehicle are considered in the UEP with respect to climate change (E1). The UEP considers the VOC emissions per vehicle with respect to topical standard pollution (E2). Water consumption per vehicle is included under water and marine resources (E3). Finally, the UEP addresses Circular economy (E5) via the assessment of waste for disposal.

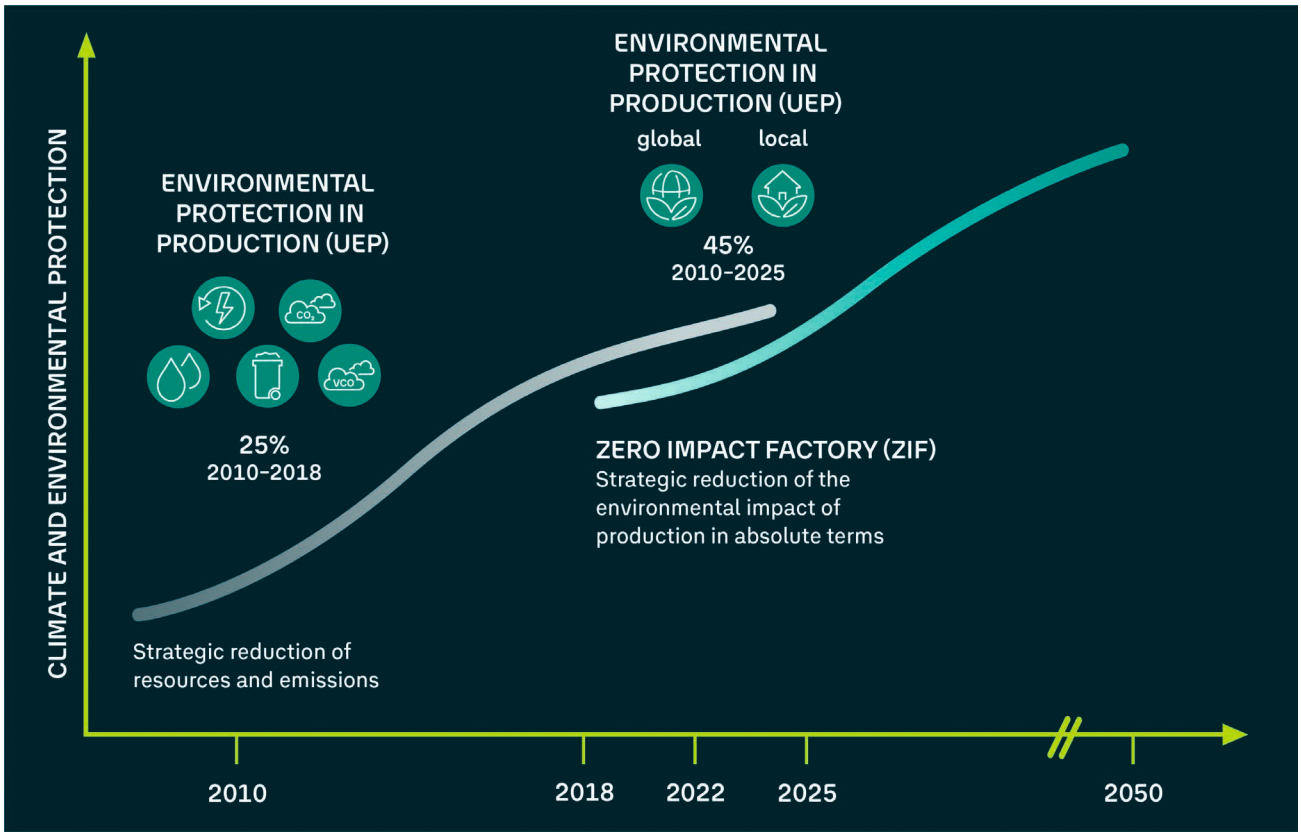
Reduction of absolute environmental impact of production

The aim of the Volkswagen Group's Zero Impact Factory strategic vision is to measure and assess the environmental impacts of its production sites worldwide in a uniform and holistic manner. Two independent methods were developed for this purpose: the Site Checklist analyzes qualitative aspects of a site in eleven action areas, while the Impact Points method facilitates a quantitative assessment of the absolute environmental impacts of a site.

The Volkswagen Group's specific objective through the impact points method is to gradually reduce the absolute negative environmental impacts of its production sites for passenger cars and light commercial vehicles and components by 37.5% by 2030, by 68.8% by 2040, and ultimately towards net neutrality by 2050, all compared to 2018 levels. This target will replace the UEP target in 2025. Progress is monitored and reviewed on an annual basis, and will be publicly communicated from reporting year 2025.

The targets for reducing the impact points are in line with the environmental mission statement goTOzero. They support the achievement of internal and external climate targets, improvement of energy and resource efficiency, and reduction of harmful emissions to air and water. The targets contribute to achievement of the United Nations' SDGs, in particular SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure), SDG 12 (responsible consumption and production), SDG 13 (climate action) and SDG 15 (life on land).

Measuring the environmental impacts of production by means of impact points forms the methodological foundation for achieving our vision of production with minimal effects on the environment. The following graphic illustrates the transition from using the UEP performance indicator to using the Impact Points method.



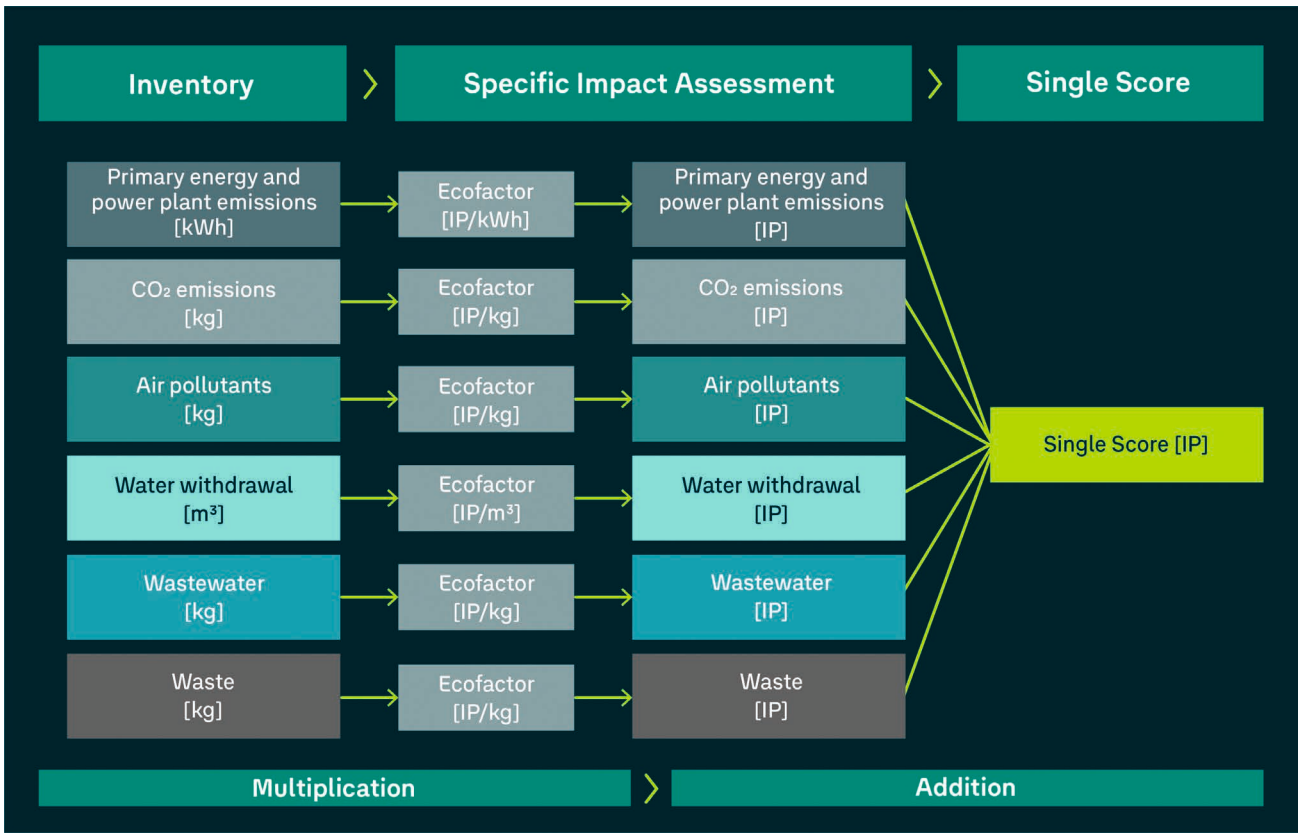
The Impact Points method was developed in close cooperation with partners from the scientific community, primarily the Technical University Berlin, and published in two scientific papers. These are publicly available at https://www.sciencedirect.com/science/article/abs/pii/S0959652622052209 and https://www.mdpi.com/2071-1050/16/7/3011. The Impact Points method is based on the ecological scarcity method, which assesses the environmental impact of pollutant emissions and resource extraction. The method also compares current environmental impacts with impacts considered socially acceptable. These environmental carrying capacities were derived for the Impact Points method from national legislation, international targets and scientific principles. The Impact Points method includes six overarching environmental aspects:

- Primary energy and power plant emissions relate to the provision and transmission of energy through the energy infrastructure, as well as emissions from power plants such as VOCs, sulfur oxide (NO_x) and dust (particulate matter (PM).
- CO_2 emissions comprise greenhouse gas emissions (GHG emissions) emitted directly from the site (Scope 1) and indirectly through the use of energy (Scope 2).
- Air pollutants comprise the local emission of pollutants such as VOCs, sulfur oxide and dust directly from the site.
- Water withdrawal refers to the local abstraction of water and use of the external freshwater infrastructure.
- Wastewater refers to the discharge of pollutants such as nitrogen (N), phosphorus (P), nickel (Ni) and zinc (Zn) into local waters and the use of the external wastewater infrastructure.
- Waste includes both transportation and the processes for disposal of waste generated in production (e.g. landfill, thermal and material recycling, and use as a substitute raw material).

The Impact Points method uses a standardized procedure similar to life cycle assessment to determine the environmental impact. The first step is to compile a data inventory (life cycle inventory). The environmental impacts of each environmental aspect are then determined by multiplying this by eco-factors (impact assessment). The level of an eco-factor illustrates the relevance of the respective environmental aspect, such as CO_2e emissions, as compared with other aspects. The eco-factors take account of both planetary limits and the political objectives of the countries in which Volkswagen Group's production sites operate. For instance, water withdrawal at a site

with low local water risk generates fewer impact points than at a site with high local water risk. This results in a weighting of environmental aspects.

The following graphic provides a schematic illustration of the impact point calculation method.



The Impact Points metric is directly connected with the environmental standards ESRS E1, E2, E3 and E5. With respect to Climate change (E1), Impact Points address both the environmental aspects of primary energy and power plant emissions and CO_2 emissions. The method includes air pollutants and wastewater as regards Pollution (E2). The water withdrawal environmental aspect is considered with respect to Water (E3). Finally, impact points address Circular economy (E5) via the environmental aspect of waste.

Addressing qualitative environmental aspects in production

The Site Checklist developed in-house is the second assessment method after the Impact Points method, aligning with the strategic vision of the Zero Impact Factory. The checklist is used to monitor implementation of defined criteria regarding the environmental characteristics of a factory in eleven action areas. The Volkswagen Group aims to achieve an average compliance rate of at least 60% of the Site Checklist at its production sites by 2030. This is set to increase to 73.4% by 2040 and to 87.2% by 2050. This objective applies to sites producing passenger cars as well as light commercial vehicles or components. The springboard in base year 2022 was a Group-wide average of 44.5% achievement of the site checklist. Public reporting on target achievement will begin in 2025.

The targets contribute to achievement of the United Nations' SDGs, in particular SDG 6 (clean water and sanitation), SDG 7 (affordable and clean energy), SDG 9 (industry, innovation and infrastructure), SDG 12 (responsible consumption and production), SDG 13 (climate action) and SDG 15 (life on land).

The Site Checklist was developed in cooperation with various Group departments, brands and companies and is based on internal and external requirements, such as the EU Green Deal and the EU BREF documentation for the best available techniques.

The Site Checklist comprises eleven action areas with a total of over 140 largely qualitative environmental criteria: Environmental compliance, architecture and perception, planning, digitalization, water, energy and CO_2, materials, soil, biodiversity, pollutants and mobility.

The action areas and criteria contained in the Site Checklist are regularly evaluated and updated as necessary. The sites assess each criterion as met or not met. Criteria may be assessed as met only if appropriate evidence is provided. The permitted forms of evidence and minimum criteria are defined in an internal manual. Achievement of individual criteria for each of the 11 action areas produces a fulfillment level from 0% (no criteria met) to 100% (all criteria met). The site results are calculated as the average of the fulfillment levels, with each of the action areas weighted equally. The result for the Group is determined as the average of all site results.

The Site Checklist method and its eleven action areas are directly related to the environmental standards ESRS E1 to E5. The energy and CO_2 and mobility action areas in particular relate to topical standard Climate change (E1). The soil and pollutants action areas have a direct link with topical standard Pollution (E2). The site checklist has an action area named water which addresses the topical standard Water (E3) with relevant screening criteria. The biodiversity action area relates to topical standard Biodiversity and ecosystems (E4). Finally, the materials action area addresses the topical standard Circular economy (E5).

Increasing the number of suppliers with environmental certification

The Volkswagen Group is pursuing the aim of improving its environmental impacts in the upstream supply chain. This has involved setting a target as part of regenerate+ of proving by 2040 that more than 95% of direct suppliers, based on their sales revenue percentage of the total procurement volume, have established a certified environmental management system (e.g. pursuant to ISO 14001 or EMAS). The target applies to suppliers with production sites that employ more than 100 people. 2023 serves as the base year for measuring progress; in that year, 80% of suppliers already had certified environmental management systems. In the reporting year, the share was increased to 85%.

The target was also documented in the Code of Conduct for Business Partners. Evidence based on the Volkswagen Group sustainability rating (S-Rating) has also been required since 2022.

Annual progress is monitored by the sustainability management team in Procurement to ensure that the target is reached by 2040. The methodology is based on a standardized self-assessment questionnaire, with the responses and documents reviewed and validated centrally by an external service provider. A risk analysis is also performed using data from external service providers and risk-based audits. This is intended to work towards target achievement and identify any deviations at an early stage.

Uniform collection of environmental data

Environmental data from the sites forms an important basis for determining quantitative metrics that are reported in the sections ESRS E1 to E5 (for a description of the scope of reporting, see the chapters under Environmental information, see the scope of reporting of the "General information" chapter). The internal Group standard VW 98000 sets out how these environmental indicators are to be uniformly determined and documented within the company. A total of around 200 environmental indicators are recorded at site level and reported via the internal environmental information system (EIS). Each site is responsible for providing the environmental indicators.

The following are acceptable methods of recording environmental indicators. Direct measurements of physical quantities should be given the highest priority, such as wastewater volume by means of a flow meter, the volume of waste using a scale, or energy consumption by means of energy meters. If direct measurement is not technically or economically feasible, the environmental indicators can be calculated based on measured variables. This method has a lower priority. This applies, for example, to the volume of CO_2 emitted from the use of combustible materials, or emissions of pollutants into wastewater, which are generally extrapolated based on random sample measurements. The permissible method with the lowest priority is an estimation of indicators based on transparent assumptions, such as the proportional dependency between waste volume and the number of manufactured units. All processes used must be transparent and verifiable by independent third parties such as certifiers or auditors.

Environmental data is collected in the chapters under Environmental information in accordance with the ESRS requirements for E1-5 (energy), E1-6 (GHG emissions), E2-4 (emissions to air and water) and E4-SBM3 (biodiversity-sensitive areas) for the Volkswagen Group and companies with operational control (in accordance with the scope of reporting of the "General information" chapter). Metrics that go beyond these disclosure requirements are reported voluntarily for the companies with operational control.

Climate change

The Volkswagen Group is committed to the Paris Climate Agreement and aligns its own activities with the 1.5 degree goal. We aim to achieve net carbon neutrality by 2050.

MATERIAL IMPACTS AND RISKS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impacts relating to climate change mitigation and energy

The positive and negative impacts described below, relating to climate change mitigation and energy were assessed as material actual and potential impacts in the double materiality assessment. It is to be expected that both the positive and the negative impacts will continue over a long-term time horizon.

Greenhouse gas (GHG) emissions are generated along the Volkswagen Group value chain, primarily in the use phase of our products, and it contributes to climate change. GHG emissions are also caused through the mining and processing of raw materials, the manufacture of components in the supply chain, and the company's own operations.

Negative impacts also arise in this context through energy consumption along the value chain. A decisive factor is the continued significant reliance on fossil energy sources, the production and use of which are associated with GHG and other emissions. The focal points in this regard are also the use phase of the products, the production processes in the upstream value chain and the company's own production processes.

The Volkswagen Group also contributes to positive impacts on climate change mitigation and energy along the value chain by reducing GHG emissions and promoting the use of renewable energy. The greatest effects can be found in the downstream value chain in the use of the vehicles: The transition to e-mobility, which enables the widespread use of renewable energy in the transportation sector, serves to reduce primary energy requirements and GHG emissions compared to vehicles with internal combustion engines.

The processes for identifying possible impacts as part of GHG accounting or energy management are described in the "Metrics: Climate change" section regarding compiling the relevant metrics.

Process description and results of the climate risk analysis

Transition risks

Possible transition risks and opportunities were identified using a scenario analysis and on the basis of additional in-house sources within the double materiality assessment (see the "Procedure for identifying material information" section of the "General information" chapter for further information).

The time horizons of the analysis correspond to the general definitions in this report. The connections between the service lives of the capital goods and the time horizons from strategic planning are set out in the "Procedure for identifying material information" section of the "General information" chapter.

The scenario used in the scenario analysis was Net Zero by 2050 from the International Energy Agency (IEA). The main sources used were the IEA report "Net Zero Roadmap: A Global Pathway to Keep the 1.5°C Goal in Reach – 2023 Update", and the "Global EV Outlook 2024". The reports take into account the latest progress reports of the Intergovernmental Panel for Climate Change (IPCC) at the time of preparation, and therefore the current state of climate science. The IEA's Global Energy and Climate Model on which it is based models not only the necessary

transformation of the transportation sector, but also of additional sectors relevant for the Group's value chain and business model, such as energy and raw materials production.

The ambition level of the scenario is aimed at the ideal goal of the Paris Climate Agreement of limiting global warming to 1.5°C; the scenario provides for a limited overshoot of the 1.5°C target, with a decline in the global temperature rise to around 1.4°C by 2100.

This makes it suitable for estimating a maximum expected intensity and speed of the transition events, and thus the maximum risk exposure. The Group also investigated processes with lower intensity and speed, particularly in the regulatory environment, as part of strategy development, to address uncertainties regarding the forms of risk driver (see the "Strategy: Climate change resilience" section for further information). This did not reveal any additional risks.

The IEA's "Net Zero by 2050" scenario requires proactive alignment by automotive producers with stricter regulations, technological disruptions and the change in the energy mix. The focus on battery-electric vehicles, innovative business models and sustainable value chains is defined as crucial to ensure long-term competitiveness and satisfy the requirements for the net-zero targets.

The scenario considers various time horizons. Specific statements relating to the transportation sector in particular are made for 2030, 2035 and 2050. The focus of the analysis was on development until 2030 for the medium-term time horizon and until 2035 for the long-term time horizon.

Several relevant transition events were identified based on the scenario. The scenario is based on the assumption that governments around the world will be implementing ambitious climate policies, including carbon pricing, stricter fleet emission standards, and bans on new registrations of internal combustion engine vehicles in key markets. The expansion of incentive schemes to promote battery-electric vehicles is also anticipated.

In terms of the market, the scenario assumes that increasing availability and decreasing costs will be additional factors in driving the demand for battery-electric vehicles – provided that the charging infrastructure is expanded quickly. Based on these assumptions, the percentage of battery-electric vehicles among passenger cars sold worldwide will increase to 67% by 2030, and among heavy trucks to 37%. However, this development may vary widely between regions.

It would cause increased demand for battery raw materials, and sustainably produced and recycled materials in the medium to long term, which may result in limited availability and price increases.

From a technological perspective, the scenario assumes that current battery technology will continue to develop and that energy efficiency will significantly improve across all sectors. This could reduce emissions from the upstream value chain considerably.

The transition events were located along the value chain and were analyzed qualitatively in terms of impacts on strategy and business model in the form of potential risks and opportunities. These were compared with the risks and opportunities formulated in the double materiality assessment.

The evaluation was performed in the double materiality assessment by the relevant departments in consultation with Group risk management and sustainability management (see the "Procedure for and results of the double materiality assessment" section of the "General information" chapter).

The risk of failing to meet the statutory worldwide fleet emission targets, for example, due to insufficient transition to electric drivetrains or lack of market resonance – was defined as material for the company. Financial effects would result primarily from the charges payable in such case. In this context, an amount in the mid-three-digit-million euro range was added to provisions in the reporting year. Financial effects are also expected to be associated with this risk in 2025. This risk was classed as material for all time horizons.

Material risks resulting from the need for sustainable raw materials are described in the chapter "Resource use and circular economy".

Physical risks

The assessment of climate-related risks for the Group's own sites involved examining climate-related hazards for the 200 most important sites. These included all production sites along with key sales, administration and development sites.

The investigation was conducted with a software tool that uses the geo-coordinates of the sites. Both chronic hazards such as heat and cold stress, and acute physical hazards such as river floods and storm floods, were analyzed.

The periods examined were based on those of the software tools employed and were largely in line with the periods used in this report. The short term corresponds to the status quo view in the tool. The medium term refers to development until 2030 and corresponds to the Group's strategic planning period, including capital allocation planning. The long-term time horizon refers to development until 2050, to reflect the potential service lives of the assets.

The IPCC Shared Socioeconomic Pathway (SSP5-8.5) scenario was used for the forecast. This represents a high emission scenario based on the current state of climate science, and therefore plausibly reflects the maximum expected risk exposure in terms of severity and likelihood of occurrence. It predicts global warming of 3.3°C to 5.7°C by the end of the 21st century and is based on intensive use of fossil fuels, economic growth, and energy-intensive lifestyles.

As regards our own operations, it was determined that some of the sites investigated are already exposed to relevant climate hazards, such as river flooding or storm surges. Additional stress factors (for example heat stress, cold stress, precipitation, etc.) were also investigated as part of the risk analysis. These risks are less relevant in terms of negative impacts on production activities.

However, the risk of direct damage and a resulting production outage was deemed not material in the materiality assessment based on the expected financial implications at Group level over all time horizons considered.

The upstream value chain is monitored and examined based on processes and data for both the short-term and the long-term. Based on current climate change predictions, the Volkswagen Group's upstream value chain will also be more exposed to climate-related hazards in the future. Consequently, there may be supply disruptions and adjustments to production programs at the Group's production sites. This was identified as a material risk over all time horizons in the double materiality assessment.

Interaction with strategy and business model

The material impacts and risks identified with respect to climate change mitigation and energy have an effect on the Group's business model and strategy. The topics of climate change mitigation and energy are key elements of the Group strategy relating to the decarbonization of the Group's business activities. Climate change mitigation is also an important aspect of the Group sustainability strategy regenerate+. A detailed strategic classification of material impacts and risks is provided in the "Strategy: Climate change and transition plan" section.

Information on the future adaptability of the strategy and business model with a view to material transition risks is provided in the "Strategy: Climate change resilience" section.

The material impacts and risks are addressed through policies, actions and targets at various levels. The focus is on mitigating negative impacts, reinforcing positive impacts, and avoiding or mitigating material risks.

The policies and overarching actions regarding the material positive and negative impacts described in the areas of climate change mitigation and energy are presented in the "Climate change mitigation and energy efficiency" section. The section on "Use of renewable energies" describes additional actions relating to the impacts from the company's own operations and the upstream and downstream value chain, including the use phase of products.

Further details and examples of implementation of the actions can be found in the "Actions and resources: Climate change" section. The actions set out in the "No decarbonization without e-mobility", "Increasing vehicle efficiency", "Net CO_2e-neutral use phase" and "Contribution to climate-friendly logistics and hard-to-abate sectors" sections are aimed at the impacts in the use phase of the products. The actions set out in the "Climate change mitigation in manufacturing", "Zero Impact Logistics", and "Decarbonization of the dealership networks"

sections relate to impacts in own operations and sections of the downstream value chain. The actions relating to the upstream supply chain are presented in the "Requirements for decarbonization in the supply chain" section.

Policies and actions to manage material risks are presented in the "Strategy: Climate change resilience" section. The target set out in the "Reduction of Scope 3 GHG emissions in the use phase" section also contributes to the identified material transition risk. The same applies to the actions presented in the section "No decarbonization without e-mobility" and "Increasing vehicle efficiency".

STRATEGY: CLIMATE CHANGE AND TRANSITION PLAN

Climate change strategy

Sustainability will remain a significant topic in the business world and will continue to gain in importance, being driven by the increasingly apparent consequences of climate change, greater awareness of sustainable lifestyles among customers and not least conditions such as the Paris Climate Agreement.

Decarbonization is a core component of Group activity and plays a key role in the Volkswagen Group strategy. Our decarbonization strategy applies to the entire Group. We do not yet have a Group-wide decarbonization plan within the meaning of ESRS E1 paragraph 16 is not yet in place, and the TRATON GROUP and MAN Energy Solutions do not have a transition plan. The TRATON GROUP and MAN Energy Solutions are developing independent transition plans, which are to be integrated in subsequent reporting cycles. The following actions and metrics on implementing the decarbonization program focus on the passenger cars and light commercial vehicles area of vehicle-related business. The transformation driven by digitalization and electrification requires extensive investment, which is incorporated in the Group strategy and included in medium-term planning.

Operationalizing the decarbonization program

Our decarbonization program for our passenger cars and light commercial vehicles business area covers the entire life cycle of our products. It is being put into operation via a clear hierarchy of actions, which is configured as follows for the passenger cars and light commercial vehicles business area: The top priority is to take action to avoid CO_2e emissions. In second place are actions with which the Group aims to gradually shift the energy supply to renewable energy across the entire value chain and in all phases of a vehicle's life. Finally, unavoidable CO_2e emissions are offset in selected cases through climate action projects that meet the highest international standards. Further information is provided in the "GHG removals and GHG mitigation projects" section.

In the hierarchy of actions, the Volkswagen Group includes definitions of four decarbonization levers to be used to achieve the emission reduction targets: (1) e-mobility, (2) conversion of energy supply, (3) energy efficiency and (4) decarbonization in the value chain. The decarbonization levers are explained in more detail in the "Actions and resources: Climate change" section. With respect to our production sites (Scope 1 and 2), we pursue the goal of reducing emissions by 90% in absolute terms between 2018 and 2040 and neutralizing the remaining emissions to achieve net CO_2e neutrality at our production sites. We aim to reduce Scope 3 CO_2e emissions in the use phase by 30% between 2018 and 2030. Specific actions for target achievement, such as climate change mitigation in manufacturing and no decarbonization without e-mobility are described in the "Actions and resources: Climate change" section.

Commitment to the Paris Climate Agreement and our climate targets

We are committed to the Paris Climate Agreement and align our own activities with the 1.5°C goal. It is our aim to be a net carbon-neutral company by 2050. We plan to achieve this through the hierarchy of actions described above, with clear priority placed on first reducing and avoiding emissions, and only applying offsetting actions for emissions that are difficult to avoid or completely unavoidable. We have set an intermediate goal for ourselves during our journey to net carbon neutrality: to reduce production-related CO_2e emissions by 50.4% by 2030 compared with the base year 2018. The renowned Science Based Targets initiative (SBTi) confirmed that our Group meets the requirements for contributing to limiting global warming to 1.5°C with this objective for the production phase (Scope 1 and 2). The Volkswagen Group also aims to reduce CO_2e emissions in passenger cars and light commercial vehicles' use phase (Scope 3 category 11) by 30% by 2030 (compared with 2018). This target has also been independently certified by the SBTi as 2°C aligned.

Strategic implementation through Group-wide sustainability management

A Group-wide sustainability management system that includes the issue of climate change mitigation has also been established in the Volkswagen Group. The related structures, processes and responsibilities are documented in an internal Group policy.

The progress of the transition plan is measured through the strategic metrics, which include Scope 1 and 2 emissions and the proportion of battery-electric vehicles (see the "GHG emissions" section as well as the "General information" chapter for further information). These also measure the progress of regenerate+.

Activities with respect to the EU Taxonomy

Detailed information on the EU Taxonomy is provided in the "EU Taxonomy" chapter.

Production capacity and technical equipment

Production capacity and technical equipment that focus on the manufacture of vehicles with internal combustion engines run the risk of losing value and potentially becoming "stranded assets" during the transition to a decarbonized business approach. The share of these investments is secondary compared to the company's (total) GHG emissions, as it is largely limited to the production of vehicles. The Group counters this risk by focusing its investment program on capacity that serves the transformation of the Group.

Exposure to coal, and oil and gas-related activities

The Volkswagen Group focuses on the manufacture, sale and marketing of motor vehicles and mobility solutions. The company's main area of economic activity is the manufacture of motor vehicles. The investments in this sector are the only ones classified as material. The analysis of economic activities revealed that activities involving coal, oil, and gas primarily take place in the context of vehicle-related business and are to be attributed to this.

Disclosure on EU Paris-aligned Benchmarks

The exclusion criteria for EU Paris-aligned Benchmarks were reviewed in the context of the Climate Benchmark Regulation, and it was determined that Annex 12.1 does not apply. EU Paris-aligned Benchmarks are indices subject to specific criteria and compiled by providers in line with such criteria in addition to their own. Nor are any exclusions by administrators of EU Paris-aligned Benchmarks pursuant to Annex 12.2 known.

Responsibilities for sustainable implementation

In-depth information on responsibilities is provided in the "Sustainability management" section of the "General information" chapter.

STRATEGY: CLIMATE CHANGE RESILIENCE

The resilience analysis was performed in the reporting year and is based on the results of the climate risk analysis (see the "Process description and results of the climate risk analysis" section) and the materiality assessment (see the "Procedure for identifying material information" section of the "General information" chapter). The critical assumptions made regarding the development of the sector derived from the scenario analysis are also included. The analysis covers the key elements of the business model and focuses on impacts, risks and opportunities identified as material and their main drivers along the value chain. Several aspects were included in the assessment of the Volkswagen Group's resilience: operational control mechanisms with regard to the material impacts, risks and opportunities, their inclusion in corporate planning and strategy, as well as the capacities required for a more far-reaching alignment of the business model. The time periods correspond to those in the "General information" chapter in the "Notes on use of the ESRS" section, like they were also used in the double materiality assessment. For the long-term time horizon, the focus is on developments up to 2035, the target year for the Group's future strategy.

A key element in increasing resilience to climate change is the positioning of decarbonization as a cornerstone of the Group's strategy, as explained above in the "Strategy: Climate change and transition plan" section. In addition, climate change mitigation is firmly anchored in regenerate+ and is measured and managed using relevant metrics, including the decarbonization index (see the "Targets: Climate change" section).

The *Konzern-Steuerkreis Flotten-Compliance* (KSK FC - Group Steering Committee for Fleet Compliance) is responsible for managing greenhouse gas emissions relating to fleet emissions. It includes experts from all brands and relevant departments. The KSK FC monitors compliance with regulatory requirements and can initiate in particular short- and medium-term actions, for example for sales management, in the event of potential deviations. The regulatory requirements and forecasts are also factored into the medium- and long-term planning process.

The key lever for complying with ambitious fleet limits is the further electrification of the product range (see the "Actions and resources: Climate change" section. The relevant targets are defined with the brands in the planning process, and capital expenditure requirements and necessary adaptations to the production sites are identified over a five-year time horizon. Uncertainties remain with regard to the speed and consistency at which electrification is being driven forward by regulatory actions in the various markets. As a result, a number of different scenarios will be examined during the development of the future Group strategy 2035. Specific courses of action were developed and evaluated on this basis, allowing the Group to adapt flexibly to different variations in the regulatory environment.

In conclusion, the resilience analysis revealed that the material impacts and transition risks are addressed comprehensively, specifically and using an integrated approach. The operational control mechanisms presented and their explicit inclusion in the integrated planning primarily have an impact in the short term, while the adapted future Group strategy will have a medium- to long-term impact.

The Group has sufficient capacity to implement the adjustment measures. In recent years, a double-digit number of sites has already been successfully converted to the production of battery-electric vehicles or the components required for them. This approach serves as a blueprint for the further transformation of the Group's sites. Implementation of the Group's emissions reduction strategy, in the context of the decarbonization strategy, requires extensive retraining and upskilling actions, some of which are already being implemented. A strategic

approach is in place and regular discussions are held within the Volkswagen Group on training-related topics (see also the "Policies: Employees and non-employees" section in the "Employees and non-employees" chapter).

The Volkswagen Group has access to a range of money market and capital market instruments to cover its capital requirements for the further implementation of its decarbonization strategy (see the "Refinancing" section in the Group management report). The Volkswagen Group's Green Finance Framework enables the company to refinance EU Taxonomy-aligned capital expenditure, for example for developing and manufacturing all-electric vehicles, through sustainable financial instruments (see also the "Strategy: Climate change and transition plan" section).

The Volkswagen Group has implemented processes and methodologies in supply chain management intended to effectively mitigate short-term supply disruptions. These include an established crisis management structure in Procurement and cross-departmental coordination between Procurement, Quality Assurance, Development, Production, and Logistics. In conjunction with a worldwide supplier network, this may help to compensate for the loss of individual supplier locations in many cases. In the medium to long term, resilience to the effects of climate-related hazards will be a key component of the procurement strategy.

In conclusion, the resilience analysis revealed that the material impacts and transition risks are addressed comprehensively, specifically and using an integrated approach. The ability to adapt the business model to the challenges of climate change is therefore considered to be secured for the short, medium and long term.

Due to the large number of Group sites, it has not yet been possible to conduct a comprehensive analysis of specific countermeasures at site level to assess physical climate risks. This has been done as part of the risk analysis for the EU Taxonomy for the relevant sites. More detailed information on this can be found in the "EU Taxonomy" chapter.

As a general rule, Business Continuity Management requires all operating units to carry out a risk assessment and, if necessary, to develop appropriate contingency plans. Furthermore, the Volkswagen Group continuously and regularly calls on its supply chain to make its own supply chain resilient to climate-related hazards.

Furthermore, the Group has already examined specific exposure to climate hazards and the countermeasures taken at some sites. In the coming years, this will be systematically addressed at all production sites and monitored using milestone plans and checks on effectiveness. Another aspect of resilience is comprehensive coverage of the Group's own assets with corresponding insurance policies, which are regularly reviewed and adapted to changing risk situations in consultation with insurers for the Group's own sites.

As a result, it can be assumed that the sites included in detail in the context of the EU Taxonomy are largely resilient to physical climate risks over the observed periods. In light of the existing overarching control mechanisms, the remaining sites and direct upstream value chain are assumed to be basically resilient. This resilience will be further strengthened in the medium term.

With regard to climate-related hazards in the indirect or further upstream supply chain, there are still uncertainties in the short to medium term that will be addressed in the future across the entire automotive and supplier industry.

POLICY: DECARBONIZATION

Decarbonization is a key focal point for the Group and is supported by a corresponding policy. This is based on scientific principles and aims to achieve the goals of the Paris Climate Agreement. That is why we derive our climate strategy from the requirements of the GHG Protocol and the SBTi, among other frameworks. We are committed to the Paris Climate Agreement and have defined corresponding climate change mitigation targets to help limit global warming to 1.5°C. A detailed description of our commitment to the Paris Climate Agreement can be found in the "Strategy: Climate change and transition plan" section. Targets in this context are explained in the "Targets: Climate change" section. The "Introduction to environmental management" chapter specifies the corresponding monitoring processes of the decarbonization policy.

The double materiality assessment identified impacts and risks for the "Climate change" topical standard (see the "Material impacts and risks and their interaction with strategy and business model" section). The identified impacts and risks are analyzed using the risk management process described above and addressed with actions as part of the decarbonization policy. The Group strategy with a focus on decarbonization, regenerate+, the

environmental mission statement goTOzero, and our Code of Conduct for Business Partners play a particularly important role in this. A detailed description of the relevant content can be found in the "Introduction to environmental management" chapter.

In addition to other relevant topics, energy and CO_2 are focal points of the Zero Impact Factory strategic vision, under which the Volkswagen Group is pursuing goals including the gradual reduction of the absolute environmental impact of its production sites for passenger cars, light commercial vehicles and components, measured in impact points, by 2050. Moreover, the Volkswagen Group aims to ensure that its production sites meet at least 60% of the internally developed site checklist in 2030. Energy and CO_2 are two specific action areas here.

Finally, in accordance with the Code of Conduct for Business Partners, reducing GHG emissions and using renewable energy sources are sustainability requirements in environmental protection for our business partners.

Climate change mitigation and energy efficiency

The topic of climate change mitigation is part of our Group sustainability strategy regenerate+ and one of the action areas of our environmental mission statement goTOzero. We systematically focus on the electrification of our products, decarbonization of our entire value chain and expansion of renewable energy generation to supply our sites and customers. We aim to achieve net carbon neutrality by 2050. A detailed description of the decarbonization levers and corresponding actions can be found in the "Actions and resources: Climate change" section.

In line with our Group sustainability strategy regenerate+, we are focusing on increasing energy efficiency and transitioning to a renewable energy supply to allow us to decarbonize our production sites. Efficient use of energy in production enables cost savings and avoids environmental impacts while maintaining or increasing production performance. Reduced energy requirements have the potential to reduce the negative impacts associated with the provision of energy. A CO_2e-free energy supply is not currently feasible for all aspects of global energy needs, so energy efficiency remains an important basis for effective climate change mitigation and should always be the first lever (a detailed explanation can be found in the "Conversion of energy supply" section).

To this end, the Volkswagen Group set its goal by 2030 to implement energy-efficiency actions at its plants, and thereby to reduce annual energy consumption by 4,900 GWh compared to 2018. A detailed description of these targets can be found in the "Targets: Climate change" section of this chapter.

Climate change adaptation

The current strategic focus in the area of climate change is primarily on decarbonization and the associated climate change mitigation, as well as on energy-related topics. The climate dimension is part of our Group sustainability strategy regenerate+ and one of the action areas of our environmental mission statement goToZero. In the context of the risk assessment of our supply chain and sites, we are working on policies/guidelines for climate change adaptation. These will be expanded and integrated into the strategy process in the future. Countermeasures are defined for high risks on a case-by-case basis (see the "Strategy: Climate change resilience" section for further information).

Use of renewable energies

Going beyond simply reducing GHG emissions is a central pillar of regenerate+. This is closely aligned with ramping up e-mobility and expanding charging networks and renewable energies. In addition to the Volkswagen Group's increased focus on e-mobility, we are concentrating on integrating renewably generated electricity in the use phase and switching the entire power supply for our plants to renewable energy.

The Charging and Energy area plays a key role in the Volkswagen Group's decarbonization strategy, with the aim of becoming a leading provider of a smart charging and energy ecosystem. As part of the strategic alignment, the Group is focusing on two key areas: Firstly, sales of battery-electric vehicles are being underpinned by the development of a global fast-charging infrastructure. Secondly, the Group is opening up new business models involving smart charging and energy solutions.

The Volkswagen Group also aims to achieve its production-related targets in terms of renewable energy through conversion of energy supply. The objective is to be procuring 100% of external electricity from carbon-neutral sources at all sites by 2030. In addition, we aim to generate 1,200 GWh of renewable energy per year through our own and local facilities by 2030. These targets are aligned with our environmental mission statement goTOzero and the strategic vision of the Zero Impact Factory.

The Volkswagen Group also has clear targets for decarbonization in the supply chain. One example of this is that in new procurement contracts, suppliers of selected focus components are already contractually obliged to comply with CO_2e limits. A detailed description of this can be found in the "Requirements for decarbonization in the supply chain" section. In our Code of Conduct for Business Partners, we require our business partners to take appropriate actions to reduce air emissions that are harmful to the environment and health, including GHG emissions. With a view to improving the environmental compatibility of products and services, we require our business partners to take proactive steps to reduce GHG emissions along the entire supply chain, such as by increasing their use of carbon-neutral energy sources. On request, business partners that deliver products to the Volkswagen Group provide information to us on the total energy consumption in megawatt hours (MWh) and CO_2e emissions in tons (Scope 1, 2 and 3) at product level. This allows the Volkswagen Group to improve the environmental indicators of our products. We also recommend that our business partners set science- and time-based emission reduction targets as well as targets for the use of renewable energies in line with the Paris Climate Agreement, and to take action to promote decarbonization along the entire value chain. We also recommend that our business partners commit to the Paris Climate Agreement and strive to achieve carbon neutrality by 2050.

TARGETS: CLIMATE CHANGE

Overarching targets

The overarching *Umweltentlastung Produktion* (UEP – environmental improvement production)" metric includes aspects such as the specific energy consumption and CO_2e emissions needed to produce a vehicle or component. The corresponding metrics are reported in the "Overarching targets and metrics" section of the "Introduction to environmental management" chapter.

There is also a connection to the impact points method through the inclusion of GHG emissions and energy requirements (see the "Overarching targets and metrics" section in the "Introduction to environmental management" chapter). This concerns, for instance, Scope 1 and 2 emissions and the use of fossil, nuclear, and renewable energy.

The site checklist (see the "Overarching targets and metrics" section in the "Introduction to environmental management" chapter) also has a clear link to the topic of climate change through the Energy and CO_2e action area. The main focus is on energy efficiency and decarbonization. Specific site checklist criteria relating to energy efficiency in production include optimization of the electrical base load during non-production periods, or climate control and ventilation based on use. Criteria relating to decarbonization include external procurement and internal generation of renewable energy.

Reduction of Scope 1 and 2 GHG emissions

The Volkswagen Group has set itself the target of reducing absolute GHG emissions in production (Scope 1 and 2) by 50.4% worldwide by 2030 compared with base year 2018. Setting this target is a key milestone on the journey to our goal of net carbon neutrality for the production sites by 2040. The target is in line with the 1.5 °C goal of the SBTi, which also validated it. Base year 2018 was defined in the course of certification by the SBTi and based on its requirements. This year is a representative year for production as the structure (type and number of sites) has not changed significantly since then. The baseline value for GHG emissions in 2018 was 9.03 million tons of CO_2e. Starting in 2030, regular updating of the base year is planned in order to reflect changes in the corporate structure. The target is based on the definitions for Scope 1 and Scope 2 emissions under the GHG Protocol and the ESRS. The reduction targets are accounted for using the market-based method and relate to the GHGs CO_2, methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), hydrofluorocarbons (HFCs), and chlorinated hydrocarbons (CHCs). The data for monitoring the target is collected annually via the EIS in accordance with the internal standard 98000, which is based on the current ESRS specifications. The data is part of the internal Decarbonization Report Production, which is also used for internal target tracking. This objective is aligned with the environmental mission statement goTOzero. For information on stakeholder engagement, see the "General information" chapter.

By the end of 2024, the Volkswagen Group had already reduced absolute GHG emissions (Scope 1 and 2 combined) by 51% compared with 2018 and therefore already met its 2030 target for reducing greenhouse gases 6 years ahead of schedule.

Reduction of Scope 3 GHG emissions in the use phase

The Volkswagen Group aims to reduce CO_2e emissions in the use phase (Scope 3) in the passenger car and light commercial vehicle sector by 30% from 2018 to 2030, which was confirmed by the SBTi as in line with the limitation of global warming to 2°C. This target is aligned with the environmental mission statement goTOzero. The use of battery-electric vehicles plays an important role in achieving this target, in combination with the use of renewable electricity. This is crucial because, to date, around 70% of the CO_2e emissions from a vehicle with a conventional powertrain arise in the use phase (wheel-to-tank and tank-to-wheel). The Volkswagen Group is anticipating continuous growth in e-mobility worldwide, which should help us achieve this target. The 30% reduction in CO_2e emissions in the use phase relates to passenger cars and light commercial vehicles worldwide. The baseline value for emissions in the use phase (Scope 3 category 11) was 412,986,695 tons of CO_2e for 2018 after the recalculation of the base year. This was determined based on the requirements of the SBTi Standard and the GHG Protocol.

The objectives were set in line with the requirements of the SBTi, which develops climate roadmaps for various sectors based on scientific findings, and aims to quantify the ambition of the Paris Climate Agreement and implement it in every sector. These targets are reassessed every five years, with the next audit expected to take place in 2025.

Potential differences in emission reports are also recorded and assessed in line with the GHG Protocol. The GHG Protocol requires the recalculation of corporate emissions in the event of material new findings or if changes occur. A recalculation of the base year of the current climate action targets for the Scope 3 inventory (2018) was carried out in the reporting year for the first time. A further information about the recalculation of the base year can be found in the "CO2e emissions over the entire life cycle (DCI)" section.

In determining and reviewing internal goals, the Volkswagen Group also considers future developments, such as changes in market requirements and general political and environmental conditions, to work toward ensuring that the emission reduction targets are feasible and constructive even when conditions change. Continuous adjustments to calculation parameters are a contributing factor. Targets are derived and tracked by means of the decarbonization index (DCI). Further information on the parameters is available in the guidelines on compiling the DCI, which is a key indicator for the Volkswagen Group based on life cycle assessment.

Increasing energy efficiency at production sites

The Volkswagen Group has set itself the goal of implementing energy efficiency actions at the global production sites from 2018 to 2030, with the aim of saving a total of 4.9 million MWh of energy annually. A total of 9,113 actions had already been implemented by 2024, achieving annual savings of 3.5 million MWh. In reporting year 2024 alone, actions with a potential saving of approximately 0.5 million MWh were implemented. The data is part of the internal Decarbonization Report Production, which is also used for internal target tracking, among other things. This objective is aligned with the environmental mission statement goTOzero. For information on stakeholder engagement, see the "General information" chapter. The same information applies to all energy targets.

Generating renewable electricity

The Volkswagen Group is actively advancing the energy transition at its own sites and has set itself the goal of generating 1.2 million MWh of electricity per year from renewable sources by 2030. The plan is to generate this energy directly at the Group's production sites worldwide or in their immediate vicinity. A total of 574,801 MWh of electricity was generated from renewable sources in 2024, which represents significant progress compared with the base year 2020 (200,000 MWh).

Procurement of electricity in production

The Volkswagen Group has set itself the goal of increasing the supply of renewable energy to its plants. It aims to ensure that electricity sourced externally for all sites with the exception of those in China is from 100% renewable sources by 2030. A total of 90.9% of this target was achieved in the base year 2020, and an improvement to 94% had already been achieved by 2024. The goal in China is to supply production sites with 100% carbon-neutral electricity by 2030. This may include electricity from nuclear sources due to the short supply of renewable energy in some provinces of China.

Reduction of carbon emissions in the retail and service network

The Volkswagen Group has also set itself the ambitious target of reducing the carbon footprint of its global dealership and service partner network for all Group brands as part of the initiative to operate a retail and service network with the lowest possible negative environmental impacts. Based on the first measurement, taken in 2020, in which CO_2e emissions amounted to a base value of 3.22 million tons, the carbon footprint is to be reduced by at least 30% by 2030, at least 55% by 2040 and at least 75% by 2050. The reduction is measured in absolute percentages and covers the entire retail network, which includes both own retail and the dealerships and service facilities under contract of all Group brands worldwide.

This target, which is part of the goTOzero Retail concept, is in line with the environmental mission statement goTOzero, which in turn is committed to the Paris Climate Agreement and to aligning its own activities with the global 1.5°C goal.

The carbon footprint is recorded annually directly at the dealerships based on the actual consumption figures of the energy sources. The calculation is supported by in-house carbon emission factors in order to achieve uniform calculation, and is linked to the Volkswagen DCI. This target derivation method was developed with the input of external experts and is based on sources such as the National Energy and Climate Plan (NECP), the International Energy Agency (IEA), the Energy Information Administration (EIA), the China Energy Outlook and Statista.

Data to determine the emissions inventory of dealers is collected in accordance with internal standards and norms and is validated annually to ensure it is up to date. This means that the carbon emissions of the entire retail network are measured annually and the results compared with the defined target pathway. The tracking process also includes a regular reconciliation with legal requirements, in order to make any necessary adjustments.

The Group uses a business intelligence tool to track targets, which follows the annual recording and review of metrics in order to make statements about milestones and deviations. This identified that the absolute GHG

emissions in 2022 were reduced by 0.8 million tons of CO_2e compared to 2020. The project is progressing as planned.

Key decarbonization levers to achieve the GHG emission reduction targets

Achieving the Volkswagen Group's GHG emission reduction targets is based on four primary levers: (1) e-mobility, (2) conversion of energy supply, (3) energy efficiency and (4) decarbonization in the value chain. Further information on this is provided in the "Actions and resources: Climate change" section.

Plans to achieve targets through new technology

Technology is the key to progress in regenerate+. As the Volkswagen Group, we are one of the few companies in the world that is taking the strategic expansion of technology leadership in e-mobility fully into its own hands – from cell and battery research to the development and production of battery-electric vehicles.

The Volkswagen Group aims to use new technologies to contribute to climate-friendly logistics outside the Group. Beyond its own value chain, the Volkswagen Group also wants to advance decarbonization in other industries in conjunction with MAN Energy Solutions. For example, the company supplies the shipping and energy industry with engines that can be powered by climate-neutral fuels or converts diesel or heavy fuel oil engines to future fuels. The product portfolio is rounded out with solutions in areas including carbon capture, utilization and storage; hydrogen; and heat pump technology.

Consideration of climate scenarios with respect to the decarbonization levers

The Volkswagen Group's climate targets are derived from the SBTi requirements for the transportation sector and are therefore based on factors including the climate scenarios included in those requirements. For example, the SBTi climate scenarios are based on the IEA climate scenarios, as well as other sources. Consequently, the material decarbonization levers were identified based on an analysis of the DCI and the emissions inventory.

The Volkswagen Group also uses model data and assumptions in a variety of contexts to make forward-looking statements. As a member of the IEA Transport project working group, for example, we use the IEA APS, STEPS and NZW scenarios, which are based on the GEC model[1]. The focus is on the 2030 target year, which represents a milestone on the path to the goal of Group net CO_2e neutrality by 2050 and acts as a reference for internal metrics. The scenario analysis focuses on the areas of production, sales and technology, the impact of products, and materials procurement. It shows that a significant reduction in emission intensity per vehicle is needed to achieve the UN climate goals, particularly in view of increasing unit sales.

CO_2e emissions over the entire life cycle (DCI)

In the decarbonization index (DCI), we have a informative instrument that makes our progress and interim results in the area of decarbonization transparent and comprehensible and is recorded using software developed in-house. The methodology is based on the GHG Protocol and is published in its guidance[2]. The DCI measures the CO_2e emissions by the brands that produce passenger cars and light commercial vehicles in the regions of Europe (EU27, United Kingdom, Norway and Iceland), China (including the Chinese joint ventures) and the USA over the entire life cycle. In this index, the use phase is calculated over 200,000 km per vehicle and with reference to region-specific fleet values without statutory flexibilities. The intensity of the CO_2e emissions from the electricity used to charge battery-electric vehicles is also calculated on the basis of region-specific energy mixes. Vehicle maintenance 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 and ISO 14044 standards. Scope 3 also includes emissions from other Group entities and regions in some categories (see "Metrics on Scope 3 GHG emissions" section for a detailed description). The DCI calculation methodology is regularly adjusted depending on internal and external

[1] https://www.iea.org/reports/global-energy-and-climate-model/
[2] Neef, M., Dettmer, T., Bäuml, G. et al. Decarbonisation Index (DCI): an LCA-based key performance indicator for the automotive industry. Int J Life Cycle Assess 29, 557–577 (2024). https://doi.org/10.1007/s11367-023-02247-w)

requirements, such as new test cycles for fleet emissions. Published DCI values can therefore also be adjusted to the new methodology and changed to facilitate the presentation of a time series that is methodologically consistent.

In the reporting year, the DCI value averaged 48.0 tons of CO_2e per vehicle. This represents a reduction of 0.9 tons of CO_2e per vehicle compared with the previous year (after recalculation). This is primarily due to lower emissions in the supply chain – for example, as a result of a shift in the portfolio toward vehicles in smaller vehicle segments, as well as the China region having a lower share in the overall production volume and due to lower emissions in the use phase as a result of reduced fleet emissions.

The GHG Protocol requires the recalculation of corporate emissions in the event of material new findings or if changes occur. There may be various reasons to remeasure previous years' emissions to enable a fair comparison with current emissions. These include structural changes in the company, changes in the calculation method, an increase in the precision of emission factors, activity data, and findings regarding significant errors. At the Volkswagen Group, changes to the calculation are decided annually in a set process. A recalculation of the previous year (2023) and the base year of the current climate action targets for the Scope 3 inventory (2018) and for all DCI values since 2018 was carried out in the reporting year for the first time. Changed calculation assumptions were generally taken into account for the recalculation if the expected overall effect on the DCI was more than 0.1 tons of CO_2e per vehicle in the base year of the current climate change mitigation targets (2018).

The recalculation includes the following topics:

- use of WLTP instead of NEDC consumption data to calculate the use phase (since 2021)
- availability of region-specific life cycle assessments for the China market (since 2022)
- use of updated and more precise emission factors for fossil fuels (since 2024)
- correction of a calculation error for vehicle-specific logistics emissions (until 2022)
- use of company-specific cutting rates for steel and aluminum components in production instead of generic data (aluminum since 2022, steel since 2023) and calculation of generic life cycle assessments with 0% recycled aluminum content (since 2022):
  All new vehicle life cycle assessments in the Volkswagen Group are calculated on the basis of the new calculation assumptions. Because life cycle assessments for vehicles based on the previous calculation assumptions are still being used to calculate supply chain emissions, recalculation of the base year value is subject to a phase-in.
- use of specific data for the emissions of Group franchises (in particular car dealerships) instead of generic figures (since 2022)
- inclusion of the Bentley and Lamborghini brands in the DCI (since 2020):
  The effect on the Group decarbonization index is below the threshold of 0.1 tons of CO_2e per vehicle, but a change in the scope of decarbonization index reporting under the rules defined by the Volkswagen Group itself in accordance with the GHG Protocol will in any case lead to a recalculation of emissions in the base year.
- transition of emission factors (since 2024) including inflation adjustment (since 2023) for reporting Scope 3 categories 2, 8 and 13:

The GHG Protocol allows for historical datapoints and changes in data that are not available to be determined via backcasting in the context of base year recalculation.

In this case, specific data for categories 13 and 14 is used: In category 14, the DCI effect from 2021 (based on primary data first collected for 2020), and in category 13 the share of the Group's own leased vehicles (first available for 2022) are applied to the preceding years.

Backcasting with average values is also used in categories 8 and 13, where individual datapoints for which there is no data for 2018 in line with the current methodology are replaced with the mean values of 2019 to 2023.

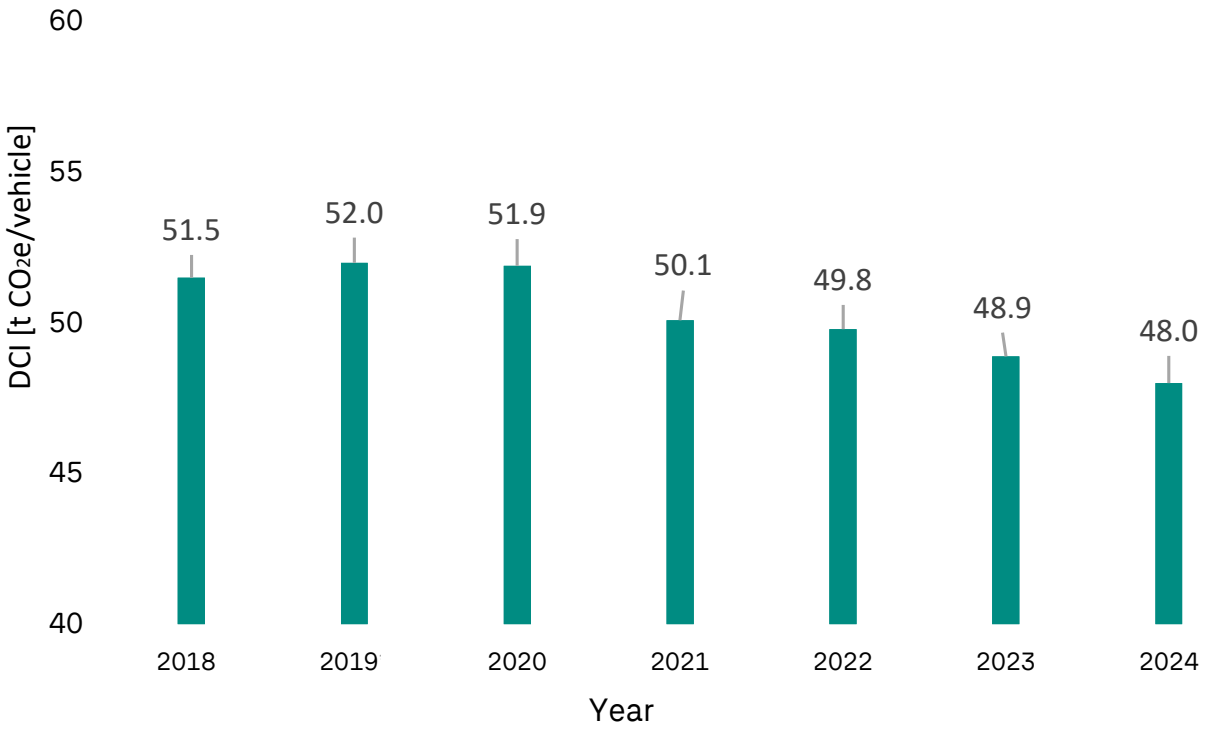
Based on the recalculation described in the above list, the chart below shows homogenized performance of the DCI since 2018 in terms of the data basis and calculation method. The DCI values for 2018 and 2019 were calculated using a simplified method based on the Scope 3 inventory. Among other things, this involved changing the data basis for vehicle volumes (primarily for the use phase) in Europe from preliminary production volume to the final number of vehicle registrations, as this corresponds more closely to the volume (sales) to be used

in accordance with the GHG Protocol. The values for the past years displayed in the chart differ from the DCI values published in those years due to the calculation adjustments explained in the above list.

Decarbonization index

	Unit	2024	2023	Notes
Decarbonization index* | GRI 305-4 WLTP	tons of CO_2e per vehicle	48.0	48.9 (47.3)	The metric includes brands producing passenger car and light commercial vehicles in the Europe (EU27, United Kingdom, Norway and Iceland), China and USA regions. The main drivers of change in the reduction in the DCI by 0.9 tons of CO_2e per vehicle are portfolio and regional shifts. The DCI for 2023 and 2024 is reported without taking offset measures into account. To enable comparability, the DCI reported in 2023 (47.3 tons of CO_2e per vehicle) was adjusted to new calculation assumptions as part of the recalculation of the base year.

* strategic metric



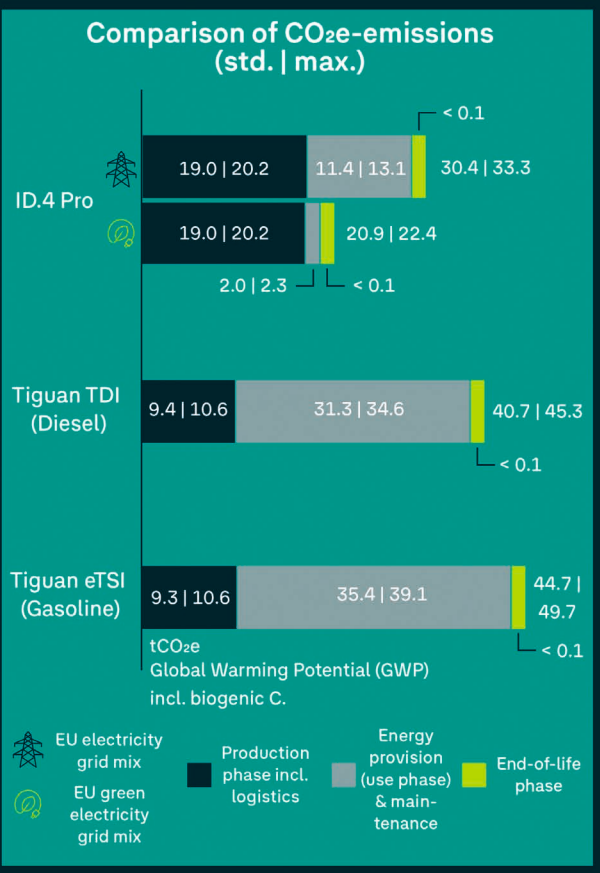
ACTIONS AND RESOURCES: CLIMATE CHANGE

With regard to the hierarchy of actions described in the transition plan, various decarbonization levers were defined as part of efforts to further decarbonize the Volkswagen Group. The Volkswagen Group has identified actions along these decarbonization levers to mitigate climate change.

The first major decarbonization lever is e-mobility. As technology advances, the automotive industry is rapidly forging ahead with the associated transformation toward e-mobility and digitalization. The market for battery-electric vehicles is expected to continue to grow in the next few years, meaning that the cost-efficient and sustainable production of battery systems and the expansion of the charging infrastructure will be crucial to success. From today's perspective, around 90% of the decarbonization targeted by the Volkswagen Group can be realized through electrification of the fleet and switching to renewably generated energy. Consistent charging with 100% electricity from renewable sources alone would reduce all CO_2e emissions by almost half compared to the normal EU power mix. The Volkswagen Group's initiative means that the same amount of electricity generated through renewable sources is fed into the grid as the Volkswagen e-vehicle fleet consumes over its lifetime. It is therefore possible to guarantee that the Volkswagen fleet's use phase is almost net CO_2e-free.

Overview LCA ID.4 Pro & Tiguan

	ID.4 Pro 210 kW 82 kWh[1]	Tiguan 2.0 TDI 110 kW[2] DSG	Tiguan 1.5 eTSI 110 kW[3] DSG
Configurations[4]	standard (std.) | maximum (max.), market Germany, MY 24		
Functional unit	200,000 km passenger transportation in WLTP test cycle		
System boundaries	production in Europe (not site-specific)		
	avg. logistics Zwickau & Emden	avg. logistics Wolfsburg	
WLTP energy / fuel consumption[5]	16.0 | 18.4 kWh per 100 km	5.3 | 5.8 liter per 100 km	6.2 | 6.8 liter per 100 km
Maintenance	tires, brake pads and disks, starter batteries, wiper blades, additionally for Tiguan engine oil and AdBlue in case of TDI		
End-of-life phase	dismantling (without battery), no credits for recovery (cut-off)		
Critical Review	TÜV NORD CERT, date of validity statement: 2024-04-16		



Information in accordance with 1999/94/EC for the German market as of April 2024:
1 energy consumption combined 18.41 - 15.93 kWh/100 km; CO_2 emissions combined 0 g/km; CO_2 class: A
2 fuel consumption combined 5.9 - 5.3 l/100 km; CO_2 emissions combined 154 - 139 g/km; CO_2 class: E
3 fuel consumption combined 6.9 - 6.2 l/100 km; CO_2 emissions combined 156 - 140 g/km; CO_2 classes: F-E
4 standard configuration: standard equipment in representative line | maximum configuration: one feasible parameter set for additional equipment for maximum weight
5 values rounded to first decimal place

The Volkswagen Group's second key decarbonization lever is conversion of energy supply. The Volkswagen Group is increasingly focusing on switching the power supply for its production sites to renewable energy. Moreover, the Volkswagen Group directly supports the expansion of renewable energy on an industrial scale, by planning new wind farms and solar parks in various regions of Europe, among other projects. The energy attribute certificates (EACs) of the installations are obtained for ten years under long-term contracts and provide guarantees of origin for the renewable electricity. In this context, the Volkswagen Group is invested in several solar parks in Germany and Spain, as well as wind farms in Sweden and other countries. The wind farm supported by Volkswagen in northern Sweden, of which the Volkswagen Group has purchased 70% of all EACs, is one of the largest onshore wind farms in Europe.

Increasing energy efficiency is a third decarbonization lever. Energy-efficient vehicle production is therefore a core element of the Zero Impact Factory strategic vision. Various actions are being implemented at production sites to increase energy efficiency, including improvements to ventilation technology, installing LED lighting, load-dependent dryer control and/or the implementation of load-dependent plant control.

Value chain decarbonization is the fourth and final essential lever to achieve the GHG emission reduction targets. We consider the environmental impact our products cause throughout the entire life cycle and at all stages of their value chain. This includes the manufacturing process with the associated extraction of raw materials, material manufacturing, supplier processes and our own production at our sites; the use phase with the resulting vehicle emissions and the necessary supply of charging current and fuel, and ultimately the dismantling of the scrap vehicle at the end of its life cycle.

No decarbonization without e-mobility

The Volkswagen Group cannot achieve decarbonization without a transition to e-mobility. Battery-electric vehicles play a central role here, as they do not cause any local emissions during use and their CO_2e footprint is better throughout their life cycles than comparable vehicles with internal combustion engines (gasoline or diesel). The consistent electrification of our fleet paves the way to net carbon-neutral mobility for our customers, too.

Our battery-electric vehicles are manufactured at 18 sites in Europe, China and the USA. The Modular Electric Drive Matrix (MEB) and Premium Platform Electric (PPE) serve as the technical backbone of the electrification campaign. The e-offensive is to be continued with the modular vehicle platform still under development, Scalable Systems Platform (SSP), with the aim of offering battery-electric vehicle across all brand Groups.

The Volkswagen Group systematically pursued its e-offensive in 2024, and will continue to do so. For instance, the reporting year saw the market launches of further all-electric models under various Group brands including the Volkswagen ID.BUZZ LWB (Long Wheel-Base), the CUPRA Tavascan, the Audi A6 e-tron, the Audi Q6 e-tron, the Porsche Taycan and the Porsche Macan. For information on the measure's progress, refer to the "Metrics on Scope 3 GHG emissions" section.

We are also working on improving efficiency in many models, such as with the highly efficient APP550 modular electric drive which will first be used in the ID.7. The entire ID. family has also had sustainability upgrades, including the use of recycled materials such as SEAQUAL polyester yarn made from recycled marine plastic. In addition, we are taking the next steps in the area of portfolio transformation by realigning the entire architecture of our vehicles, for example through the Volkswagen Group's partnership with US battery-electric vehicle manufacturer Rivian. The aim of the partnership is to develop next generation software-defined vehicle (SDV) architectures to be used in future vehicles of both companies. The joint venture builds on Rivian's software and electrical architecture to facilitate the joint development of best-in-class architectures and software for the SDVs of both partners.

Conversion of energy supply

Climate change mitigation in manufacturing

Volkswagen is also paying particular attention to restructuring its own electricity generation. For example, the conversion of the power plants in Wolfsburg from coal to natural gas for the Wolfsburg North/South cogeneration plant, which commenced in 2018, was completed at the end of 2021. Commissioning of the new gas and steam turbine facilities in the Wolfsburg West cogeneration plant was completed in December 2023. The last coal blocks in the Wolfsburg West cogeneration plant were taken out of service on April 1, 2024.

The Volkswagen Group is pushing ahead with efforts to supply its own plants with electricity from renewable sources. To date, 73 sites worldwide have been supplied with external electricity from 100% renewable energy sources. In 2024, more than half (66.9%) of total global electricity consumption was accounted for by electricity from renewable sources. Compared with the previous year, this is a rise of 10.6%.

Volkswagen is also increasingly focusing on generating renewable energy at its sites and in their immediate vicinity. A total of 574,801 MWh of electricity from renewable sources was generated at the sites in 2024.

Net CO_2e-neutral use phase

The Volkswagen Group is committed to achieving a net CO_2e-neutral use phase for its battery-electric vehicles fleet by expanding the use of renewable energy. It is particularly important to ensure that the use phase of the vehicles is net CO_2e-neutral in the long term, as a large proportion of CO_2e emissions are generated during operation. The use of electricity from renewable sources will therefore play a key role as the emissions are reduced. In the EU, for example, almost half of the EU power mix is of non-renewable origin. The Volkswagen Group offsets the amount of gray electricity (electricity from fossil energy sources) in the power mix of the entire fleet charging processes, as determined by a transparency study. To this end, VW Kraftwerk GmbH, Wolfsburg/Germany concludes long-term (ten-year) purchase agreements for green electricity certificates (EAC) with new renewable energy plants using a balance sheet approach. During the contract period, the green electricity certificates of the plants are withdrawn from the market. This balances the calculated amount of gray electricity

share during the fixed use phase of 200,000 km. This ensures almost CO_2e-neutral mobility for our customers in Europe during the use phase.

Energy efficiency

Increasing vehicle efficiency

In addition to the increase in renewable energies, decarbonization is also being driven by the increase in vehicle efficiency. This efficiency is basically controlled and continuously implemented by system options designed to reduce energy consumption during vehicle operation. For example, driving mode selection supports fuel-efficient driving via one option. In addition, there are recommendations for changing gear in the case of manual-transmission vehicles. An battery-electric vehicle route planner is optionally available in the electric ID. models for efficient route planning.

The ID.7 provides one example of Increasing vehicle efficiency:

Intelligent design for improved aerodynamics: Sophisticated aerodynamics make the ID.7 an efficiency champion. The technology reduces energy consumption and enables ranges of up to 700 kilometers (WLTP) and lower charging costs. The streamlined basic design, the low drag coefficient (cd value) of 0.23 and the front surface area of 2.46 m^2 are the result of close collaboration between design and development. In the case of saloon like the ID.7, about 50 percent of the cd value depends on the body shape. The ID.7 has an almost entirely closed underbody and therefore offers as little air resistance as possible. Newly developed wheel spoilers on the front wheels, side air curtains on the front bumper and flared side skirts are also effective. As the wheels also significantly impact aerodynamics (approximately 30% of the cd vehicle drag is caused by the air flowing around the wheels), we have developed special AERO aluminum wheel rims and aerodynamically efficient tires.

Optimizing the electric motor: An electric motor's efficiency is a crucial factor affecting its power and the range of the vehicle. This is measured as the ratio of electrical energy used to mechanical power generated. Higher efficiency therefore means less energy is lost in the form of heat and friction. The Volkswagen Group accordingly optimized the electric motor for the ID.7, reducing its carbon footprint while increasing its power.

Energy efficiency in manufacturing

Increasing energy efficiency is an important element of our decarbonization strategy. A total of 9,113 actions had already been implemented by 2024, achieving annual savings of 3.5 million MWh. In reporting year 2024 alone, actions with a potential saving of approximately 0.5 million MWh were implemented, including, for example, improvements to ventilation technology, heat recovery, load-dependent dryer control and/or the implementation of load-dependent plant control.

Decarbonization in the value chain

Battery production capacity

The Volkswagen Group is one of the few automotive manufacturers around the world that is adopting a hands-on approach to the battery as a core e-mobility technology.

The formation of the subsidiary PowerCo SE, Salzgitter/Germany in 2022 integrated the development and production of battery cells into the Group's own value chain, thus keeping a significant part of the added value of the battery-electric vehicle within the Group.

From the new European battery hub in Salzgitter, this company manages the development of international factory operations, continuous development of cell technology, vertical integration of the value chain and supplies of machinery and equipment to factories.

The battery activities are primarily intended to substantially reduce the complexity and cost of this key technology so as to make battery-electric vehicles attractive and affordable for as many people as possible. They also enable a greater degree of technological independence. The main key concepts of PowerCo are the unified cell, the standard factory concept, and vertical integration of the value chain. In the reporting year, three Group-owned sites for battery cell production were under construction, including the main plant in Salzgitter, Valencia/Spain, and St. Thomas/Canada. All sites are to be consistently operated with electricity from low-carbon sources.

PowerCo strongly committed to the reduction of CO_2e emissions along the entire battery cell production value chain. Strict requirements are placed on suppliers and monitored in the upstream value chain, including the use of certified electricity from renewable sources and compliance with fixed CO_2e limits. Continuous decarbonization actions are also planned in logistics.

PowerCo is pursuing ambitious decarbonization strategies in production, which, in addition to using low-carbon electricity, include for example energy saving measures such as innovative dry coating technologies, and reducing production waste and material consumption.

PowerCo is working toward using low-carbon recycled materials and establishing the recycling of production waste. In collaboration with the Volkswagen Group, PowerCo is also forging ahead with the development of end-of-life battery recycling. Finally, PowerCo is investing in the development of low-carbon future technologies and the use of alternative materials in order to further optimize the carbon footprint of battery cells.

Requirements for decarbonization in the supply chain

In new contracts for high-voltage batteries for the European market, suppliers are already obliged to comply with CO_2e limits. In the case of existing supply contracts for current MEB vehicle projects, suppliers are required to use certified power from renewable sources in their production.

For new vehicle projects such as initial use of the SSP, the Volkswagen Group intends to make CO_2e emissions a technical feature for relevant components. This means that binding CO_2e targets will be set for suppliers within the EU, and they must demonstrate compliance with these at all times. This applies to certain components for the European market. One example is the new SSP mechatronics platform on which the batteries are assigned a CO_2e limit. To achieve these limits, suppliers need to implement actions in their own production processes and upstream supply chains – for example, the use of renewable energy. The Volkswagen Group is using actions of this kind to reduce emissions in its value chain and the carbon footprint of many battery-electric vehicle models.

Volkswagen Group China is also working together with its suppliers on a more sustainable supply chain. For example, together with suppliers and partners, the Group is developing a roadmap for the transition to 100% renewable energies by 2030. To date, more than 500 suppliers have already signed a declaration committing to switching to electricity from renewable energy sources.

Zero Impact Logistics

The actions the Volkswagen Group is taking to achieve net carbon-neutral logistics in the future include, for example, the ongoing shift of shipments from road to rail and almost complete avoidance of CO_2e emissions through the use of green electricity generated from renewable energy sources on the electrified lines in rail transport in Germany and other European countries in collaboration with railway companies. This is an important contribution to reducing GHG emissions in the value chain. However, the prerequisites for this include sufficient available capacity in the railway network infrastructure, particularly in Germany.

There is also a focus on preparing for the use of completely battery-electric trucks and biogenic fuels in the truck network. The Volkswagen Group also transports high-voltage batteries for battery-electric vehicles in an environmentally conscious and efficient manner, for example at the component site in Braunschweig. Here, the batteries are loaded fully automatically onto trains that run on renewable power, which then take them to the plant in Zwickau.

Group Logistics uses thirteen roll-on/roll-off charter ships, two of which are powered by low-pollution liquefied natural gas (LNG) to transport vehicles across the North Atlantic. By the end of 2024, four more LNG-powered car freighters had been gradually introduced on this route, replacing a total of six conventionally powered ships. Group Logistics' charter ships are more climate-friendly than other LNG-fueled marine engines because the high-pressure technology of the two-stroke engines from MAN Energy Solutions means that virtually no methane escapes. In principle, the dual-fuel engines will also enable non-fossil fuels – such as biogas (bio-LNG), e-gas (synthetic gas) from renewables, or biofuel – to be used in future. This will allow carbon emissions to be reduced even further.

Since 2021, Group Logistics has been continuously operating two charter ships on European sea routes using biofuel, which produces less CO_2e than conventional fossil fuels. The raw material for the biofuel is made up of used cooking oils and fats. These waste and residual materials, originating from industries such as catering and food production, cannot be processed into food or animal feed.

Decarbonization of the dealership networks

Since 2022, the carbon footprint of the entire retail and service network has been recorded annually in category 14 "Franchises" of Scope 3 GHG emissions.

To identify and successfully implement the correct actions for decarbonization and to reduce environmental impacts, we provide the businesses with manuals, training and marketing materials, such as a comprehensive guidebook, online training and videos on customer communication. In addition, the Volkswagen Group has developed a cross-brand certification system for the entire retail network – the goTOzero RETAIL certification. This is based on established systems such as the ISO 14001 standard, building certifications and rating systems and also covers a dealership's core business. Although goTOzero RETAIL was only introduced in 2023, some dealerships have already achieved gold and platinum certification status. All 50 key retail markets, which alone account for 95% of the worldwide retail and service network, are to progressively be included in the goTOzero RETAIL certification. Currently, the scope of the certification is being expanded to "Full ESG", with a focus on environmental issues. The success and progress of the goTOzero RETAIL project is demonstrated through regular internal and external communication.

In addition to the certifications, an energy and resource consulting concept has been developed, which is available to all markets and partner companies. The Volkswagen Group strives for maximum energy efficiency possible and the use of renewable energy for new and existing dealership and service buildings to the extent this is economically and technically feasible.

Net carbon-neutral handover of battery-electric vehicles

In 2022, the Volkswagen Group decided to take the voluntary measure of making the delivery of a number of the Group's battery-electric vehicles to our customers in Europe net carbon neutral. Until the Volkswagen Group can avoid CO_2e emissions entirely and use renewable energies everywhere, we will voluntarily offset the remaining GHG emissions from our supply chain, production and logistics. This applies to MEB vehicles from the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Audi, Porsche, SEAT/CUPRA, and Škoda brands in Europe.

In 2024, the offset amount was 6.7 million tons of CO_2e for the Group. This action will continue into 2025 and will end with the 2025 reporting year for the Group. As part of net carbon-neutral delivery, we offset unavoidable emissions from the two life cycle phases of the supply chain or production through climate action projects with high certification standards. These include the Verified Carbon Standard (VCS), the Climate Community and Biodiversity Standards (CCB Standards) and the Gold Standard. In addition to external certification standards, we also assess offsetting projects for quality assurance in accordance with our own criteria.

We consider protection of natural carbon sinks and development of additional carbon sinks to be a vital task in climate change mitigation, which is why the Volkswagen Group is committed to developing its own climate action projects via the joint venture Volkswagen ClimatePartner GmbH. It develops and funds certified climate action projects that serve the recognized offsetting of CO_2e emissions. One key requirement for all projects is that they must meet the highest quality standards. For this reason, the joint venture also takes control of quality assurance. Core aspects include the additionality, accuracy and permanence of the emission reductions, the socioeconomic and environmental benefits for the region, and regular audit by independent third parties. The initial project standards are the VCS and the Gold Standard. The joint venture commenced its operational work in 2022 and is focusing on forest protection projects and nature-based solutions. It is accompanied by a specially established independent project advisory board.

Contribution to climate-friendly logistics and hard-to-abate sectors

Beyond its own value chain, the Volkswagen Group also wants to advance decarbonization in other industries together with the MAN Energy Solutions subsidiary. For example, the company also supplies the global shipping and energy industry with engines that can be powered by more climate-friendly fuels (future fuels) and converts diesel or heavy fuel oil engines to future fuels.

MAN Energy Solution's portfolio helps customers reduce emissions, use energy more efficiently and deploy environmentally friendly fuel alternatives. With a broad range of key future technologies, industry-leading digitalization services and a wide portfolio of durable products, the company provides sustainable answers to today's climate challenges.

In addition to climate-friendly engines, the portfolio also includes key technologies such as carbon capture, utilization and storage; heat pumps; and hydrogen production plants.

Charging and energy activities

The Volkswagen Group is one of the driving forces behind e-mobility and is resolutely pressing ahead with the expansion of the charging network worldwide. The Charging and Energy area plays an important role in the Volkswagen Group's e-mobility strategy as part of the 10-point program, and is developing integrated energy solutions for private and commercial customers worldwide through its own brands. The Volkswagen Group is accelerating the expansion of the charging infrastructure worldwide through the Group brands Electrify America (North America), Elli (Europe) and the CAMS joint venture (China). This remains a key requirement in ramping up e-mobility and decarbonizing individual mobility. The aim is to establish more than 40,000 fast-charging points around the world in the medium term, with more than half of them installed so far. The largest fast-charging networks are already operated in the growth regions of China and the USA/Canada. The Volkswagen Group is increasingly supporting sustainable energy projects and developing new business models relating to energy in order to promote power from renewable sources for charging and the expansion of renewable energy. The aim is to charge battery-electric vehicles with electricity from renewable sources and thereby exploit their full potential.

Europe

As a charging and energy company operating across Europe, the Elli brand has set itself the task of supporting private and commercial clients with intelligent hardware and software solutions in the sustainable energy transition and advancing the decarbonization of society. The Elli brand was formed as a Volkswagen Group subsidiary in 2018 and is now one of the leading providers of a smart charging and energy ecosystem. The product range is broad and includes AC wallboxes and flexible quick-charging stations (Flexpole), public charging services, software solutions, energy trading, and electricity supply.

An example of the products for the interface between energy and mobility is the new unidirectional wallbox Elli Charger 2, which, in conjunction with the private PV system and the Elli brand's dynamic electricity tariff, reduces charging costs for customers by up to 40%.

The Elli brand also offers the Volkswagen Group's customers as well as commercial and private clients outside the Group access to Europe's largest charging network with some 850,000 charge points – via a single app or charging cards. The Selected Partner Network established in 2024 comprises premium charge point operators and has optimal charging stations, a high-performance charging infrastructure with on-site convenience services (for example cafés, restaurants, sanitary facilities) and a high level of operational safety.

In addition, the Volkswagen Group is actively expanding fast charging points in Europe via joint ventures. Together with other manufacturers, the Volkswagen Group established the IONITY joint venture in 2017, which had set up 4,700 fast-charging stations on major highways across Europe by the end of 2024.

The process of decarbonizing society increases the need for storage solutions for regenerative energy, in order to ensure stability and efficiency in the electrical distribution system. Vehicle batteries can act as a key asset and powerbank in this regard. Elli's medium-term vision for the future is a managed battery network, in which batteries – such as mass storage, battery-electric vehicle, residential or commercial building – can be connected to form a standardized, networked virtual power plant. This future ecosystem will not only support the grid when demand is high, but also provide access to the electricity spot markets, to provide customers with financial incentives to make the timing of their electricity demand more flexible. The aim is also to tap into new profit pools for the Volkswagen Group. In this context, the Elli brand received a license for electricity trading on Europe's largest electricity exchange (EPEX) back in July 2023 and is marketing the flexibility of the electricity market in the first storage testing center in Kassel (Baunatal).

North America

The Group brand Electrify America is the largest public hyper-fast-charging network in the US. It made a significant contribution to the development of a national network of fast-charging points for communities and highways, and to the increasing introduction of zero-emission vehicles. Electrify America's fast-charging network has expanded significantly since installation of the first charging station in May 2018. The network now comprises over 1,000 charging stations and more than 4,700 hyper-fast charge points.

Electrify America launched the Electrify America Solar Glow™ 1 solar photovoltaic project in San Bernardino County, California, in August 2023. Electrify America Solar Glow™ 1 is an important milestone in Electrify America's commitment to reduce the company's energy carbon footprint. The park has more than 200,000 solar panels and generates an estimated 75 MW at peak capacity, which is comparable to the power drawn by 500 battery-electric vehicles charging at once at an average speed of 150 kilowatts. The solar park is the result of a 15-year virtual power purchase agreement (VPPA) with developer Terra-Gen. Electrify America is the largest open network of DC fast charging points for battery-electric vehicles in the US to enter into a virtual power purchase agreement for new renewable energy generation.

Electrify America Solar Glow™ 1 contributes to the additionality of energy generation from renewable sources.

China

As of December 31, 2024, the CAMS joint venture has installed 1,621 charging stations with over 13,000 charging points in 213 cities in China and they have over 6.6 million registered users. CAMS is also active in the field of energy services. At the beginning of 2024, for example, four carbon-neutral charging stations began operating in Guangdong (China), contributing to decarbonization. In addition, the Volkswagen Group is working with a range of partners on projects to improve the stability of energy supply and promote electricity generation from renewable sources. For example, Volkswagen Group China launched a V1G pilot project with State Grid in the Beijing-Tianjin-Hebei cluster in December 2023 to improve interaction between vehicles and the grid, achieve balance in electricity supply and demand, and help stabilize the power grid.

Dependency on resources for implementation of actions

The sustainable transformation will require extensive investment in digitalization and electrification. Among other things, the digital transformation ensures that actions for climate change mitigation can be implemented. The budget designated for this purpose is also determined by the sustainable transformation, among other factors.

The cost-intensive transformation is also associated with the financing and attractiveness of the Volkswagen Group for investors seeking sustainable investment opportunities. The Volkswagen Group has had a Green Finance Framework for various forms of financing since 2020, such as green bonds, which define the framework for financial instruments geared to sustainability.

In the reporting period, we refinanced taxonomy-aligned capital expenditure from fiscal years 2021 through 2023 based on the Green Finance Framework updated in October 2022 by issuing green bonds in the amount of €1.0 billion.

The Volkswagen Group has issued a total of €10.5 billion in green bonds to refinance capital expenditure for battery-electric vehicles since 2020. In 2022, the Volkswagen Group published a revised Green Finance Framework that was further developed in particular through the integration of the EU Taxonomy. As was the case in the previous Green Finance Framework, the Volkswagen Group continues to focus on the exclusive inclusion of battery-electric vehicles in sustainable financing. Under the updated Green Finance Framework, only taxonomy-aligned investments will be considered. This links our corporate objective of net carbon neutrality by 2050 with our financing strategy. The funds raised under the Green Finance Framework are specifically used to refinance environmentally friendly projects such as e-mobility. This both fulfills the clean transportation category of the Green Bond Principles of the International Capital Market Association (ICMA) and is in line with the Sustainable Development Goals of the United Nations and the European Union. The success of the updated Green Finance Framework has been confirmed by Sustainalytics to comply with the ICMA's Green Bond Principles and the Green Loan Principles of the Loan Market Association (LMA).

Taxonomy-related CapEx and OpEx

Expanding e-mobility is the most important lever for our transformation. Our actions to expand e-mobility are in line with economic activity 3.3. Manufacture of low-carbon technologies for transport. The relevant disclosure requirements of ESRS E1 paragraph 29 c can be found in the "EU Taxonomy" chapter of the report.

Differences concerning operating expenditure and capital expenditure

The data disclosed under this standard on capital expenditure (CapEx) and operating expenditure (OpEx) is in line with the information reported on CapEx and OpEx in the "EU Taxonomy" chapter. There are therefore no differences to disclose.

METRICS: CLIMATE CHANGE

Group standard 98000 sets out indicators for emissions and energy which are tracked uniformly by all sites worldwide. They include GHG emissions such as carbon dioxide (CO_2), sulfur hexafluoride (SF6), nitrous oxide (N2O), chlorinated hydrocarbons (CHCs) and hydrofluorocarbons (HFCs). The data collected with respect to energy includes generation, purchase and use of fossil, nuclear and renewable energy sources, including the use of combustible materials.

Energy consumption and mix

For the purposes of data collection, the energy consumption and energy mixes of the worldwide production sites are recorded annually. Both self-generated energy and energy procured from external suppliers (purchased electricity) are taken into account. In addition, the renewable and nuclear shares of the energy mix are recorded separately. The relevant portion that comes from non-fuel-based renewable sources such as wind power or photovoltaics is also recorded. The Volkswagen Group's quality criteria must be observed and appropriate documentation provided when procuring renewable energies.
Quantitative metrics for energy consumption and mix are described in the following (see table):

ENERGY CONSUMPTION AND MIX

		2024		2023	
	Unit	Volkswagen Group	Companies with operational control	Volkswagen Group	Companies with operational control
Total energy consumption	million MWh	19.0	5.5	19.4	6.3
Total energy consumption of Volkswagen Group & companies with operational control	million MWh	24.6		25.8	
Energy consumption from fossil sources[1]	million MWh	11.9	3.7	13.5	5.0
Coal and coal products	million MWh	0.8	1.0	2.3	1.0
Crude oil and petroleum products	million MWh	1.1	0.02	1.3	0.04
Natural gas	million MWh	8.7	1.1	8.6	1.4
Fuel from other fossil sources	million MWh	0.1	0.0	0.1	0.0
Purchased energy from fossil sources[1]	million MWh	1.2	1.6	1.3	2.5
Energy consumption from nuclear sources[2]	million MWh	0.04	0.1	-	-
Energy consumption from renewable sources	million MWh	7.1	1.7	5.9	1.4
Fuel – renewable	million MWh	1.0	0.5	0.5	0.5
Purchased energy – renewable[1]	million MWh	6.0	1.2	5.5	0.9
Purchased energy – renewable, electric	million MWh	5.7	1.1	5.2	0.8
Share of renewable electricity purchased bundled[2]	%	65.4	0.9	-	-
Share of renewable electricity purchased unbundled[2]	%	34.6	99.1	-	-
Self-generated energy – renewable, non-fuel[2]	million MWh	0.04	0.0	-	-

1 The datapoint contains estimated values
2 No reporting possible for 2023
The information for 2023 is provided voluntarily and has not been externally validated.

Contractual instruments for the procurement of renewable electricity

A distinction is made regarding procurement of electricity from renewable sources between bundled and unbundled procurement. Bundled means that the certificates of origin, renewable energy certificates or green electricity certificates are purchased together with the green electricity product (not separately) from a supplier.
A distinction is currently made between the following contracts:

- On-site power purchase agreements
- Off-site power purchase agreements
- Other contracts

Energy intensity

Energy intensity is calculated based on the total energy consumption and sales revenue. Sales revenue is taken from the consolidated financial statements, where more detailed information can be found. The energy intensity metric is reported excluding the companies with operational control.

ENERGY INTENSITY IN HIGH CLIMATE IMPACT SECTORS

	Unit	2024
Energy intensity for activities in high climate impact sectors (energy consumption per sales revenue)	kWh/€	0.059
Total energy consumption from activities in high climate impact sectors[1]	million MWh	19.0
Sales revenue from activities in high climate impact sectors	million €	324,656
Total sales revenue (financial statements)	million €	324,656

1 Corresponds to total energy consumption

High climate impact sectors to determine energy intensity

All activities within the Volkswagen Group contribute to vehicle production and relate to NACE code C.29.10 (Manufacture of motor vehicles). They are therefore associated with activities in high climate impact sectors. Since all of the Volkswagen Group's activities are included in the calculation of energy intensity, total energy consumption is used here for the calculation. MAN Energy Solutions is also included in the energy intensity calculation.

Energy generation

Self-generated energy includes energy from plants owned, rented, or leased and operated by the Volkswagen Group (for example, power plants, cogeneration plants, boiler houses.). This also applies to the company's own energy generation systems operated by third parties.

TOTAL ENERGY GENERATION

		2024		2023	
	Unit	Volkswagen Group	Companies with operational control	Volkswagen Group	Companies with operational control
Total energy generation	million MWh	6.4	0.3	7.2	0.3
Total energy generation of Volkswagen Group & companies with operational control	million MWh		6.7		7.5
Non-renewable energy generated[1]	million MWh	5.6	0.2	6.6	0.2
Renewable energy generated	million MWh	0.8	0.05	0.5	0.05

1 The datapoint contains estimated figures.
The information for 2023 is provided voluntarily and has not been externally validated.

GHG emissions

Metrics on Scope 1 and Scope 2 GHG emissions

Scope 1 GHG emissions are direct GHG emissions that are generated by the Volkswagen Group through sources it controls itself, such as through the use of fuels at the sites. Direct biogenic CO_2 emissions (Scope 1) are emissions that result from the use of biogenic fuels at the sites. The *Verband der Automobilindustrie* (VDA - German Association of the Automotive Industry) emission factors are used to calculate the emissions.

Scope 2 GHG emissions are indirect CO_2 emissions from energy generation that are generated as a result of purchasing energy from external power plants, cogeneration plants and boiler houses and released elsewhere. Scope 2 GHG emissions are calculated using both the market-based and location-based methods in accordance with the GHG Protocol. Indirect location-based biogenic CO_2 emissions are emissions that result from the use of biogenic fuels by external energy suppliers (for example generation of electrical energy or heat) and are assessed using local emission factors. The current VDA emission factors are used to calculate the emissions.

SCOPE 1 AND 2 GHG EMISSIONS

		2024		2023	
Metric	Unit	Volkswagen Group	Companies with operational control	Volkswagen Group	Companies with operational control
Scope 1 GHG emissions	million tons of CO_2e	3.0	0.3	3.6	0.4
Total Scope 1 GHG emissions of Volkswagen Group & companies with operational control	million tons of CO_2e	3.3		4.0	
of which TRATON GROUP	million tons of CO_2e	0.2	0.0	0.2	0.0
of which MAN Energy Solutions	million tons of CO_2e	0.03	0.0	0.04	0.0
Scope 1 biogenic GHG emissions	million tons of CO_2e	0.4	0.2	0.2	0.2
Share of Scope 1 GHG emissions in regulated ETS[1]	%	84.4	18.2	-	-
Scope 2 GHG emissions (location-based)	million tons of CO_2e	2.6	1.6	2.4	1.9
Total Scope 2 GHG emissions (location-based) of Volkswagen Group & companies with operational control	million tons of CO_2e	4.2		4.3	
of which TRATON GROUP	million tons of CO_2e	0.3	0.0	0.2	0.0
of which MAN Energy Solutions	million tons of CO_2e	0.03	0.0	0.03	0.0
Scope 2 biogenic GHG emissions (location-based)[2]	million tons of CO_2e	0.4	0.1	0.5	0.1
Scope 2 GHG emissions (market-based)	million tons of CO_2e	0.5	0.7	0.7	1.3
Total Scope 2 GHG emissions (market-based) of Volkswagen Group & companies with operational control	million tons of CO_2e	1.1		2.0	
of which TRATON GROUP	million tons of CO_2e	0.1	0.0	0.1	0.0
of which MAN Energy Solutions	million tons of CO_2e	0.01	0.0	0.01	0.0

[1] No reporting possible for 2023

[2] The datapoint contains estimated figures

The information for 2023 is provided voluntarily and has not been externally validated.

Methodologies, assumptions and emission factors used to measure Scope 1 and Scope 2 GHG emissions

The GHG emissions (Scope 1 and 2) of the production sites are calculated annually pursuant to the requirements of the GHG Protocol and the ESRS. Provider-specific factors are applied for market-based CO_2 emission calculation, whereas VDA emission factors are used for location-based measurement.

The total GHG emissions of the site are determined by adding all relevant emissions, each multiplied by their global warming potential. The CO_2 emission factors for energy not generated on site (for example electrical energy, district heating, district cooling) are obtained from or provided by the relevant energy suppliers. The CO_2 emission factors for own consumption of primary energy sources for heat or power generation are calculated from the heating values or calorific values of the fuels and the efficiency of the own generation system.

We use the electricity grid mix of the country in question to calculate the location-based Scope 2 emissions.

Identifying and disclosing material Scope 3 categories

Metrics on Scope 3 GHG emissions

In line with the Scope 3 standard published by the World Business Council for Sustainable Development and the World Resources Institute, we are reporting CO_2e emissions for 13 out of a total of 15 Scope 3 categories in 2024. Category 9 (Downstream transportation and distribution) is included in the reporting on category 4. Additionally, category 10 (Processing of sold products) is included in the reporting on Scope 1 GHG emissions. Category 15 includes emissions from various types of investments and is not reported due to low materiality at Group level. Around 21.4% of all Scope 3 emissions fall under the emission category Purchased goods and services, while 72.7% arise during the use phase (well-to-wheel). The following tables show the Scope 3 emissions of the Volkswagen Group, the TRATON GROUP and MAN Energy Solutions, including notes on methodology for data collection and calculation:

VOLKSWAGEN GROUP

Scope 3 category	Unit	2024	2023	Notes
Total Scope 3 GHG emissions	million tons of CO_2e	408.58	429.12 (413.95)[1]	The previous year's figure was adjusted as part of the recalculation of the base year.
Category 1: Purchased goods and services	tons of CO_2e/%	87,346,897 / 21.4	94,907,875 / 22.1 (89,572,138 / 21.6)[1]	The category 1 CO_2e emissions relate to the supply chain emissions of all passenger cars and light commercial vehicles produced in the reporting year. They were calculated on the basis of 72 production-volume-weighted life cycle assessments (LCAs). All vehicle LCAs for passenger cars and light commercial vehicles have been independently certified in accordance with ISO 14040/44, mainly by TÜV NORD CERT GmbH. Key drivers of change include portfolio and regional shifts and lower production figures. The previous year's figure was adjusted as part of the recalculation of the base year. The Volkswagen Group uses the electricity grid mix as standard for assessing the production phase of vehicles and, at the same time, includes certificates for renewable energies from suppliers to highlight common decarbonization efforts. This combination of location-based and market-based approaches may result in slight double counting of the proportion of renewable energy. A fully market-based approach will be possible as soon as the relevant emission factors are available in the databases the Volkswagen Group uses. Figure in the base year (2018): 96,763,132 tons of CO_2e
Category 2: Capital goods	tons of CO_2e/%	9,712,587 / 2.4	9,182,158 / 2.1 (5,716,214 / 1.4)[1]	The calculation of emissions from capital goods is based on financial data from the Volkswagen Group and the use of emission factors. These have been adjusted for inflation since the 2023 reporting year. With effect from the 2024 reporting year, a new data source has been used for the emission factors because the original data source is no longer available. The previous year's figure was adjusted as part of the recalculation of the base year. Figure in the base year (2018): 10,180,382 tons of CO_2e
Category 3: Fuel- and energy-related emissions (not included in Scope 1 or 2)	tons of CO_2e/%	1,338,434 / 0.3	983,498 / 0.2	Energy consumption across the Volkswagen Group is recorded annually in the internal EIS and converted into CO_2e using emission factors for the various energy sources from a representative generic database. With effect from the 2024 reporting year, the emission factors have been differentiated by region, where possible. Figure in the base year (2018): 1,510,068 tons of CO_2e
Category 4: Upstream transportation and distribution	tons of CO_2e/%	4,290,314 / 1.1	4,153,587 / 1.0	Categories 4 and 9 correspond to the CO_2e emissions from energy source supply and use, both from inbound and outbound shipments and transportation processes between the sites worldwide (excluding the Chinese joint ventures). Transportation data is manually derived from internal transport IT systems for all modes of transport and manually recorded processes. Reduction actions are certified by TÜV NORD CERT GmbH. Figure in the base year (2018): 4,716,050 tons of CO_2e

Category 5: Waste	tons of CO_2e/%	1,276,726 / 0.3	1,050,976 / 0.2	The waste produced across the Group is recorded annually in the internal EIS and converted into CO_2eq using emission factors for the various waste streams from a representative generic database. Figure in the base year (2018): 1,205,683 tons of CO_2e
Category 6: Business travel	tons of CO_2e/%	224,616 / 0.1	248,450 / 0.1	Since the 2022 reporting year, the emissions have been calculated based on Volkswagen AG's actual air and rail travel, among other factors, and extrapolated for the Group based on the number of employees worldwide. Figure in the base year (2018): 708,180 tons of CO_2e
Category 7: Employee commuting	tons of CO_2e/%	327,861 / 0.1	1,114,774 / 0.3	Starting in 2024, the emissions are based on a calculation that takes into account the global number of employees (direct and indirect) of the Volkswagen Group and region-specific, external, generic parameters for the modal split, mode-specific emission factors, average commuting distances and working days. Figure in the base year (2018): 1,009,481 tons of CO_2e
Category 8: Upstream leased assets	tons of CO_2e/%	136,675 / 0.0	120,831 / 0.0 (259,659 / 0.1)[1]	The calculation of emissions from upstream leased assets is based on financial data from the Volkswagen Group and the use of emission factors. These have been adjusted for inflation since the 2023 reporting year. With effect from the 2024 reporting year, a new data source has been used for the emission factors because the original data source is no longer available. The previous year's figure was adjusted as part of the recalculation of the base year. Figure in the base year (2018): 137,539 tons of CO_2e
Category 9: Downstream transportation and distribution	tons of CO_2e/%	-	-	Included in Scope 3 category 4 Upstream transportation and distribution
Category 10: Processing of sold products	tons of CO_2e/%	-	-	Included in Scope 1
Category 11: Use of sold products	tons of CO_2e/%	296,904,121 / 72.7	310,470,033 / 72.4 (299,195,581 / 72.3)[1]	The CO_2e emissions comprise the well-to-wheel emissions of all passenger cars and light commercial vehicles produced in 2024 at an assumed lifetime mileage of 200,000 kilometers. The calculation is based on the weighted average fleet emissions [g CO_2/km] in the main markets of Europe (EU27, United Kingdom, Norway and Iceland), China and the USA in accordance with the currently legally applicable driving cycles. Region-specific emission factors for fuel and electricity supply chains from a representative generic database were used to calculate the corresponding well-to-tank emissions. As these generic emission factors were updated in 2024, the historical emissions were also updated to reflect the new state of knowledge. Reduction actions are certified by TÜV NORD CERT GmbH. Figure in the base year (2018): 412,986,695 tons of CO_2e
Category 12: End-of-life treatment of sold products	tons of CO_2e/%	541,918 / 0.1	609,577 / 0.1	The category 12 CO_2e emissions relate to the potential end-of-life emissions of all passenger cars and light commercial vehicles produced in the reporting year. They were calculated on the basis of production-volume-weighted life cycle assessments. All vehicle LCAs for passenger cars and light commercial vehicles have been independently certified in accordance with ISO 14040/44. Figure in the base year (2018): 1,146,594 tons of CO_2e
Category 13: Downstream leased assets	tons of CO_2e/%	4,233,126 / 1.0	3,858,556 / 0.9 (8,627,724 / 2.1)[1]	The calculation of emissions from downstream leased assets is based on financial data from the Volkswagen Group and the use of emission factors. These have been adjusted for inflation since the 2023 reporting year. With effect from the 2024 reporting year, a new data source has been used for the emission factors because the original data source is no longer available. In addition, the results will be revised to exclude emissions for leased vehicles from Group production to avoid double counting, particularly with categories 1 and 11. The previous year's figure was adjusted as part of the recalculation of the base year. Figure in the base year (2018): 2,955,240 tons of CO_2e
Category 14: Franchises	tons of CO_2e/%	2,248,100 / 0.6	2,415,100 / 0.6	Since the 2022 reporting year, calculation of category 14 has been based on an annual evaluation of the CO_2eq emissions of the Volkswagen Group's trading and service partners on the basis of the sites' energy consumption and country-specific emission factors. The latter come from a representative generic database. Figure in the base year (2018): 3,215,900 tons of CO_2e

Category 15: Investments	tons of CO_2e/%	-	- Category 15 is not reported due to low materiality at Group level.

1 Figures correspond to the previous year's figures before recalculation

TRATON

Scope 3 category	Unit	2024	Notes
Category 1: Purchased goods and services	tons of CO_2e	8,437,991	Purchased goods and services = volume of the vehicle and components * weight of vehicle and components kg CO_2e per reference vehicle or components. Purchased services (IT, accessories, packaging, sales marketing) were not included due to their minimal impact (<1%). Scania combines similar products into eight reference groups, using production volumes and an internal material data system (SMDS) with external life cycle assessment (LCA) data. MAN Truck and Bus applies life cycle assessments for vehicle categories by using sales data, average weight calculations and expert estimates. For International, this datapoint is calculated by ClimatePartner. Volkswagen Truck and Bus (VWTB) calculates the emissions from the volumes of the components and uses ecoinvent emission factors based on technical calculations.
Category 2: Capital goods	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 3: Fuel- and energy-related emissions (not included in Scope 1 or 2)	tons of CO_2e	-	The production sites' emissions are included in the Volkswagen Group figure.
Category 4: Upstream transportation and distribution	tons of CO_2e	1,230,802	Scania and VWTB use an activity-based calculation method. MAN Truck and Bus uses a cost-based approach. Scania and MAN Truck and Bus use emission factors from the Global Logistics Emission Council (GLEC). VWTB uses emission factors from the Department for Environment, Food & Rural Affairs (DEFRA) and the Brazilian GHG Protocol Program (PBGHGP). ClimatePartner calculates this datapoint for International.
Category 5: Waste	tons of CO_2e	-	The production sites' emissions are included in the Volkswagen Group figure
Category 6: Business travel	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 7: Employee commuting	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 8: Upstream leased assets	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 9: Downstream transportation and distribution	tons of CO_2e	-	Included in Scope 3 category 4 Upstream transportation and distribution
Category 10: Processing of sold products	tons of CO_2e	151,500	Only rigids are included in the processing calculation. The emissions are estimated by assuming that the processing emissions per vehicle correspond to the production emissions per vehicle. Scope 1 and Scope 2 emissions are divided by the total number of vehicles sold and then multiplied by the number of rigids sold. ClimatePartner calculates this datapoint for International.
Category 11: Use of sold products	tons of CO_2e	342,519,213	Emissions from the use phase of the products sold comprise the largest part of the TRATON GROUP's emission inventory. The calculation of these emissions is divided into two methods depending on the product category. The first method applies to the trucks and buses product category, while the second method applies to the power solutions and external engines and motors product category. To calculate the emissions from trucks and buses, variables such as the number of vehicles, energy consumption, a well-to-wheel GHG emission factor and the distance driven are taken into account. Each brand applies the same general formula by multiplying the values. But due to differences in the product portfolio, each brand calculates the total emissions in an individual way with differently grouped vehicle classes. For drive solutions and external engines and motors, Scania and MAN Truck and Bus estimate total fuel consumption based on information from engine and motor experts and multiply it by a CO_2 emission factor. International and VWTB do not sell their own engines and motors and therefore do not calculate emissions for this product category.
Category 12: End-of-life treatment of sold products	tons of CO_2e	622,842	End-of-life treatment of sold products = Σ (intensity factor (tons of CO_2 per vehicle group) * product sales volume). Scania and MAN Truck and Bus use a combined LCA model to estimate the CO_2 emissions for each vehicle group at the end of its life cycle. Only disassembly and transportation are taken into account here, not credits for recycling or energy recovery. This method is also used by VWTB and applied to sales volumes. ClimatePartner calculates this datapoint for International.
Category 13: Downstream leased assets	tons of CO_2e	-	Included in the Volkswagen Group figure

Category 14: Franchises	tons of CO_2e	292,358	Scania and MAN's emissions from franchises are calculated on the basis of the average Scope 1 and Scope 2 emissions of a typical commercial site. ClimatePartner calculates this datapoint for International. VWTB does not have any commercial sites that fall within the scope of the ESRS.
Category 15: Investments	tons of CO_2e	8,690	Scania calculates this datapoint in two steps. First, the investments are prioritized by relevance, and the ten most important investments are selected for evaluation. The Scope 1 and Scope 2 emissions are then calculated in proportion to Scania's shareholdings in these companies. It is calculated as emissions * percentage held. The emission data needed comes from the companies' environmental reports or, if these are not available, from completed questionnaires sent to the companies. MAN Truck and Bus has fewer than ten investments and therefore includes all investments in the calculation. For International, this datapoint is calculated by ClimatePartner. VWTB does not provide any financial resources for external companies.

MAN Energy Solutions

Scope 3 category	Unit	2024	Notes
Category 1: Purchased goods and services	tons of CO_2e	1,129,132	For the calculation of Scope 3 a spend-based approach is used. This category's CO_2e emissions relate to the supply chain emissions of all goods and services purchased in the reporting year. They were calculated on the basis of the invoice volume in €.
Category 2: Capital goods	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 3: Fuel- and energy-related emissions (not included in Scope 1 or 2)	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 4: Upstream transportation and distribution	tons of CO_2e	115,828	Calculation is based on a distance-based approach. The values from Logistics relate to the MAN Energy Solutions production sites' in- and outbound shipments and transportation processes. Emissions are extrapolated on the basis of revenue data.
Category 5: Waste	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 6: Business travel	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 7: Employee commuting	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 8: Upstream leased assets	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 9: Downstream transportation and distribution	tons of CO_2e	-	Included in Scope 3 category 4 Upstream transportation and distribution
Category 10: Processing of sold products	tons of CO_2e	-	Not relevant for MAN Energy Solutions
Category 11: Use of sold products	tons of CO_2e	48,918,574	For the calculation of Scope 3 category 11, an average-based approach is used based on secondary data (assumptions). CO_2e emissions are calculated using well-to-tank emission factors. Systems commissioned in the year are taken into account by calculating their lifetime emissions. The included divisions are new products from the Marine 4-Stroke, Power, Industries & Quest-One. Representative emission factors are used on region-specific level as well as on sector specific.
Category 12: End-of-life treatment of sold products	tons of CO_2e	0	This approach is based on the assumption that MAN Energy Solutions products are almost 100% recyclable at their end of life. The CO_2e emissions that arise from recycling are excluded by a cut-off-approach.
Category 13: Downstream leased assets	tons of CO_2e	-	Included in the Volkswagen Group figure
Category 14: Franchises	tons of CO_2e	-	not relevant for MAN Energy Solutions
Category 15: Investments	tons of CO_2e	-	Category 15 is not reported due to low materiality at Group level.

No Scope 3 GHG emission levels are available for the TRATON GROUP or MAN Energy Solutions for 2023

Biogenic Scope 3 GHG emissions at Group level

Biogenic CO_2 is reported for Scope 3 category 11. The data is collected on the basis of the DCI, meaning that the reporting is initially focused on passenger cars and light commercial vehicles. The data on the biofuel proportion and average emission factors is taken from a representative generic database. Efforts are being made to expand the scope of reporting in the coming years to heavy commercial vehicles. In the reporting year, biogenic Scope 3 GHG emissions amounted to 9,653,769 tons of CO_2. No reporting possible for 2023.

Methodologies, assumptions and emission factors used to measure Scope 3 GHG emissions

The Volkswagen Group's Scope 3 inventory is calculated on an annual basis in accordance with the requirements of the internationally accepted GHG Protocol and the ESRS. This enables the success of the actions to be determined and other areas where action can be taken to be identified. The methodologies and assumptions used for the calculation are documented in the internal manual, and updated annually.

The emission factors used to calculate Scope 3 GHG emissions are taken primarily from a representative generic database. Factors from other sources (for example GHG Protocol) are also used for individual Scope 3 categories.

Material changes and their effect on the comparability of GHG emissions

In its internal manual, the Volkswagen Group states how the Group's Scope 3 inventory is compiled and updated annually. Year-on-year comparability has already been established for the DCI in recent years. In addition, reference was made to significant changes in how the Scope 3 emissions inventory is complied.

In the past, we disclosed changes in the extent of reporting (coverage), the calculation method or the calculation data basis for Scope 3 GHG emissions in comparison to the preceding annual report. The following material changes apply compared with last year's reporting: Starting in 2024, the category 7 emissions are based on a calculation that takes into account the global number of employees (direct and indirect) of the Volkswagen Group and region-specific, external, generic parameters for the modal split (distribution of transport by means of transport), mode-specific emission factors, average commuting distances and working days. For categories 2, 8, and 13, the emission factors used have been revised with effect from the 2024 reporting year because the source of the previous emission factors is no longer available. With effect from the 2024 reporting year, the data for category 13 has been revised to exclude emissions for leased vehicles from Group production to avoid double counting, particularly with categories 1 and 11. With effect from the 2024 reporting year, the emission factors have been differentiated by region, where possible, for categories 3 and 5. Updated emission factors for fossil fuels are used to determine the emissions in category 11. The "Targets: Climate change" section explains the material changes in reporting compared with previous years and how these changes affect the outcome. The emissions from the supply chains are currently calculated primarily using secondary data and industry averages. Immaterial changes to this data are not specifically assessed in terms of their impact on the overall outcome.

Reporting periods in the value chain

The Upstream transportation and distribution (category 4), Downstream transportation and distribution (category 9) and Franchises (category 14) areas of the Group report figures from the previous reporting year. This is done for procedural reasons. If there are any relevant changes, these would be reported and transparently disclosed in the following year.

Scope 3 GHG emissions based on specific activities in the value chain

The vehicle model and therefore all materials integrated in a vehicle and their weight are based on the vehicle bill of materials, i.e., on primary data. There is primary data from Tier 1 suppliers for individual hotspot materials or components. The same will apply in future for the battery (cell) production processes required in EU Batteries Regulation Article 7. There is not yet any recognized or standardized method of indicating the proportion of these emissions. Neither an indication as a share of datapoints nor as a share of total GHG emissions is entirely meaningful, because, for example, the proportion of emissions from decarbonized hotspot parts is naturally decreasing.

Total GHG emissions

The total GHG emissions metrics are calculated from the sum of the total emissions of the Scope 1, 2 and 3 categories.

TOTAL GHG EMISSIONS

Metric	Unit	2024	2023
Total GHG emissions – location-based	million tons of CO_2e	416.1	437.4
Total GHG emissions – market-based	million tons of CO_2e	413.0	435.1

No Scope 3 GHG emission levels are available for the TRATON GROUP or MAN Energy Solutions for 2023
The information for 2023 is provided voluntarily and has not been externally validated.

GHG intensity

GHG intensity is calculated from the metrics for total GHG emissions and sales revenue. Sales revenue is taken from the financial report, where you can find more detailed information. The GHG intensity metric is reported excluding the companies with operational control.

GHG INTENSITY

Metric	Unit	2024
Total GHG emissions per sales revenue – location-based	kg CO_2e/€	0.8
Total GHG emissions per sales revenue – market-based	kg CO_2e/€	0.8
Sales revenue used to calculate GHG intensity	million €	324,656
Total sales revenue (financial statements)	million €	324,656

GHG removals and GHG mitigation projects

GHG removal and storage

No actions have been implemented for the removal and storage of GHGs in the Group's own business activities or value chain. If such actions are introduced in the future, we plan to differentiate between technology-based and nature-based solutions. Technology-based solutions should be based on specific counting, weighing and measurement of the GHGs removed from the atmosphere; assumptions, methodologies and frameworks shall not be applied. Nature-based solutions, on the other hand, should be based on assumptions, methodologies and frameworks of major established standards in the carbon market, such as VERRA and Gold Standard.

Metrics on GHG removal and storage

No metrics on GHG removal or storage are reported, as no actions for removing and storing GHGs have yet been implemented in the Group's own operations or in the value chain.

Use of carbon credits

In line with the hierarchy of actions set out in the transition plan, the offsetting projects enhance our decarbonization strategy and, as explained in the plan, are an important factor in achieving our decarbonization targets.

A carbon-free energy supply is not currently possible for global energy requirements. Energy efficiency therefore remains an important basis for effective climate change mitigation and should always be the first lever.

Ultimately, the remaining energy needs requirements be covered with as much carbon efficiency as possible (second priority lever). This involves reviewing innovative energy concepts, direct integration of renewable energies, and technological changes such as electrification.

In the area of hard-to-abate emissions, the Volkswagen Group is considering using climate action projects to offset them, for example to achieve net CO_2e-neutral production (third priority lever). Emissions are considered to be hard to abate if avoiding them is either not currently technically possible or would be disproportionately expensive and therefore not economically feasible. As part of the net CO_2e-neutral transition, the Volkswagen Group continues to offset unavoidable emissions from the life cycle phases, such as from the supply chain or production, through climate action projects with high certification standards. These include the VCS, the Climate Community and Biodiversity Standards (CCB Standards) and the Gold Standard. In addition to external certification standards, offsetting projects for quality assurance are also assessed in accordance with our own criteria. The Volkswagen Group intends to continue to observe the highest quality and certification standards in carbon offsetting (carbon credits) to achieve the long-term climate targets.

Role of carbon credits as part of the decarbonization strategy

The carbon offsetting approach is used for all emission categories from Scope 1 to Scope 3. Once all actions to increase efficiency and reduce emissions as outlined in our transition plan have been implemented, we intend to offset particularly hard-to-abate emissions through carbon offset projects. This will affect less than 10% of emissions. This is based on the requirements of the SBTi.

If carbon credits are used to achieve decarbonization targets, they are used to ensure net carbon-neutral delivery of the battery-electric vehicles. The only carbon credits we use are those that meet the standards of VERRA and Gold Standard. We did not use carbon credits from any other standards in the reporting year.

Metrics on carbon credits

As a general rule, the carbon credits used by the Volkswagen Group must meet the highest quality standards. For this reason, they are only acquired from certain project types and from appropriately prequalified companies. The Volkswagen Group only accepts certain issuing standards for the carbon credits themselves.

The underlying projects are implemented in accordance with publicly verifiable and scientifically based methodologies. The results of these projects are verified by independent third parties.

Each carbon credit used by the Volkswagen Group represents -1 ton of CO_2e. After purchase, the carbon credit is always transferred to Volkswagen Group accounts and only then used (usually at a later date).

CANCELLATION OF CARBON CREDITS

	Unit	2024
Total carbon credits canceled in the reporting year[1]	tons of CO_2e	6,076,738
Share of projects to reduce CO_2 emissions	%	0
Removal projects from biogenic reductions	% / tons of CO_2e	0
Removal projects from technological reductions	% / tons of CO_2e	0
Share of projects to reduce CO_2 emissions	%	100
VERRA share	% / tons of CO_2e	70 / 4,232,578
Gold Standard share	% / tons of CO_2e	30 / 1,844,460
Share of projects within the EU	%	-
Share deemed the corresponding adjustment to Article 6 of the Paris Climate Agreement	%	-

1 This figure differs from the DCI figure, as only the carbon credits canceled in the reporting year are taken into account here, whereas the DCI also takes into account surplus carbon credits from the previous year

Net zero target taking account of carbon credits

It is the Volkswagen Group's aim to be a net carbon-neutral company by 2050. However, there is not yet a certification standard for a binding net zero target. This means that there are also no specific targets for the removal and storage of GHG emissions. Nevertheless, the Volkswagen Group has set itself the goal of basing its carbon offsetting actions on the requirements of the SBTi and the GHG Protocol and to limit their share to below 10%. The company will abide by internationally recognized standards in carbon offsetting.

Internal carbon pricing

We do not currently use an internal carbon price in investment decisions. However, we apply an abatement cost approach to support strategic decisions and to calculate and prioritize decarbonization actions in production. This involves relating various GHG emissions to the net present value, resulting in a value in €/ tons of CO_2e. This assessment produces an abatement cost curve, from savings per ton of CO_2e (energy efficiency actions) to high costs per ton of CO_2e (use of synthetic fuels). This abatement cost curve helps to prioritize actions and to estimate the total costs of target achievement. However, this approach is not yet used in individual investment decisions.

Pollution

The Volkswagen Group is pursuing the vision of a Zero Impact Factory, the aim of which is to reduce the emission and use of substances that lead to air and water pollution as well as substances of concern at its production sites.

MATERIAL IMPACTS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Pollution of air

Impacts in the area of air pollution

Air pollution can contribute to the deterioration of local air quality and affect humans and the environment.

As part of the double materiality assessment, the topic of air pollution was identified as a material actual negative impact. Negative impacts arise in particular from emissions during the use phase, i.e. when our customers use their vehicles. The statutory limits applicable upon vehicle registration are complied with.

Emissions that arise in the context of the core automotive production business are also relevant, both in the upstream and downstream value chain and in the Group's own business operations. As a minimum, the Volkswagen Group's production facilities comply with the statutory requirements for air pollutants associated with approval. Since air emissions are also caused along the upstream and downstream value chain, the Volkswagen Group requires its partners to work to the same high standards.

Interaction with strategy and business model

The impact identified in the double materiality assessment in relation to air pollution has an influence on the Group's business model, strategy and value chain. The overarching topic of minimizing air pollution is strategically anchored in the Group sustainability strategy regenerate+, the environmental mission statement goTOzero, the vision of the Zero Impact Factory and the Code of Conduct for Business Partners, among other things.

In addition, the Volkswagen Group is taking the following actions to respond to the influence of its material negative impacts on its business model, strategy and value chain in the area of air pollution:

Along the value chain, compliance with the Code of Conduct for Business Partners aims to reduce negative impacts. The Code of Conduct requires business partners to implement appropriate actions to reduce air pollution. Within the Volkswagen Group's business activities, the aim is to minimize negative impacts of this kind by putting policies in place (see "Policy: pollution" section) and by pursuing the vision of the Zero Impact Factory. This includes designing production sites to ensure that as few air-polluting substances as possible are emitted. During the use phase, the impact of vehicles will be reduced, in part, by selling a higher proportion of battery-electric vehicles. This target is anchored in regenerate+.

A detailed description and explanation of the actions is provided in the "Actions and resources: pollution" section.

Pollution of water

Impacts in the area of water pollution

Pollutants that enter waters can negatively impact the aquatic environment and people.

The discharge of pollutants into water was classified as a material actual negative impact along the value chain in the double materiality assessment.

Water is used at various points in the value chain. Chemicals are used in particular in the upstream supply chain for the extraction of raw materials and the production of components. This can lead to the resulting wastewater being contaminated with pollutants. The use of chemicals in our own production processes and during the use phase is considered to be less relevant.

All wastewater is treated before being discharged into receiving waters (for example rivers, lakes or seas) or must be disposed of appropriately. Furthermore, maximum concentrations for certain pollutants are defined for the direct and indirect discharges of wastewater, regardless of the legal requirements at the particular site. Compliance with statutory limits is a top priority for the Volkswagen Group.

The statutory provisions allow certain pollutants to be discharged into receiving waters. However, this discharge may only take place in accordance with the statutory requirements. This aims to ensure that the impact on the aquatic environment is kept to a minimum.

Interaction with strategy and business model

The impact of the Volkswagen Group in relation to water pollution identified in the double materiality assessment has an influence on the Group's business model, strategy and value chain. The topic of avoiding water pollution is anchored in the environmental mission statement goTOzero and regenerate+. The key elements here are minimizing the discharge of pollutants into waters and groundwater. The Volkswagen Group's Code of Conduct for Business Partners also requires its business partners not to cause any harmful water pollution.

The Volkswagen Group is applying the following actions to respond to the influence of its material negative impact on its business model, strategy and value chain in the area of water pollution:

In its own business operations, the Volkswagen Group's processes are designed to minimize pollution. Additionally, the Volkswagen Group reduces this impact by installing treatment and wastewater treatment plants at its production sites.

For suppliers in the upstream value chain, the Volkswagen Group implements the raw materials due diligence management system (RMDDMS) to address this impact. This system is designed to make raw materials procurement sustainable and transparent, thereby preventing negative environmental impacts such as water pollution.

Suppliers along the upstream value chain are also required to implement the Code of Conduct for Business Partners so as to mitigate the negative impacts. This calls for appropriate actions to comply with applicable laws and international rules for preventing water pollution.

The "Actions and resources: pollution" section provides a detailed description and explanation of the actions in this area of activity.

Substances of very high concern

Impacts in the area of substances of very high concern

When working with substances of very high concern, there is generally a risk of harm to people and the environment due to improper handling along the value chain. This topic therefore represents a material actual negative impact as defined by the assessment logic of the materiality assessment in the upstream and downstream value chain.

Some of the substances currently on the European Chemicals Agency's (ECHA) candidate list of substances of very high concern (SVHCs) are present in vehicle parts of the Volkswagen Group. The Volkswagen Group is committed to the responsible and appropriate handling of SVHCs and implements appropriate actions to prevent negative impacts on people and the environment. It complies with all legal requirements. As SVHCs are typically already part of the material composition of supplied vehicle parts, greater attention is paid to the release of SVHCs in the upstream and downstream value chain than in the Group's own operations and in the use phase of the vehicles.

Interaction with strategy and business model

The impact identified in the materiality assessment in relation to substances of very high concern has an influence on the Group's business model, strategy and value chain. The topic of substances of very high concern is anchored at an overarching level in an internal Group standard, which references the Global Automotive Declarable Substance List (GADSL) (www.gadsl.org). The Code of Conduct for Business Partners requires business partners to take appropriate actions to eliminate or avoid using substances and materials that adversely impact people and the environment (for example carcinogenic substances, mutagens or reprotoxic substances) in the context of applicable laws and taking into account the applicable requirements of the Volkswagen Group. This topic is also identified as an area of activity in the Group sustainability strategy regenerate+, where the focus is on reducing and substituting substances of concern in products. The detailed formulation of the strategic topic is currently still in the development phase and will be defined in greater detail in the course of the further strategy processes.

The Volkswagen Group is countering the material negative impact on its business model, strategy and value chain in the area of substances of very high concern with the following actions:

In its own business operations, the Volkswagen Group is reducing the impact by implementing precautionary actions for risk mitigation and control, as well as actions to avoid and replace SVHCs.

For suppliers from the upstream value chain, the Volkswagen Group is addressing the impact with the help of the Code of Conduct for Business Partners, which calls on business partners to implement actions to avoid the use of SVHCs.

The Volkswagen Group regards chemical compliance as a crosscutting issue that is integrated into and influences existing policies.

The "Actions and resources: pollution" section provides a detailed description and explanation of the actions in these two areas of activity.

Microplastics

Impacts in the area of microplastics

Microplastics enter the environment as a by-product of the decomposition of plastic and are very difficult to break down, taking an extremely long time to decompose. They can now be found in all regions and ecosystems on our planet. They have also been detected in human and animal organisms. Microplastics can have very different constituents and can negatively impact people and the environment.

The double materiality assessment identified a material actual negative impact of microplastics in the downstream value chain. Microplastics can enter the environment primarily through tire abrasion. This affects vehicles in general, including those produced by the Volkswagen Group.

Interaction with strategy and business model

The impact identified in the double materiality assessment in relation to microplastics has an influence on the Group's business model, strategy and value chain.

Microplastics are primarily located in regenerate+ in the nature dimension, which also considers the reduction of microplastics. The detailed formulation of the topic is currently still in the development phase and will be fleshed out in the course of the further strategy processes.

POLICY: POLLUTION

Policy on pollution prevention

The topic of pollution prevention is part of the environmental mission statement goTOzero and is anchored in an associated policy. The mission statement reads: "We reduce harmful emissions in air, soil and water."

The double materiality assessment identified material negative impacts related to pollution. Production processes and product use lead to air and water pollution due to emissions associated with financial and reputational risks.

The identified impacts are addressed in the policy on pollution prevention. For example, the topics of air and water pollution are strategically anchored in the environmental mission statement goTOzero. The main focus here is on reducing the discharge of pollutants into the air and waters. In addition, the goal of increasing unit sales of battery-electric vehicles is anchored in regenerate+. This goal aims to reduce air pollution. The Code of Conduct for Business Partners is also designed to ensure that less harmful air or water pollution is caused.

Regarding the topic of pollutants, the strategic vision of the Zero Impact Factory is as follows: "We design our production facilities so that they emit as few substances as possible that are harmful to the health of humans, animals or vegetation, or to soil, waters or air". In relation to water protection, the focus is on general minimization of pollutant discharge, and also on soil and groundwater protection when using water-polluting substances. Any deterioration in the ecological and chemical status of the waters into which wastewater is discharged must be avoided.

The issue of damage to soil, water and air is anchored in the Code of Conduct for Business Partners: Business partners must ensure that they do not cause any harmful soil changes, water pollution, air pollution, harmful noise emissions or excessive water consumption that could lead to significant harm to the natural basis for food and drinking water or human health, or to minimize this to the greatest extent possible.

In turn, the topic of SVHC is strategically anchored in the Group standard Environmental standard on material and chemical conformity of products. The Code of Conduct for Business Partners also requires the registration, evaluation and restriction of substances and raw materials. This includes compliance with international agreements (Minamata Convention, Stockholm Convention) and legal instruments on the production, use, handling, and disposal of certain substances. It also includes taking actions to avoid the use of substances that are hazardous to the environment or people, in accordance with applicable laws and regulations and Group requirements.

The Group also has plans to further improve the management of chemical substances in order to realize this strategic anchoring. As a world-leading automotive manufacturer and provider of mobility services, the Volkswagen Group is aware of the increasing importance of the sustainable management of chemical substances. The legal and regulatory requirements of chemicals management are complex and vary in the global markets where the Group operates. The Volkswagen Group is committed to complying with existing regulations and to responsibly handling chemical substances that are required for its products, activities and services.

In addition, the Volkswagen Group regards chemical compliance as a crosscutting issue. The necessary processes have already been integrated into existing management systems to ensure compliance. A further step is to implement chemical compliance in existing policies, defining specific roles and process requirements.

In addition, the Volkswagen Group engages in needs-based exchanges with its employees, suppliers, industry associations and regulatory authorities in order to reduce the use of hazardous chemicals. This ranges from Research and Development, through Design, Production, Distribution and Logistics, to the reuse and recycling of products.

Registration, evaluation and restriction of substances and raw materials are also emphasized in the Code of Conduct for Business Partners. Business partners are expected to take appropriate actions to eliminate or avoid the use of substances and materials that have adverse environmental or health impacts, such as carcinogens, mutagens or reprotoxic substances. When doing so, they must comply with applicable laws and the applicable requirements of the Volkswagen Group.

Avoiding air and water pollution

In order to avoid pollution of air and water, the environmental mission statement goTOzero and the ECMS play a key role in the policy on pollution prevention. The strategic vision of the Zero Impact Factory focuses on minimizing pollutant discharges at production sites. There are specific requirements for this, such as limits for the concentration of pollutants in wastewater, which must be documented in measurement reports. The design of the production sites should be geared towards ensuring that the use of local water resources does not negatively impact them. No substances should be discharged into waters that could impair their natural condition.

The Volkswagen Group has installed various processes in its business operations to ensure that the due diligence requirements of the *Lieferkettensorgfaltspflichtengesetz* (LkSG – German Supply Chain Due Diligence Act) with respect to harmful soil changes, water pollution, air pollution and harmful noise emission are met. The introduction of these processes is supported by a Group policy. This provides a framework and minimum requirements for how an ECMS should be implemented in an organization. Each company then develops its own processes to comply with these rules. A compliance and risk management system is also integrated into the ECMS, which is designed to deal with the risks of the aforementioned environmental media preventively at an early stage. For example, production sites typically conduct an environmental aspects analysis that allows them to identify and assess potential environmental risks from production processes at an early stage. As a result, the decision-makers can take preventive actions to mitigate the risks.

The environmental management requirements apply across all phases of the business activity and the entire life cycle of the products and services. Each controlled company is responsible for the detailed formulation of the processes. These are operationally active and belong mostly to the Volkswagen Group and are therefore responsible and accountable for implementing this Group policy. The Federal Office of Economic Affairs and Export Control (BAFA) report on compliance with due diligence obligations in accordance with the LkSG comments on the aforementioned processes in relation to the LkSG.

Minimizing the use of substances of very high concern

To enable compliance in all markets, the Volkswagen Group and its suppliers must comply with the regulations, laws and regulatory requirements in the target markets. In addition, compliance with standards, including the Group standards for Environmental standard on material and chemical conformity of products and Evidential and approval requirements for delivery of chemicals, is a mandatory contractual requirement for suppliers. This ensures compliance with all applicable material regulations and restrictions.

The Group standard Evidential and approval requirements for delivery of chemicals addresses the registration, evaluation and restriction of chemical substances. Chemicals classified as carcinogenic, mutagenic or reproductive toxic (reprotoxic) in categories 1A or 1B are generally prohibited from use (terminology used in Regulation (EC) No. 1272/2008 – CLP). Decisions to use them may be made in justified exceptional cases only with due consideration of the principle of substitution. Substances of very high concern, such as those referred to in Regulation (EC) No 1907/2006 (REACH), Article 57 (2), are largely to be avoided and may be refused on a case-by-case basis following assessment of their longer-term usability.

The regulation *Vorschriftenkoordinator/Vorschriftenexperten* (VKO/VEX - coordinator/regulation expert) process was implemented in Technical Development to navigate the approximately 240 laws on harmful substances worldwide, including end-of-life vehicle, battery, chemical and biocide laws, and requirements on interior emissions. This is defined in a separate Group process standard. Implementation and internal/external communication are carried out in accordance with Group standard Environmental standard on material and chemical conformity of products which references the GADSL. Since 2000, compliance has been verified by participating in the international material data system (IMDS) (www.imdsystem.com) and by consistently

requiring supplier data on the chemical composition of components and materials in vehicles. All IMDS data is assessed in line with relevant applicable legislation.

The Group standard Environmental standard on material and chemical conformity of products requires avoidance of the use of SVHCs within the meaning of the EU REACH Regulation No. 1907/2006 that are included on the ECHA candidate list. Outside of the law, the Volkswagen Group requires substances subject to authorization pursuant to Annex XIV of the REACH Regulation (EC) No 1907/2006 to no longer be used in new developments as a rule, even if the authorization requirement does not enter into effect until after series production.

In addition, an alternative test for the use of substances (within the scope of Appendix C of Annex I to Commission Delegated Regulation (EU) 2021/2139) for deliverables that are relevant for reporting under the EU Taxonomy Regulation is carried out by the supplier with professional and technical support. Among other things, this scope includes SVHCs. In its vehicle-related business, the Volkswagen Group has defined existing specifications and processes in greater detail with the aim of avoiding and replacing the substances relevant for reporting under the EU Taxonomy Regulation. On this basis, the Group's analyses look at vehicle-related materials and components of all-electric vehicles in order to assess whether the SVHCs and other substances of relevance under the EU Taxonomy can be substituted, taking into account factors such as technical and economic criteria.

Furthermore, we impose an obligation on our business partners to comply with the requirements based on international conventions and other legal instruments regarding the production, use, handling and disposal of certain substances. In particular the requirements of the Minamata Convention on Mercury of October 10, 2013 and the Stockholm Convention on Persistent Organic Pollutants (POPs) of May 23, 2001, as well as the corresponding applicable implementing regulations at national and supranational level, must be complied with.

Avoiding incidents and emergency situations

The Volkswagen Group requires the controlled companies to have in place contingency plans and hazard prevention actions that are specially tailored to company-specific environmental risks, and that are aimed at avoiding or minimizing negative effects on the environment. Examples of specific actions include communicating contingency plans to employees, relevant departments and contractors and training them in hazard prevention. Communication is a matter for the individual companies and can take place, for example, using noticeboards, instructions or training. They also include testing and reviewing the contingency plans and ensuring the availability of resources for expert advice in the event of an incident.

The contingency plans should be reviewed and updated in the event of significant physical or operational changes. This also incorporates experience from exercises or actual emergency actions. The frequency of the exercises performed is left to the discretion of each company, which is responsible and accountable for implementing the corresponding Group policy (see the "Overarching policies" section in the "Introduction to environmental management" chapter for more information on the scope).

TARGETS: POLLUTION

Overarching targets

The overarching specific UEP metric takes into account factors including the VOC emissions associated with vehicle and components production. The target for the UEP metric is therefore directly related to air pollution.

The impact points target for reducing the absolute environmental impacts of the production sites also includes a target for emissions into the air and water. The environmental aspect of air pollutants is used to monitor air emissions of VOCs, nitrogen oxides and dust, CHCs and HFCs during production. In addition, the environmental aspect of wastewater is used to monitor emissions of chemical oxygen demand (COD), nitrogen, phosphorus, nickel and zinc into waters.

The site checklist also covers the areas of pollutants and water. For example, it includes criteria such as the use of VOC-reduced rinsing thinners and paints, requirements for VOC emissions from paint shops, restrictions on dust emissions, avoidance of the use of heavy metals and hazardous substances, and limits for the discharge of chloride, sulfate, nickel, zinc, manganese and COD into wastewater.

Prevention and control of substances of very high concern

No measurable outcome-oriented targets within the meaning of the ESRS have been defined for the production sites in relation to the prevention and control of SVHCs. Systematic data collection is currently being worked on to enable end-to-end quantitative reporting. The large number of substances, as well as the concentration data of SVHCs in chemical mixtures, which are often only specified by suppliers within concentration ranges, pose a challenge in terms of data collection and quantification.

The Volkswagen Group and the operators at the sites of the individual brands always act in accordance with the applicable legal requirements. If SVHCs are used during vehicle production or are present in the vehicle, they are recorded, verified and approved in advance by internal chemical management processes and systems. In addition, the Volkswagen Group implements processes to generally avoid SVHCs and to review them for substitutability. One example is the verification of substitutability and associated reduction of SVHCs during vehicle production and in components of all-electric vehicles in accordance with the EU Taxonomy Regulation.

Information on target drivers

The voluntary targets defined for the UEP metric, impact points and site checklist all relate to the topic of pollution. The Volkswagen Group generally complies with the applicable emission regulations, including EU Directive 2010/75/EU on industrial emissions (IED), and national requirements such as the *Abwasserverordnung* (AbwV - German Waste Water Ordinance).

ACTIONS AND RESOURCES: POLLUTION

Compliance with legal requirements with regard to chemicals and substances of very high concern

There is no separate management system for chemical compliance requirements. These requirements are already being met continually by the operating organizations and suppliers and are expected to be integrated into existing management systems in the future. The aim is to manage the risk associated with the handling of chemicals and SVHC in the Volkswagen Group within the structures of the Three Lines Model of the Institute of Internal Auditors (IIA). The first line comprises operational risk management in the business operations, the second line Group-wide risk management and the third line Internal Audit, which reviews the effectiveness of the first two lines. The tools for identifying and implementing the specific requirements are supplied by the management systems used. In addition to the management system tools, regulatory requirements are also identified by the second line of the VKO/VEX and distributed within the organization as needed. To verify material-related requirements, the second line accesses the data from the internal material information system (MISS). The data used is the supplier data from the IMDS.

In addition to continuous risk management using the Three Lines Model, the Volkswagen Group has established specifications and processes for managing regulatory requirements (VKO/VEX) and internal requirements (for example by means of the Group standards Environmental standard on material and chemical conformity of products, Evidential and approval requirements for delivery of chemicals) in the vehicle-related business, which

generally stipulate that SVHCs must be avoided and substituted. On this basis, vehicle-related chemicals and components of all-electric vehicles are analyzed in accordance with the requirements of the EU Taxonomy Regulation and the substitutability of SVHCs in these products is reviewed together with suppliers, taking into account technical and economic criteria. The "EU Taxonomy" chapter provides a specific overview of the components considered in the Volkswagen Group.

Prevention and control of emissions to water

In the interests of water protection, the Volkswagen Group does not discharge untreated wastewater resulting from the Group's activities into receiving waters. Pretreatment plants are usually used to remove pollutants from wastewater that cannot be removed in a biological wastewater treatment plant. For example, light liquid and grease separators, evaporators and oil skimmers are installed to remove fat, oil and emulsions. By contrast, metals are removed by means of the physico-chemical precipitation process. COD is practically eliminated through adsorption, filtration or flotation processes. The final step before discharge is biological treatment of the pretreated wastewater using a membrane bioreactor to remove potential pollutants such as phosphorus and nitrogen. If the wastewater is not treated at the production site itself, it is treated in an external treatment plant or disposed of appropriately as waste.

In line with the Zero Impact Factory strategic vision, further actions are being considered in production with regard to pollutants in wastewater: In the interests of preventive water protection, for example, when working with substances that are potentially hazardous to water, it is important to ensure that the relevant containers are fitted with a secondary barrier for retention in the event of an accident. Additionally, the site checklist for wastewater discharge specifies maximum concentrations for the discharge of certain pollutants into wastewater, irrespective of the legal requirements at the site in question.

Compliance with measurement obligations is ensured by regular wastewater analysis, the frequency of which varies depending on the pollutant, and is based on the legal and internal requirements (in certain cases, samples are taken several times a day).

Prevention and control of emissions to air

The Volkswagen Group is committed to continuously reducing its air emissions in its own activities and in the supply chain. Within the company's own operations, in addition to the actions for compliance with all legal requirements, the impact points target serves to reduce the absolute environmental impacts of the production sites, and also takes air emissions into account.

In addition, the site checklist defines criteria including the use of VOC-reduced rinsing thinners and paints, requirements for VOC emissions from paint shops and restrictions on dust emissions.

In the upstream and downstream value chain, compliance with the Code of Conduct for Business Partners is intended to reduce the emission of air pollutants by requiring business partners to implement appropriate actions to reduce air pollution.

By transforming its portfolio towards e-mobility, the Volkswagen Group is also making a contribution to improving local air quality by reducing nitrogen oxide and particulate matter emissions (for more information see the "Actions and resources: climate change" section of the "Climate change" chapter).

Engagement in the upstream and downstream value chains for raw materials

The Volkswagen Group is aware that its suppliers' business activities can have a significant impact on people and the environment. The extraction and processing of some of raw materials for the automotive industry is associated with environmental risks, such as air and water pollution, as well as deforestation. To enable greater transparency, the Group publishes a Responsible Raw Materials Report. This provides detailed information on the Volkswagen Group's methodologies and activities in the context of the RMDDMS for sustainable raw material procurement.

The RMDDMS includes continuous risk-based due diligence reviews to identify and assess actual and potential negative impacts as well as potential human rights risks in the supply chain. The supply chains for sustainable raw materials sourcing require a particular focus, as the Volkswagen Group's risk analysis reveals a high exposure to human and environmental risks that occur more frequently among indirect suppliers. The RMDDMS provides additional assessments for high-risk raw materials, which enable risk mitigation and actions to prevent systematic risks and reviews of their effectiveness. At present, 18 raw materials are identified as particularly risky. These include the battery raw materials cobalt, lithium, nickel and graphite, the conflict minerals tin, tungsten, tantalum and gold (3TG), and aluminum, copper, leather, mica, steel, natural rubber, platinum group metals, rare earths, magnesium and cotton.

Audits are one of the main tools of the RMDDMS, serving to assess risks in the Volkswagen Group's lower supply chains and derive risk mitigation actions. They supplement other raw material due diligence tools and promote transparency, compliance and a culture of continual improvement and dialog throughout the upstream supply chain. Further actions that can be derived from the RMDDMS are described in the "Workers in the value chain" chapter.

The Volkswagen Group includes the responsibility of its business partners in its commitment to improving the supply chain. For this reason, the Code of Conduct for Business Partners requires business partners to implement appropriate actions to eliminate or avoid using substances and materials that adversely impact people and the environment (for example carcinogenic substances, mutagens or reprotoxic substances).

The Volkswagen Group aims to procure responsible sourcing of raw materials and is guided by the five steps of the Organization for Economic Cooperation and Development's (OECD) Due Diligence Guidance for Responsible Business Conduct and the requirements of the OECD's Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Accordingly, business partners may only use raw materials in smelting works or refineries of materials that meet the requirements of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. They must also have been verified by the Responsible Mineral Initiative (RMI) or similar organizations. The Volkswagen Group expects its suppliers to avoid all minerals from conflict-affected smelting works. However, the aim is not to prohibit the procurement of conflict minerals or other products originating from conflict-affected and high-risk areas, but to encourage the procurement from responsible sources within these regions. The identification of the 3TG smelting works and refiners used by suppliers or their sub-suppliers must be disclosed annually. In line with international best practices, the Volkswagen Group also expects its suppliers to complete Conflict Mineral Reporting Templates (CMRT). As well as identifying the smelting works and refiners, this template also allows the countries of origin of the mined materials to be specified. Compliance with the OECD guidance is assessed using the RMI's Responsible Minerals Assurance Process (RMAP). The RMAP is an independent third-party assessment of the management systems and sourcing practices of smelting works/refineries to confirm compliance. To underscore its commitment to responsible supply chains for conflict minerals, the Volkswagen Group voluntarily publishes a CMRT to ensure end-to-end transparency.

METRICS: POLLUTION

Air and water pollution

Metrics on emissions into air and water

The metrics recorded across the Group are shown in the following. If thresholds for other air or water emissions as defined by the European Pollutant Release and Transfer Register (E-PRTR) are exceeded at European production sites, the sites report this to the competent authorities as part of their annual reporting obligations.

EMISSIONS INTO AIR AND WATER

		2024		2023	
	Unit	Volkswagen Group	Companies with operational control	Volkswagen Group	Companies with operational control
Air emissions					
VOC[1]	tons	10,963	979	10,635	1,384
CHCs	tons	5.7	4.2	8.3	5.5
HFCs	tons	22.6	6.1	27.4	7.5
NO_x[1]	tons	1,126.1	332.0	1,209.5	334.1
SO_2[1, 2]	tons	0.0	371.4	399.3	378.9
Dust (PM10)[1, 2]	tons	148.4	0.0	138.0	0.0
CO[1, 2]	tons	0.0	0.0	0.0	0.0
Water emissions	tons				
TOC[1, 2]	tons	463.1	157.9	578.9	259.3
Zinc[1, 2, 3]	tons	2.2	0.3	-	-
Nickel[1, 2, 3]	tons	2.6	0.2	-	-
Dissolved fluoride[1, 2, 3]	tons	26.6	17.9	-	-

1 Only sites that exceed the threshold as defined by the E-PRTR (Annex II).
2 This metric does not include the TRATON GROUP sites.
3 No reporting possible for the 2023 reporting year.
The information for 2023 is provided voluntarily and has not been externally validated.

Description of measurement methodologies

Group standard 98000 defines indicators for emissions to enable their consistent collection at Volkswagen Group sites. They include the recording of pollutants discharged into wastewater such as zinc, nickel, COD, total organic carbon (TOC) and dissolved fluoride as well as air emissions such as dust, VOCs, nitrogen oxides (NO_x), sulfur dioxide (SO_2), CFCs and HFCs. The recording hierarchy in accordance with Group standard 98000 applies in conjunction with the permitted measurement methods described in the standard. These are parameter-specific and based on the state of the art.

Context information on pollution of air

The Volkswagen Group's production sites record a range of environmentally relevant air emissions, irrespective of national legislation or regulatory requirements. These include refrigerants containing climate-relevant CFCs or HFCs, for which the quantities emitted from stationary facilities are recorded. Emissions from combustion processes, such as nitrogen oxides, carbon monoxide (CO) and sulfur dioxide, are calculated by multiplying the quantities of fuel used by country-specific emission factors, unless more precise, site-specific emission factors are available. In addition, the VOC emissions, which are mainly released during painting processes, are recorded. When calculating VOC emissions, as a minimum those emissions required by national legislation or plant permits are recorded. VOC emissions from painting facilities must be calculated for all vehicle paint shops. If VOC emissions are combusted through thermal post-combustion or regenerative post-combustion, the CO_2 emissions released must also be recorded. With regard to recording particulate matter with a diameter of 10 µm or less (particulate matter 10 – PM10), it is permitted to record the total dust quantity and then convert it into PM10 using conversion factors.

Context information on pollution of water

The data collection interval and analytical methods for the pollutant concentrations contained in the wastewater are based on the requirements of the site approvals and/or relevant laws (in Germany, for example the AbwV) and vary from quarterly measurements to daily measurements, depending on the pollutant. In addition, Group standard VW 98000 sets certain minimum standards for specific pollutants, which are to be sampled at least quarterly and based on relevant ISO standards. Additionally, the scope of the analysis should represent at least 80% of the total volume of a site's wastewater. DIN EN ISO 10304-1 is used to measure dissolved fluoride in wastewater. The specifications of DIN EN 1484 are used to measure TOC. Alternatively, the COD can be measured and converted into TOC. The specifications of DIN EN ISO 11885 are used for zinc and nickel emissions. The reported annual emission quantities into wastewater typically result from multiplying the measured wastewater volumes and the averaged, analytically determined concentrations of the relevant pollutants.

Processes for recording and accounting

Each site is responsible for providing the environmental indicators. The environmental indicators are recorded in the EIS in accordance with Group standard 98000 and validated at Group level. The sites must work towards ensuring that the environmental indicators are determined for each specified recording interval using the same system. Year-on-year changes in excess of a predefined tolerance level must be justified.

Information sources

Permitted measurement methods are generally based on national and international laws and regulations (for example German Federal Emission Control Act, EU F-Gas Regulation), internationally recognized standards and norms (for example GHG, ISO standards), industry-specific requirements (for example VDA emission factors) and scientific findings (for example IPCC assessment reports).

Reasons for choosing alternative methodology to quantify emissions

Pursuant to the measurement hierarchy of Group standard 98000, environmental data is to be collected primarily by measurement. If direct and complete measurements are not technologically possible or not economically justifiable, calculations substantiated by measurements or by extrapolations based on assumptions may be used. This also applies where calculations or extrapolations produce results that are equivalent to direct measurements in terms of accuracy. The decision on the data collection methodology is made at site level. The assumptions are site-specific and are verified by random sampling.

Standard, measurement uncertainty and range of estimates

Pursuant to the measurement hierarchy of Group standard 98000, direct measurement of physical amounts takes priority over calculation based on parameters. Estimates are made with the lowest priority based on transparent assumptions.

Substances of very high concern

The IMDS-SVHC list of the European Automobile Manufacturers' Association (ACEA), which is derived from the ECHA candidate list, is used as the basis for recording substances of very high concern.

Total amount of SVHCs generated, used or procured during production

If SVHCs are used as substances or in mixtures during vehicle production, or become a component of the Automotive product during the production process, they have been checked, recorded and approved in advance by internal chemical management processes. An evaluation of substance-related quantities for SVHCs cannot currently be carried out in full at Group level. An approach for recording the quantities of all SVHCs used as substances or in mixtures (SVHC > 0.1 M%) during vehicle production is currently being developed in conjunction with Procurement. This is intended to ensure that the total quantity of SVHCs (kg/a) procured and used can be recorded in future.

If different chemical substances are combined during the production process, such as in process baths, there is a possibility of new chemical compounds forming on a small scale. Due to the small quantities involved, these are not currently recorded.

Total amount of SVHCs generated in production in the form of emissions

The Volkswagen Group and the operators at the sites of the individual brands always act in accordance with the applicable legal requirements. The sites and systems technology have been approved by the authorities in accordance with these requirements. This applies in particular to environment-relevant installations, where operations generate emissions to air and water, resulting in extensive operator obligations being outlined in their plant permits. Within the framework of such ancillary provisions, recurrent emission measurements are also conducted to ensure compliance with applicable limits.

To facilitate Group-wide compliance with all binding commitments on production-related emissions, the Volkswagen Group has implemented the Three Lines Model described in the "Actions and resources: pollution" section.

There is currently no limit that encompasses the full range of all known SVHCs. There is also no measurement method for recording the total spectrum of all SVHCs. It is therefore not possible to gather data on these emissions in accordance with the latest advancements.

Total amount of SVHCs generated in production as part of products

The total amount is calculated for each SVHC. To do this, the proportion by weight per SVHC is first determined for each component containing SVHCs (threshold of 0.1% per smallest relevant item in the component according to REACH Article 33) and added up for the corresponding reference vehicles (ID.4 and Tiguan) (for more information on the reference vehicles, see the "Metrics: resource use and circular economy" section in the "Resource use and circular economy" chapter). Calculation of the total amount of each SVHC is based on production figures for battery-electric vehicles and internal combustion engine vehicles. Lastly, the SVHCs are allocated to the reportable hazard classes. As individual substances can be allocated to multiple hazard classes, the overall total amount does not correspond to the sum of the individual hazard classes due to double entry. Nevertheless, in order to provide a total amount of the SVHCs used, the total weight per substance is allocated to only one hazard class in the following table.

In addition, the SVHC information for the Porsche AG Group and TRATON GROUP is provided below, excluding the consideration of MAN Energy Solutions. The values are determined as described above.

SUBSTANCES OF VERY HIGH CONCERN FOR THE VOLKSWAGEN GROUP

Hazard class	Unit	2024 Battery-electric vehicles	2024 Internal combustion engine vehicles
Carcinogenic (Article 57a)	tons	6	73
Mutagenic (Article 57b)	tons	-	-
Toxic for reproduction (Article 57c)	tons	5,398	39,365
PBT (Article 57d)	tons	0.5	5
vPvB (Article 57e)	tons	6	151
Endocrine disrupting properties (Article 57f – environment)	tons	7	58
Endocrine disrupting properties (Article 57f – human health)	tons	0.004	0.1
Respiratory sensitizing properties (Article 57f – human health)	tons	4	0.2
Specific target organ toxicity after repeated exposure (Article 57f – human health)	tons	0.3	26
Likely to have serious and concerning effects on human health and/or the environment (Article 57f)	tons	0.3	26
Total of substances of very high concern as component of the product	tons	5,421	39,672

Total amount of SVHCs generated in production as part of products in the Porsche AG Group

The determination of SVHC volumes is based on a reference vehicle approach. One vehicle model is analyzed for each of the five vehicle segments (two-door sports car, sports utility vehicle (SUV) internal combustion engine, SUV battery-electric vehicle, saloon internal combustion engine, saloon battery-electric vehicle). The SVHC quantities of the reference vehicle are extrapolated to the vehicles produced in each segment during the reporting year based on the production quantities. Finally, overarching segment totals are calculated for each substance, and the substances are allocated to the appropriate hazard classes for substances of concern.

SUBSTANCES OF VERY HIGH CONCERN IN THE PORSCHE AG GROUP

Hazard class	Unit	2024
Carcinogenic (Article 57a)	tons	14
Mutagenic (Article 57b)	tons	0
Toxic for reproduction (Article 57c)	tons	2,832
PBT (Article 57d)	tons	0
vPvB (Article 57e)	tons	7
Endocrine disrupting properties (Article 57f – environment)	tons	15
Endocrine disrupting properties (Article 57f – human health)	tons	0
Respiratory sensitizing properties (Article 57f – human health)	tons	5
Specific target organ toxicity after repeated exposure (Article 57f – human health)	tons	0
Likely to have serious and concerning effects on human health and/or the environment (Article 57f)	tons	10
Total amount of substances of very high concern as component of the product	tons	2,883

Total amount of SVHCs generated in production as part of products in the TRATON GROUP

To calculate the amounts (SVHCs), the TRATON GROUP uses the lead content in starter batteries, which according to a study by MAN Truck & Bus, make up 98% of all SVHCs in a typical truck. For 2024, the amount of SVHCs in the products corresponds to a total amount of 24,780 tons.

Water

Water is a valuable resource. We combine sustainable water management with a number of aspects; our aims include reducing freshwater consumption, making water use more efficient and improving groundwater protection.

MATERIAL IMPACT AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact in the area of water

Water is an indispensable resource in the Volkswagen Group's value chain and is needed at various points both within our own production processes and, to an especially high degree, in the upstream supply chain for the extraction and processing of raw materials. A relevant level of water consumption can also be observed in the use phase of vehicles, caused, for example, by the washing of vehicles or fuel production. Using large quantities of water, particularly in regions where it is in short supply, leads to water stress and can contribute to the depletion of groundwater reserves, the impairment of ecosystems and the escalation of social tensions. This was identified in the double materiality assessment as a long-term actual impact that negatively affects the environment.

Interaction with strategy and business model

The impacts of water use identified in the double materiality assessment are factored into the Group's business model, strategy and value chain. The sustainable use of resources, including water, is anchored at an overarching level in the Group sustainability strategy regenerate+. Based on this, increasing resource efficiency is also one of the action areas in the Volkswagen Group's environmental mission statement goTOzero. The focus here is on systematically encouraging reuse and recycling approaches along the entire value chain.

The closed-loop circulation of process water and the associated reduction in the use of fresh water are anchored in the Zero Impact Factory strategic vision for the Volkswagen Group's own production sites. Specifically, we are aiming to reduce water withdrawal at passenger car and light commercial vehicle production sites by 30% by 2035 compared with 2018. At selected hot spot locations in areas with water stress, the reduction of water withdrawal will be as much as 40%. Our commitment to achieving this target will help mitigate the identified impacts of water use.

The Code of Conduct for Business Partners requires business partners to take appropriate action to ensure responsible use of water. Business partners confirming that they comply with corresponding sustainability requirements and pass them on to relevant business partners should enable continuous application of the requirements along the upstream and downstream value chain.

POLICY: WATER

Policy for sustainable water management

Water management in the Volkswagen Group is set out in a dedicated policy. One of the focal points of the approach is conservation of water as a resource. In line with the regenerate+ strategy, the Volkswagen Group is working to continually reduce the need for primary raw materials, including water.

As part of its environmental mission statement, the Volkswagen Group also sets itself goals for conserving resources. With regard to water, this involves improving resource efficiency and promoting reuse approaches. Another action area in the mission statement is protecting ecosystems, with the associated goal of reducing harmful emissions into water.

Water is also a focal point of our Group-wide Zero Impact Factory strategic vision. Our production sites must be designed their water use has the least possible negative impact on water as a local resource. The Zero Impact Factory therefore focuses specifically on reducing water withdrawal, increasing reuse of water, using water responsibly (particularly in areas with water stress), minimizing the input of water-polluting substances and preventing deterioration of the ecological and chemical quality of receiving water.

The Code of Conduct for Business Partners also stipulates that business partners have an obligation to take appropriate actions to minimize water consumption at their sites and along the business partners' own supply chains. These actions should ensure that they do not cause any water pollution that could lead to significant harm to the natural basis for drinking water.

In the downstream value chain, the Volkswagen Group is unable to regulate relevant water consumption by means of its own levers.

Water management at the company

Water is needed for numerous reasons at the production sites, such as for painting, cooling and sanitary purposes. The use of freshwater is necessary in many areas, around two thirds of which is obtained from external suppliers such as municipal water boards. Around a third of water withdrawal is covered through our own wells, rainwater and abstraction from surface water. Production sites are part of the local water cycles and affect the water resources available through water withdrawal, treatment and wastewater discharges.

In this connection, internal water treatment is becoming increasingly important. A growing number of sites are starting to reuse their treated wastewater in production processes, in cooling towers, in sanitary facilities or for irrigation purposes, thereby reducing their need for water withdrawal. A closed loop and recycling of cooling or process water reduces freshwater consumption and wastewater generation and therefore contributes to responsible use of water as a resource. The Volkswagen Group strives to achieve the highest possible technical treatment level and does not release any untreated wastewater into receiving waters. Nearly all sites have pretreatment systems that remove harmful substances from wastewater (for more information, see the "Actions and resources: Pollution" section in the "Pollution" chapter). If wastewater is not treated on site, it is treated in an external treatment plant or, in individual cases, disposed of as waste.

Water withdrawal in water risk areas

The use of freshwater in vehicle production may impact water availability in the region. A proportion of water withdrawal by the Volkswagen Group takes place at sites in areas with water stress. Responsible use of water is particularly important in such regions to avoid further shortages. This is why the Volkswagen Group's Zero Impact Factory strategic vision places particular emphasis on reducing water withdrawal and making water use more efficient in areas with water stress.

Conservation of resources is anchored in the Volkswagen Group's goTOzero environmental mission statement. Together with business partners, the Volkswagen Group aims to reduce the use of natural resources along its supply chain.

In any comparison between production sites and the supply chain, the largest share of water withdrawal occurs within the supply chain, in particular as a result of the extraction and processing of raw materials. The Code of Conduct for Business Partners requires business partners to take appropriate actions to ensure responsible use of water, with water-scarce regions taking priority.

Business partners confirming that they comply with corresponding sustainability requirements and pass them on to relevant business partners should enable continuous application of the requirements along the upstream and downstream value chain (for more information, see the "Actions and resources: Water" section).

Strategies for sites in water risk areas

The Volkswagen Group's policies relating to the environment apply to all production sites. The Zero Impact Factory strategic vision addresses the reduction of water withdrawal and the efficient use of water, particularly in areas with water stress.

TARGETS: WATER

Overarching targets

Overarching targets are set for the "Water" chapter based on the goals outlined above (see the "Overarching targets and metrics" section in the "Introduction to environmental management" chapter): By 2025, the production-related environmental impacts at all sites where we produce passenger cars and light commercial vehicles are to be reduced by 45% compared with 2010. As well as other aspects, the UEP metric also includes water consumption per vehicle. Additionally, the topics of water consumption and reuse of water are addressed by analyzing water withdrawal and wastewater discharge as part of the Impact Points method. The Volkswagen Group also considers the topic of water as part of the Site Checklist. Within the water area of activity, specific criteria for improving water management at the production sites are considered.

Group-wide reduction in water withdrawal

The Volkswagen Group has set specific targets for water withdrawal at its production sites. These were defined together with the brands against a backdrop of rising water stress in the IPCC climate scenarios and taking the market situation into account. Among other things, they are designed to help reduce the risk of future supply bottlenecks. Water withdrawal at the Volkswagen Group's production sites (with the exception of TRATON GROUP and MAN Energy Solutions) is to be reduced by 30% on average across the Group by 2035 compared with 2018 (baseline value: 45.6 million m³). At relevant production sites in areas with moderate to extreme water stress (known as "hot spot" locations), water withdrawal is set to be reduced by as much as 40% (baseline value: 28.1 million m³). The Verisk Maplecroft database is used to identify locations with water stress and hot spot locations (see section "Metrics: Water" for further information). Data on water withdrawal at the production sites is collected in accordance with the internal 98000 standard and reflects the requirements of the ESRS. With these voluntary targets, the Volkswagen Group is contributing to the Sustainable Development Goals SDG 6.4 (Clean water and sanitation), SDG 12.2 (Responsible consumption and production) and SDG 13 (Climate action), among other things.

In the 2024 reporting year, water withdrawal Group-wide (excluding TRATON GROUP and MAN Energy Solutions) was 32.5 million m³, a reduction of 13.1 million m³ compared with the base year 2018, or a target achievement of 94.9%. Along with economies of scale, VW Kraftwerk GmbH's fuel switching from coal to gas at the Wolfsburg site accounts for a large share of the progress already made in achieving the target. As a consequence of the fuel switching, the quantity of waste heat fell significantly, and with it cooling water requirements, reducing VW Kraftwerk GmbH's water withdrawal by nearly 2 million m³ since 2018.

Water withdrawal for the hot spot sites in the 2024 reporting year was 17.8 million m³, a reduction of 10.3 million m³ compared with the base year 2018, or a target achievement of 93.2%.

ACTIONS AND RESOURCES: WATER

Actions in the value chain

As already mentioned in section "Policy: Water", the Code of Conduct for Business Partners requires business partners to take appropriate action to ensure that water withdrawal is continually minimized. A particular focus is on improvements in regions with water scarcity or water stress. Appropriate actions may include in particular the effective reduction of water withdrawal, reuse and recycling, and responsible and effective treatment of wastewater to protect the environment and improve water quality overall. Business partners should ensure that people affected by their business activities have secure access to affordable water in sufficient quantities for personal use. On request, business partners that deliver products to the Volkswagen Group are additionally required to provide information on their total freshwater consumption at product level.

The Lithium Partnership initiative in Chile is one example of responsible water management. In 2021, the Volkswagen Group co-founded the Responsible Lithium Partnership in Chile, a multistakeholder platform coordinated by development agency *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ) and financed by several companies. The aim of the initiative is to strengthen dialog between local stakeholders from different sectors and promote the responsible management of water. For the first time, representatives from indigenous communities, mining, tourism, agriculture and public authorities are working together to find solutions to the water problems in Salar de Atacama, where around a quarter of the world's lithium is extracted. In spring 2024, the members of the multistakeholder platform agreed to protect the catchment area's water resources through a joint action plan and to manage them more sustainably. This includes a register of all water rights holders, geological and hydrological mapping, water scarcity campaigns, the provision of drinking water to local communities and the recycling of gray water.

Actions at the production sites

Continuous optimization of water-saving processes is a goal at all of the Volkswagen Group's production sites. Close cooperation between the brands worldwide is deemed essential.

Responsible use of water as a resource is particularly relevant in areas at water risk. Approximately 42.3% (around 14.5 million m^3) of Group-wide water withdrawal is attributable to sites in areas of high or extreme water stress. However, closed-loop circulation or recirculation of cooling and process water means that water withdrawal and the quantity of wastewater can be reduced. The San José Chiapa/Mexico site, which can be considered a wastewater-free site due to closed-loop circulation, provides a good example of this. Various actions have been taken in recent years to reduce water withdrawal at our site in Kariega in South Africa, which is a high water-stress area. Among other things, the engine production cooling towers have been fed with rainwater since 2022. A recycling system for production wastewater has also been in operation since 2023, which is expected to reduce water withdrawal at the site by around 15% in the future.

Other sites are beginning to reuse their treated wastewater in production processes, in cooling towers, for toilet flushing or for irrigation purposes. Closed loops and recycling of cooling or process water therefore reduce water consumption and wastewater generation and therefore help ensure the responsible use of water as a resource. A total of approximately 3.9 million m^3 of water was reused at the Group's production sites in 2024. Significant portions of this were attributable to the sites in Ingolstadt (Germany) (0.7 million m^3) and Puebla/Mexico (0.6 million m^3). The two sites mainly use a combination of ultra filtration and reverse osmosis in their wastewater recycling.

METRICS: WATER

Measurement methodologies

Internal Group standard 98000 defines how water-related metrics are expected to be collected consistently at all sites worldwide. If flow volumes are measured, this is usually done continuously using analog or digital flow measurement devices.

Hot spot sites

The Volkswagen Group has defined especially ambitious targets for "hot spot" sites related to water (see section "Targets: Water"). A total of 25 production sites are currently considered to be hot spot sites. To identify them, all production sites that Verisk Maplecroft found to be in the categories of medium, high or extremely high water stress were included. In addition, they were prioritized according to water withdrawal in the base year 2018. Sites that are in the upper median in the Group's internal comparison were taken into account. TRATON GROUP and MAN Energy Solutions sites were excluded because they are outside the scope of the target.

Sites in water risk areas

For many years, the Volkswagen Group has used the water stress index from the Verisk Maplecroft database to define areas at water risk. Sites with high or extreme water stress are considered here.

Maplecroft identifies areas as affected by high water stress when the ratio of water withdrawal to water availability is greater than 40%, following the standard scientific definition. This percentage corresponds to a value of 5 in Maplecroft's non-linear scaling. Extreme water stress (80% or greater) is shown on the scale from a value of 2.5 or lower. The same scale range is used to determine areas at water risk as would be the case when using the World Resources Institute Aqueduct database (see ESRS Annex II, to be used for areas with water risks of 40% – 100%), although Aqueduct also covers other physical and regulatory risks (e.g. water quality) as well as reputational risks, in addition to water stress. These are not currently factored into the analysis using Verisk Maplecroft. Nevertheless, other water risks are also being addressed by the Volkswagen Group, for example, implicitly improving water quality using the impact points method (see "Overarching targets and metrics" section in the "Introduction to environmental management" chapter).

Water consumption

Water consumption is generally calculated using the following formula: water consumption = water withdrawal minus volume of wastewater. Consequently, water consumption describes the water that is no longer available for further use, for ecosystems or for local communities. For the Volkswagen Group, water consumption results mainly from evaporation losses that arise during the production processes. The metrics water withdrawal and volume of wastewater that are used to determine water consumption are described in the following.

Water withdrawals

Water is withdrawn to supply the Volkswagen Group's production sites with water. This includes volumes of water that are either procured from third parties or extracted from our own sources.

Externally procured water is the volume of water obtained from public or private water suppliers and other non-Volkswagen Group organizations. This may be high-quality drinking water or lower-quality water used as process water. Externally procured wastewater is water that is fed in by an external water supplier for use at the site and that had already been used. As regards externally procured water, reports on water quality are prepared in accordance with local or national requirements. The quantity of externally procured water at the sites is usually recorded on the basis of billing.

Water extracted from own sources refers to the volume of water pumped and collected by the site. This includes utilized rainwater, surface water and groundwater:

- Rainwater refers to water in the form of rain, snow or hail, for example, that falls on the grounds of the site and is used in its water supply. The annual volume of rainfall is usually collected by official sources, such as KOSTRA-DWD, or by own weather stations.

- Surface water refers to the water taken from open bodies of water (lakes, rivers, oceans) and supplied to the site for use. Use for once-through cooling with subsequent direct recirculation is not considered to be water withdrawal.
- Groundwater refers to the water taken from underground bodies of water (aquifers) and supplied to the site for use. Groundwater withdrawn solely for groundwater treatment or remediation is not considered to be water withdrawal.

The scope and frequency of the analysis of water extracted from the Group's own sources are based on withdrawal approvals or national regulations, such as the German Drinking Water Regulation (TrinkwV), but they are performed at least once a year.

Approximately 86% of the water samples taken at the Volkswagen Group's sites are measured directly and approximately 9% are calculated. Approximately 1% is determined by estimates. No information is available for 4%. This information on the data collection methods is based on information provided by the sites and is not validated externally.

Volume of wastewater

The volume of wastewater is the amount of water that leaves the site after use or treatment. A distinction is made between direct and indirect discharge. Direct discharge is taken to mean the discharge of treated wastewater directly into a receiving body of water (receiving water), while indirect discharge refers to the discharge of wastewater into a sewer system or wastewater treatment plant or its transportation by tanker to a third-party treatment plant.

Approximately 55% of the volume of wastewater is determined by measurement, approximately 26% by calculation and approximately 14% by estimates. No information is available for approximately 5%. This information on the data collection methods is based on information provided by the sites and is not validated externally.

Water intensity

Water intensity is calculated based on the total water consumption and sales revenue. Sales revenue is taken from the consolidated financial statements, where more detailed information can be found. This metric water intensity is reported excluding the companies with operational control.

Reuse of water

The reuse of water metric covers water that is reused and recycled. Reuse means water used again at the site without being treated, whereas recycling refers to water that is used again following treatment. Reuse of water can help to reduce the amount of freshwater needed, which is of particular relevance in areas experiencing high water stress or water scarcity. Reuse of water also includes utilized rainwater and wastewater produced by other organizations and supplied to the site for use (see water withdrawal). Reuse of water solely comprise actions that are cross-plant or cross-process. Water that is reused in the same process or in the same plant (with or without prior treatment) and only leads to an increase in its service life is not included. This includes, for example, closed-loop circulation in car washes and recirculated water for the flushing process in the paint shop.

Approximately 64% of the reused water volume is directly metered, approximately 24% is calculated and approximately 6% is determined using estimates (e.g. recycled water used in sanitary facilities). No information is available for approximately 6%. This information on the data collection methods is based on information provided by the sites and is not validated externally.

METRICS
WATER

	Unit	2024		2023	
		Volkswagen Group	Companies with operational control	Volkswagen Group	Companies with operational control
Water consumption					
Total water consumption[1, 2]	in million m³	8.8	5.0	-	-
In areas at water risk[1, 2]	in million m³	2.6	3.1	-	-
Water intensity[1, 2]	l/€	0.03	-	-	-
Water withdrawals					
Total water withdrawals	in million m³	21.2	13.2	21.9	15.6
In areas at water risk	in million m³	4.4	10.2	4.0	12.3
Wastewater discharge					
Total wastewater discharge[1]	in million m³	13.9	8.2	17.4	9.3
In areas at water risk	in million m³	2.0	7.1	1.9	8.1
Reused water					
Total reused water	in million m³	2.7	1.1	2.3	1.3

1 The datapoint contains estimated figures.
2 No reporting possible for 2023.
3 The information on water withdrawals and wastewater discharge is provided voluntarily and have not been externally validated.
The information for 2023 is provided voluntarily and has not been externally validated.

Biodiversity and ecosystems

The Volkswagen Group is endeavoring to increase biodiversity at its production sites and within the supply chain, thereby achieving added value for nature and improvement in biodiversity.

MATERIAL IMPACTS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impacts on biodiversity and ecosystems

When carrying out the materiality assessment, the Volkswagen Group identified four material actual negative impacts along its value chain. These relate to biodiversity, the conservation status of species and ecosystems, and the availability of ecosystem services.

Several aspects have an impact on biodiversity, for example raw material extraction for our materials, energy generation, deforestation and repurposing of land use for biofuel production, and agriculture (e.g. rubber plantations). They also have an impact on the conservation status of species. Issues of importance in this context include the spread of invasive species as a result of global logistics flows, the decrease in insect populations caused by pesticide use in agriculture, for example for the manufacture of rubber tires or biofuels. In the downstream value chain, land sealing and fragmentation due to road-building may have adverse effects on the conservation status of ecosystems. Activities along the value chain may have a negative impact on ecosystem services, for example through emissions to the air or to water.

Interaction with strategy and business model

The impacts identified in the materiality assessment have an influence on the Volkswagen Group's business model, strategy and value chain. The topics of biodiversity and ecosystems is anchored in the Group regenerate+ sustainability strategy, core elements being preservation of biodiversity and its sustainable use. The Volkswagen Group has committed to protecting, preserving and promoting biodiversity in the environmental mission statement and also in our Biodiversity Commitment. The Code of Conduct for Business Partners places particular emphasis on the topics of biodiversity and ecosystems along the value chain, especially for the protection of threatened habitats and species, as well as on sustainable use of natural resources. The Code of Conduct for Business Partners requires the Volkswagen Group's business partners to comply with actions under legislation applicable to them and with international biodiversity requirements, amongst other aspects.

Implementation of the biodiversity-related actions aims to offset the impacts of the Volkswagen Group's business activities.

In particular, biodiversity actions are being implemented at the production sites to offset land use in line with the Zero Impact Factory strategic vision, such as the creation of flower meadows or green walls. The positive contribution of these projects in and around the Volkswagen Group plants is assessed using a metric.

In addition, we aim to mitigate negative impacts away from the Volkswagen Group's operating sites by collaborating on voluntary global biodiversity projects.

TRANSITION PLAN AND CONSIDERATION OF BIODIVERSITY AND ECOSYSTEMS IN STRATEGY AND BUSINESS MODEL

In the 2024 reporting year, a resilience analysis was conducted to examine the Volkswagen Group's ability to adapt to the significant negative impacts on biodiversity and ecosystems (ESRS E4) identified in the materiality assessment. The analysis did not identify any significant physical risks, transition risks and systemic risks or opportunities in relation to biodiversity and ecosystems, but it did identify material impacts. The resilience analysis included a qualitative assessment of the extent to which the strategy and business model are able to address the material impacts. Criteria such as the scope and quality of existing policies, actions and targets, the consideration of impacts in Group sustainability strategy, and the challenges of implementing adaptation measures and strategies were used to assess resilience in the short-, medium- and long-term. One of the key assumptions is that the requisite access to capital can be provided as planned, irrespective of the economic situation. It is also assumed that the Volkswagen Group's biodiversity performance continues to satisfy the expectations of investors and lenders. It is also assumed that suppliers are willing to provide relevant data pertaining to biodiversity and ecosystems. These assumptions are continuously validated in the relevant planning and steering committees. There is uncertainty regarding the fundamental challenges of unpredictable developments in the global vehicle sales market, as well as the evolution of regulatory requirements related to biodiversity and ecosystems.

The time horizons considered in the resilience analysis correspond to the time horizons defined in the "General information" chapter in the "Notes on use of the ESRS" section and also used in the materiality assessment. These are divided into short-term (up to one year), medium-term (between one and five years) and long-term (more than five years) targets. The analysis covers the impacts identified as material and their main drivers along the Group sustainability strategy and value chain. In particular, this includes the integration of biodiversity and ecosystems into regenerate+, as well as the level of coverage of strategic and operational adjustment actions along the upstream value chain and the company's own operations. The downstream value chain was also taken into account in the analysis of the level of coverage of the policies and actions.

To take relevant stakeholders into account in the resilience analysis in accordance with ESRS E4 paragraph 13 (f), internal experts who maintain regular contact and cooperation with relevant stakeholders were involved in the process. External stakeholders and people with indigenous and local knowledge of affected regions were not included in the process. Regenerate+ serves as the central strategic framework for mitigating significant negative impacts on biodiversity and ecosystems. Nature is defined as a core dimension within regenerate+. Topics such as genetic diversity and biodiversity are explicitly addressed in the ecosystems pillar, giving the core elements of ESRS E4 relevant significance in the Group sustainability strategy. Biodiversity and ecosystems are also addressed in the corporate strategy by fundamentally anchoring sustainability in it. In addition, there is an opportunity to address specific topics related to biological diversity and ecosystems at Board of Management level by embedding regenerate+ in the strategy process. The strategic direction and pilot projects in the Group are discussed and brought to other relevant bodies in monthly Group-wide dialog formats on biodiversity and ecosystems at a technical level whose members are experts and representatives for biodiversity from the various brands and plants. The aim is to use metrics for long-term management. The Group brands also define different focus areas for biodiversity. For example, specific projects on commodity hotspots are being developed by individual brands in the supply chain with the aim of implementing pilot projects with suppliers and other partners in 2025.

The impact on biodiversity and ecosystems, particularly in the medium- and long-term, is addressed through the interplay of operational policies such as the Group's environmental mission statement goTOzero or the Volkswagen Group's Biodiversity Commitment and location-based biodiversity actions. In the short term, actions such as creating insect hotels, installing nesting boxes for birds and bats, and planting flowering meadows are intended to mitigate the negative impacts. No specific targets for biodiversity and ecosystems were defined for 2024 at Group level, but are currently being developed. In addition, existing targets from strategic focus topics contribute to biodiversity and ecosystems, such as decarbonization and water management. Group-wide operationalization of these strategic focus topics, including targets across all brands and locations, is still pending.

To mitigate negative impacts on biodiversity and ecosystems, the Volkswagen Group uses the Code of Conduct for Business Partners, which places suppliers under a general contractual obligation to comply with the relevant sustainability requirements. Suppliers are also called on to pass sustainability requirements on to relevant business partners so as to enable requirements to be continuously applied along the upstream and downstream value chain. Although the majority of suppliers do not pose an increased risk in terms of biodiversity and ecosystems, the upstream and downstream value chain, particularly for mining or agricultural products, is examined in advance. No significant investments are planned for the adaptation of the supplier structure in terms of biodiversity.

The overall picture reveals that the Volkswagen Group is capable of addressing the significant negative impacts on biodiversity and ecosystems, particularly from its own operations, in the medium- and long-term through existing adjustment strategies, policies and site-specific actions. There are several comprehensive policies and site-specific actions. The strategic anchoring of biodiversity and ecosystems is largely complete. Formalization of the biodiversity targets and expansion of the actions to all brands and sites were identified as the next steps to be implemented in the short to medium term. This is crucial when it comes to comprehensively addressing the impacts on biodiversity and ecosystems and to driving forward operationalization.

IMPACTS AND DEPENDENCIES IN OR NEAR BIODIVERSITY-SENSITIVE AREAS

The standard process described in the "General information" chapter was used to identify the material topics. Furthermore, the department analyzed the impacts of the company's activities in or near biodiversity-sensitive areas, giving consideration to potential impacts and dependencies. Transition risks, physical risks and opportunities, and systemic risks were not taken into account. A scenario analysis was not applied. Consultations with affected communities were not held as part of the analyses.

Potential impacts and dependencies were identified using the online tool Exploring Natural Capital, Opportunities, Risks and Exposure (ENCORE). This performs a sector analysis in order to assess potential risks, impacts and dependencies in the context of the relevant sector. It focuses solely on the potential impacts that may arise from the Volkswagen Group's own production, excluding the associated impacts from the supply chain (for example, metal production). The evaluation looked at the sector's potential impact on a range of impact categories. Relevant impact categories are land use change (for example, land in use), resource use (for example, water use), climate change (GHG emissions), pollution (for example, harmful emissions to soil, air and water, waste generation) and disruptions (for example, noise or light). Linking these categories shows the potential overall impact of the activity (for example, vehicle manufacturing) on soil, water, biodiversity and the atmosphere. Activities considered are the manufacture of motor vehicles, the manufacture of parts and accessories for motor vehicles, energy generation from fossil fuels, and the manufacture of special-purpose machinery. The existing dependencies of the company's own activities on biodiversity and ecosystems were also examined. The ecosystem services taken into account in this context are the provision of services (for example, water supply) and regulation and maintenance services (for example, flood control, water purification). The very high, high and medium impacts and dependencies of the individual activities at the different sites are detailed in the table "Annex: Sites near or in biodiversity-sensitive areas". Minor and very minor impacts of activities at the sites include land use, the volume of water consumption, GHG emissions and emissions of other air pollutants, as well as the generation and release of solid waste. Low and very low dependencies of activities at the sites relate to global and local climate regulation, mitigation of sensory impacts, control pattern regulation, air filtration, solid waste decomposition, dilution effect through atmosphere and ecosystems, and water supply, among others. In addition, the environmental status of the areas is addressed through the Biodiversity Intactness Index (BII) and GLOBIO Mean Species Abundance (MSA) Index in the table "Annex: Sites near or in biodiversity-sensitive areas". The BII is a metric used to assess the extent to which ecosystems are intact and functioning in relation to their natural state. It measures the abundance and diversity of species in a given area, compared to what would be expected in an undisturbed ecosystem. GLOBIO uses the MSA index to calculate the integrity of local terrestrial biodiversity, based on the assessment of human impacts.

Owing to the construction of production sites, vehicle manufacturing has a negative impact on biodiversity and ecosystems through land use change and sealing. Efforts are underway to avoid land use change (land use

for production), or to reduce it as far as possible. It is intended that unused areas will be restored and used areas offset. An average of approximately 50% of the plant area is currently sealed. In 2024, the new Biodiversity Land Use Indicator (BLI) was rolled out at all passenger car and light commercial vehicle production sites and associated component manufacturing sites worldwide. The aim was to measure the impact of land consumption by the company's own production sites and their contribution to land enhancement through biodiversity actions. This metric is intended to enable an assessment of land use and setting of associated targets.

A comprehensive assessment was conducted to determine whether Volkswagen Group sites are located near biodiversity-sensitive areas. The assessment covered the Volkswagen Group properties classified as environmentally relevant. These include the production sites where activities related to the manufacturing of vehicles, components, assemblies or special-purpose machinery take place. Four more environmentally relevant sites such as environmentally relevant external production facilities and a technical development center were also included in the analysis.

The sites classified as significant due to their proximity to protected areas and the significant activities conducted there are listed in the table "Annex: Sites near or in biodiversity-sensitive areas". A radius of 4.5 km was applied in the assessment to determine whether the Group sites are located near biodiversity-sensitive areas. The results show that 58 of the 117 sites analyzed are located near biodiversity-sensitive areas. A total of 126 protected areas are located in the vicinity of the Volkswagen Group's sites. Four sites are located directly adjacent to a protected area.

An analysis of the protected areas was carried out, covering protected habitat types, endangered and critically endangered species, and species at risk of extinction. The number of species with protected status and habitats currently identified in these areas was also compared against the most recent status from the analysis conducted. No direct negative impacts caused by the production sites and other sites were identified for the protected areas for which the necessary information for the analysis was available. The impacts from our own production on changes to freshwater resources and the associated actions are described in detail in the "Water" chapter. The material impacts of production on soil degradation and desertification have not yet been assessed in detail.

POLICY: BIODIVERSITY AND ECOSYSTEMS

Biodiversity policy

The manufacture and operation of vehicles impact biodiversity through emissions, land use and transportation – from raw material extraction to the use phase through to recycling. The Volkswagen Group supports conservation projects worldwide, examples being the "Green Belt" reforestation project in China and projects to restore moorland in Germany and Poland. The Volkswagen Group has also been involved in protecting and preserving biodiversity since 2007. As described in the "Material impacts and their interaction with strategy and business model" section, the materiality assessment identified negative impacts, particularly along the upstream value chain. The negative impacts are addressed within the scope of the Biodiversity policy. The Group's Chief Sustainability Officer is responsible for coordinating the topic of biodiversity within the scope of the Group's regenerate+ strategy. The Group Head of Environment is responsible for activities relating to biodiversity in production. As environmental management officer, he performs the tasks of the Volkswagen AG biodiversity officer.

The Volkswagen Group's regenerate+ makes specific reference to biodiversity and ecosystems. The Volkswagen Group is aware of the importance of biodiversity and its dependency on ecosystem services and has therefore incorporated their protection as an action area in its environmental mission statement goTOzero. The Volkswagen Group has committed to protecting, preserving and promoting biodiversity through this mission statement and the Biodiversity Commitment: The Volkswagen Group reduces harmful emissions to air, soil and water, mitigates the impact of its business operations on biodiversity and ecosystem services and support projects to conserve these.

As a founding member of the Biodiversity in Good Company e. V. initiative, the Volkswagen Group also acknowledges the three goals of the international Convention on Biological Diversity (CBD). These are the conservation of biological diversity, the sustainable use of the components of biological diversity, and the equitable sharing of the benefits arising from the utilization of genetic resources. In the Volkswagen Group's Biodiversity Commitment, corresponding action areas have been defined to make a contribution to achieving these goals within the framework of the Group's business activities. A biennial progress report is published as part of the Biodiversity in Good Company Initiative. Furthermore, the Volkswagen Group supports the CBD's Action Agenda for Nature and People initiative by publishing its commitment on the German Business for Biodiversity platform set up by the German Federal Ministry for the Environment (BMUV), and on the CBD website.

Another component of the Volkswagen Group's efforts is raising employees' awareness by informing and training them on the topic of biodiversity and involving them in the projects.

The topics of biodiversity and ecosystems are anchored in the Code of Conduct for Business Partners with the aim of protecting natural ecosystems and achieving sustainable use of natural resources. Business partners must strive for supply chains that do not involve logging or deforestation based on the legislation applicable to them, and taking into account international biodiversity requirements. These international requirements include the resolutions and recommendations regarding biodiversity of the CBD and the International Union for Conservation of Nature (IUCN).

Another important point is that the Volkswagen Group was the first automotive manufacturer to join the LEAF Coalition (Lowering Emissions by Accelerating Forest finance) in the reporting year. Together with governments and companies around the world, the initiative supports the protection of tropical rainforests, making an important contribution to achieving the Paris climate goals, protecting biodiversity and realizing sustainable development.

The Volkswagen Group is also a member of the DRIVE Sustainability Partnership, which is involved in the development of a Raw Material Outlook Platform. This included the material change risk analysis on raw materials and their extraction and processing. One of the 16 criteria applied concerned overlaps with areas important to preserving biological diversity. The direct impacts of the production on biodiversity and ecosystems also play a key role. Details on biodiversity management at production sites are provided in the strategic vision for the Zero Impact Factory. It includes voluntary biodiversity offsets and ongoing assessment of the impacts of the production sites on biodiversity. Since 2024, the BLI has been rolled out as a new Group-wide performance indicator aimed at improving biodiversity by creating semi-natural areas at and around the sites.

The Volkswagen Group engages in dialog with expert partners and promotes networking between the realms of politics, the economy, science, regulation and associations in order to improve its own and society's knowledge about biodiversity and biodiversity management. The Volkswagen Group relies on knowledgeable partners such as non-governmental organizations (NGOs) and other local players to realize biodiversity projects.

Impacts of biodiversity loss and the state of species and dependencies on ecosystem services

The vision of the Volkswagen Group is to have a positive impact on people and nature and to make a sustainable contribution. The focus on ecosystems and preserving biodiversity is a central pillar of the Group sustainability strategy. The production and operation of vehicles impact biodiversity through emissions, land use, and transportation. This impact will be countered by reducing land use and thereby achieving added value for nature and an improvement in biodiversity. The Volkswagen Group has set itself the goal of increasing biodiversity at its production sites and within the supply chain. In accordance with the Biodiversity Commitment, the Volkswagen Group pursues these goals as follows: Risks and opportunities are assessed with respect to the Group's business activities that have an impact on biodiversity and ecosystem services. Biodiversity is also integrated into the Volkswagen Group's ECMS. Projects are also being implemented to protect and preserve biodiversity.

Sustainable raw material sourcing in the value chain

The Volkswagen Group is aware that its suppliers' business activities can have a significant impact on people and the environment. The extraction and processing of some raw materials for the automotive industry is associated with environmental risks such as deforestation and air and water pollution. The Volkswagen Group published its first Responsible Raw Materials Report in 2021. It provides detailed information on the methodologies and activities in the context of the raw materials due diligence management system for raw material sourcing. The current report covers the period from January to December 2023 and gives an insight into the scope, the methodology and the implementation of activities and results concerning due diligence for raw materials classed as a priority by the Volkswagen Group. This also involves memberships in various initiatives.

Social consequences of biodiversity impacts and sustainable land use practices

The Code of Conduct for Business Partners emphasizes the issue of damage to soil, water and air. Business partners must ensure that they do not cause any harmful soil changes, water pollution, harmful air pollution, noise emissions or excessive water consumption that could lead to significant harm to the natural basis for food and drinking water or human health. They must also observe the prohibition of unlawful eviction and unlawful taking of land, forests and waters in the acquisition, development or other use of these resources.

Biodiversity-sensitive areas

The Volkswagen Group carried out an evaluation of protected areas close to Group sites in order to determine the impacts on biodiversity of the production sites and rule out potential risks.

Assessments of compatibility with biodiversity are performed when seeking new locations for production sites. When extending existing production facilities or building new ones, protection of natural capital requires priority to be given to land already used for industrial purposes, in order to minimize land use and soil sealing as far as possible (for further information, see "Transition plan and consideration of biodiversity and ecosystems in strategy and business model" and the "Biodiversity-sensitive sites" table in the Annex).

Deforestation

Business partners must strive for supply chains that do not involve logging or deforestation based on the applicable legislation and on international biodiversity requirements. These international requirements include the resolutions and recommendations regarding biodiversity of the CBD and the IUCN. In addition, the Volkswagen Group is currently making preparations for the implementation of the EU Deforestation Regulation.

TARGETS: BIODIVERSITY AND ECOSYSTEMS

As described earlier under section "Policy: Biodiversity and ecosystems", the topics of biodiversity and ecosystems are already anchored in regenerate+, the Biodiversity Commitment and the environmental mission statement goTOzero. In order to record developments and progress, the Volkswagen Group is a founding member of the Biodiversity in Good Company e. V. initiative.

The topic of biodiversity is part of the strategic vision of the Zero Impact Factory. The Volkswagen Group has created a site checklist featuring quantifiable targets on the topic of biodiversity and ecosystems. In relation to biodiversity management, the site checklist contains criteria such as the consideration of local protected areas or the provision of funding schemes for biodiversity and environmental education. The checklist also acknowledges specific actions such as planting regional plant species at sites, semi-natural design of green spaces, and promoting biodiversity through creation of habitats at or close to sites.

Furthermore, a new metric for measuring biodiversity was introduced in 2024 – the BLI, for which a specific target will also be set in the future. This metric aims to increase the proportion and quality of semi-natural areas at the sites.

ACTIONS AND RESOURCES: BIODIVERSITY AND ECOSYSTEMS

Actions at the production sites

The sites identify, plan, perform, uphold and evaluate the biodiversity actions for their particular site themselves. The decentralized implementation of a range of nature-based actions enables the local knowledge available at the site to be harnessed. Local service providers are normally involved in implementing the actions. In suitable places, the Group's own employees are involved in designing the actions.

Examples are provided below of the actions carried out regularly at different sites, including during the reporting year, that are contributing to promoting and preserving biodiversity at the sites:

- Flower meadows created, for example in Poznań/Poland and implementation of mowing regimes adapted to flowering times, for example in Pamplona/Spain
- Bug hotels installed, for example in Crewe/United Kingdom
- Nesting boxes for birds and bats installed, for example in Barcelona/Spain and Września/Poland
- Bee colonies established, for example in Puebla/Mexico
- Trees planted, for example in San José Chiapa/Mexico
- Native wild shrubs hedges established, for example in Győr/Hungary
- Deadwood piles created, for example in Wolfsburg/Germany

There are also numerous specific projects at the sites aimed at promoting biodiversity. For example, seeds from various indigenous tree species, such as the neem tree (Azadirachta indica) and the pongam tree (Pongamia pinnata), are collected in Pune/India to grow for internal use. At the Chattanooga site/USA, a grazing project is taking place across an area of 30 hectares. The project involves allowing sheep to graze the grassland, avoiding

the need for motorized mowing. Grazing is intended to reduce invasive species, while at the same time action are being taken to promote the growth of native shrubs, grasses and wildflowers.

It is also important to the Volkswagen Group that employees get involved in the biodiversity projects and to raise their awareness of the issue in the process. This is demonstrated by the example of the Volkswagen Group site in Palmela/Portugal, where 2,000 native trees and shrubs were planted by employees and their families in volunteer projects. In addition, a waste collection campaign undertaken by 120 volunteers, in conjunction with the national NGO Brigada do Mar, collected eleven tons of waste in the area around the plant and handed it in for proper disposal.

Of the more than 200 Corporate Citizenship projects implemented in fiscal year 2024, over 29 serve directly to promote and protect biodiversity. These projects include tree planting, preserving and developing ecosystems, refuse collection campaigns on beaches and in forests, environmental education, and support for research and science.

The 2024 Zero Impact Factory Award for biodiversity issues deserves particular mention. All Volkswagen Group plants were invited to submit their top biodiversity actions, from which the three most outstanding were selected as winners in early 2025.

To support the sites' biodiversity work, a Sustainability Impact Fund for internal sustainability projects will be available from 2025 onwards. A decision committee made up of experts will select the projects to be supported in the future.

Contribution to global voluntary biodiversity projects

The Volkswagen Group also aims to promote biodiversity by launching a biodiversity fund with up to €25 million per year from 2025 for external projects. The fund has a general term of five years, so projects undertaken between 2025 and 2029 are eligible for financial support. Here, too, a decision committee composed of experts will select the projects to be supported. The Volkswagen Group is already supporting biodiversity projects worldwide:

Volkswagen de México has been supporting conservation and reforestation projects since 2008, in order to preserve ecosystems. The projects create habitats for wild fauna and promote the development of biodiversity. The reforestation actions help to prevent soil erosion and promote groundwater storage. Construction of infiltration ditches also helps rainwater infiltration. This serves to protect the soil and promote groundwater recharge, for example, on the volcanic slopes of Popocatépetl and Iztaccíhuatl, where years of logging, livestock farming and fires have created open land.

The Group works with partners such as UNESCO and the Seabird Life organization to support sustainable mobility projects and to remediate storm damage in UNESCO biosphere reserves in Spain, as well as other projects to conserve and restore moorland in reserves in Poland and Germany.

Volkswagen Group China, along with the Volkswagen, Audi and Škoda brands, has initiated the Green Belt reforestation project to protect habitats and promote sustainable development. More than 8.5 million trees are to be planted by 2030 on a total area of over 40 million m^2 in ten environmentally sensitive regions in the north of China. Reforestation serves the purpose of carbon sinks, supports biodiversity and helps to prevent wind erosion and soil losses.

ŠKODA has launched the "Gardens of the Giant Mountains" project via the ŠKODA Auto Endowment Fund. The fund is an addition to the company's long-term "Škoda Trees" initiative and supports projects aimed at water retention, supporting local biodiversity and promoting nature conservation. In 2024, various actions were taken with the aim of reintroducing the Apollo butterfly (Parnassius apollo), which is on the Red List of Threatened Species and is at risk of extinction in the Czech Republic.

METRICS: BIODIVERSITY AND ECOSYSTEMS

Biodiversity Land Use Indicator

As a vehicle and component manufacturer, the Volkswagen Group has an impact on land use. Plant construction usually involves building on and permanently sealing large areas of land. To determine the contribution of production to land use and reduce it in the future, a new metric for production sites for passenger cars and light commercial vehicles was established at Group level in 2024 – the BLI. It builds on the EMAS biodiversity guide and the No Net Loss/Net Gain (NNL/NG) approach of the IUCN.

The BLI provides information on the proportion of semi-natural areas at the site, taking into account their quality. These semi-natural areas may be located on the site premises or within a 30 km radius, providing they are owned or managed by the site and serve primarily to promote biodiversity. Areas managed in conjunction with partners may also be considered where the scope of the joint management is clearly regulated. The ecological quality of each area is classified as low, medium or high. The areas are weighted according to this quality factor. A calculation tool (BLI tool) and accompanying guidelines are available for determining the site result. The initial Group-wide survey of the BLI in 2024 showed a result of approximately 28.6%, taking into account the quality of the area. A future target of this metric is planned.

Sites near or in biodiversity-sensitive areas

The sites near or in biodiversity-sensitive areas metric provides information on the number and area of sites that are in or near protected areas or in important areas for biodiversity. For 2024, the Volkswagen Group is using the radius from the EU Taxonomy reporting, which is defined as 4.5 kilometers. The corresponding protected areas have been analyzed by a third party.

SITES NEAR OR IN BIODIVERSITY-SENSITIVE AREAS

	Unit	2024	2023
Sites in the vicinity of protected areas[1]	number	58	-
Area of sites in the vicinity of protected areas[1]	hectares	8,653	-

1 No reporting possible for 2023.

Resource use and circular economy

The finite nature of natural resources and the social and environmental consequences of mining raw materials make the development of a circular economy a key sustainability topic for us.

MATERIAL IMPACTS AND RISKS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Intensification of the closed-loop circulation of materials helps to reduce the negative environmental impact of resource consumption and counteract the shortage of raw materials. This makes it a key sustainability topic for the Volkswagen Group.

Impacts in the area of resource inflows

The materiality assessment identified an actual negative impact in the resource inflows, including resource use topic. The Volkswagen Group believes this is attributable to its current use of primary and non-renewable resources in its own business operations, but is also connected with the resource intensity of the automotive sector, including in the upstream supply chain.

In addition, the materiality assessment identified an actual positive impact, advanced by the use of secondary materials in the Group's own production and in the supply chain. For one thing, the useful life of resources is being extended. What is more, greenhouse gas emissions are being reduced and supply chains are becoming more resilient, as the use of secondary material increases material availability and creates a second supply chain option. This leads to greater resilience in the supply chain.

Impacts in the area of resource outflows

The Volkswagen Group identified an actual negative impact in the materiality assessment. The Group contributes to the depletion of scarce resources by manufacturing products using non-renewable resources in its own business operations, but also because of the current challenges in recycling and reparability in the downstream value chain.

Yet, the Group also contributes to the circular economy in a variety of ways, reducing resource outflow by promoting the reusability of products and extending the service life of products by offering repair services. In this respect, the materiality assessment also identified an actual and potential long-term positive impact in the Group's own business operations and in the downstream value chain.

Impacts in the area of waste

In the materiality assessment, the Volkswagen Group identified an actual and a potential long-term negative impact on the scarcity of resources in the area of waste. Waste is generated at all stages of the Group's value chain, from the mining of raw materials through production and up to the end of the use phase of vehicles.

Financial risks in the area of resource use and circular economy

Three material risks in the area of resource inflows were identified in the materiality assessment. Owing to proposed future statutory obligations to use high-quality plastic recyclates, raw material procurement costs are rising. This squeezes the Volkswagen Group's margins and profitability because the price increases cannot usually be passed on to customers in full.

The fluctuations and occasional scarcity in the availability of raw materials needed for battery production, as well as the tightening of statutory regulations on the recycling of old batteries, may lead to higher purchase prices or even limit availability (for example of old batteries). This may squeeze the Volkswagen Group's margins and profitability because the price increases cannot be passed on to customers in full.

Furthermore, as a result of the forthcoming tightening of legislation (Euro 7), it is likely that tires with excessive abrasion which release excessive amounts of microplastics into the environment will no longer be approved for use or that compensation payments will have to be made for such tires. As few tires are currently below the expected limits, this could lead to higher costs. Tires could become significantly more expensive, not only due to increased raw material prices but also as a result of rising demand in connection with current reduced availability.

A material risk in relation to resource outflows was identified in the materiality assessment. Non-compliance with statutory and general requirements in relation to the Group's own product may result in it not being authorized for market release. The fluctuations and occasional scarcity in the availability of raw materials needed for battery production, as well as the tightening of statutory regulations on the recycling of old batteries, may lead to sales issues. Additionally, challenges such as the limited availability of recycled materials and quality issues with recyclates may prevent the achievement of the proposed regulatory recyclate quota. According to the current draft of the new Directive on end-of-life vehicles, this could result in failure to obtain type approval in the EU. Further regulatory clarification is also required as to how the goal of achieving a circular economy will be governed in future in connection with material bans.

Interaction with strategy and business model

The impacts and risks identified in the materiality assessment have an influence on the Group's business model, strategy and value chain. The overarching topic of circular economy and resource inflows is strategically anchored in the Group sustainability strategy regenerate+. Key elements are the increasing closed-loop circulation of materials, the introduction of new recycling technologies and the use of secondary materials. The environmental mission statement also focuses on further improving resource efficiency and promoting approaches for reusing and recycling materials. In addition, the topic of resource efficiency is anchored in the Code of Conduct for Business Partners.

The Volkswagen Group responds to the impacts and risks to its business model, strategy and value chain in the area of circular economy and resource inflows by taking the following actions to mitigate negative impacts and risks and strengthen positive impacts:

The identified impacts and the risk related to resource inflows, including resource use, occur in the upstream value chain and in the Group's own business operations. In the area of resource inflows, including resource use, the use of primary raw materials, for example, will be reduced through the use of recyclates and renewable raw materials, and cross-brand working structures will be developed for a circular and resource-efficient business approach. The impacts and risks identified in connection with resource outflows related to products and services concern both the Group's own business operations and the downstream value chain. In vehicle development, actions are taken based on reparability and recycling, with plastic components labeled for easy identification and separation by type.

The impacts identified in the area of waste have an effect throughout the value chain. To counteract this, production waste is recycled at the sites in the Group, for example, and a waste management system is

implemented with the aim of reducing the amount of waste and recovering unavoidable waste. Waste will also be further minimized by closing loops.

By taking additional actions throughout the entire life cycle of the product and therefore along the value chain, the Volkswagen Group counteracts the impacts and risks identified. These include moving over to new circular business models, which is to be examined and implemented.

POLICY: RESOURCE USE AND CIRCULAR ECONOMY

Resource use and circular economy play key roles in the Group strategy and regenerate+, and are addressed in a corresponding policy.

Impacts and financial effects for the topic Circular economy were identified in the materiality assessment that refer specifically to resource inflows, including resource use and resource outflows related to products and services, as well as waste. The identified impacts and risks are addressed by the resource use and circular economy policy. Key elements are the closed-loop circulation of materials, joint development of recycling technologies, the use of secondary materials, improvements in resource efficiency, and reuse and recycling of materials and components.

The increasing closed-loop circulation of materials helps to reduce the negative environmental impact of resource consumption and counteract the shortage of raw materials. This makes circular economy a key sustainability topic for the Volkswagen Group. At the same time, this development offers many opportunities: it promotes the development of new technologies through innovations in material design, recycling technologies and business models.

Conserving resources, secondary raw materials, sustainable procurement and renewable raw materials

In the nature dimension of regenerate+ , the Volkswagen Group is working to continuously reduce its demand for primary raw materials. The finite nature of natural resources and the social and environmental consequences of mining raw materials make the development of a circular economy a key sustainability topic. The focus here is primarily on conserving resources.

The topic of circular economy is a core element of the environmental mission statement goTOzero, on which the strategic design of this action area is oriented. As part of this mission statement, the Volkswagen Group is setting itself targets including further improving its resource efficiency and promoting reuse and recycling approaches in relation to materials and water. This will be achieved by using recycled material and renewable raw materials as well as by establishing closed loops for materials and water.

Resource efficiency is also addressed in the environmental protection section of the environmental policy. The Volkswagen Group's ECMS includes processes that support environmentally compatible waste management in production, recycling of waste and use of secondary raw materials.

Other topics that contribute to a circular economy are embedded in the strategic vision of the Zero Impact Factory program. Material efficiency is a focal point here. Production processes must be designed to use and reuse materials efficiently and sustainably, to reduce the volume of waste to a minimum and to recycle the waste created.

The circularity and environmental compatibility of vehicles is included in our thinking from the development stage onwards. The requirements for the development of vehicles and their components are specified in the Volkswagen Group's environmental standards. One particular example of note here is the Volkswagen Group environmental standard for vehicles, Recycling Requirements, Use of Recyclates, Recyclability Type Approval, which contains recommendations and guidelines on design for circular economy.

Other requirements include the preferred use of recyclates if technically suitable and available throughout the service life, as well as the legally required labeling of plastics in accordance with internationally applicable ISO standards.

The topics of resource efficiency, circular economy and waste management are central components of the Code of Conduct for Business Partners. Business partners are required to take appropriate actions to ensure efficient use of energy, water and raw materials, use of renewable resources and minimal damage to the environment and health. In addition, the Code calls on business partners to take appropriate actions to prevent

waste, to reuse resources, to implement recycling, and to dispose of residual waste, chemicals and wastewater in a safe and environmentally friendly manner. Such actions may be taken in the development or production stages, during the product lifespan or recycling at the end of their useful life, and during further activities. Business partners must also comply with international conventions on cross-border movement of hazardous waste (for more information, see section "Actions and resources: resource use and circular economy"). Where technically possible and economically viable, the Volkswagen Group recommends that business partners use secondary materials in their processes. Business partners should know the proportion of recycled content in their products and be able to provide this information. They should also endeavor to establish and promote closed loop systems.

TARGETS: RESOURCE USE AND CIRCULAR ECONOMY

Overarching targets:

The overarching *Umwelt Entlastung Produktion* (UEP – Environmental improvement production) metric includes the volume of waste for disposal per vehicle. The UEP target therefore provides an incentive for the sites to reduce the volume of waste.

Moreover, the Impact Points method covers all production waste. The metric assesses the environmental impacts that arise through the transport and handling or disposal of production waste. The overarching impact points target likewise helps to improve waste management by rewarding higher-value processes for waste treatment.

The site checklist has a clear link to circular economy in production through the "material" action area. This includes, for example, implementing closed-loop recycling, achieving zero landfill and completely avoiding disposal of production waste to landfill, as well as substituting disposable packaging with reusable alternatives. The targets set for fulfilling the site checklist provide an incentive for the production sites to increase their resource efficiency and close material cycles.

Increasing the proportion of circular materials in vehicles

The Volkswagen Group aims to be using 40% circular materials in its vehicles from 2040 onwards (excluding China). By increasing its use of renewable, recycled, and reconditioned materials, the Volkswagen Group aims to make a significant contribution to the circular economy, reduce its use of primary raw materials and extend the service life of valuable resources.

The Volkswagen Group is also working hard to meet future statutory targets for improving the sustainability and environmental friendliness of its products. In accordance with the draft regulation on circularity requirements for vehicle design and on disposal of end-of-life vehicles, starting from around 2032 new vehicles must contain a specific share of post-consumer plastic recyclate (PCR), with a corresponding proportion coming from end-of-life vehicles (ELVs).

Another target in accordance with the new Batteries Regulation concerns the battery cells in electric vehicles. From 2031, 6% lithium, 16% cobalt and 6% nickel must come from end-of-live high-voltage batteries or battery production waste.

Sustainable sourcing and use of renewable resources

The Volkswagen Group intends to increase the use of circular materials, with the increasing use of renewable resources playing a key role. The sustainability rating (S-Rating) target can support the sustainable sourcing of resources (for more information, see the "Workers in the value chain" chapter). The S-Rating is used to check the level of compliance with Volkswagen's sustainability requirements by direct suppliers with a high sustainability risk. We have set ourselves the objective of, in terms of revenue, 95% of our direct suppliers having a positive S-Rating (A or B scores) by 2040. We have set ourselves the objective of, in terms of sales revenue, 95% of our direct suppliers having a positive S-Rating (A or B scores) by 2040. As an intermediate target, we aim to achieve 85% in 2025.

Sustainability requirements for suppliers

In line with the goal of increasing the number of suppliers with environmental certification (see the "Overarching targets and metrics" section in the "Introduction to environmental management" chapter), 95% of the Volkswagen Group's suppliers that operate a production site with more than 100 employees are to be certified in accordance with the ISO 14001 or EMAS environmental management system by 2040.

Expansion of circular product design

The Volkswagen Group has not yet set measurable outcome-oriented ESRS-related targets for expanding circular product design. The "Circular economy" area generally focuses on the use of circular materials. Vehicles are already developed based on circular criteria with a view to their entire life cycle. Attention is paid to the recyclability of the materials and avoidance of pollutants (for more information see section "Policy: resource use and circular economy" and "Actions and resources: resource use and circular economy").

Allocating targets to the waste hierarchy

The Volkswagen Group bases its treatment of waste on the waste hierarchy. Avoiding waste has top priority. Unavoidable waste must be subjected to recycling processes of the highest possible quality. The lower levels of the waste hierarchy provide for disposal in the form of incineration and, as the last option, landfilling.

The waste hierarchy is also taken into consideration in the Impact Points method. Waste with lower environmental relevance has lower eco-factors than waste with a potentially high environmental impact. The Impact Points targets therefore provide an incentive to allocate waste to a higher-value recovery operation.

ACTIONS AND RESOURCES: RESOURCE USE AND CIRCULAR ECONOMY

Contribution to a circular economy

After achieving the longest possible service life, material recycling during the vehicle recovery phase is becoming increasingly important. Vehicles already have a long service life; the average age of an end-of-life vehicle is 14 to 20 years according to national authorities in Europe. The initial steps in relation to circular economy concentrated on batteries, steel, aluminum and plastics. The results obtained from this are used to further develop the overall circular economy strategy and to devise new business models. The topic of circular economy is also about strengthening the company's resilience and minimizing dependencies. The Volkswagen Group achieves this in particular by closing its own material loops.

Cross-divisional and cross-brand working structures have been developed at Group level for managing the topics to be developed. These build on the work of committees including the Group Steering Committee for the Environment and Energy, the Group Steering Committee for Product Recycling and the Sustainability Product Group platform. In addition, information is shared between the employees active in waste management, who meet up regularly within the scope of a working group. The Volkswagen Group will seek to intensify its efforts for a transition to an economically and environmentally sound circular and resource-efficient business approach in the future. To achieve this, it relies on alliances and the implementation of joint projects with various partners, such as suppliers, plant manufacturers, the recycling sector and universities.

Among others, two alliances for sustainable raw material extraction can be highlighted here: the Global Battery Alliance and the Initiative for Responsible Mining Assurance (IRMA). Sustainable use of resources

involves extracting these raw materials under fair and humane conditions and using them efficiently. This is why the Volkswagen Group supports the Global Battery Alliance, a partnership of 140+ companies, governmental and non-governmental organizations as well as researchers. Its main goals are socially and environmentally responsible raw material extraction, transition to a circular economy achieved through reuse and recycling, and innovation along the entire value chain. This alliance of companies, mining companies and non-profit organizations works to implement common standards for better conditions in industrial mining – for example, with regard to health and safety in the workplace or environmental protection. The IRMA standards are being gradually integrated into the Volkswagen Group's own supply chain.

Actions along the entire life cycle

The most important actions to be taken to implement the circular-economy strategic orientation include further clarifying targets and indicators and also realizing circular business models. This applies to the most important components and materials, such as batteries, steel, aluminum and plastics. In addition to the existing metrics (DCI, UEP), the Board of Management adopted a set of metrics for the topic of circular economy in the reporting year. It includes a description of the use of circular materials at vehicle level. This set of metrics will also be used in battery production and will show the progress in this area. There will be reports on the metrics.

To make our contribution to a circular business approach, the Volkswagen Group is continuously stepping up efforts to use material loops in production processes, as recycling is an important means of reducing environmental impact and conserving resources. Material loops are being intensified, for example, by the return of aluminum or through the recycling of waste.

For the Volkswagen Group, recycling begins at the new vehicle development stage. Here it focuses on the recyclability of the materials and avoidance of pollutants. The Group also gives recommendations on the reparability of the materials. For this reason, all components made of plastic are labeled in accordance with international ISO standards so that the plastics can later be identified and separated by type. In addition, the vehicle environmental standard includes design recommendations that enable materials to be more effectively separated from each other after the end of the vehicle's life. Likewise, all fluids can later be removed from the end-of-life vehicle and many components disassembled.

In its environmental standard for business partners, the Volkswagen Group requires the use of secondary materials obtained from production waste (pre-consumer recyclates) or end-of-life products (post-consumer recyclates) if these meet the same quality standards as primary materials and are available in sufficient quantity over the service life.

Sustainable supply chains

In the area of Group Procurement Sustainability, a comprehensive strategy program was launched in 2022 whose aims include continuously strengthening sustainability. It focuses on the topics of circular economy and climate neutrality, fairness and equality and global management. The first focus topic covers initiatives and projects relating to the topics of decarbonization, the circular economy, resource efficiency, and biodiversity. Additional work focuses include implementing projects and partnerships in the area of the circular economy and reducing CO_2e emissions in the supply chain.

The Volkswagen Group is aware that its suppliers' business activities can have an impact on people and the environment. To that end, it published the first of its now annual Responsible Raw Materials Reports in 2021. This provides detailed information on the Volkswagen Group's methodologies and activities in the context of the raw materials due diligence management system.

The Volkswagen Group works continually on responsible supply chains for 18 high-risk raw materials, including battery raw materials and rare earth elements. Since 2022, there has been cooperation with international representatives from industry, government ministries, science and technology in the field of rare earth elements. Specific sustainability criteria are to be determined in cross-industry initiatives and implemented along the supply chain. The same applies to possibilities for auditing. As part of the DRIVE Sustainability Initiative, a risk analysis of human rights and environmental issues was carried out for the rare earth supply chains. Based on a systematic risk analysis, social and environmental risks and corruption along the supply chain will be preventively avoided. The analysis should also help to detect and deal with violations by suppliers and continuously improve their sustainability performance. The Volkswagen Group's responsible supply chain system (ReSC system) includes elements for this that build on each other.

For example, there have been material specifications for leather since early 2022, with compliance mandatory for all new contract award suppliers since April 2022. Disclosure of the country of origin of the raw product and provision of a leather-specific sustainability certificate – such as Leather Working Group certification – is requested by means of the specifications. In this way, the Volkswagen Group obligates its suppliers to respect animal welfare and ensure responsible production and processing of leather. This includes compliance with strict criteria regarding water consumption and avoiding water contamination in the tanning process, among others.

Leather is one of the 18 materials defined by the Volkswagen Group as high risk. The Sustainable Leather Specifications have been created to work towards environmentally and socially responsible procurement of leather and to minimize the identified risks. The Volkswagen Group therefore requires transparent and responsible raw materials supply chains as a binding prerequisite for all future nominations (global and forward sourcing) of all procured leather, including direct and indirect quantities. Suppliers are requested to adhere to the "Sustainable Leather" Specifications and provide proof of this prior to nomination.

Use of renewable raw materials

To cut down on resource consumption, the Volkswagen Group starts using raw materials from renewable sources from the vehicle design phase onwards. Wherever possible, the Group brands use, for example, the natural fibers flax, cotton, wood and cellulose.

Use of recyclates in vehicles

Using the highest possible proportion of recycled materials is very important for the Volkswagen Group. The Volkswagen Group's environmental standards also state that recyclates or materials with a recyclate content are to be used preferentially in place of other materials where technically possible. In the ID. family, recyclates can be used in the following components, for example: headliners, fabrics, carpets, seats, door trim panels and decorative inlays. Some of the seat textiles for individual equipment lines are made of up to 100% recycled PET, mostly manufactured from used PET bottles.

The Volkswagen Group is researching a range of promising approaches and implementing them in series production with the aim of continuously reducing its environmental footprint further. It focuses on non-animal and recycled materials for interior equipment. The plan for Volkswagen brand all-electric models is therefore to use non-animal materials as alternatives in the interior as far as possible. For example, alternative materials

made of marine plastic or old PET bottles (approximately 63 500 milliliter bottles) are used in the seat covers of the Design and Comfort lines of the ID. Buzz People. The surface material of a seat cover is made of Seaqual® yarn, which contains 10% ocean waste and 90% recycled PES. This saves 32% of CO_2e carbon emissions in manufacture compared to traditional surface materials. The recycled content of seat covers made of ArtVelours Eco® is 71%.

Recycled materials are also used in the ID.7. Recyclates – materials from recycled products – are used for some of the seat upholstery, floor coverings, surfaces and the roof liner of the ID.7. The decorative headliner "Anmut", the "Dilours" carpet and the floor mats, for example, are made from nearly 100% recycled PET. ArtVelours Eco consists of 71% recycled material made from PET bottles and used T-shirts. Highlights in the interior include – depending on equipment – ArtTex imitation leather and the microfiber material ArtVelours Eco, used for the center console and the interior door paneling. Both materials look just as classy as leather and have a similar feel. Bio-based plasticizers are used, which is an important step towards increased sustainability.

In-house expertise in battery recycling and conserving resources

The Volkswagen Group has been heavily involved with research, development and validation of battery recycling processes, concepts and strategies since 2009. The Group is currently exploring strategic partnerships with numerous players in the battery value chain to comprehensively close the loop for the Group. The Volkswagen Group opened its first pilot facility for recycling high-voltage batteries at the Salzgitter site in early 2021. The objective is to develop industrialized recovery of valuable raw materials such as lithium, nickel, manganese and cobalt in a closed loop and also of aluminum, copper and plastic. Additionally, various concepts for discharging and dismantling batteries are being developed, alongside investigations into the further recyclability of battery materials. The facility has been initially designed to recycle up to 3,600 battery systems per year in pilot operation. The long-term goal is to develop a closed material loop for high-voltage batteries to support the provision of the Group's own supply chains with the most sustainable raw materials possible.

The Volkswagen Group is one of the few automotive manufacturers around the world that is adopting a hands-on approach to the battery as a core e-mobility technology – from the procurement of raw materials all the way through to recycling. The PowerCo cell factories play a key role in this ambition, and will be designed to maximize material use within production through close-to-production recycling of production waste. PowerCo is also planning the systematic use of recyclates and, in collaboration with the Volkswagen Group, is forging ahead with the development of end-of-life battery recycling.

In the reporting year, three Group-owned sites for battery cell production were under construction, including the main plant in Salzgitter/Germany, Valencia in Spain and St. Thomas in Canada. In addition, each factory will use electricity generated with low CO_2 emissions and be designed for future closed-loop recycling, i.e. recycling as part of a circular economy. The circular economy will first be implemented for NMP and cathode active materials.

To date, tools for engine production have been processed at the center of excellence for tools at the Salzgitter site to make them suitable to return to use. The existing expertise in production tool preparation is also to be applied to battery cell manufacture in the future.

Along with efforts to recycle batteries, other solutions for conserving resources are also being worked on, for example in the ID.7. Intelligent and resource-saving solutions for electric car batteries are currently in development.

Aluminum closed loop

The Aluminum Closed Loop project, launched at the Audi plant in Neckarsulm/Germany in 2017, is the first closed loop for aluminum to be implemented across company boundaries. The waste from aluminum sheet-metal parts from the press shop is sent directly back to the suppliers, who recycle the waste 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 continuously avoids CO_2e emissions and reduces the quantity of primary raw materials needed. In addition to the Audi plants in Ingolstadt/Germany, Neckarsulm/Germany and Győr/Hungary and the multibrand plant in Bratislava/Slovakia, the Audi Münchsmünster and Volkswagen Emden sites in Germany have been part of the aluminum closed loop process since 2024.

Internal and external recycling of production waste

Waste with recyclable content generated in production is increasingly being incorporated into closed-loop processes. For example, all aluminum chips generated at the Kassel/Germany site are returned to the casting process in the foundry. Almost 15 tons of aluminum chips are produced in Kassel each day and melted down in the plant. According to forecasts, this alternative to regular aluminum production using primary raw material reduces energy requirements by up to 2,000 MWh per year and reduces CO_2 emissions by around 800 tons per year.

In addition, at the Volkswagen plant in Wolfsburg, plastic waste produced in the process of manufacturing gasoline tanks (co-extrusion) is treated and used for the production of diesel tanks (mono-extrusion). As a result, over 400 tons of material that would otherwise have been disposed of was reused in plastic tanks in 2023.

The Volkswagen Group aims to optimize the recycling processes even further by being actively involved in publicly funded research projects on recycling technologies. These projects are carried out in collaboration with partners such as universities and research institutions throughout Germany and aim to improve and automate individual process steps. This relates, for example, to dismantling batteries or recycling raw materials multiple times.

One example of this is the research consortium HVBatCycle. The consortium, which was created in 2023, is funded by the German Federal Ministry for Economic Affairs and Climate Action (BMWK) and is set to operate for three years. Under the leadership of the Volkswagen Group, the consortium wants to prove that the most valuable components of traction batteries can be recovered and reused several times in succession through recycling. The aim is to permanently recover valuable materials, contributing to more sustainability and greater security of supply.

The Open Hybrid LabFactory (OHLF) in Wolfsburg is also involved in researching automotive material loops. Funded by the German Federal Ministry of Education and Research (BMBF), the research campus provides a platform for dialog between science and industry in order to accelerate research activities and their implementation in mass production. The OHLF's work is divided into four fields of research: design for circular economy, processes for reverse production, circular material concepts and overall system analyses and design.

Waste management

The Volkswagen Group's approach to waste disposal in production aims to continuously reduce the quantity of waste we produce, to reuse unavoidable waste to a high standard and to close loops. The focus is on avoiding waste creation by optimizing production and auxiliary processes and increasing material utilization levels (material efficiency), prioritizing the reuse of waste and reducing the quantity of waste for disposal. Digital waste management systems are increasingly being used to optimize the management of waste. They make it easier to control waste management processes and facilitate state control of the disposal of hazardous waste.

The Procurement Division has established a Group-wide system for recovering waste materials that can generate income, for example, paper, plastics, wood, electronic components and metal. Efforts to avoid plastic waste have been stepped up with the Zero Plastic Waste project. This includes recycling plastic waste in diesel tank production.

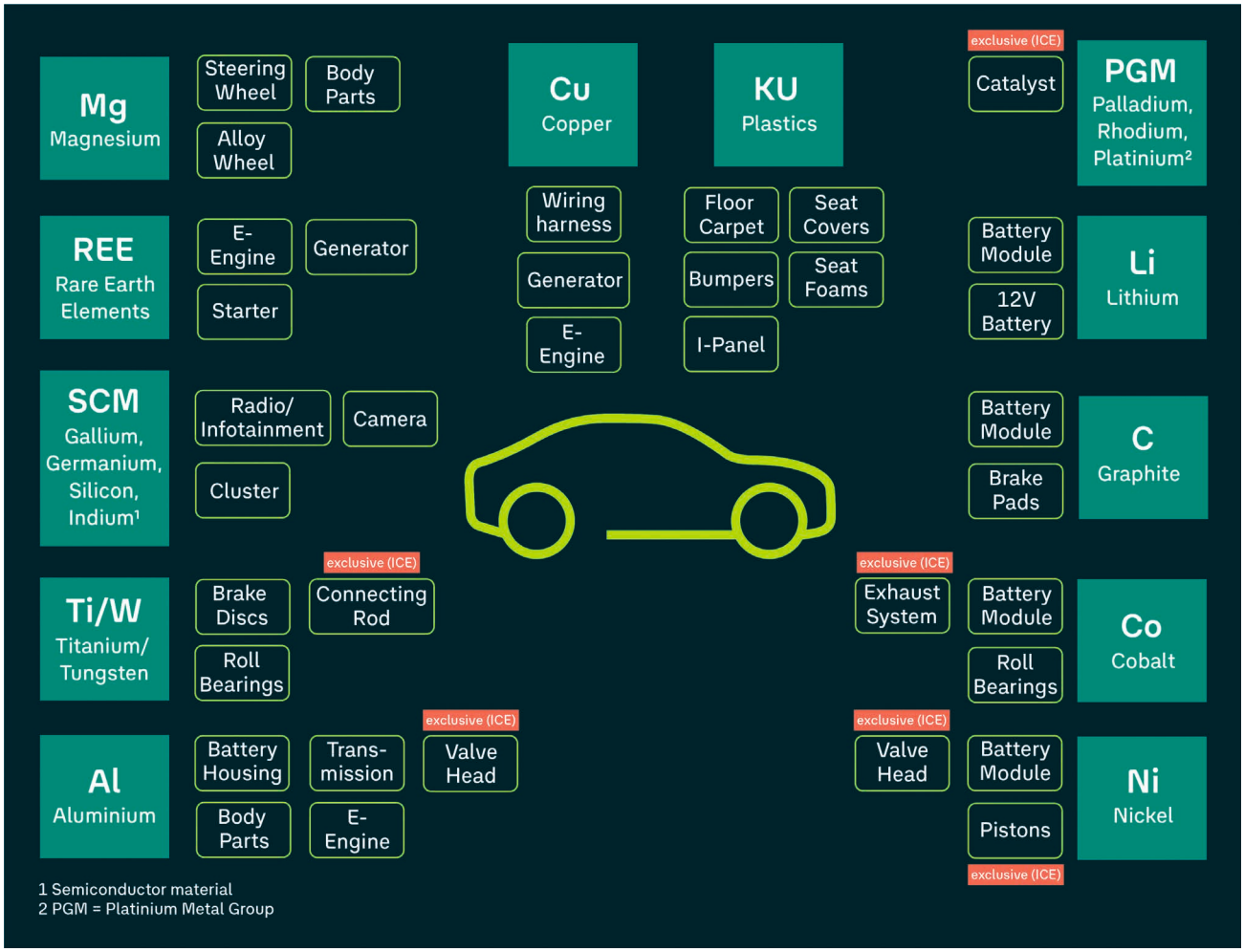
Waste management also forms part of the Code of Conduct for Business Partners. This sets out that business partners must take appropriate actions to prevent waste, to reuse resources, to implement recycling, and to dispose of residual waste, chemicals and wastewater in a safe and environmentally friendly manner. Such actions may be taken in the development or production stages, during product use and recycling at the end of their useful life, and during other activities. In particular, our business partners must also comply with national and international conventions on waste, in particular the 1989 Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, and other applicable conventions and legislation at national and international level.

METRICS: RESOURCE USE AND CIRCULAR ECONOMY

Resource inflows

Material and product inflows

A vehicle essentially comprises around 10,000 individual parts. A particular focus can be placed on the following components with a view to raw material criticality, supply chain risk and relevance to sustainability (see illustration): steering wheels, aluminum wheel rims, aluminum exterior parts, high-voltage batteries, permanent magnets, generators, wiring harnesses, brake discs, semiconductor-relevant material groups (e.g. infotainment systems, control modules, radios) catalytic converters and seat modules (foam and covers). Every year, the Volkswagen Group purchases a wide range of raw materials, components and other goods.



Critical raw materials and rare earths in operations and the value chain

As already mentioned in section "Actions and resources: resource use and circular economy", the Volkswagen Group uses raw materials from renewable sources to reduce resource consumption. Wherever possible, the Group brands use, for example, 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.

Electric drives are an important step toward low-emission mobility and so help to protect the climate. At the same time, their production results in different components entering circulation from the production of conventional vehicles, for example, high-voltage batteries. The raw materials these contain are valuable and it is important for them to remain in circulation for many reasons. Using battery raw materials multiple times helps the Volkswagen Group to reduce its carbon footprint, for example.

The Volkswagen Group wants to live up to its responsibility in the procurement of raw materials in the automotive industry. To that end, it published the first of its now annual Responsible Raw Materials Reports in 2021. In total, the management system currently covers 18 raw materials. These include the battery raw materials

cobalt, lithium, nickel and graphite, the conflict minerals tin, tungsten, tantalum and gold (3TG), and aluminum, copper, leather, mica, steel, natural rubber, platinum group metals, and rare earths, and the newly added raw materials cotton and magnesium.

In terms of procurement, the following raw materials are currently purchased directly: steel, platinum group metals (PGMs), aluminum and plastics (both for in-house production only) and leather. Given the increasing complexity of the supply chains and the geopolitical and material availability challenges of recent years, it is necessary to expand the range of raw materials purchased directly and to define an efficient Group-wide material protection strategy. The plan is to develop a Group raw material procurement process to secure critical and strategic raw materials (contained in focal components). Strategic support is to be provided for nine different raw material groups. The raw material groups are magnesium, rare earth elements, aluminum, semiconductor materials (gallium, germanium, silicon and indium), tungsten, titanium, recycled materials (plastics and aluminum), copper, plastics (primary production) and PGMs. The definition of these nine focal raw material groups is based on an internal criticality analysis that applies six different criteria and their commercial relevance. The results were then compared with the Critical Raw Materials List from the EU Critical Raw Materials Act and confirmed accordingly (see illustration).

Source: Study on the Critical Raw Materials for the EU – Version 2023

Water in operations and the value chain

The supply chain, in particular obtaining and processing raw materials, is responsible for the majority of our water use. Through the Code of Conduct for Business Partners, the Volkswagen Group exerts influence on the supply chain and requires that its suppliers do not cause water pollution or excessive water consumption that could lead to significant harm to the natural basis for food and drinking water or human health. Approximately 42.3% (around 14.5 million m³) of Group-wide water withdrawal is attributable to sites in areas of high to extreme water stress (for further information on water management see the "Actions and resources: water" section of the "Water" chapter).

New production sites in the reporting year

No new production sites were opened in the reporting year, so there were therefore no significant resource inflows in this respect.

Methodology used to record quantitative resource inflows based on reference vehicle approach

The resource inflows for the vehicle-related business for reporting year 2024 were calculated using a reference vehicle/output-based approach. This involves a back-calculation from the materials installed in the vehicle to the materials flowing into the vehicle to determine the resource inflows in quantitative terms. The Tiguan and ID.4 passenger car models were selected as sample reference vehicles. They were among the most produced vehicles in the reporting year.

In terms of vehicle configuration, the most representative configurations based on sales data were used. The maximum vehicle weight was selected based on conservative assumptions.

The waste material created in production was not included for reporting year 2024 as insufficient data was available.

The reference models are weighted based on production figures in the reporting year and extrapolated based on the ratio of production of internal combustion engine models to battery-electric vehicle models to determine the resource inflow metrics.

TOTAL WEIGHT OF PRODUCTS AND MATERIALS USED

		2024	
	Unit	Battery-electric vehicles	Internal combustion engine vehicles
Total weight of products and technical and biological materials used	tons	1,185,989	8,639,279
Weight of technical materials	tons	1,184,705	8,622,786
Weight of biological materials	tons	1,283	16,493
Proportion of sustainably sourced biological materials	%	0.0	0.12
Weight of reused or secondary recycled components, products and materials used (minimum to maximum)	tons	147,764 – 295,493	1,413,941 – 2,264,010
Percentage of reused or secondary recycled components, products and materials used	%	12.5 – 24.9	16.4 – 26.2

Information about the resource inflows of other Volkswagen Group brands (Porsche and TRATON GROUP) can be found at the end of this chapter. There is no reporting on quantitative resource inflows for MAN Energy Solutions in 2024.

Methodology used to record technical and biological materials and products

The reference vehicle approach is also used to calculate technical and biological materials and products. The materials are recorded in line with the VDA 231-106 material classification. VDA categories 1 to 9 comprise technical materials such as steel and polymer materials (with the exception of category 7.1, which comprises biological materials such as leather and wood).

Methodology used to record sustainably sourced biological materials

The reference vehicle approach described above is also used to calculate biological materials that were sustainably sourced. The following definition applies to determining biological materials that were sustainably sourced: a biological material is deemed to be sustainably sourced if it is certified under a recognized and widespread certification system. Leather is considered to be sustainably sourced at the Volkswagen Group in line with this definition. In accordance with the "Sustainable leather specification document", suppliers must have a certificate from the Leather Working Group (LWG) or comparable certification from a similar organization.

Biological materials are determined pursuant to VDA category 7.1 "modified organic natural materials", which include organic natural materials such as wood and cotton fleece in addition to leather. To identify the leather within VDA category 7.1, a structured analysis was carried out for weight-relevant parts per vehicle so as to list all materials that indicate a leather material based on their pure substances (for example, collagen). These pure substances were only identified for the Tiguan; there is no leather in the ID.4.

There are no biofuels used for non-energy purposes with respect to our product.

Methodology used to record shares of secondary materials

The reference vehicle approach is used to calculate the proportion of secondary materials flowing in. The materials are recorded in line with the VDA 231-106 material classification.

The Volkswagen Group has developed a standardized process to calculate the share of secondary materials in vehicles. Essentially, the objective is to determine the proportion of secondary materials in accordance with DIN EN ISO 14021:2012. This process follows an internal work instruction which has been externally audited. A system-based method is used to determine the share of secondary materials. In VDA categories 1 to 3, the proportion of secondary materials is determined based on VDA data, and in categories 4 to 9, based on supplier data. The resulting proportion of secondary materials in the vehicle is presented as a from/to range. The results reflect the data available at the time the data is collected.

Packaging is also significant in resource inflows in relation to the product. In this context, the vehicle is considered the product. Accessories or other materials are not included. Packaging within the meaning of the ESRS definition comprises materials passed on to the user or consumer. Although the Volkswagen Group does use packaging materials to transport vehicles to dealerships, they are removed prior to handing over the vehicles to users and consumers. Therefore, the transport protection materials pursuant to the ESRS definition are not to be understood as packaging and are not included in the report.

Avoidance of double counting in reuse and recycling

No reused components are currently used in production, so double counting of reused and recycled components can be ruled out.

Methodology used to record quantitative resource inflows of the Porsche AG Group

To determine the total material consumption for the vehicles produced, the percentage-based material composition is evaluated for each model series for a representative vehicle. The evaluation categories are taken from VDA 231-106 "Material classification in motor vehicle construction: Structure and nomenclature". Finally, the total number of vehicles produced and the average weight per model series can be used to determine higher-level totals for material consumption per material group. Leather is the most relevant biological material in Porsche vehicles. It was not possible to collect data on the proportion of secondary materials for the vehicles produced in the Porsche AG Group for the 2024 reporting year.

TOTAL WEIGHT OF PRODUCTS AND MATERIALS USED IN THE PORSCHE AG GROUP

	Unit	2024
Total weight of products and technical and biological materials used	tons	621,679
Weight of technical materials	tons	-
Weight of biological materials	tons	-
Proportion of sustainably sourced biological materials	%	0.2

Methodology used to record quantitative resource inflows of the TRATON GROUP

Vehicles' total weight is calculated either based on supplier data on the weight of the parts or by directly weighing the vehicles. To calculate the total value, the weight data for each product group is averaged and multiplied by the production volume. The total weight of the products is divided into material groups and the corresponding proportion of secondary materials is applied.

TOTAL WEIGHT OF PRODUCTS AND MATERIALS USED BY THE TRATON GROUP

	Unit	2024
Total weight of products and technical and biological materials used	tons	2,473,853
Weight of technical materials	tons	-
Weight of biological materials	tons	-
Proportion of sustainably sourced biological materials	%	0.0
Weight of reused or secondary recycled components, products and materials used	tons	604,511
Percentage of reused or secondary recycled components, products and materials used	%	24.4

Resource outflows

Group standard 98000 defines indicators for waste that are to be collected uniformly at all sites worldwide. This includes both production waste and non-production-specific waste.

The site checklist also describes voluntary criteria for the handling of waste. With regard to waste disposal, this includes waste disposal audits for waste streams, a ban on landfilling of production-specific waste and quotas for the maximum proportion of disposal waste in production. With regard to packaging and disposable products, criteria such as the substitution of disposable packaging with reusable alternatives or the recycling of packaging materials were defined.

Material and product outflows

Activities focus on the development of vehicles, engines, motors, vehicle software and batteries, the production and sale of passenger cars and light commercial vehicles, and the genuine parts business. The product portfolio ranges from compact cars to luxury vehicles and also includes motorcycles, and is supplemented by mobility solutions. The Commercial Vehicles Business Area primarily comprises the development of vehicles and engines, motors, the production and sale of trucks and buses, the genuine parts business and related services. The commercial vehicles portfolio ranges from light vans to heavy trucks and buses.

When new vehicles are being developed, attention is paid to the recyclability of the required materials and avoiding pollutants in order to make a contribution to a circular economy. Under the current 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 Volkswagen Group vehicles registered in Europe comply with this law.

In addition, the Group standard on recycling sets out requirements relating to the recyclability of vehicles, including design recommendations that enable materials to be more effectively separated from each other after the end of the vehicle's life. Another example is the labeling of all components made of plastic in accordance with international ISO standards so that they can later be identified and separated by type.

Vehicles already have a long service life: The average age of an end-of-life vehicle in Europe is 14 to 20 years according to national authorities. This useful life helps to minimize the consumption of resources and energy and provide extended producer responsibility with a circular business approach in mind.

Sector comparison of product service lives

Mileage of 200,000 km is assumed for passenger cars. This is a standard figure used by the Volkswagen Group and various other car manufacturers which applies the life cycle assessment. This figure was also confirmed in a scientific study by Weymar and Finkbeiner (2016), which involved statistical analysis of different data sets, including from the *Kraftfahrt-Bundesamt* (KBA – German Federal Motor Transport Authority), of a sample of more than 800,000 vehicles.

TRATON GROUP vehicles are constructed and built to be operable for a long period of time. Their longevity is underpinned by regular maintenance and repair or through replacement of defective parts. However, there is currently no industry-wide standard or average method for calculating the service life of heavy commercial vehicles.

Reparability

The Volkswagen Group's focus on high quality with a low need for repair and good reparability is aimed at ensuring a long service life for the vehicles during the use phase and is therefore an important contribution to resource efficiency.

Availability of replacement parts

A network of some 2,000 service facilities support repair work on Volkswagen Group vehicles in Germany. The service experts are equipped with cutting-edge technology and special tools in order to ensure efficient and high-quality repairs.

The Volkswagen Group offers its customers high availability of parts, delivering these as quickly as possible. This enables the service facilities to provide repairs and services quickly. Automatic delivery of quick-turn parts ensures that the Volkswagen dealer and service facility network can always guarantee a direct and prompt supply.

Repair time

The design of vehicles enables fast and comprehensive reparability that is highly adaptable to the cause of the damage. For instance, according to the repair manual, the headlight of the Tiguan model year 2025 can be replaced in 110 time units (66 minutes). In cases of minor crash damage, the highly complex and expensive LED headlights are not generally affected, so replacement of the plastic headlight base is sufficient. This alternative repair solution involves a separate working position in addition to the inexpensive headlight bracket. Furthermore, this customer-centric repair solution is sustainable and reduces the cost of replacement parts and the working time compared to replacing the entire headlight.

With respect to high-voltage batteries, the professional service centers and the damage assessors from insurance companies are also provided with a damage assessment checklist for all battery components. In the event of an accident repair, this ensures that reusable components can remain in the vehicle, where environmentally and economically viable, and that only the damaged components are replaced. In such cases, the dealer is provided with extensive workshop information including the necessary repair times.

Costs

The Volkswagen Group offers a comprehensive range of services, with service reflecting the vehicle's current value and high replacement part quality, enabling more cost-effective repairs. It includes, for example, the Volkswagen Economy Service for vehicles older than four years, which is offered to customers in Germany. This underscores the company's objective of reducing overall costs for vehicle owners.

Proportion of recyclable content in products

Under the European Directive on end-of-life vehicles, passenger cars (M1) and light commercial vehicles (N1) must be 85% recyclable and 95% recoverable at end of life. All Volkswagen Group vehicles registered in Europe comply with these standards.

The recycling and reuse rates are calculated based on ISO 22628 (Road vehicles – Recyclability and recoverability – Calculation method). The rates are calculated in an internal IT system and based on the material data sheets of the components and materials used.

For information on packaging, refer to the section "Methodology used to record shares of secondary materials".

Relevant waste streams and materials present in waste

As an automotive manufacturer, production-specific waste streams are of particular significance to the Volkswagen Group. The majority is attributable to scrap metal comprising chips, sheet stamping waste, castings and other metal debris. The composition of scrap metal varies based on the production process and the materials used. For example, scrap steel predominates in vehicle body production, whereas the manufacture of engines and transmissions creates mainly scrap aluminum.

Large quantities of waste containing plastic are also generated, such as from injection molding, extrusion and mechanical processing of interior components, bumpers and other structural vehicle parts. The content of this waste is very varied and comprises mainly polypropylene, polyethylene, polyurethane, and composite materials.

Paint sludge generated from painting vehicles represents another important waste stream. Its composition depends on the type of paint used and may include solvents, pigments, resins, fillers, and additives. The delivery of components also involves paper, cardboard, and plastic packaging materials. The final type of waste is hazardous waste, which is generated from processes including chemical surface treatment and coating of body parts, replacing used oils and lubricants, and the use of cleaning agents and solvents.

WASTE METRICS

		2024		2023	
Metric	Unit	Volkswagen Group	Companies with operational control	Volkswagen Group	Companies with operational control
Total waste[1]	tons	2,357,654	573,762	2,420,453	641,200
Total waste for recovery	tons	2,185,092	556,443	2,278,457	613,576
Waste for recovery – preparation for reuse	tons	171,809	21,174	160,609	20,872
Of which non-hazardous waste[2]	tons	158,931	11,513	-	-
Of which hazardous waste[2,4]	tons	12,878	9,661	-	-
Waste for recovery – recycling	tons	1,875,417	485,566	1,844,070	540,611
Of which non-hazardous waste[2]	tons	1,773,202	471,282	-	-
Of which hazardous waste[2,4]	tons	102,216	14,283	-	-
Waste for recovery – other recovery actions[5]	tons	137,866	49,703	273,779	52,093
Of which non-hazardous waste[2]	tons	93,043	46,867	-	-
Of which hazardous waste[2,4]	tons	44,823	2,837	-	-
Total waste for disposal	tons	172,596	17,318	141,996	27,624
Waste for disposal – incineration	tons	19,229	14,514	15,996	23,969

Of which non-hazardous waste[2]	tons	3,130	3,750	-	-
Of which hazardous waste[2, 4]	tons	16,098	10,765	-	-
Waste for disposal – landfill	tons	144,750	2,586	110,417	3,014
Of which non-hazardous waste[2]	tons	114,262	736	-	-
Of which hazardous waste[2, 4]	tons	30,487	1,851	-	-
Waste for disposal – other disposal actions[6]	tons	8,618	218	15,583	641
Of which non-hazardous waste[2]	tons	6,740	218	-	-
Of which hazardous waste[2, 4]	tons	1,878	0	-	-
Of which radioactive waste[2]	tons	0	0	-	-
Non-recycled waste[3]	tons	310,492	67,022	415,775	79,717
Non-recycled waste – share of total waste volume[3]	%	13.2	11.7	17.2	12.4
Total hazardous waste[2]	tons	210,023	39,396	-	-

1 The waste inventory contains estimated values, which were calculated using company-specific allocation keys, among other things.
2 No reporting possible for 2023.
3 Excluding waste for recovery – preparation for reuse.
4 Waste volumes with non-verifiable hazardousness are classified as hazardous waste.
5 Waste volumes with non-verifiable recovery operations are classified under other recovery operations.
6 Waste volumes with non-verifiable disposal operations are classified under other disposal operations.
The information for 2023 is provided voluntarily and has not been externally validated.

Methodology for calculating the waste generated

The volumes of all types of waste generated must be reported. This necessitates determining the masses of waste that leave the company's plants or are disposed of in the plants' own disposal facilities (e.g. landfills or incinerators). The total volume of waste also includes waste that is prepared for reuse, recycled, recovered in some other way, incinerated, landfilled or otherwise disposed of. Waste is to be recorded by weighing or calculating the unit weights.

For more information on recording environmental data, see the "Overarching targets and metrics" section in the "Introduction to environmental management" chapter.

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 degree of a company's environmental sustainability. With our taxonomy-aligned investments in development activities and in property, plant and equipment, we are today already shaping the future in an environmentally 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. The finance sector is expected to make an important contribution to realizing this objective. In this context, the EU published the "Strategy for Financing the Transition to a Sustainable Economy" in 2021. Aimed at supporting the financing of the transition to a sustainable economy, the published strategy contains proposals relating to transition finance, inclusiveness, resilience and contribution of the financial system, and global ambition. It is based on the EU's action plan on Financing Sustainable Growth of 2018. In addition to "Disclosures" and "Tools", another key module is 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 therefore 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.

The wording and terminology used in the EU Taxonomy are still subject to some uncertainty in interpretation, which could lead to changes in the reporting when it is subsequently clarified by the EU. Ultimately, there is a risk that the metrics presented as taxonomy-aligned would need to be assessed differently. Our interpretation is set out below.

ECONOMIC ACTIVITIES OF THE VOLKSWAGEN GROUP

With "The Group Strategy – Mobility for generations" we are tackling the challenges facing the automotive industry worldwide. Our vision is to be the global automotive tech driver. In this context, we pay particular attention to the use of resources and the emissions of our product portfolio, as well as those of our sites. We are committed to the Paris Climate Agreement and align our own activities with the 1.5 degree goal. It is our aim to be a net carbon-neutral company by 2050.

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.

An analysis of our economic activities in the context of the EU Taxonomy has not revealed any activities that contribute specifically to one of the other five environmental objectives.

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: Climate change mitigation		
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 do not fall under other economic activities in the manufacturing sector.	Power Engineering
3.18 Manufacture of automotive and mobility components	Manufacture, repair, maintenance, retrofitting, repurposing and upgrade of automotive and mobility systems and components that are essential for delivering and improving the environmental performance of the vehicle.	Vehicle-related business
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 current regulations. 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 (BEVs). Until December 31, 2025, they also include passenger cars and light commercial vehicles with CO_2 emissions of less than 50 g/km in accordance with the WLTP. This encompasses the majority of our plug-in hybrids.

Economic activity 3.18 Manufacture of automotive and mobility components

The components that play a key role in reducing greenhouse gas emissions are reported in this economic activity. To this activity we allocate the sale to third parties of motors and powertrains produced by us for all-electric vehicles; this primarily comprises the sale of these components to our Chinese joint ventures.

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 these economic activities 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 additional engines and powertrains, as well as parts deliveries, the sale of non-Group products and production under license by third parties. Based on current assumptions, hedging transactions and individual activities that we present primarily under "Other sales revenue" in the consolidated financial statements cannot be classified as economic activities under 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 business of building new heavy fuel oil engines and individual components for the extraction and processing of fossil fuels, have identified them as taxonomy-eligible. To enable us to also demonstrate the substantial contribution made by individual activities to climate change mitigation, we have developed a systematic method of calculating life-cycle greenhouse gas (GHG) emissions that is based on parameters and is suitable for the building of both individual machines and systems. This approach was verified for the Turbomachinery business area by an independent third party and is expected to be extended to other business areas in future.

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

Our activities in relation to the manufacture of equipment for the production of hydrogen are taxonomy-eligible: they include the electrolyzers we manufacture and the complete hydrogen systems we build. To meet the substantial contribution criteria, evidence of the life-cycle GHG emissions of the hydrogen later produced by the equipment's user must also be provided. This depends on the source of the energy used for electrolysis.

The manufacture of equipment for the use of hydrogen, which is required for a hydrogen-based supply of energy and raw materials, makes a substantial contribution to climate change mitigation. This equipment includes the compressors we manufacture for the transport, compression, or liquefaction of hydrogen, tanks and equipment for the storage of hydrogen, and reactors and equipment for processing hydrogen into hydrogen-based synthetic fuels.

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 GHG 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 carbon capture, utilization and storage (CCUS) technology. 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.

To count as a substantial contribution to economic activity 3.6, we must demonstrate that the use of the product reported here enables substantial life-cycle GHG emission savings compared to the best-performing alternative available on the market. Examining the life-cycle GHG emissions of the product itself does not suffice; the difference from the emissions of the alternative technology must also be calculated and evaluated. For this purpose, we apply the systematic method based on parameters that is used to calculate life-cycle GHG emissions to the CCUS industrial solutions, large-scale heat pumps, energy storage systems and paper industry applications manufactured by us.

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 GHGs. We allocate our licensing business to this economic activity. In the course of such business we provide 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.

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, 3.18 Manufacture of automotive and mobility components, 3.2 Manufacture of equipment for the production and use of hydrogen and 3.6 Manufacture of other low-carbon technologies.

In the vehicle-related business, analyses were performed largely for our all-electric vehicles and at the level of the production sites where passenger cars, light commercial vehicles, trucks, buses and components are or will be produced that meet the screening criteria for the substantial contribution of economic activities 3.3 Manufacture of low-carbon technologies for transport and 3.18 Manufacture of automotive and mobility components, or that are to meet them in future according to our five-year planning, and based on current regulations. Of the approximately 40 sites included, the majority are located in the EU, with some in the United Kingdom, Türkiye, South Africa, the USA, Mexico, Brazil, Argentina, China and India. We also included the sites that manufacture specific components for electric vehicles.

For the Power Engineering Business Area, analyses were performed on a project basis and largely at the level of the production sites that produce relevant components for systems or are responsible for supply chains that meet the screening criteria for the substantial contribution of economic activities 3.2 Manufacture of equipment for the production and use of hydrogen and 3.6 Manufacture of other low-carbon technologies, or that are to meet them in future according to our five-year planning. These comprise five sites in Germany, one in Switzerland and one in Sweden.

The wording and terminology used in the EU Taxonomy are subject to some uncertainty in interpretation. To some extent, the Taxonomy goes beyond the regulations to be applied in regular business operations. In addition, the application of the EU Taxonomy to sites outside the EU leads to particular challenges due to the possibility of diverging legislation. Below, we set out our interpretation and describe the main analyses we used to examine whether there was any significant harm to the other environmental objectives. Our assessments confirmed that primarily for Europe we met the requirements of the DNSH criteria in the reporting year in the vehicle-related business at the sites producing passenger cars, light commercial vehicles and components, as well as for the all-electric vehicles and their components produced at these sites.

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 the Representative Concentration Pathway (RCP8.5) and on the Shared Socioeconomic Pathway (SSP5-8.5) scenario 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 appropriate, the actions 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 of surface water used; performing an environmental impact assessment (EIA) or comparable processes that take into account the impacts on water resources; and implementing actions to mitigate water stress. Risks identified in an EIA or comparable processes are examined and, if relevant, result in actions and regulatory requirements. The analysis was based primarily on ISO 14001 certificates, information from site approvals and other external data sources related to sites in regions with a high risk exposure.

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 major aspects of Volkswagen's environmental management system. Volkswagen defines 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 taken into account through 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 actions for the use of recycled materials in new vehicles.

For trucks and buses, a review is conducted at the level of each brand to establish the extent to which local legislation or internal rules and regulations cover the specific requirements.

In the Power Engineering Business Area, a major lever for the circular economy can be found particularly in a long product lifespan, supported by other factors, including our retrofitting business.

Pollution prevention and control

To be considered environmentally sustainable, an economic activity may not significantly increase air, water or soil pollutant emissions as compared with the situation before the activity started.

Overall, the automotive sector is already tightly regulated, as demonstrated for example by the publicly accessible Global Automotive Declarable Substance List (GADSL). Approval and monitoring processes have been implemented with the aim of ensuring compliance with the legal requirements and internal rules and regulations applicable to regular business operations. In this context, we also already consider the use of alternative substances in our analyses and assessments.

In June 2023, the European Commission revised the DNSH criterion of the EU Taxonomy. There is room for interpretation as to the effect that the revised requirements will have on internal processes related to the assessment of substitution options for substances of very high concern (SVHC) and, beginning with the 2024 reporting year, also for other substances of relevance under the EU Taxonomy.

In the vehicle-related business, we fleshed out existing standards and processes with the aim of generally avoiding and substituting substances of relevance under the EU Taxonomy. On this basis, our analyses look at the substances contained in the vehicle-related materials and components, in order to assess whether the substances of relevance under the EU Taxonomy can be substituted, taking into account factors such as technical and economic criteria. Corresponding substitution assessments have already been initiated for sites that manufacture passenger cars and light commercial vehicles and for the all-electric vehicles or components produced there, which must be carried out primarily with the professional and technical support of our suppliers. In the reporting year, it was not possible to demonstrate that the all-electric vehicles and components currently manufactured and sold in North America and China, plug-in hybrids and the truck and bus brands comply with the new regulations.

In the Power Engineering Business Area, the corresponding processes include surveys relating to the substitution assessments and guidelines for performing these assessments. The specifics with regard to the substances of relevance under the EU Taxonomy were fleshed out in the reporting year. However, it was not possible to meet the requirements under the EU Taxonomy because checking the substances of relevance under the EU

Taxonomy requires excessive administrative and technical effort to implement and control on account of the highly project-based business model.

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 actions had been defined in the environmental approvals and subsequently implemented. It was also checked whether there had been changes in an area's conservation status.

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 Organization (ILO) and the International Bill of Human Rights. The assessments confirm that we meet the requirements of the minimum safeguards in the reporting year.

As a business with a global presence, the Volkswagen Group accepts its corporate responsibility for human rights, fully recognizes these conventions and declarations and reaffirms its agreement with the contents and principles stated therein. Compliance with legal requirements, internal rules and the principles enshrined in the Code of Conduct has top priority. This is why the Volkswagen Group appointed a Human Rights Officer, whose duties relate primarily to monitoring, checking and advising within the meaning of the *Lieferkettensorgfaltspflichtengesetz* (LkSG – German Supply Chain Due Diligence Act).

The LkSG imposes certain due diligence obligations designed to avoid risks associated with human rights and the environment. These obligations include the performance of risk analyses, the integration of preventive measures, remedial actions and the provision of a complaints mechanism. The whistleblower system is the central point of contact for reporting cases of breaches by employees of the Volkswagen Group or by suppliers. Employees can also contact the internal workers' representatives with their concerns. Reports submitted to the Volkswagen Group are transferred to the whistleblower system and processed there. As soon as breaches are identified and remedial action is necessary, the department responsible immediately and autonomously initiates appropriate remedial action. Remedial action that results from risk analyses or is necessary for other reasons is also defined and implemented by the departments responsible.

The Volkswagen Group checks whether the actions taken are effective at avoiding or reducing negative impacts on a regular and ad hoc basis in what is known as compliance monitoring. This also includes checking whether the Code of Conduct is being complied with and whether complaints have been dealt with.

Furthermore, along with the Group policies developed by Group Occupational Safety and Group Security, the HR Compliance Group policy sets out the organizational framework conditions in the controlled companies of the Volkswagen Group with regard to integrity and compliance in HR tools, actions and processes and takes into account local legal, collective-bargaining and operational regulations when implementing these. The provisions of the Code of Conduct are an integral part of the Group policy in that they require employees' human rights to be upheld.

Relationships with our business partners are based on agreements such as the Code of Conduct for Business Partners. Compliance with the requirements defined in the Code is contractually binding, and we review this with the aid of a sustainability rating in the case of relevant suppliers. We address existing sustainability risks and violations of sustainability principles by systematically defining and allocating packages of actions to correct the violations; we also apply this approach to the upstream supply chain. In addition, we also conducted training for suppliers and audits at suppliers with a high risk exposure in the reporting period. We implemented a Human Rights Focus System in 2022 to optimize our management system in line with international frameworks and requirements and specifically the LkSG. The system aims to identify particularly high risks in our supply chain in connection with human rights violations and the environment and to manage these appropriately.

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. We explain these below. The tables required by the EU Taxonomy are included at the end of the section.

The figures reported on sales revenue, capital expenditure and operating expenditure relate to the companies consolidated in the Volkswagen Group's financial statements. Volumes and financial data for our Chinese joint ventures are therefore excluded.

The financial figures relevant for the Volkswagen Group are taken from the IFRS consolidated financial statements for fiscal year 2024. As we differentiate between economic activities, we have avoided double counting. Where possible, the figures within an economic activity have been allocated directly. 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 were allocation formulas used based on the planned vehicle volumes. 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. This amounted to € 324.7 billion in fiscal year 2024 (see also note on "Sales revenue" in the notes to the consolidated financial statements).

Of this total, €292.7 billion, or 90.2% of Group sales, was attributable to economic activity 3.3 Manufacture of low-carbon technologies for transport, and was classified as taxonomy-eligible. This includes sales revenue after sales allowances from the sale of 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 the vehicles, such as workshop and other services.

Economic activity 3.18 Manufacture of automotive and mobility components accounted for taxonomy-eligible sales revenue of €182 million or 0.1% of Group sales. This includes the sale of all-electric vehicle motors and powertrains to third parties.

Of the taxonomy-eligible sales revenue from economic activity 3.3 Manufacture of low-carbon technologies for transport, €38.3 billion met the screening criteria used to measure the substantial contribution to climate change mitigation. This includes all of our all-electric vehicles and a large proportion of our plug-in hybrids. In 2024, this were 755 thousand such vehicles, or around 5% fewer than in the previous year. Their share of the relevant sales volume – excluding the vehicles from the Chinese joint ventures – was 12.0 (12.7)%. Passenger cars and light commercial vehicles made up the bulk at 754 thousand vehicles; trucks and buses recorded a noticeable decrease year-on-year. Sales of all-electric vehicles (BEV) also decreased noticeably compared with the prior year.

In addition, the taxonomy-eligible sales revenue from economic activity 3.18 Manufacture of automotive and mobility components met the screening criteria used to measure the substantial contribution to climate change mitigation.

Taking into account the DNSH criteria and minimum safeguards, €24.1 (36.5) billion of the sales revenue generated from our vehicle-related business, equating to 7.4 (11.3)% of consolidated sales revenue, was taxonomy-aligned. Taxonomy-aligned sales revenue is generated from economic activity 3.3 Manufacture of low-carbon technologies for transport and in the 2024 reporting year exclusively comprises our all-electric passenger cars and light commercial vehicles that were manufactured in or for Europe. For economic activity 3.18 Manufacture of automotive and mobility components, taking into account the DNSH criterion for assessing substitution options, no sales revenue was reported as taxonomy-aligned in the reporting year (previous year: €165 million).

In the Power Engineering Business Area, our activities that fall under economic activity 3.2 Manufacture of equipment for the production and use of hydrogen generated taxonomy-eligible sales revenue of €34 million, which also met the criteria for the substantial contribution. Most of our taxonomy-eligible sales revenue in the Power Engineering Business Area was attributable to economic activity 3.6 Manufacture of other low-carbon technologies (€ 3.2 billion). In the reporting year, the complex evidential requirements for the substantial contribution were fulfilled for €102 million. A further €76 million was contributed to taxonomy-eligible sales revenue by economic activity 9.1 Close to market research, development and innovation.

Taking into account the DNSH criterion for assessing substitution options, no sales revenue in the Power Engineering Business Area was reported as taxonomy-aligned in the reporting year (previous year: a total of €96 million).

Of the Volkswagen Group's total sales revenue in fiscal year 2024,
- €296.2 (297.4) billion, or 91.2 (92.3)%, was taxonomy-eligible sales revenue and
- €24.1 (36.6) billion, or 7.4 (11.4)%, was taxonomy-aligned sales revenue.

SALES REVENUE 2024

	SALES REVENUE		SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION		COMPLIANCE WITH DNSH CRITERIA	COMPLIANCE WITH MINIMUM SAFEGUARDS	TAXONOMY-ALIGNED SALES REVENUE	
Economic activities	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	**296,215**	**91.2**	**38,627**	**11.9**	**Y/N**	**Y**	**24,104**	**7.4**
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	292,685	90.2	38,309	11.8	Y/N	Y	24,104	7.4
3.18 Manufacture of automotive and mobility components	182	0.1	182	0.1	N	Y	-	-
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	34	0.0	34	0.0	N	Y	-	-
3.6 Manufacture of other low-carbon technologies	3,237	1.0	102	0.0	N	Y	-	-
9.1 Close to market research, development and innovation	76	0.0	-	-	-	-	-	-
B. Taxonomy-non-eligible activities	**28,441**	**8.8**						
Total (A + B)	**324,656**							

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 2024 consolidated financial statements in the notes on "Intangible assets", "Property, plant and equipment" and "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 2024, additions in the Volkswagen Group as defined above amounted to

- €12.7 billion from intangible assets,
- €16.7 billion from property, plant and equipment and
- €38.0 billion from lease assets (mainly vehicle leasing business) and investment property.

Other additions to be included resulted from changes in the consolidated Group, amounting to €0.2 billion in fiscal year 2024. Total capital expenditure to be included in accordance with the EU Taxonomy therefore came to €67.6 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 €67.2 billion, or 99.3% 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. Any capital expenditure directly attributable to vehicles that do not meet the screening criteria was not included. 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 developed allocation formulas based on planned volumes of all-electric vehicles for the Group companies. In the sales companies, for example, we used allocation formulas related either to individual brands or to all brands, depending on the primary business activity, while site-based allocation formulas were used for production companies. This means that capital expenditure was counted in full via the allocation formulas for sites that according to our medium-term planning will produce only all-electric vehicles in the next five years. By contrast, capital expenditure for sites that do not produce all-electric vehicles was not counted via the allocation formulas. Calculated in this way, capital expenditure relating to vehicles that meet the screening criteria for the substantial contribution amounted to €23.2 billion.

Taking into account the DNSH criteria and minimum safeguards, capital expenditure of €18.5 (20.0) billion was taxonomy-aligned. This represented 27.3 (32.6) % of the Group's total capital expenditure. Of this figure, €5.1 billion was attributable to intangible assets, €5.5 billion to property, plant and equipment and €7.9 billion to lease assets and investment property. Taxonomy-aligned capital expenditure in the 2024 reporting year refers exclusively to our all-electric passenger cars and light commercial vehicles and mainly concerns Europe; it includes additions to capitalized development costs of €4.3 billion and additions to property, plant and equipment of €5.5 billion.

In the reporting period, we refinanced taxonomy-aligned capital expenditure from fiscal years 2021 through 2023 based on the Green Finance Framework updated in October 2022 by issuing green bonds in the amount of €1.0 billion. Only capital expenditure in connection with all-electric vehicles was included here.

€93 million of the taxonomy-eligible capital expenditure in the Power Engineering Business Area is attributable to economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, which also fulfills the substantial contribution criterion. €134 million of the taxonomy-eligible capital expenditure in the Power Engineering Business Area is attributable to economic activity 3.6 Manufacture of other low-carbon technologies, based on the planned sales revenue, of which €38 million will make a substantial contribution.

Taking into account the DNSH criterion for assessing substitution options, no capital expenditure in the Power Engineering Business Area was reported as taxonomy-aligned in the reporting year (previous year: a total of €62 million).

Of the Volkswagen Group's total capital expenditure in fiscal year 2024,
- €67.4 (61.3) billion, or 99.6 (99.6)%, was taxonomy-eligible capital expenditure and
- €18.5 (20.1) billion, or 27.3 (32.7)%, was taxonomy-aligned capital expenditure.

CAPITAL EXPENDITURE 2024

	CAPITAL EXPENDITURE		SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION		COMPLI-ANCE WITH DNSH CRITERIA	COMPLI-ANCE WITH MINIMUM SAFE-GUARDS	TAXONOMY-ALIGNED CAPITAL EXPENDITURE	
Economic activities	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	**67,381**	**99.6**	**23,373**	**34.6**	**Y/N**	**Y**	**18,481**	**27.3**
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	67,155	99.3	23,242	34.4	Y/N	Y	18,481	27.3
of which additions to capitalized development costs for BEVs							4,286	6.3
of which additions to property, plant and equipment for BEVs							5,493	8.1
3.18 Manufacture of automotive and mobility components	-	-	-	-	-	-	-	-
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	93	0.1	93	0.1	N	Y	-	-
3.6 Manufacture of other low-carbon technologies	134	0.2	38	0.1	N	Y	-	-
9.1 Close to market research, development and innovation	-	-	-	-	-	-	-	-
B. Taxonomy-non-eligible activities	**253**	**0.4**						
Total (A + B)	**67,634**							

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 the note on "Intangible assets". We also include the expenditure for short term leases recognized in our consolidated financial statements, which can be found in the note on "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. They were 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, allocation formulas were used, similarly to capital expenditure. Taxonomy-aligned operating expenditure in the 2024 reporting year related solely to our all-electric passenger cars and light commercial vehicles and was attributable above all to Europe. Of the taxonomy-aligned operating expenditure of €5.4 (5.7) billion, around 86% was attributable to non-capitalized research and development costs.

€11 million of the taxonomy-eligible operating expenditure in the Power Engineering Business Area is attributable to economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, which also fulfills the substantial contribution criterion. €233 million of the taxonomy-eligible operating expenditure in the Power Engineering Business Area is attributable to economic activity 3.6 Manufacture of other low-carbon technologies, based on the planned sales revenue, of which €69 million will make a substantial contribution. Taking into account the DNSH criterion for assessing substitution options, no operating expenditure in the Power Engineering Business Area was reported as taxonomy-aligned in the reporting year (previous year: a total of €69 million).

OPERATING EXPENDITURE 2024

Economic activities	OPERATING EXPENDITURE € million	OPERATING EXPENDITURE %[1]	SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION € million	SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION %[1]	COMPLIANCE WITH DNSH CRITERIA Y/N	COMPLIANCE WITH MINIMUM SAFEGUARDS Y/N	TAXONOMY-ALIGNED OPERATING EXPENDITURE € million	TAXONOMY-ALIGNED OPERATING EXPENDITURE %[1]
A. Taxonomy-eligible activities	**13,367**	**99.2**	**6,134**	**45.5**	**Y/N**	**Y**	**5,448**	**40.4**
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	13,122	97.4	6,054	44.9	Y/N	Y	5,448	40.4
3.18 Manufacture of automotive and mobility components	-	-	-	-	-	-	-	-
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	11	0.1	11	0.1	N	Y	-	-
3.6 Manufacture of other low-carbon technologies	233	1.7	69	0.5	N	Y	-	-
9.1 Close to market research, development and innovation	-	-	-	-	-	-	-	-
B. Taxonomy-non-eligible activities	**107**	**0.8**						
Total (A + B)	**13,474**							

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

CAPEX PLAN UNDER THE EU TAXONOMY

The EU Taxonomy requires the reporting to state the extent to which taxonomy-aligned capital and operating expenditures a) relate to assets or processes associated with environmentally sustainable economic activities or b) are part of a plan to expand taxonomy-aligned economic activities or to allow taxonomy-eligible economic activities to become taxonomy-aligned (CapEx plan). A CapEx plan under the EU Taxonomy shows the total capital expense, i.e. the sum of capital and operating expenditures expected to be incurred in the reporting period and during the five-year medium-term planning in order to expand taxonomy-aligned economic activities or allow taxonomy-eligible economic activities to become taxonomy-aligned.

For the vehicle-related business, the CapEx plan drawn up under the EU Taxonomy relates to economic activity 3.3 Manufacture of low-carbon technologies for transport within the climate change mitigation environmental objective.

Additions from lease assets (mainly vehicle leasing business) are based on existing environmentally sustainable activities and have therefore not been included in the CapEx plan. We allocated additions from intangible assets and property, plant and equipment, as well as non-capitalized research and development costs to the CapEx plan if they allow taxonomy-eligible economic activities to become taxonomy-aligned or lead to the expansion of taxonomy-aligned economic activities. For this, we compared the average expected taxonomy-aligned production volume of all-electric vehicles from the medium-term planning with the taxonomy-aligned all-electric vehicles from the reporting period and allocated the taxonomy-aligned capital expenditure according to this ratio, whereby we also took into account the share exceeding the current taxonomy-aligned production volume of all-electric vehicles.

As a result, €8 (8) billion of the taxonomy-aligned capital expenditure and €4 (3) billion of the taxonomy-aligned operating expenditure in the reporting period is attributable to the CapEx plan under the EU Taxonomy. The total capital expense from the CapEx plan under the EU Taxonomy that is expected to be incurred in the reporting period and during the five-year medium-term planning amounts to €88 (90) billion. The CapEx plan was revised due to changes in market expectations, adjustments to medium-term planning and a reappraisal of the requirements of the EU Taxonomy.

In the Power Engineering Business Area, the CapEx plan under the EU Taxonomy relates to economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, and economic activity 3.6 Manufacture of other low-carbon technologies, both of which are listed in the climate change mitigation environmental objective. In respect of the manufacture of equipment for the production and use of hydrogen and taking into account the DNSH criterion for assessing substitution options, we were not able to allocate any capital expenditure or operating expenditure to the CapEx plan in the reporting year (previous year: a total of €45 million). Based on the ratio of taxonomy-aligned sales revenue in the reporting year to the expected average taxonomy-aligned sales revenue envisaged in the medium-term planning, the total capital expense from the CapEx plan under the EU Taxonomy that is expected to be incurred in the reporting period and during the medium-term planning amounts to around €455 (455) million. In respect of the manufacture of other low-carbon technologies and taking into account the DNSH criterion for assessing substitution options, we were not able to allocate any capital expenditure or operating expenditure to the CapEx plan in the reporting year (previous year: a total of €59 million). Based on the ratio of taxonomy-aligned sales revenue in the reporting year to the expected average taxonomy-aligned sales revenue envisaged in the medium-term planning, the total capital expense from the CapEx plan under the EU Taxonomy that is expected to be incurred in the reporting period and during the medium-term planning amounts to approximately €360 (380) million.

TABULAR PRESENTATION IN ACCORDANCE WITH THE EU TAXONOMY
SALES REVENUE 2024

				CRITERIA FOR A SIGNIFICANT CONTRIBUTION						DNSH CRITERIA (DO NO SIGNIFICANT HARM)								
Economic activities	Code	Sales revenue	Proportion of sales revenue 2024	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Taxonomy-aligned (A.1) or taxonomy-eligible (A.2) proportion of sales revenue 2023	Enabling activities category	Transition activities category
		€ million	%[1]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%[1]	E	T
A. Taxonomy-eligible activities																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of low-carbon technologies for transport	CCM 3.3	24,104	7.4	Y	N/EL	N/EL	N/EL	N/EL	N/EL		Y	Y	Y	Y	Y	Y	11.3	E	
Manufacture of automotive and mobility components	CCM 3.18	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1		
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0		
Manufacture of other low-carbon technologies	CCM 3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0		
Sales revenue from environmentally sustainable activities (taxonomy-aligned) (A.1)		**24,104**	**7.4**	**7.4**	**-**	**-**	**-**	**-**	**-**		**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**11.4**		
Of which enabling activities		24,104	7.4	7.4	-	-	-	-	-		Y	Y	Y	Y	Y	Y	11.4	E	
Of which transition activities		-	-	-							-	-	-	-	-	-	-		
A.2 Taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned)				EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]										
Manufacture of low-carbon technologies for transport	CCM 3.3	268,582	82.7	EL	N/EL	N/EL	N/EL	N/EL	N/EL								80.0		
Manufacture of automotive and mobility components	CCM 3.18	182	0.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL								-		
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	34	0.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								-		
Manufacture of other low-carbon technologies	CCM 3.6	3,237	1.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.9		
Close to market research, development and innovation	CCM 9.1	76	0.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.0		
Sales revenue from taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned) (A.2)		**272,112**	**83.8**	**83.8**	**-**	**-**	**-**	**-**	**-**								**80.9**		
Sales revenue from taxonomy-eligible activities (A.1 + A.2)		**296,215**	**91.2**	**91.2**	**-**	**-**	**-**	**-**	**-**								**92.3**		
B. Taxonomy-non-eligible activities																			
Sales revenue from activities that are not taxonomy-eligible (B)		28,441	8.8																
Total (A + B)		**324,656**	**100.0**																

1 All percentages relate to the Group's total sales revenue.
2 Y: Yes, taxonomy-eligible activity and taxonomy-aligned with the relevant environmental objective; N: No, taxonomy-eligible activity but not taxonomy-aligned with the relevant environmental objective; N/EL: 'Not eligible', activity not taxonomy-eligible for the relevant environmental objective.
3 EL: Taxonomy-eligible activity for the relevant objective; N/EL: Activity that is not taxonomy-eligible for the relevant objective.

CAPITAL EXPENDITURE 2024

				CRITERIA FOR A SIGNIFICANT CONTRIBUTION						DNSH CRITERIA (DO NO SIGNIFICANT HARM)									
Economic activities	Code	CapEx	Proportion of CapEx 2024	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Taxonomy-aligned (A.1) or taxonomy-eligible (A.2) proportion of CapEx 2023	Enabling activities category	Transition activities category
		€ million	%[1]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%[1]	E	T
A. Taxonomy-eligible activities																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of low-carbon technologies for transport	CCM 3.3	18,481	27.3	Y	N/EL	N/EL	N/EL	N/EL	N/EL		Y	Y	Y	Y	Y	Y	32.6	E	
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1		
Manufacture of other low-carbon technologies	CCM 3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0		
CapEx from environmentally sustainable activities (taxonomy-aligned) (A.1)		**18,481**	**27.3**	**27.3**	**–**	**–**	**–**	**–**	**–**		**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**32.7**		
Of which enabling activities		18,481	27.3	27.3	–	–	–	–	–		Y	Y	Y	Y	Y	Y	32.7	E	
Of which transition activities		-	-	-							–	–	–	–	–	–	-		
A.2 Taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned)				EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]										
Manufacture of low-carbon technologies for transport	CCM 3.3	48,674	72.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								66.9		
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	93	0.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL								-		
Manufacture of other low-carbon technologies	CCM 3.6	134	0.2	EL	N/EL	N/EL	N/EL	N/EL	N/EL								0.1		
CapEx from taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned) (A.2)		**48,900**	**72.3**	**72.3**	**–**	**–**	**–**	**–**	**–**								**67.0**		
CapEx from taxonomy-eligible activities (A.1 + A.2)		**67,381**	**99.6**	**99.6**	**–**	**–**	**–**	**–**	**–**								**99.6**		
B. Taxonomy-non-eligible activities																			
CapEx from activities that are not taxonomy-eligible (B)		253	0.4																
Total (A + B)		**67,634**	**100.0**																

1 All percentages relate to the Group's total capital expenditure.
2 Y: Yes, taxonomy-eligible activity and taxonomy-aligned with the relevant environmental objective; N: No, taxonomy-eligible activity but not taxonomy-aligned with the relevant environmental objective; N/EL: 'Not eligible', activity not taxonomy-eligible for the relevant environmental objective.
3 EL: Taxonomy-eligible activity for the relevant objective; N/EL: Activity that is not taxonomy-eligible for the relevant objective.

OPERATING EXPENDITURE 2024

				CRITERIA FOR A SIGNIFICANT CONTRIBUTION						DNSH CRITERIA (DO NO SIGNIFICANT HARM)									
Economic activities	Code	OpEx	Proportion of OpEx 2024	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Minimum safeguards	Taxonomy-aligned (A.1) or taxonomy-eligible (A.2) proportion of OpEx 2023	Enabling activities category	Transition activities category
		€ million	%[1]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y; N; N/EL[2]	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	Y/N	%[1]	E	T
A. Taxonomy-eligible activities																			
A.1 Environmentally sustainable activities (taxonomy-aligned)																			
Manufacture of low-carbon technologies for transport	CCM 3.3	5,448	40.4	Y	N/EL	N/EL	N/EL	N/EL	N/EL		Y	Y	Y	Y	Y	Y	43.2	E	
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1		
Manufacture of other low-carbon technologies	CCM 3.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5		
OpEx from environmentally sustainable activities (taxonomy-aligned) (A.1)		**5,448**	**40.4**	**40.4**	**–**	**–**	**–**	**–**	**–**		**Y**	**Y**	**Y**	**Y**	**Y**	**Y**	**43.8**		
Of which enabling activities		5,448	40.4	40.4	–	–	–	–	–		Y	Y	Y	Y	Y	Y	43.8	E	
Of which transition activities		-	-	-							-	-	-	-	-	-	-		
A.2 Taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned)				EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]	EL; N/EL[3]										
Manufacture of low-carbon technologies for transport	CCM 3.3	7,674	57.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL								53.9		
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	11	0.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL								-		
Manufacture of other low-carbon technologies	CCM 3.6	233	1.7	EL	N/EL	N/EL	N/EL	N/EL	N/EL								1.2		
OpEx from taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned) (A.2)		**7,919**	**58.8**	**58.8**	**–**	**–**	**–**	**–**	**–**								**55.1**		
OpEx from taxonomy-eligible activities (A.1 + A.2)		**13,367**	**99.2**	**99.2**	**–**	**–**	**–**	**–**	**–**								**98.9**		
B. Taxonomy-non-eligible activities																			
OpEx from activities that are not taxonomy-eligible (B)		107	0.8																
Total (A + B)		**13,474**	**100.0**																

1 All percentages relate to the Group's total operating expenditure.
2 Y: Yes, taxonomy-eligible activity and taxonomy-aligned with the relevant environmental objective; N: No, taxonomy-eligible activity but not taxonomy-aligned with the relevant environmental objective; N/EL: 'Not eligible', activity not taxonomy-eligible for the relevant environmental objective.
3 EL: Taxonomy-eligible activity for the relevant objective; N/EL: Activity that is not taxonomy-eligible for the relevant objective.

Due to a lack of economic activities in the fields of nuclear energy and fossil gas, tabular presentation has been omitted.

Employees and non-employees

The Volkswagen Group is a social employer that promotes a diverse, inclusive and non-discriminatory culture.

MATERIAL IMPACTS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Employees and non-employees were included in the assessment of significant impacts, in accordance with the ESRS. The employees and non-employees who are or may be affected by activities' material impacts comprise the following groups: employees, self-employed people, and temporary external personnel.

Employees means anyone with an active employment contract who takes part in the Volkswagen Group's value creation process, including members of top management, people in the passive phase of partial retirement and vocational trainees. The quantitative disclosures do not include people in dormant employment, such as people on parental leave. Nor do they include employees in academic training, such as interns, student workers, or students studying for a PhD, master's degree, or bachelor's degree. Employees are categorized according to different characteristics, such as term of employment and gender distribution.

In addition, another group consists of non-employees, who comprise self-employed people and temporary external personnel. In contrast to non-employees, only employees can exert direct influence in the sense of promoting or mitigating the impacts identified below. For this reason, policies, actions, targets, and stakeholder engagement in relation to employees are described in the following. Where policies exist in relation to non-employees (temporary external personnel and self-employed people) or the involvement of non-employees, these are explicitly described.

The impacts identified by the materiality assessment are concentrated on the Company itself. In addition to the ongoing dialog with employees, for example through workers' representatives, the materiality assessment process has given the Volkswagen Group an understanding of whether and which groups of employees and non-employees might be more significantly affected by negative impacts.

Impacts in the area of working conditions

The Volkswagen Group's materiality assessment identified a positive actual and potential impact on employees and non-employees with long-term effect. This impact results from the provision of secure jobs with fair and transparent pay and healthy working conditions. This includes, for example, training programs, health protection, and extensive participation rights. For both employees and non-employees, this can mean a secure income, health, and long-term employment prospects despite changing requirements in the working environment.

In addition, the materiality assessment identified an actual negative impact. This arises if business processes relating to the Group's working conditions have a negative impact for the individual affected (e.g. in the case of job cuts, restricted freedom of association due to local laws, or unhealthy working conditions). The negative impact is related to isolated incidents. This may mean the loss of their job and a secure income for the individuals concerned and also limited opportunities to represent interests and health restrictions.

Impacts in the area of equal treatment and equal opportunities

In addition to the impacts identified in the area of working conditions, the Volkswagen Group's materiality assessment identified an actual positive impact on employees and non-employees through the provision of an inclusive working environment and equal treatment of employees and non-employees, including with regard to development opportunities.

This also encompasses the inclusion of persons with disabilities, the promotion of a culture free of discrimination, violence, and harassment, and awareness-raising among employees and non-employees of these topics. For employees and non-employees, this impact is felt through a non-discriminatory approach to the development of potential and the facilitation of development prospects.

Moreover, the materiality assessment also identified an actual negative impact. This is reflected in isolated cases of unequal treatment, including with regard to a shortage of development opportunities due to a lack of or insufficient objective rules on avoiding discriminatory behavior, such as remuneration policies or hiring and promotion processes. The negative impact is related to isolated incidents. Discrimination and unequal treatment can have far-reaching consequences, which may lead to both financial losses and adverse health effects.

Impacts in the area of other work-related rights

In addition, the Volkswagen Group's materiality assessment identified an actual and potential positive impact on employees and non-employees through the promotion and enforcement of compliance with social and human-rights standards with regard to employees and non-employees (e.g. no child labor or forced labor). The impact is potentially long term.

In addition to the impacts identified for the sustainability report in the context of the double materiality assessment, there are additional personnel risks inherent in the business model. These are described in the "Personnel risks" section in the chapter "Report on Risks and Opportunities" in the Group management report. The actions described below also mitigate the personnel risks mentioned there.

Interaction with strategy and business model

The impacts identified in the materiality assessment have an effect on the Volkswagen Group's business model and strategies. The consideration of impacts on employees is anchored in the Volkswagen Group's fundamental corporate values. The Code of Conduct maps out the common set of values for integrity and compliance in the Volkswagen Group and specifies a framework of values for the Group's strategic direction. An in-depth description of the Code of Conduct is provided under the section "HR Compliance Group policy and Code of Conduct" and in the chapter "Business conduct information". The balance between the interests of the Company and those of our employees is to be safeguarded by the employee representatives through co-determination processes.

This consideration of the interests of employees has an impact that goes beyond the impacts identified in the short term.

The Volkswagen Group's sustainability strategy regenerate+ includes the aim of being a socially responsible employer for employees. The strategy describes the path to a sustainable future, focusing on a safe and healthy working environment; a diverse, inclusive, and non-discriminatory culture; attractive jobs; fair wages; and good further training opportunities for the long-term qualification of employees.

In addition to the Group sustainability strategy, the management of impacts on employees is also guided by the Group People Strategy, which is the human resources strategy, for the three brand groups of Core, Progressive and Sport Luxury. The Group strategy describes the guiding principles for the transformation of all employees and their diversity as focus topics. These form the framework for the Group People Strategy.

More detailed information on regenerate+ and the new Group strategy can be found in the "General information" chapter. The Group People Strategy is expanded on in the "Sustainable Value Enhancement" chapter of the Group management report. Implementation of occupational health and safety targets is supported by the Group-wide Safety First strategy. The Volkswagen Group attaches great importance to protecting its employees and creating a safe and healthy working environment in accordance with the applicable international standards. Occupational health and safety are therefore key topics for the Volkswagen Group. The vision of this strategy is to anchor "safety first" as a guiding principle in the actions of all managers and employees. The aim is for all

occupational safety processes to be known and applied reliably. All managers and employees are to be informed and trained and act in line with safety requirements. The aim is to ensure the protection and promotion of physical and mental health, taking into account psychosocial risks and their effects. Employees should not suffer accidents when working. The workplaces should therefore be designed with the help of the departments responsible for occupational safety.

The Volkswagen Group plays a role in the material impacts described above through its activities. It uses the actions described in the following paragraphs to promote material positive impacts and respond to the influence of its material negative impacts from the business model, strategy and value chain in the area of employees. These are broadly categorized here, but explained in detail further on in the sections "Actions related to working conditions," "Actions related to occupational health and safety," "Actions related to equal treatment and equal opportunities" and "Actions related to other work-related rights".

With regard to working conditions, the Volkswagen Group wants to strengthen positive impacts through the establishment and ongoing improvement of an occupational health and safety management system at production sites with more than 1,000 employees. This system is not only audited internally but also certified externally. In addition, systematic risk analyses and Group audits of occupational health and safety are conducted in the Group in order to further increase this for employees. The action regarding freedom of association described below enables employees to realize their right to freedom of association in compliance with the laws applicable in the various countries and locations. In addition, digital training for employees is being introduced and gradually expanded so that employees can maintain their long-term employability even when requirements change.

The Volkswagen Group wants to prevent negative impacts relating to working conditions, particularly with regard to business processes that have a negative effect on individual employees, for example, in the case of job cuts – by planning Group-wide plant utilization in the budget planning round. Furthermore, the opinion survey is used to identify and mitigate topics that employees view as particularly critical and to derive actions to improve working conditions. The opinion survey is generally conducted annually but was suspended in the reporting year due to revision.

With regard to equal treatment, the Volkswagen Group wants to strengthen positive impacts by defining actions to create an inclusive working environment and equal treatment of employees. The Group provides the companies with a Group-wide policy to define topics and action areas that must be implemented to promote diversity, equal opportunities, inclusion, and belonging. In addition, the Volkswagen Group uses training and provides work materials to empower managers throughout the Group to create an unbiased working environment and processes geared to equal opportunities. In order to create a direct incentive to comply with diversity targets, the Group management's remuneration is linked to the diversity index. The Company uses this index to continuously monitor how the diversity of its management is developing.

The Volkswagen Group wants to prevent negative impacts relating to equal treatment by penalizing misconduct and collecting and publishing a statistic on the disclosure of the penalization of misconduct. In addition, a new anti-discrimination rule was created to close gaps in regulation on the avoidance of discrimination in the hiring, remuneration, and promotion process. The Group companies are currently working on introducing this.

With regard to other work-related rights, the Volkswagen Group has strengthened positive impacts by extending a Group-wide process to prevent violations of fundamental human rights in the recruitment process (prohibition of child labor and forced labor).

Due to the positive impact of the promotion and enforcement of compliance with social and human-rights standards (e.g. no child labor or forced labor), any risk of forced labor or child labor in the Volkswagen Group with regard to its activities or the countries, regions, or geographical areas in which the Volkswagen Group operates is essentially mitigated.

PROCESSES: ENGAGING WITH EMPLOYEES AND WORKERS' REPRESENTATIVES ABOUT IMPACTS

Employee participation policy

The Volkswagen Group facilitates the most comprehensive representation of employee interests possible, respects its employees' perspectives and interests, and addresses these on an ongoing basis. Both managers and HR are contacts for employees in day-to-day business. Additional contacts (e.g. diversity experts) are usually available at the company level for marginalized groups. In addition, the Volkswagen Group maintains a continuous dialog with workers' representatives (e.g. works councils, trade unions, representation on the Supervisory Board) about material actual and potential positive and negative impacts that the Company has or could have on employees. The Group focuses here on the stable dialog and feedback formats described below, which provide a space for evolving material topics and employee matters. These also include potential negative impacts that could arise from business processes independently of the business area. This enables actual and potential impacts arising to be addressed promptly. Information on any controversies, including in relation to employee matters, is promptly and transparently made available on the Group's web-based information service.

The most important pillar for including the interests of employees is representation by workers' representatives. The Volkswagen Group is committed to openly working together with workers' representatives in a spirit of trust, maintaining constructive and cooperative dialog, and striving for a fair balance of interests. Dealing professionally with workers' representatives is part of the corporate culture. The workers' representatives facilitate the indirect representation of employees' interests, views, and rights to management – continuously and at various levels. This has a long tradition in Germany in particular, but internationally there are also established forms of workers' representation, as well as a Group Global Works Council in the Volkswagen Group that has existed for decades. Agreements between workers' representatives and senior management are codified through various documents – such as key issues papers and future proofing programs. Temporary external personnel can use the Group's interest representation bodies in relation to topics that affect their employment, provided that there are no statutory or company regulations to the contrary.

The formats and channels listed below are intended to ensure that the interests of employees are heard by management at local, European, and global level both directly and through the workers' representatives.

Employee codetermination in the Supervisory Board

The Volkswagen AG Supervisory Board has equal representation, with an equal number of employer representatives and workers' representatives. As a rule, it adopts its resolutions within the scope of its responsibilities in meetings of all its members. Equal representation is enshrined in the *Aktiengesetz* (AktG - German Stock Corporation Act) and the *Mitbestimmungsgesetz* (MitbestG - German Codetermination Act). Equal representation is also designed to ensure that employee interests are institutionalized over the long term.

The Supervisory Board committees that prepare decisions are also generally based on equal representation, enabling indirect codetermination for employees and ensuring that employee interests are reflected in Supervisory Board decisions. This is designed to help promote the positive impact of the Group's business operations on employees and mitigate negative impacts on employees. The Supervisory Board holds at least two meetings in each half of the calendar year. The precise number of meetings and the main topics discussed are outlined in the Report of the Supervisory Board.

Operational responsibility for convening Supervisory Board meetings lies with the Chair of the Supervisory Board, while operational responsibility for convening committee meetings lies with the relevant committee chair.

Group European Works Council and Global Group Works Council

The Group European Works Council and Global Group Works Council are central tools for incorporating employee interests. The workers' representatives and management regularly meet at consultative meetings where the Group Board of Management informs the Group European Works Council and Global Group Works Council on current topics relevant to the workforce. All members of the Group European Works Council and the Global Group Works Council attend at least one joint session every year. In addition, delegation trips and workshops are jointly organized and hosted.

Important international framework agreements have been concluded between these committees and the Volkswagen's Group management, including the Declaration by the Volkswagen Group on Social Rights, Industrial Relations and Business and Human Rights (the "Declaration on Social Rights" for short). In keeping with the contents of the Declaration on Social Rights, bodies representing workers have been formed in accordance with local law throughout almost the entire Group.

As part of the negotiation and creation of the Declaration on Social Rights, employees' perspectives were taken into account through their representatives. The annual meeting includes reporting on compliance and the assessment of adjustment requirements. Other charters resulting from collaboration between the Group European Works Council and Global Group Works Council represent binding rules for management. The same applies regarding decisions or activities aimed at managing the actual and potential impacts on the Group's employees and non-employees.

Other agreements resulting from this collaboration include the Charter on Labor Relations, the Charter on Temporary Work, and the Charter on Vocational Training. They are designed to give employees and non-employees security with regard to their collective rights at the workplace and also set out the principles of the labor policy. The charters also show that the interests of employees and non-employees are taken into account when drawing up human-rights and HR principles and guidelines.

The Charter on Labor Relations gives workers' representatives in the Group European Works Council and Global Group Works Council precisely defined information, consultation, and codetermination rights – for example, codetermination rights on personnel development or occupational health and safety. These principles, which are set out in the charter, form the Group-wide framework for the representation of employee interests at local level.

The Charter on Temporary Work sets out the principles of temporary work, governs the framework conditions for employment and wages of temporary external personnel in the Volkswagen Group, and is intended to standardize the use of temporary work in the entire Volkswagen Group.

The Charter on Vocational Training was adopted in order to define key aspects for shaping conditions for vocational trainees that must be taken into account when implementing the Charter on Labor Relations.

Operational responsibility for the implementation of the communication format and codification of the results lies with the Chair of the Group European Works Council and Global Group Works Council, with the involvement

of the member of the Volkswagen AG Board of Management member for Human Resources, represented by the Group Human Resources International organizational unit.

Opinion survey

An annual employee survey used comprehensively across the Group has provided employees with a direct and established opportunity to give their opinion since 2008. The Company used the so called opinion survey to collect data on employee satisfaction every year. Based on the results, follow-up processes were implemented in which measures were developed and executed. In this way, employees' views were taken into account when taking action to remediate negative impacts and evaluating its effectiveness. The measurement and publication of the participation rate served as an indicator of the opinion survey's effectiveness and acceptance. In 2023, the rate was 79% of employees at the participating companies.

In 2024, the opinion survey was suspended in the Group to allow it to be revised. After its revision, it should continue to be provided to all the companies as a tool. Group Human Resources will continue to have operational responsibility for the opinion survey. More information on the new opinion survey design can be found under the section "Actions related to working conditions" and in the "Business conduct information" chapter under "Actions: Corporate culture".

The Company has established additional formats that employees can use to report their interests and problems. These are direct forms of communication. The formats include the Group-wide whistleblower system and direct reporting to managers, who are required to follow the report up and take action where necessary. The reporting requirement for employees in management is set out in a Group policy. More information on the effectiveness of the whistleblower system is provided in the sections below.

PROCESSES: REMEDIATION OF NEGATIVE IMPACTS AND COMPLAINT CHANNELS

Compliance with legal requirements, internal rules and the Code of Conduct has top priority in the Volkswagen Group. This is intended to avoid and prevent negative impacts on employees and non-employees.

However, the materiality assessment identified actual negative impacts on working conditions, equal treatment and equal opportunities within the Volkswagen Group. These are isolated cases that relate to the topics of job cuts, freedom of association restricted under local law, unhealthy working conditions and unequal treatment, including a lack of development opportunities due to a lack of or inadequate objective rules to avoid discrimination, such as remuneration guidelines or recruitment and promotion processes. As no systematic impacts were identified, but merely individual cases, which are also subject to regional conditions, the impacts are managed at the local level in the companies rather than at Group level.

Specifically, this means that the companies take action when individual cases arise relating to job cuts and unhealthy working conditions. In relation to job cuts, for example, this means creating opportunities at other sites, exhausting the demographic curve to minimize actual redundancies, or adopting a socially responsible approach if job cuts cannot be avoided. With regard to unhealthy working conditions, the relevant circumstances of the reported work-related accidents are responded to locally and actions are taken.

Due to different political and legal conditions, it is not possible to implement the standards of the Organisation for Economic Co-operation and Development (OECD) and International Labour Organization (ILO) at all the Group's production sites around the world to the same extent as in the European Union. Freedom of association is realized in compliance with the laws applicable in the various countries and locations. The aim is to bridge the tension between the different national conditions and the interest in the greatest possible achievement of the right to organize. A particular challenge arises in states that have not signed the ILO Convention on Freedom of Association and Protection of the Right to Organize. In these efforts, care is taken not to violate local laws and not to put local employees at risk.

In the event of individual serious breaches of the rules, for example in connection with unequal treatment and discrimination, the employees can use the whistleblower system described below to seek redress that, in contrast to the topics described above, is handled on a Group-wide basis.

The Volkswagen Group has established defined complaint channels and remediation processes. If a grievance is identified when a complaint is made, countermeasures are taken immediately – in compliance with national

regulations – and the implementation of these countermeasures is monitored in order to put a stop to the potential or actual negative impact and prevent reoccurrence.

Complaint channels

With its binding principles and regulated procedures, the Group-wide whistleblower system is intended to avert damage to the Company and enable both employees and non-employees to draw attention to potential misconduct. It serves as the central point of contact for reporting cases of rule-breaking and is a complaint procedure provided centrally by the Volkswagen Group.

The Central Investigation Office in Wolfsburg is responsible for coordinating the Group-wide whistleblower system. The employees there process whistleblower information concerning Volkswagen AG and any of its subsidiaries that do not have their own investigation office and also process reports with relevance for the Volkswagen Group. Employees from the Audit, Security and Legal Affairs departments investigate the cases. AUDI AG, Dr. Ing. h.c. F. Porsche AG and TRATON SE each have separate investigation offices for themselves and their subsidiaries. There is also a regional investigation office at Volkswagen (China) Investment Company Ltd. It processes whistleblower information concerning Volkswagen AG's and Audi AG's Chinese subsidiaries.

All the Group's employees, business partners and their workforce, customers and other third parties can report information on potential breaches of the rules at any time, including serious impacts for employees and non-employees and human-rights violations. They may do this anonymously if they so choose.

The Volkswagen Group whistleblower system's principles, reporting channels and procedures are described in detail in the "Business conduct information" chapter.

The reporting channels and further information on the existing complaint procedures are publicly accessible on the Volkswagen Group website.

The availability and accessibility of the whistleblower system's reporting channels are checked as part of the internal control system.

Employees can also contact the internal workers' representatives with their concerns. Further information is provided in the section "Processes: Engaging with employees and workers' representatives about impacts".

In addition to these complaint channels operated by the Volkswagen Group itself, external grievance mechanisms are also available, such as the OECD National Contact Point or the *Bundesamt für Wirtschaft und Ausfuhrkontrolle* (BAFA – German Federal Office for Economic Affairs and Export Control). Reports submitted to the Volkswagen Group are transferred to the whistleblower system and processed there.

Prosecution and monitoring of reported complaints

The Volkswagen Group takes every complaint seriously and handles them in accordance with defined policies and procedures. These are set out in publicly available rules of procedure and in a Group policy.

After a complaint is received through the reporting channels managed by the whistleblower system, it is documented. If the complaint concerns a situation in the Group's own business area without any employee misconduct, the whistleblower system will immediately forward the complaint to the relevant body within the Group that, based on the complaint's subject matter, is responsible for handling the complaint.

The relevant investigation office has responsibility for any potentially serious complaints against Volkswagen Group employees.

Every case in which there is the possibility to contact the complainant is discussed with the complainant. The Group informs the whistleblower of the processing and the outcome, aiming for the greatest possible transparency. After completion of the investigation, the department responsible must document the case. The Group has a catalog of actions for taking action against breaches of the rules, which was drawn up taking local legislation into account and is implemented across the Group. In addition, disciplinary actions are documented. A reporting system on this has been established in all companies with five or more employees.

Approach and procedures for implementing remedial action

If the whistleblower system is not responsible for further action, the respective departments and the functional areas are responsible for initiating remedial action.

Group HR Compliance, Group Occupational Health and Safety, and Group Security act in an advisory and monitoring capacity toward the departments and functional areas of the relevant Group companies. As soon as breaches are identified and remedial action is necessary, the department responsible autonomously initiates appropriate remedial action. The remedial action is determined on a case-by-case basis depending on the type, severity, and likelihood of occurrence of the prohibition in question.

Remedial action that results from risk analyses or is necessary for other reasons is also defined and implemented by the aforementioned departments responsible.

The Volkswagen Group checks whether the actions taken are effective at avoiding or reducing negative impacts on a regular and ad hoc basis in what is known as compliance monitoring. This also includes checking whether the Code of Conduct is being complied with and whether complaints have been dealt with.

Effectiveness of the procedure

The procedure for handling complaints in the whistleblower system is based on the effectiveness criteria in the UN Guiding Principles on Business and Human Rights and is clearly described in rules of procedure.

Information is provided in a way suitable for the context and target group. The rules of procedure give the target groups access to the information needed to participate in the complaint procedure, including information on the procedure's time frame.

Information on complaints received and the remedial action for them is publicly available in the Volkswagen Group's BAFA report. Decision-makers in the undertaking are regularly informed about serious breaches of duty by the undertaking relating to human rights (see also the "Business conduct information" chapter).

The procedure is checked for its effectiveness. Questions about or suggestions for the improvement of the whistleblower system can be addressed to the Central Investigation Office. Anyone who has been interviewed in an investigation also has the option of giving feedback to the ombudsperson as an independent body.

Employee trust in the complaint procedure

The Volkswagen Group provides web-based training on human rights to ensure that employees are familiar with the structures and procedures and trust them as a way to raise their concerns or needs and have them addressed. This training explains all the available contact options in detail.

In addition, the undertaking focuses on diverse communication activities to raise awareness and promote the use of complaint channels. The whistleblower system is part of all mandatory compliance training courses. Further information on training is provided in the "Business conduct information" chapter. Participation in mandatory training courses is tracked. The proportion of anonymous reports without contact details remains very low.

The Volkswagen Group has a policy regarding the protection of individuals, including workers' representatives, against retaliation in the form of a Group policy and the rules of procedure for the grievance mechanism. Detailed information on the protection of whistleblowers can be found in the "Protection of whistleblowers" section in the "Business conduct information" chapter.

POLICIES: EMPLOYEES AND NON-EMPLOYEES

The Volkswagen Group is a socially responsible employer that follows international frameworks in its HR activities. The Volkswagen Group's employees are spread across many countries around the world. At some sites, the Group has already been an employer for decades, whereas other sites are more recent. Employees' working and living conditions and their interests and views are, consequently, diverse. The HR challenge for the Group is to cope with the tensions of this diversity while at the same time also implementing Group-wide standards. In line with ESRS requirements, the focus here is only on content that has global relevance for the Group's employees. In addition, various brands and companies have additional regional policies, targets and actions that are geared to employees' local interests and views but are described in their sustainability reporting, for example, rather than here.

The Volkswagen Group handles its business activities' positive and negative impacts on employees with Group-wide management policies. "Group-wide" means that the management policies are to be implemented in all controlled companies of the Volkswagen Group. The Volkswagen Group's management policies on employees are primarily set out in Group policies. The following sections explain which management policies address the issues of employees in the Volkswagen Group.

For non-employees in the Group, the aim is also to ensure that they also have appropriate working and remuneration conditions. When Procurement hires temporary external personnel, compliance with the standards of the relevant employment conditions is implemented through Procurement's management policies. These are described in the "Workers in the value chain" chapter. By means of corresponding requirements for business partners, Procurement's policies and actions also mitigate and promote the impacts on non-employees identified in the "Employees and non-employees" chapter in relation to fair and transparent pay, healthy working conditions, freedom of coalition, a non-discriminatory and inclusive working environment, equal treatment and the enforcement of compliance with social and human rights standards (e.g. no child labor or forced labor). Where there are procedural deviations, the requirements of the Charter on Temporary Work and thus also the Code of Conduct for Business Partners also apply. These requirements must be met by temporary employment agencies for these to be used. The plan is to also anchor the use of the Code of Conduct for Business Partners in the relevant Group policy issued by Procurement in all deviating cases.

Compliance management system for complying with human rights due diligence obligations

As a Group with a global footprint, the Volkswagen Group recognizes the following international conventions and declarations and reaffirms its agreement with the contents and principles stated in these. These include:

- The Universal Declaration of Human Rights, codified in particular in the International Covenant on Civil and Political Rights and in the International Covenant on Economic, Social and Cultural Rights (in addition to other applicable human rights treaties that are binding under international law, for example the UN Convention on the Rights of the Child)
- The Core Labour Standards of the International Labour Organization (ILO)
- The Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy of the ILO
- The ten principles of the United Nations Global Compact (UN Global Compact)
- The UN Guiding Principles on Business and Human Rights
- The Organisation for Economic Cooperation and Development's Guidelines for Multinational Enterprises (OECD Guidelines)
- The international covenants on civil and political rights and on economic, social and cultural rights of December 19, 1966

As a signatory of the UN Global Compact, the Volkswagen Group follows international sustainability frameworks and standards in its HR activities, such as the UN Sustainable Development Goals (SDGs). In addition, the *Lieferkettensorgfaltspflichtengesetz* (LkSG - German Supply Chain Due Diligence Act) came into force in Germany on January 1, 2023. The Volkswagen Group has integrated the topic of business and human rights into its existing compliance management system (CMS) in order to implement its due diligence obligations related to human rights. The topics of child labor, forced labor and human trafficking are addressed indirectly in the Code of Conduct and explicitly in the Declaration on Social Rights and the Code of Conduct for Business Partners.

At Volkswagen, clear responsibilities are established throughout the Group as part of the "three-line of defense model" as a regulatory framework for a holistic governance, risk and compliance management system for managing corporate risks, including human rights risks.

The first line consists of specialist and functional departments responsible for day-to-day operational business. In their operational activities they mitigate risks, including protected legal positions related to human rights, which they detect at an early stage, analyze and actively manage by means of suitable preventive measures. Relevant divisions for ensuring the fulfillment of human rights and environmental due diligence obligations primarily include, in Volkswagen AG's own business area, the Human Resources, Group Occupational Health and Safety and Group Security divisions, as well as Group Procurement for suppliers.

The second line of defense consists of the advisory departments, at Group level primarily Group Legal and Group Compliance, HR Compliance, Group Environment and Group Occupational Health and Safety. These advisory departments are responsible mainly for ensuring compliance processes and for advising and supporting the operational divisions in their risk management activities.

The third line of defense is the Internal Audit department as an objective auditing body.

This management policy is in line with the due diligence process in the UN Guiding Principles on Business and Human Rights, the OECD Guidelines for Multinational Enterprises and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. Compliance with these is monitored using the human-rights risk management system.

If infringements of the frameworks are identified, remedial actions must be initiated and checked for their effectiveness. Furthermore, a process has been defined to ensure that the policies on the Group website, such as the Code of Conduct, are reviewed annually, so that any updates necessary are made.

The management policy for compliance with human rights due diligence is available in the Group policies of the relevant areas for anyone who needs help with its implementation. The management policy is available to all potential stakeholders on the Group homepage in the "Group" category under "Ethics, Risk Management & Compliance" and then under "Human rights". This is where the declaration of principles on compliance with human rights due diligence in accordance with the LkSG is also published.

A process to take what action is needed and appropriate in response to particular actual or potential negative impacts has also been defined in the management policy. This sets out who is responsible for developing preventive and remedial actions and will formulate appropriate actions.

The compliance management system for Human Rights makes a significant contribution to the management of the actual and potential positive impacts identified in the double materiality assessment, which include fair and transparent pay, extensive participation rights, healthy working conditions, an inclusive working environment, equal treatment of employees, and the promotion of a culture free from discrimination, violence and harassment. This also concerns the promotion and enforcement of compliance with social and human-rights standards with regard to employees and non-employees (e.g. no child labor or forced labor). The actual negative impacts identified are also mitigated in this way. These include if business processes concerning the Group's working conditions have a negative impact or if there are isolated cases of unequal treatment in the employment relationship. This also applies with regard to a shortage of development opportunities for employees due to lack of or insufficient objective rules on avoiding discriminatory behavior.

Group policies

Other management policies addressing the Volkswagen Group's employees are described in the Group policies set out below. The Group policies apply to all the Volkswagen Group's controlled companies. The department responsible checks whether they are up to date at least once a year and updates them if necessary. The Group policies can be accessed on the intranet by those who are responsible for implementing them. For affected stakeholders, the public documents enacted with the Group policies are available on the Group website – for example, the Code of Conduct and the occupational health and safety policy.

HR Compliance Group policy and Code of Conduct

The HR Compliance Group policy sets out the organizational framework conditions, the organization of and responsibility for proper operation, the involvement of HR Compliance, and the requirements for the implementation of HR compliance in the Volkswagen Group's controlled companies. The local legal, collective-bargaining and operational regulations are taken into account here, and the workers' representatives' existing participation rights are safeguarded.

The Group policy is managed by the HR Compliance organizational unit, which is an integral part of the overall strategic and operational HR work in the Volkswagen Group. Application of the Group policy systematically promotes and enhances integrity and compliance in HR tools, actions and processes. It also contributes significantly to the attitude, conduct, and actions of employees with regard to honesty and compliance with the law and concerning full compliance with human-rights due diligence obligations and the Code of Conduct, which is firmly embedded in the Group's HR Compliance guidelines. This also applies with regard to preventing and taking action to prevent discrimination and promote diversity and inclusion.

In addition to further content, which is addressed in particular in the context of management policies under "Corporate culture" in the chapter "Business conduct information", the basic values with regard to diversity and respect for the human rights of employees are enshrined in the Code of Conduct and the Group HR Compliance policy. This describes that the Volkswagen Group promotes diversity and works to create an inclusive working environment. The aim is to ensure equal opportunities for everyone and prevent all forms of discrimination. This applies, in particular, to discrimination due to ethnic or social origin; skin color; gender; nationality; language; religion; belief; age; physical or mental limitations; gender identity; sexual orientation; political beliefs, provided these are based on democratic principles and tolerance towards those who hold different views; or other, legally protected characteristics. The Volkswagen Group respects and protects the rights of vulnerable groups such as persons with disabilities; people with a migration background; older employees; and ethnic, religious, or comparable minorities and promotes teamwork characterized by mutual respect. The Volkswagen Group respects the right to freedom of conscience, expression and religion. In cases where these rights are subject to state restrictions, it strives for societal dialog.

The Volkswagen Group does not tolerate any form of harassment. This applies, in particular, to violence and harassment that occurs during, in relation to, or as a result of work being carried out. For the Group, different life

stages and ways of life form another aspect of employees' diversity that it is important to support with regard to work-life balance. By creating clear minimum standards and standards of conduct in the two documents referred to above for diversity, equal opportunities, and equal participation, anchoring them in the awareness of employees, and promoting them through qualified managers whose awareness of the issues has been raised, discrimination and harassment can be prevented, contained and combated. At the same time, matters such as diversity and inclusion are expected to be promoted.

Another substantive element of the Code of Conduct is the commitment to openly working together with workers' representatives in a spirit of trust, maintaining constructive and cooperative dialog, and striving for a fair balance of interests. Safeguarding the future of Volkswagen and its workforce takes place in a spirit of cooperative conflict management and social commitment based on and with the goal of ensuring economic and technological competitiveness. Economic efficiency and job protection are equal-ranking and shared goals. The Code of Conduct and the HR Compliance Group policy thus make a significant contribution to management of the actual and potential positive impacts identified in the double materiality assessment process. These include the provision of secure jobs, an inclusive working environment, extensive participation rights, and the equal treatment of employees, including with regard to development opportunities in the Group, the inclusion of persons with disabilities and the promotion of a culture free of discrimination, violence, and harassment. This likewise involves the promotion and enforcement of compliance with social and human-rights standards for employees. The actual negative impacts identified are also mitigated by the Group policy. These include if business processes concerning the Group's working conditions have a negative impact or if there are isolated cases of unequal treatment in the employment relationship, including with regard to a shortage of development opportunities for employees due to lack of or insufficient objective rules on avoiding discriminatory behavior, such as remuneration policies or hiring and promotion processes.

The Chief Human Resources Officer has overall responsibility for the topic of HR compliance. The Head of Group HR Policy and Governance is responsible for the operational implementation of the management policy.

Group policy on occupational health and safety

Another Group policy defines the responsibility for occupational health and safety and specifies the binding requirements for occupational health and safety for all the Group's controlled companies.

It is the task of Health Services to ensure that the protection of its employees' health at least meets the nationally applicable legal requirements. This needs to be carried out by qualified medical personnel (company physicians).

Occupational safety experts have the task of advising senior managers, line managers, workers' representatives and others responsible for occupational health and safety on occupational safety and accident prevention, checking the safety of facilities and technical equipment, in particular before these are put into operation, and checking the safety of work processes, in particular before these are introduced. In addition, they are to monitor the implementation of occupational safety and accident prevention, check its effectiveness and work towards ensuring that the conduct of all of the business's employees is in line with the requirements of occupational safety and accident prevention.

Occupational health and safety is organizationally assigned to the Chief Human Resources Officer and reports to this individual. Health care is managed at Group level by the Head of Group Occupational Health and Safety, who is also Volkswagen AG's senior physician. In organizational terms, the management of occupational safety at Group level is assigned to Group Occupational Health and Safety. The Head of Occupational Safety also reports directly to the Chief Human Resources Officer.

In the Board of Management conference on occupational health and safety, in addition to defining fundamental health policy issues and strategies, a report is also given by the Head of Group Health and the Head of Group Occupational Safety. Among other things, this is used to track the Group policy on occupational health and safety, with the respective head's report primarily covering external and internal regulatory topics. In addition to serving the purpose of information, this also makes it possible to point out possible decision-making needs and prevailing problems. The participants in the Board of Management conference on occupational health and safety include representatives of the Board of Management and the Works Council, the Head of Group Occupational

Health and Safety and the Head of Group Occupational Safety. The participation of workers' representatives enables employees' interests to be taken into account.

The Group policy on occupational health and safety also includes the Volkswagen Group occupational health and safety policy. This documents the Group's responsibility to ensure the health and safety of its employees and communicates this aim externally. The occupational health and safety policy is available to employees and non-employees on the Volkswagen Group's website.

The occupational health and safety Group policy thus makes a significant contribution to the management of the actual and potential positive impacts identified in the double materiality assessment, including the provision of jobs with healthy working conditions and a strong focus on health protection.

WORKING CONDITIONS

This section covers the sustainability topics of secure employment, adequate wages, social dialog, freedom of association and collective bargaining, training, and skills development, which are specified in ESRS 1.

Actions related to working conditions

The organizational units of the Volkswagen Group responsible for implementing actions relating to the working conditions focus area are Group HR Policy and Governance and Volkswagen AG's Volkswagen Group Academy, which use human and financial resources on an ongoing basis to have a positive effect on the material impacts for employees and to contribute toward achievement of the targets set.

Budget planning round

What is known as the budget planning round (medium-term planning), in which Group-wide plant utilization is also planned, generally takes place annually as a key instrument of investment planning. The staffing situation of the individual sites is also taken into account.

The results of the medium-term planning are subject to approval by the Supervisory Board as regards the investment programs and investments included in it. Employee representatives on the Supervisory Board are also involved in the Supervisory Board's decision on approval. Involving employee representatives is designed to help ensure that the goal of safeguarding jobs is achieved.

The budget planning round prevents business processes from having actual negative impacts on the working conditions of individual employees (e.g. job cuts) through workforce planning that stabilizes employment. The action is not tracked.

Due to the collective bargaining at Volkswagen AG that lasted until the end of 2024, it was not possible to complete this standard process in the reporting year.

Opinion survey

There is a direct opportunity in the Volkswagen Group for employees to speak up about their own and the Company's interests, which has been used extensively in recent years, in the shape of the opinion survey. As part of the opinion survey, various aspects were highlighted in relation to an improvement in working conditions, including opportunities for employee development and qualification, a healthy work environment, participation opportunities and a good work-life balance. Within the organizational units employees had the opportunity to work with their line managers to develop actions in these areas on the basis of the survey results. Global measures were also derived in the last years from this employee survey in order to improve working conditions and participation opportunities. In the reporting year, the opinion survey was suspended for the purpose of revision.

Revising the opinion survey is intended to continuously strengthen dialog with employees. Furthermore, the interests of employees should be heard and taken into account in order to give the Group a well-founded pool of data for deriving effective actions on above-mentioned topics. Another employee survey is planned for 2025. Further information can be found in the chapter "Business conduct information" under "Corporate culture".

The opinion survey is an important instrument for enabling mitigation of actual negative impacts of business processes. This is done by identifying, deriving, and taking actions relating to topics employees perceive as particularly critical.

The extent to which the tool is accepted by employees using employees' rate of participation in the opinion survey will be tracked again in the future after its reintroduction. This can be used to assess whether the derivation of actions at critical points covers a broad base of employees and can accordingly be assessed to be effective.

Creation and expansion of digital training

The Volkswagen Group invests in training, which helps to enable employees to maintain long-term employability even when requirements change. In 2024, the focus was on creating and expanding a program of digital training to be able to provide more varied learning content for a larger number of employees. The Volkswagen Group is implementing and integrating the Success Factors tool and the learning platform Degreed as a learning ecosystem for digital learning and self-directed training. This creates a common framework for the qualification of all employees in the Volkswagen Group based on and controlled by the Volkswagen Group Academy. The global rollout is taking place in defined stages. The plan is to complete the rollout to the Group companies included in Success Factors by the end of 2028. On the learning platform Degreed's "Volkswagen Group" subsection, for example, seven new companies were added in the reporting year, and user numbers increased by more than 25% from over 30,000 in 2023.

The Volkswagen Group's efforts in the area of further training and qualification are also a response to the automotive industry's far-reaching technological transformation in order to live up to rising societal expectations, international treaties, and political regulations that require targeted decarbonization of products and business processes. In this transformation process, the Company is also opening up new fields of business and business models for which the employees concerned are trained.

This action contributes to the actual and potential positive impacts on employees by providing secure jobs. This is achieved through the development and expansion of digital training courses to strengthen employee qualifications for the purpose of improving their employability.

The development and expansion of digital further training and the traditional training format offering are tracked through the strategic target of increasing average further training hours. Further information on this can be found under section "Targets related to working conditions".

Actions related to freedom of association

The Volkswagen Group is committed to global compliance with freedom of association and recognizes the right of all employees to form trade unions and workers' representation. Employees' right to negative freedom of association is also respected. The recognition of the right of all employees to form trade unions and workers' representation represents a key component of the Declaration on Social Rights.

The metrics collected in the reporting year for the first time on the coverage of employees by collective bargaining agreements of 92.0% (European Economic Area/EEA only) and on the rate of employees covered by a workers' representative of 99.1% (European Economic Area/EEA only) show that the Volkswagen Group has created an environment that enables effective representation of interests. This effective representation of interests is the basis for the negotiation of fair and transparent pay by the collective bargaining parties. The negotiation process usually takes place within the framework of collective bargaining autonomy and is therefore governed by local regulatory conditions. Further information on the metrics can be found under "Metrics related to collective bargaining coverage and social dialog".

Due to different political and legal conditions, it is not possible to implement the OECD and ILO standards at all Group's production sites around the world to the same extent as in the European Union (EU). Freedom of association is realized in compliance with the laws applicable in the various countries and locations. The aim is to bridge the tension between the different national conditions and the interest in the greatest possible achievement of the right to organize. A particular challenge arises in states that have not signed the ILO Convention on Freedom of Association and Protection of the Right to Organize. In these efforts, care is taken not to violate local laws and not to put local employees at risk.

The Volkswagen Group maintains regular communication with and makes annual inquiries to, in particular, selected risk regions and risk markets in which it operates and in which a local legal right to freedom of association does not exist or is restricted.

Through this continuous measure, the Volkswagen Group contributes to the actual and potential positive impacts on employees in terms of comprehensive participation rights. In a restrictive environment, this takes place through regular communication with and inquiries to risk regions and risk markets.

Targets related to working conditions

Targets in the Human Resources business unit were developed deductively from the Group People Strategy, which was in turn developed in accordance with the Group sustainability strategy regenerate+ and the Group strategy.

The Group People Strategy and its targets were developed by the Group HR strategy department with the involvement of additional central organizational units of the Group HR divisions of Volkswagen AG and the HR strategy departments of selected Volkswagen Group brands. Employees and non-employees were not involved in the process for defining the targets. A new Group strategy was adopted in December 2024, as part of which the Group HR strategy was also adapted. The Human Resources business unit's targets are analyzed at least once a year and discussed with the Board of Management and the brands' board of management members responsible for HR at regular intervals. They are reviewed to determine whether the targets or actions for achieving the targets need to be adjusted.

With regard to tracking the undertaking's performance against the achievement of these targets and identifying lessons or improvement opportunities arising as a result of the undertaking's performance, no process for codetermination by employees or their representatives is planned.

Target related to training and skills development

The Volkswagen Group aims to promote employees' employability. This is intended to facilitate secure employment in the long term. The Volkswagen Group therefore offers its employees extensive training opportunities.

Independently of the metrics required by the ESRS in this focus area, the Volkswagen Group has already had a strategic metric on training hours for several years.

In contrast to the definition of employees set out in the chapter introduction under "Material impacts and their interaction with strategy and business model", the active workforce is used for the strategic KPI, but excluding employees in the withdrawal phase of the time asset bonds (time asset bond: time credit from deferred compensation). The active workforce covers all employees excluding vocational trainees and employees in the passive phase of their partial retirement. In addition, the Chinese joint ventures are not taken into account in the strategic KPI. The different calculation bases mean that the strategic KPI differs from the metric average number of training hours per employee in accordance with the ESRS, which is listed further below in the text.

The goal is to increase the average number of training hours per employee in the active workforce (here excluding employees in the withdrawal phase of their time asset bonds) in the Volkswagen Group by 35% to 30 hours per year by 2030. The baseline value is 22.3 hours and represents the average for the base years 2015 to 2019. These years were chosen as the baseline due to the Covid-19 pandemic, which temporarily curtailed training activities in 2020 and 2021.

The target for this strategic KPI for the reporting year was 26 hours. With an average of 20.8 hours per employee, the target has not been met. The decrease in the number of training hours is due to the prioritized implementation of efficiency programs in the Group, with the result that the departments did not focus on measures to increase the number of training hours. In the 2023 reporting year, 22.1 hours per employee were achieved.

This target was developed as part of the Group People Strategy and the associated Group strategy and was included in the Group sustainability strategy regenerate+ as a top KPI. Due to the momentum in this focus area and the varied training needs and regulatory requirements in the various local companies, no extended, Group-wide regulation of this focus area has been put in place beyond the strategic direction, with the exception of the Charter on Training with its scope of application. Since the target was set, no changes have been made to the target itself.

The strategic metric of the Group People Strategy covers the employees' training hours, including the digital self-guided training hours that are time-independent. The annual average was calculated on the basis of the data from January 1 to December 31 until 2023. In the course of the transition to using the requirements of the ESRS, the calculation was adjusted to the effect that the annual average is now calculated on the basis of data from December 31 of the previous year to December 31 of the reporting year. As a result, the KPI will in the future correspond to the metric in this aspect.

By 2023, the strategic HR planning implementation status was reported as a KPI of the same name, which has helped to provide secure jobs. Strategic HR planning supplements operational HR planning by adding a qualitative, long-term and strategic planning perspective. It allows to identify qualitative and quantitative surpluses and shortfalls in parts of the Company at an early stage and derives necessary qualification, vocational training and restructuring requirements designed to help support the transformation. To map progress in strategic HR planning, we measure the percentage of the active workforce included in the strategic HR planning from 2023. The targets are being adjusted as part of the Group strategy revision, and reporting of the KPI has been suspended for 2024 due to the ongoing efficiency programs.

No other measurable outcome-oriented targets within the meaning of the ESRS requirements have been set in connection with adequate wages, social dialog, freedom of association, or collective bargaining. The effectiveness of the policies and actions in relation to the impacts identified through the materiality assessment performed this year for the first time is not monitored.

METRICS: EMPLOYEES AND NON-EMPLOYEES

Metrics related to the characteristics of employees

A total of 614,082 employees were employed at the Volkswagen Group at the end of the 2024 reporting year; the number of employees is given in headcount The definition of employees covers anyone with an active employment contract who takes part in the Volkswagen Group's value creation process, including members of top management, people in the passive phase of partial retirement, and vocational trainees. The quantitative disclosures do not include people in dormant employment, such as people on parental leave. Nor do they include employees in academic training, such as interns, student workers, or students studying for a PhD, master's degree, or bachelor's degree. Both full-time and part-time employees are counted as employees. A full-time employee works the maximum number of hours per day, week, or month that are defined for the employee category in question in accordance with the national laws, collective bargaining agreements, or company regulations. Any deviation from the collectively or non-collectively agreed full-time weekly working hours is deemed to constitute part-time employment. Permanent employees do not have an end date in their employment contracts. Temporary employees means all of the respective undertaking's employees that have a temporary contract with an end date. Non-guaranteed hours employees are classified as temporary employees. They are employed without a guarantee of a minimum or fixed number of working hours. A non-guaranteed hours employee must make themselves available for work as required, but the employer is not contractually obligated to offer the employee a minimum or fixed number of working hours per day, week, or month.

In the reporting year, 37,516 employees left the Volkswagen Group. The staff turnover rate was 6.1%. It is calculated by dividing the number of people who left by the average number of employees in the reporting year. The calculation is based on the data from December of the previous year to December of the financial year regarding employees of the Volkswagen Group's reportable entities in the future in the context of the requirements of the ESRS. The reference base is the average number of employees in this period. The following groups are included in employees leaving: employees who have left the Volkswagen Group due to dismissal, retirement, death or resignation.

The following tables show the distribution of employees by gender, country of employment and contract type.

EMPLOYEES BY GENDER

As of Dec. 31, 2024

Gender	Employees
Male	489,917
Female	124,125
Diverse	7
Not disclosed	33
Total workforce	**614,082**

Workforce disclosures are also contained in the Group management report under "Sustainable Value Enhancement" chapter under "People" section. Discrepancies between the figures are due to the inclusion of the workforce of the Chinese joint ventures in the Group management report. The total number of employees includes 33 employees ("Not disclosed") who have made use of their local legal right not to disclose their gender.

EMPLOYEES BY COUNTRY

As of Dec. 31, 2024

Country/territory	Employees
Germany	293,338
Czech Republic	37,005
USA	26,117
Sweden	25,804
China	23555
Spain	23,064
Brazil	22,810
Mexico	20,117
Poland	19,622
Hungary	12,826
Slovakia	11,947
Italy	10,263
UK	9,793
India	8,957
France	8,208
Austria	7,938
Portugal	5,919
Argentina	5,674
South Africa	5,199
Turkey	4,334
Netherlands	3,620
Belgium	3,561
Denmark	3,184
Romania	1,821
Switzerland	1,793
Norway	1,584
Japan	1,376
Australia	1,308
Chile	1,011
South Korea	894
Slovenia	870
Canada	838
Ecuador	798
Croatia	746
Singapore	703
Finland	590
Colombia	558
Peru	530
Bulgaria	513
Malaysia	499
Thailand	423
United Arab Emirates	422
Serbia	397
Taiwan	350

Ukraine	338
British Virgin Islands	286
New Zealand	276
Ireland	263
Greece	200
Estonia	192
Latvia	147
Bosnia and Herzegovina	143
Lithuania	143
Morocco	133
Macedonia	123
Qatar	118
Kenya	103
United Republic of Tanzania	88
Albania	81
Ghana	76
Indonesia	67
Pakistan	61
Panama	60
Namibia	54
Luxembourg	51
Saudi Arabia	48
Botswana	44
Senegal	41
Kazakhstan	39
Montenegro	15
Uruguay	13
Total workforce	614,082

EMPLOYEES BY CONTRACT TYPE, BROKEN DOWN BY GENDER

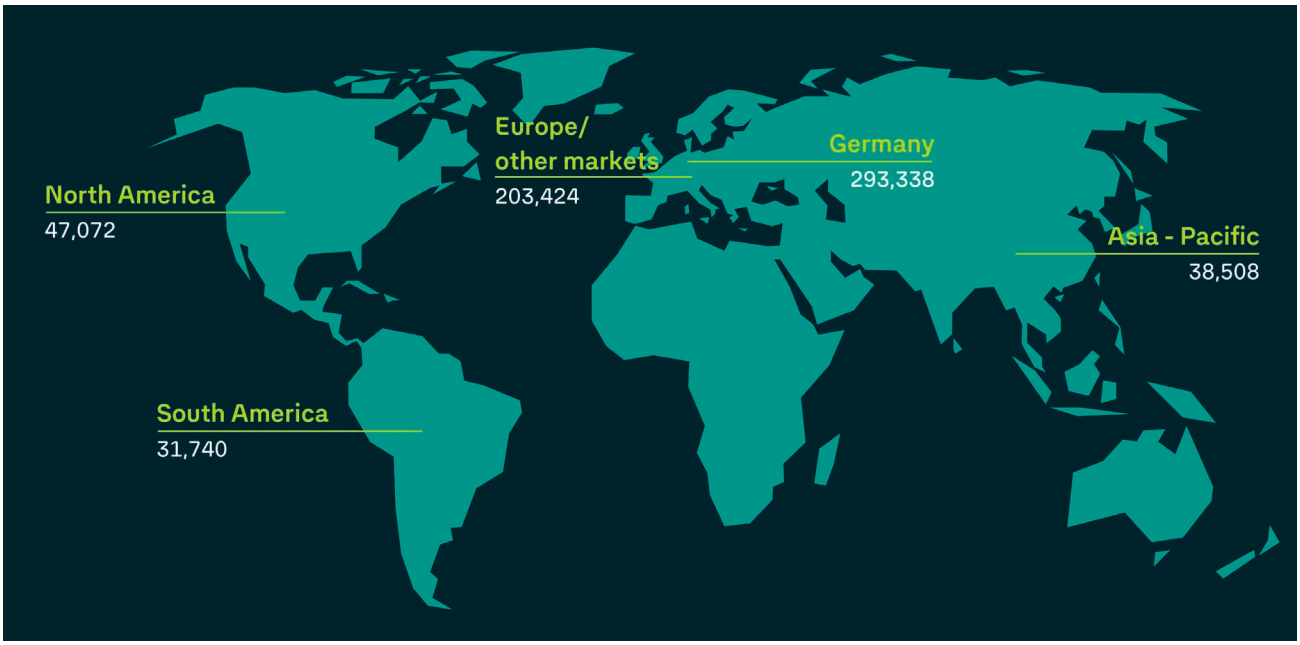
As of Dec. 31, 2024

	Male	Female	Other	Not disclosed	Total
Employees	489,917	124,125	7	0	614,082
Employees with a permanent contract	473,198	117,902	4	33	591,137
Employees with a temporary employment contract	16,719	6,223	3	0	22,945
Non-guaranteed hours employees	0	0	0	0	0

Gender is disclosed as specified by the employees themselves. The total number of employees includes 33 employees who have made use of their local legal right not to disclose their gender.

EMPLOYEES BY CONTRACT TYPE, BROKEN DOWN BY MARKET

As of Dec. 31, 2024



	Germany	Europe/Other Markets*	North America	South America	Asia-Pacific
Employees	293,338	203,424	47,072	31,740	38,508
Employees with a permanent contract	285,935	193,767	45,791	30,019	35,625
Employees with a temporary employment contract	7,403	9,657	1,281	1,721	2,883

*Excluding Germany

Metrics related to non-employees

Non-employees include self-employed people and people provided by undertakings primarily engaged in employment activities (known as temporary external personnel). The total number (headcount) of non-employees working in the Group was 25,162 at the end of the reporting year.

Metrics related to collective bargaining coverage and social dialog

A total of 92.0% of the Volkswagen Group's employees are covered by collective bargaining agreements. This number only relates to employees in countries in the European Economic Area (EEA) in the first reporting year in accordance with the ESRS. A collective bargaining agreement means a written agreement between trade unions – or, in their absence, duly elected workers' representatives – and employers, which, among other things, governs working hours and wages as core components. A total of 99.1% of the Volkswagen Group's employees in the EEA are covered by workers' representatives. There are agreements with employees regarding representation by a European Works Council (EWC, EWC SE, EWC SEC).

COLLECTIVE BARGAINING COVERAGE AND SOCIAL DIALOG IN 2024

	Collective bargaining coverage	Social dialog
Coverage rate (in %)	Employees (EEA only)	Workplace representation (EEA only)
0 – 19	Bulgaria, Estonia, Ireland, Croatia, Latvia, Lithuania	Ireland
20 – 39	Greece, Luxembourg	-
40 – 59	Denmark	-
60 – 79	Poland, Romania, Slovenia	Greece, Luxembourg
80 – 100	Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden	Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Italy, Latvia, Lithuania, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden

Metrics related to adequate wages

The statutory minimum wage of a country or, where this is not defined, a benchmark that is not lower than the minimum wage of a neighboring country with similar socioeconomic status is used as a benchmark for adequate wages in accordance with ESRS requirements within the EEA. As there is no uniform methodology for setting a minimum wage outside the EEA, the benchmarks from the Wage Indicator Foundation's Living Wage database, which is cited in the requirements of the ESRS as a possible data source for countries outside the EEA, are used. The benchmarks for all the countries outside the EEA where the Volkswagen Group has employees are obtained from this database. The underlying benchmarks were last updated for this report in October 2024.

The salary components used to calculate the lowest gross hourly wages in each case are specified in accordance with the requirements of the ESRS and uniformly defined throughout the Group. Only the base salary and guaranteed additional payments are included in the calculation. However, in many cases, there are other remuneration components in the Volkswagen Group that are not included in this calculation. From the Company's perspective, these other remuneration components may represent a fundamental proportion of wages but are not taken into account in accordance with the ESRS.

For the following metrics, the lowest gross hourly wages for each company are compared to the respective country's benchmark. These comparisons were used as a basis to ascertain that near enough all of the Group's employees are paid a wage above the respective benchmarks and therefore receive an adequate wage in accordance with the ESRS definition. The few exceptions here are listed in the table below, which lists the countries and the number of Volkswagen Group employees who receive a wage below the set ESRS benchmark. In addition, the table shows the proportion of these Volkswagen Group employees who receive a wage that is below the respective benchmark in relation the total number of Volkswagen Group employees in the country in question. The employees listed in the table are still remunerated in accordance with existing local statutory requirements and the provisions of collective bargaining agreements. Furthermore, other remuneration components that do not fall within the definition of income according to the ESRS mean that the employees' actual wages are higher than those depicted in this comparison. These additional remuneration components include, for example, sales commission (e.g. in Singapore), additional contributions to pensions and/or health insurance, and free catering (e.g. in Morocco). Further temporary effects also come into play, such as lower wages paid during a specific probation period (e.g. three to six months in Mexico). Similar practices are used in Albania, Brazil and Sweden, as well as Austria to a certain extent, where employees are generally moved to a higher wage group after a short induction period. The other employees in Austria mainly work on a part-time basis. The two cases in Germany relate to trainees, who fall within the scope of the *Berufsbildungsgesetz* (BBiG - German Vocational Training Act).

ADEQUATE WAGES OF EMPLOYEES IN 2024

Country	Employees in the respective country (total)	Employees in the respective country whose wages* are below the benchmark* for the country concerned	Proportion of employees in the respective country whose wages* are below the benchmark* for the country concerned (as a percentage)
Singapore	703	86	12.2
Morocco	133	6	4.5
Albania	81	2	2.5
Sweden	25,804	49	0.2
Austria	7,938	5	0.1
Mexico	20,117	10	0.1
Brazil	22810	1	0.0
Germany	293,338	2	0.0

*According to the ESRS definition

Metrics related to training

The average number of training hours per employee in accordance with the requirements of the ESRS was 18.9 hours. The calculation is based on the employee data from December of the previous year to December of the reporting year. Time-bound and non-time-bound classroom and online training with or without a trainer (self-guided) count as training. In time-bound learning, primarily the precise qualification time is recorded. If this is not technically possible, the stored target value per non-time-bond training measure is evaluated.

OCCUPATIONAL HEALTH AND SAFETY

This section addresses the sustainability topics of occupational health and safety in accordance with ESRS 1.

Actions related to occupational health and safety

A Group policy ensures that the senior managers of each company make adequate financial, human and material resources available to fulfill the tasks in the focus area of occupational health and safety and ensures sufficient qualification and training of skilled staff. Volkswagen AG's Group Occupational Health and Safety organizational unit is tasked with standard-setting, information provision, communication and monitoring.

Mandatory establishment and ongoing improvement of an occupational health and safety management system

The Group has issued a Group-wide policy requiring the companies to introduce and obtain certification for an ISO 45001 management system at all production sites with more than 1,000 employees, which must be implemented to promote occupational health and safety. The certification itself is the responsibility of the respective companies. As part of the Group audit program, internal audits are conducted on the basis of ISO 45001 requirements and Group policies. Four (three) Group audits were conducted in 2024. Completion of the required ISO 45001 certifications by 2026 is planned.

Certification of the management systems on occupational health and safety has also been underpinned by a target. Information on the action's progress and effectiveness can be found under section "Targets related to occupational health and safety".

Conducting a systematic health & safety risk analysis

To evaluate the Group companies' current performance in occupational health and safety, in this reporting year the Volkswagen Group conducted a risk analysis based on self-assessment questionnaires at the level of the companies. The scope of the 2024 risk analysis was defined on the basis of risk-based criteria, incorporating the previous year's results. As a result, it was possible to identify improvement potential and introduce measures to reduce sustainability-related risks, for example. In addition, regular dialog took place as part of communication with the companies. The good practices identified give rise to potential for the Group companies.

The Volkswagen Group conducts systematic analyses of the status quo of occupational health and safety in the Group each year. From these analyses, it derives measures to minimize work-related risks where a need for action is identified. These cover all the Volkswagen Group's employees and are made accessible to them through targeted communication.

Through the two actions described, the Volkswagen Group promotes employees' occupational health and safety and, in this way, contributes to the actual and potential positive impacts on employees by creating healthy working conditions.

The effectiveness of the risk analysis and the actions derived from it to minimize work-related risks is tracked using spot checks of the companies – even those without identified risk indicators.

Targets related to occupational health and safety

The Safety First strategy and the Group policy on occupational health and safety require all Volkswagen Group production sites to comply with the standards of ISO 45001 occupational health and safety management systems. All production sites (including the Chinese joint ventures) with more than 1,000 employees are to be certified in accordance with ISO 45001 by 2026.

The development of the target was intentionally advanced in accordance with the ILO recommendation on the certification of occupational health and safety management systems and the sustainability reporting standards prevailing at that time.

At the same time, the development process took account of the particular local characteristics of the location and industry through the restriction of the target to production sites with more than 1,000 employees. Specific capital market requirements that were brought to the Volkswagen Group's attention through ESG ratings were also integrated into the reporting through additional reporting on the coverage of the certified management systems.

Collecting metrics is a core element for assessing the effectiveness of our actions. To monitor the target, an analysis is done each year of how many of the Group-wide production sites with more than 1,000 employees are ISO 45001 certified and how high the associated coverage of employees is. At the end of 2024, a total of 80 (72) Group production sites (including the Chinese joint ventures) were certified in accordance with ISO 45001. This corresponds to coverage of 74 (51)% of the employees at the Group production sites (including the Chinese joint ventures) with more than 1,000 employees. The metric is calculated by dividing the number of employees at certified production sites with more than 1,000 employees by the total number of employees at production sites with more than 1,000 employees.

Since the target was set, no changes have been made to the target itself or to the underlying methodology. Based on targeted and constant communication with the companies affected in the relevant steering committees, we are not currently aware of any significant obstacles to achieving the target.

In addition to the number of ISO 45001-certified production sites and their level of coverage of employees, the Volkswagen Group also uses the lost time injury frequency rate (LTIFR) for employees as a key performance indicator for reporting. This is recorded as an accident frequency index and provides information on the number of accidents at work as a proportion of the total of all hours worked. It is calculated as the number of accidents at work reported with at least one day lost multiplied by 1 million divided by total number of hours worked. In 2024, the accident frequency at the Volkswagen Group was 6.4 (3.6). Compared with the previous year, the metric's scope was expanded in the reporting year from all production sites including the Chinese joint ventures previously to employees of the Group's consolidated companies excluding the Chinese joint ventures. In addition, the Group switched from weekdays to calendar days for the calculation of days lost. Comparability with the prior-period figures is not possible due to the change in methodology.

The Volkswagen Group attaches great importance to reducing the LTIFR to below 1 for all brands and companies by 2040. This target was set as part of the Group sustainability strategy regenerate+ and is a strategic metric in its own right, and the accident frequency target was developed taking account of ESG rating requirements. The documentation obligation for work-related accidents that is necessary for obtaining the metric is set out in the occupational health and safety Group policy.

The target referred to above also addresses ILO recommendations on occupational health and safety and the Global Reporting Initiative (GRI) sustainability reporting standards used at the time of development. The targets of ISO 45001 certification and the number of work-related accidents are not measured against either a specific baseline or a specific base year, as the Volkswagen Group measures itself against the aim of having as few work-related accidents as possible each year, and none of them fatal.

The Group uses Group regulations to provide Group-wide information in the event of fatal accidents involving employees or non-employees who work at the Volkswagen Group's sites. On this basis, actions can be taken to prevent similar accidents across all sites in the future. Accidents are analyzed locally and appropriate measures are introduced to prevent further accidents.

As part of the sustainability reporting based on the requirements of the ESRS, the metric for the calculation of accident frequency in the reporting year was switched from the lost time injury frequency rate (LTIFR) to the total recordable injury rate (TRIR) so that significant work-related accidents are now included in the calculation regardless of the employee's absence. In the reporting year, the TRIR at the Volkswagen Group was 11.7.

Employees and non-employees were not involved in the process for defining the targets.

Metrics related to occupational health and safety

A total of 83% of employees are covered by the Group's health and safety management system based on legal requirements and/or recognized standards or guidelines. 46% of employees are covered by such a health and safety management system that has been audited or certified by an external party.

There were four deaths in the reporting year. Of these, three deaths concerned Volkswagen Group employees. One death concerned other workers, such as workers in the value chain at Volkswagen Group sites.

In the reporting year, employees had 10,819 recordable work-related accidents, which equates to a rate of 11.7 for the TRIR. It is calculated as the number of significant accidents at work reported multiplied by 1 million divided by total number of hours worked.

EQUAL TREATMENT AND EQUAL OPPORTUNITIES

This section addresses the sustainability topics of diversity, gender equality and equal pay for work of equal value, action against workplace harassment and inclusion of persons with disabilities in accordance with ESRS 1. The sustainability matter of training and skills development in terms of equal opportunities is included in this section. The employability aspect is addressed in the "Working conditions" section.

Actions related to equal treatment and equal opportunities

The organizational units of the Volkswagen Group responsible for implementing actions relating to the focus area of equal treatment and equal opportunities are Group Diversity and Advancement of Women, Volkswagen Group Academy and Volkswagen AG's Group HR Management. They use human and financial resources on an ongoing basis to have a positive effect on the material impacts for employees and to contribute toward achievement of the targets set.

The Volkswagen Group has a varied employee structure around the world. This results in a need for specific actions to ensure equal treatment and equal opportunities. It is therefore up to the brands and companies to create and ensure an inclusive working environment based on their respective needs.

Actions to create an inclusive working environment and equal treatment of employees

The Group uses the HR Compliance Group policy that applies throughout the Group to stipulate action areas to the companies to promote the topics of diversity, equal opportunities, including regarding work-life balance and inclusion. These action areas encompass the integration of these topics into corporate values, processes and communication and the appointment of a contact person. From a certain size of company, the role of a diversity expert needs to be created. Awareness-raising measures for employees and managers are required to be implemented in the above-mentioned action areas. The scope and depth of the actions are geared to the size of the Company.

This contributes to an actual positive impact on employees through the provision of an inclusive working environment, the equal treatment of employees, including with regard to development opportunities in the Group, and increasing awareness among employees and managers for a culture free of discrimination, violence and harassment. Overall, this is a continuous measure.

The effectiveness of this action is not tracked centrally but, due to the diversity of the actions, is generally tracked at local or company level.

New anti-discrimination rule

In addition, in 2024, the Group provided the companies with a new anti-discrimination rule developed in 2023 to close gaps in the rules on the avoidance of discrimination in the hiring, remuneration and promotion process.

In 2024, the anti-discrimination rule was communicated to 106 Group companies that have implemented no or insufficient rules on avoiding discrimination.

Group companies are not required to introduce this rule, but it is recommended by the Group.

The new anti-discrimination rule is intended to provide a remedy to the actual negative impact on employees of unequal treatment in the employment relationship. HR Compliance also revised the specific Group policy with regard to the Volkswagen Group's potential negative impacts in relation to unequal treatment of employees. For the recruitment process, it was amended to stipulate that decisions on recruitment will only be made on the basis of the applicant's level of qualification.

The effectiveness of this action is not tracked centrally but, due the differences in the implementation of the action, is generally tracked at local or company level.

Preparation of materials for managers

The Group trains and empowers management and managers across the Group regarding their impartiality and the preservation of equal opportunities. In addition, the Group promotes sustainable discussion of the topic of unconscious bias among all managers in order to promote the creation of an unbiased working environment and processes geared to equal opportunities. Based on their training, they should be empowered to analyze their own department-specific processes and derive and implement suitable measures to ensure equal opportunities and reduce prejudices and stereotypes in their department. In addition, supporting materials are developed centrally and made available to the brands and companies. The Group suggests making local adjustments and integrating the methods into existing training and processes while maintaining the described target.

This contributes to an actual positive impact on employees through the provision of an inclusive working environment, the equal treatment of employees, including with regard to development opportunities in the Group, and the promotion of a culture free of discrimination, violence and harassment. This is a continuous measure.

The effectiveness of this action is not tracked centrally but, due to the diversity of the actions, is generally tracked at local or company level.

Linking Group Board of Management and management remuneration to the diversity index

Among other things, the short-term variable remuneration of the Group Board of Management (annual bonus) is linked to the ESG factor, including the diversity index, so as to create a direct incentive at the Group Board of Management level to achieve the diversity targets. The diversity index's relevance to remuneration is described in more detail in the "General information" chapter.

In addition, an ESG factor was included in the short-term variable remuneration (annual bonus) for management below the Group Board of Management in 2023. As part of this ESG factor, the proportion of women in management relevant to the index is embedded in the short-term variable remuneration.

Creating an incentive to promote diversity in the undertaking contributes to an actual positive impact on employees through the equal treatment of employees, including with regard to development opportunities in the Group, and the promotion of a culture free of discrimination, violence and harassment.

The effectiveness of this action, but also the promotion of diversity itself, is tracked through the development of the diversity index, which is composed of the proportion of women in management and the internationality of top management. Both components of the diversity index are underpinned by a strategic target. More information on this can be found under the section "Targets related to equal treatment and equal opportunities".

Collecting and publishing the statistic on penalizing employee misconduct

Each year, the Volkswagen Group collects and publishes a statistic on the disclosure of the penalization of employee misconduct in the relevant reporting year. The regular reporting on the disciplinary statistic is used firstly to create transparency and secondly to enable countermeasures to be taken as soon as possible if there are any anomalies. Publishing the disciplinary statistic internally additionally contributes to transparency and increased awareness, but also encourages employees to directly address or report misconduct.

In 2024, 32 Volkswagen Group employees were dismissed due to breaches in the area of discrimination, bullying, or stalking.

The publication of the statistic on penalizing misconduct in the area of discrimination, bullying, or stalking is a measure to promote awareness of the consequences of unequal treatment and thus prevent discrimination and actual negative impacts on employees as a result of isolated incidents of unequal treatment.

The effectiveness of this action is tracked by constant monitoring of the development of case numbers by the Group's responsible department and taking action where necessary.

Targets related to equal treatment and equal opportunities

The topic of diversity and equal opportunities is enshrined in the HR Compliance Group policy. The particular importance of this action area is also underlined in the Volkswagen Group by its introduction of the diversity index as a strategic metric of the Group People Strategy, the Group strategy, and the Group sustainability strategy regenerate+, which also has direct remuneration relevance at Group Board of Management level. The Volkswagen Group is endeavoring to increase diversity in the Company (further details can be found under the heading "Linking Group Board of Management and management remuneration to the diversity index"). This includes setting targets for the percentage of women in management and for the internationality of top management. Both of these figures have been combined in the diversity index since 2017. It is compiled for the employees of the entire Volkswagen Group, but excluding employees in the withdrawal phase of the time asset bonds (time asset bond: time credit from deferred compensation), vocational trainees and employees in the passive phase of partial retirement. In addition, and as a departure from the requirements of the ESRS, the Chinese joint ventures are included in this strategic KPI. This index is used to measure and steer the implementation of the targets.

The proportion of women in management, comprised of management, senior management and top management (including members of the Group Board of Management and brand boards of management), amounted to 19.9% in 2024 and was 0.7 percentage points up on the prior year (19.2%). The intermediate target of 19% for 2024 was thus achieved. The Volkswagen Group wants to increase the proportion of women in management to 20.2% by 2025. This represents an increase of 8.1 percentage points compared with our baseline of 12.1% from 2016. The target of at least 25.0% by 2025 has been defined for the international composition of

top management, the uppermost of the three management tiers. Achievement of the target would represent an increase of 8.0 percentage points compared with the baseline of 17.0%, also from 2016. This stood at 29.1 (25.6)% in the fiscal year now ended. The intermediate target of 24.1% for the reporting year was thus achieved. The figures for the proportion of women in management and the internationalization of top management are incorporated with equal weighting into the diversity index, which was set to 100 for 2016. For 2024 it was planned to increase this index to 149. This target value was exceeded with a score of 168 (154).

The diversity index was created in 2017 and was continued as a KPI in the applicable Group strategy and Group People Strategy. Recently, the associated sub-index "Proportion of women in management" was also incorporated into regenerate+ as a top KPI. The Supervisory Board has decided to define the diversity index as the performance criterion for the Social subtarget within the framework of the ESG factor for the variable remuneration (annual bonus) of the members of the Board of Management. The interests of the workforce are represented in this decision through the participation of the employee representatives. No changes were made to the methodology for collecting the metrics relevant to the target during the year.

No measurable outcome-oriented targets have been defined within the meaning of the requirements of the ESRS with regard to the employment and inclusion of persons with disabilities, the promotion of a culture free of discrimination, violence and harassment, and the raising of awareness among employees. The effectiveness of the policies and actions in relation to the impacts identified through the materiality assessment performed this year for the first time is not monitored.

Metrics on diversity

The following tables show the gender distribution of employees in number and percentage at top-management level and the distribution of employees by age group. In contrast to the percentage of women included in the diversity index, the gender distribution at this point only includes top management (including the Group and brand Boards of Management) and not senior management or management.

GENDER DISTRIBUTION AT TOP-MANAGEMENT LEVEL

As of Dec. 31, 2024

Gender	Employees	Breakdown in percent
Male	**421**	**87.7**
Female	59	12.3
Other	0	0.0

EMPLOYEES BY AGE GROUP

As of Dec. 31, 2024

Age group	Breakdown in percent
Under 30 years	16.1
30-50 years	56.9
More than 50 years	27.0

Metrics related to pay gaps and annual total gross remuneration

The Gender Pay Gap describes the difference in the average pay for women and men. In this report, the unadjusted Gender Pay Gap is disclosed. It shows the percentage difference in the average gross hourly pay level of men and women without taking structural differences into account. In the reporting year, the difference at the Volkswagen Group was 13 percent.

The unadjusted Gender Pay Gap is determined by calculating the difference between the average earnings of male employees and the average earnings of female employees. This difference is then divided by the average hourly earnings of male employees and multiplied by 100 to produce this figure as a percentage.

The average hourly earnings per gender are calculated on the basis of employees' annual total gross remuneration. This includes remuneration for work performed in the reporting year (remuneration of working hours including overtime, shift allowances) and the remuneration of lost hours/absence, i.e. vacation pay, public holidays, illness and other absences, for example. This total gross remuneration is divided by the annual working hours, including overtime registered in the time recording system, according to gender.

Unlike the unadjusted Gender Pay Gap, the adjusted Gender Pay Gap takes account of factors such as qualification, professional experience, job system or position. It therefore shows the remaining pay gap between men and women with comparable characteristics. On the basis of available economic data, this figure is usually significantly lower than the unadjusted figure.

The ratio between the annual total gross remuneration of the highest paid individual and the median annual total gross remuneration for all employees (excluding the highest-paid individual) was around 195.

An approximation method based on the median remuneration, the companies' average pay level, and the distribution of pay within the companies was used to calculate the median. For the calculation of employees' average pay levels at the companies, the same definition of annual total gross remuneration was used as for calculating the pay gap between women and men.

OTHER WORK-RELATED RIGHTS

This section addresses the sustainability topics of child labor and forced labor in accordance with ESRS 1.

Actions related to other work-related rights

The organizational units of the Volkswagen Group responsible for implementing actions relating to the focus area of other work-related rights are Group HR Compliance at Volkswagen AG and the relevant operational HR departments at company level, which use human and financial resources on an ongoing basis to have a positive effect on the material impacts for employees and to contribute toward achievement of the targets set.

Minimum standards to prevent violations of human rights in the recruitment process

To better implement social standards and respect human rights, various basic measures were introduced and actions that had already been initiated were expanded to include a focus on protecting human rights. In this way, identity and age checks are carried out for all employees who enter into a temporary or permanent training or employment contract with a Volkswagen Group company as part of Volkswagen's recruitment process for external hires. In addition, the local minimum age limit for employment is checked. Furthermore, when the contract is concluded, the voluntary declaration of intent is documented and a confirmatory signature in the form of a job offer letter is provided.

In the event of deviations from the standard recruitment process, documentation is prepared and a decision is made in accordance with the principle of multiple-party verification. Discrepancies from the minimum age limit check are not permitted so as to ensure that child labor is avoided. The action applies in the recruitment process for potential new employees across the Group and in implementation for HR department employees. The measure is implemented continuously.

Through the actions to improve the recruitment process, the Volkswagen Group contributes to the actual and potential positive impacts on employees by promoting and enforcing compliance with social and human-rights standards.

The effectiveness of these actions is tracked by reviewing compliance with the actions each year using a risk-based approach.

Targets related to other work-related rights

No measurable outcome-oriented targets within the meaning of the requirements of the ESRS are currently defined in connection with child labor and forced labor. The effectiveness of the policies and actions in relation to the impacts identified through the materiality assessment performed this year for the first time is not currently monitored. On the basis of our corporate values, the Volkswagen Group does not tolerate any child labor or forced labor.

Metrics related to other work-related rights

A total of 3,555 reports were received through the investigation offices in the reporting year.

Cases received regarding discrimination and harassment are treated as potential serious regulatory violations of the rules. 37 cases that were categorized as potential serious regulatory violations of the rules concerned discrimination and/or harassment in the reporting year. In the reporting year, 22 cases were confirmed as serious regulatory violations of the rules concerning discrimination and harassment.

In the disciplinary statistics, 250 sanctioned cases were recorded in the discrimination/bullying/stalking and sexual harassment clusters in the reporting year. In some cases, these already include the serious violations identified. Taking this duplication into account, a total of 257 cases regarding discrimination and harassment were thus identified.

A further 15 cases that the investigation offices categorized as potential serious regulatory violations of the rules concerned workforce issues other than discrimination or harassment in the reporting year. In the reporting year, two cases were confirmed as serious regulatory violations of the rules concerning these workforce issues other than discrimination or harassment. The National Contact Points for OECD Multinational Enterprise submitted no cases in relation to workforce issues other than discrimination or harassment to the investigation offices.

The total amount of fines, penalties and compensation for damages including the incidents and complaints on discrimination, including harassment, was €9 thousand. This amount is reported under other operating expense in the income statement but not disclosed individually and can also include items from previous years.

During the reporting year, potential relevance to the LkSG was identified for 15 reports, specifically related to the protected human rights in the employment relationship. In this period, there were no confirmed violations of the human rights protected by the LkSG. This disclosure can also be based on reports received by the relevant investigation office in the previous year, but for which a check of whether a violation was confirmed was only performed during the reporting year. This also means that there are no cases of severe human rights violations

within the meaning of the ESRS. Since the LkSG is based on the United Nations Guiding Principles on Business and Human Rights, the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work and the OECD Guidelines for Multinational Enterprises, it can therefore be assumed that the indications of potential LkSG relevance correspond to potential violations of these frameworks in this respect. No fines, penalties or compensation for damages were incurred in connection with severe human rights incidents.

Workers in the value chain

We aim to meet our legal, social, and environmental responsibilities not only within the Group but also in our supply chain.

MATERIAL IMPACTS AND RISKS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

The Volkswagen Group's upstream and downstream value chain is taken into account when identifying material impacts, risks and opportunities in the materiality assessment. The complexity of the upstream and downstream value chain means that there is a certain lack of transparency regarding actual impacts on workers in the value chain. The assessment of these impacts has therefore been based on conservative assumptions. Detailed information is provided in the "General information on the procedure for and results of the double materiality assessment" chapter.

The materiality assessment showed that the workforce of direct and indirect suppliers in the upstream and downstream value chain are or may be materially affected by positive and negative impacts. This applies in particular to the workforce in the upstream value chain. Suppliers also include joint ventures that also act as suppliers.

Suppliers from the upstream value chain include producers of components for automotive production, machinery, tools and equipment, and also producers of raw materials. Recycling service providers, for example, are classified as suppliers in the downstream value chain. Suppliers that cannot be clearly attributed to the upstream value chain or the downstream value chain are also taken into account. These include, for example, IT service providers, construction companies, canteen service providers and cleaning service providers.

In the context of the responsible supply chain system (ReSC system) policy and incorporated actions, such as the raw materials due diligence management system (RMDDMS) and the human rights focus system (HRFS), and various audits of suppliers, the Volkswagen Group has developed an understanding of how workers with particular characteristics, those working in particular contexts, or those undertaking particular activities may be more greatly affected by impacts. In individual cases, this includes young workers and migrant workers, for example. These findings have been incorporated into the materiality assessment.

Impacts in the area of working conditions in the value chain

The Volkswagen Group's materiality assessment identified an actual positive impact on the working conditions of workers in the upstream and downstream value chain whereby the impact in the immediate business environment, e.g. on direct suppliers and their contractual partners, is estimated to be higher. The positive impact may already be visible in the form of better working conditions and is based on the dissemination of the Volkswagen Group's sustainability requirements, event-related or risk-based controls, and other actions.

The positive impact arises as a result of factors such as the use of the Code of Conduct for Business Partners, which focuses on working conditions and is intended to ensure that direct suppliers take relevant sustainability topics into account. As a result, the workers may benefit from improved working conditions, such as compliance with occupational safety requirements and health protection.

In addition to the Code of Conduct for Business Partners, there are projects such as Cobalt for Development that support workers, including artisanal smallholders who work in the raw material production region in the Democratic Republic of the Congo. Working conditions can be improved, for example, by running training on occupational safety and health and by providing protective work clothing. Workers, such as smallholders who work in rubber processing in Indonesia, are also particularly affected by the positive impact. Training can enable smallholders to secure an adequate living by learning efficient ways to improve agricultural quality and cultivation methods.

Furthermore, the Volkswagen Group's materiality assessment identified an actual and potential negative impact for suppliers in the upstream and downstream value chain that may take effect over a medium-term time horizon. In individual cases, direct suppliers might not have adhered to the requirements of the Code of Conduct for Business Partners. This may be expressed in the form of insufficient action on occupational safety, unsafe working conditions, or low wages.

The following examples describe two regions and sectors particularly affected by this impact. The social standard audits identified that excessive overtime was frequent and widespread, especially in the procurement market in China. Furthermore, an internal analysis identified a high risk of insufficient compliance with the Volkswagen Group's requirements on occupational health and safety in the logistics sector. Furthermore, an internal analysis identified a high risk of insufficient compliance with the Volkswagen Group's requirements on occupational health and safety in the logistics sector.

Impact in the area of equal treatment and equal opportunities for workers in the value chain

The Volkswagen Group's materiality assessment identified an actual positive impact on the equal treatment of and equal opportunities for workers in the upstream and downstream value chain. If suppliers in the upstream and downstream value chain comply with and disseminate sustainability requirements and conduct risk-based and ad hoc supplier audits to check compliance with requirements, this can help to promote equal treatment and equal opportunities. This impact may be noticeable for workers in the upstream and downstream value chain in the form of non-discriminatory pay.

Impacts in the area of other work-related rights of workers in the value chain

In the context of the materiality assessment, the Volkswagen Group has identified actual positive impacts on groups potentially affected by child and forced labor and the observance of other labor-related rights in individual cases in the upstream and downstream value chain. This strengthens the rights of rights holders, for example, to avoid child labor and forced labor. Actions that contribute to this include complying with and disseminating sustainability requirements from the Code of Conduct for Business Partners and conducting risk-based and ad hoc supplier audits on compliance with the requirements. This promotes compliance with other work-related rights, primarily by direct suppliers. Moreover, as part of a mica mining project, alternative income sources are created for parents to ensure that families can generate enough income and children can attend school instead of working.

In addition, the materiality assessment identified an actual negative impact in the upstream and downstream value chain. This arises when suppliers do not adhere to the requirements of the Code of Conduct for Business Partners in individual cases. The focus in this case is on areas such as battery supply chains, where human rights violations such as child labor or forced labor may arise.

Financial risk of employment relationships in the value chain

The materiality assessment identified the material medium-term financial risk of not taking sufficient account of human rights in the Volkswagen Group's upstream and downstream value chain. This has a particular impact on the employment relationships in the value chain. The risk results from the possibility that human rights considerations are insufficiently addressed within the value chain. One possible risk is that child labor may occur in the battery supply chain. This may lead to violations of applicable law or associated reporting procedures and may result in possible fines or compensation payments for the Volkswagen Group. Another possible consequence is the restriction of market access (import bans), which may result in volume losses. Any subsequent discovery of violations may also lead to recalls and considerable reworking costs for vehicles that have already been delivered. In addition, reputational damage is to be expected.

Interaction with the strategy and business model

The impacts identified in the materiality assessment and the financial risk have an effect on the Group's value chain. The topic of value chain workers is taken into account at an overarching level in the Group's sustainability strategy regenerate+. The focus is on creating responsible and sustainable supply chains. In the area of procurement, we launched a comprehensive review of the strategy program, whose aims include strengthening sustainability and implementing regenerate+.

The Volkswagen Group responds to negative impacts in the areas of working conditions and other work-related rights. Preventive actions within the ReSC system have an impact here, including confirmation of the Code of Conduct for Business Partners, the sustainability rating (S-Rating), training courses for suppliers, and the HRFS, as do mitigation and remedial action such as the supply chain grievance mechanism (SCGM) and supplier audits. These actions also address risk in the area of other work-related rights and apply to direct suppliers and, in some cases, to indirect suppliers – as also shown in the ReSC system chart in "Policy: Workers in the value chain".

In order also to be able to address negative impacts lower down the supply chain (indirect suppliers), the Volkswagen Group has identified 18 high-risk raw materials. A management system, the RMDDMS, was put in place for this and is used to identify sustainability risks, take appropriate action to mitigate them and create transparency in the relevant supply chains.

The measures may lead to the prevention of breaches of the Volkswagen Group's sustainability requirements with regard to working conditions and other work-related rights, such as working time, adequate wages and occupational safety. This leads to workers in the upstream and downstream value chain having their rights strengthened and being able to demand remedial action in the event of noncompliance.

These measures are allowing the Volkswagen Group to promote positive impacts in the areas of working conditions, equal treatment and equal opportunities and other work-related rights. Other components of the actions that may have a positive impact include projects and cooperation in multi-stakeholder initiatives, such as the NAP industry dialogue, Responsible Business Alliance (RBA), the living wage HRFS focus topic and the industry dialogue working groups. A detailed description and explanation of all actions in this action area is provided in "Actions: Workers in the value chain".

POLICY: WORKERS IN THE VALUE CHAIN

Respect for human rights is of paramount importance to the Volkswagen Group. We are convinced that sustainable economic activity is only possible by acting ethically and with integrity. Within the framework of our entrepreneurial activities, we are fully committed to upholding our responsibility regarding human rights.

In order to live up to these human-rights and environmental obligations, especially with regard to workers in the value chain, the Volkswagen Group developed the ReSC system management policy in Procurement. This begins before a contractual relationship is entered into, i.e. before the negotiation of specific delivery times and purchase prices. The implementation of the due diligence obligations enshrined in it extends to all direct suppliers of the Volkswagen Group in both the upstream and the downstream value chain.[3] Depending on the situation and the risk, it also encompasses indirect suppliers.

The policy has the aim of avoiding and minimizing potential and actual negative impacts on workers along the Volkswagen Group's supply chain based on a risk analysis. It is also intended to help to identify and put an end to breaches and continuously improve suppliers' sustainability performance.

At the same time, it is possible to react to actual negative impacts on the aforementioned working conditions and other work-related rights (child labor, forced labor, adequate housing, and water and sanitation) of value chain workers. At the same time, this is intended to reduce the financial risk for Volkswagen AG caused by actual negative impacts on work-related rights of value chain workers.

Furthermore, positive impacts on working conditions, other work-related rights, and equal treatment and equal opportunities (gender equality and equal pay for work of equal value, employment and inclusion of persons with disabilities, measures against violence and harassment, and diversity) of value chain workers are to be achieved.

The ReSC system includes the following elements, which build on each other:

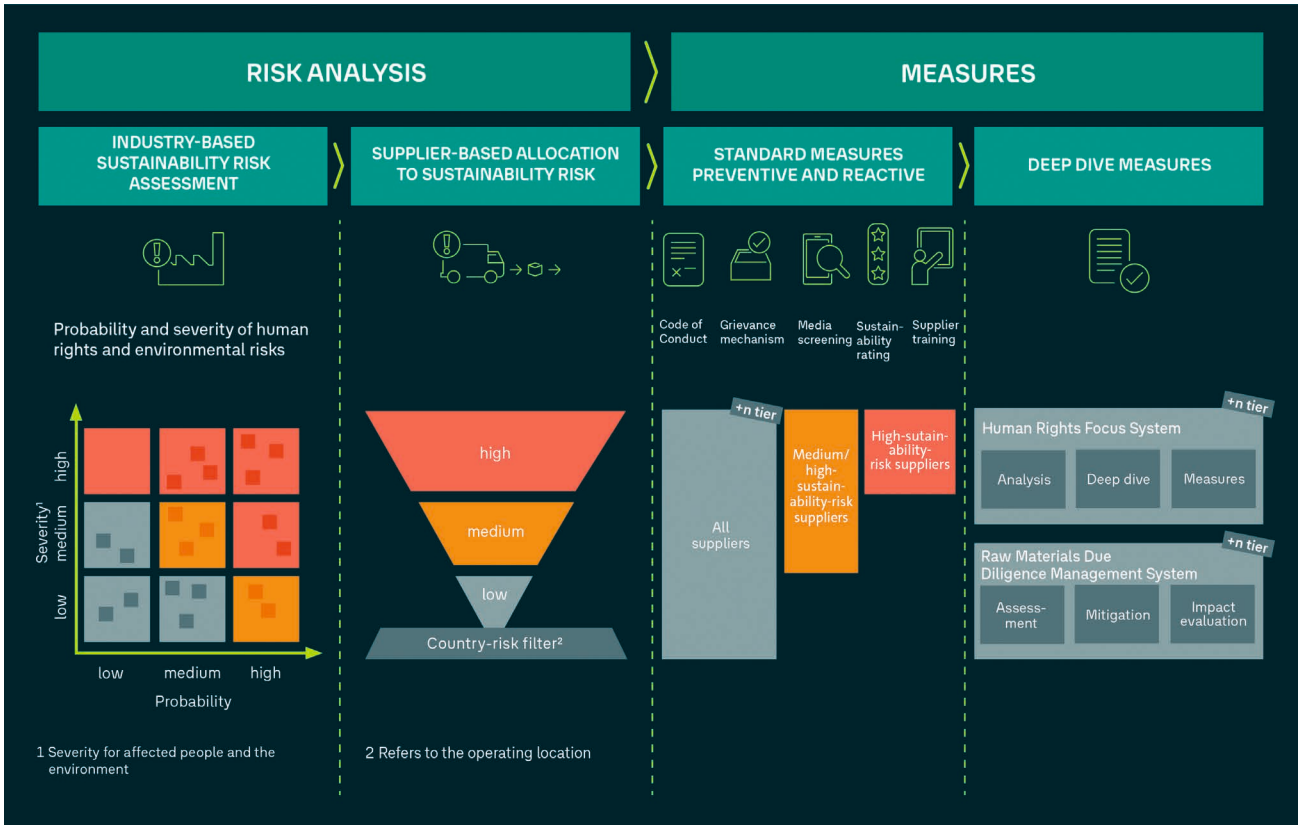
Risk analysis: A regular risk analysis is used to identify potential negative impacts on workers at supplier level. The processes for analyzing risk represent the first step of the ReSC system. Based on the risk class determined for certain business models and countries, the supplier is assigned a package of actions to prevent and mitigate the potential negative impacts identified to enable it to be eligible for the award of contracts. A detailed description of the risk analysis is provided in "Actions: Workers in the value chain".

Standard actions: These preventive and reactive actions include confirmation of the Code of Conduct for Business Partners by direct suppliers, the SCGM, media screening, the S-Rating, and training for suppliers and employees.

Deep-dive actions: These include the HRFS, the RMDDMS, and collaboration with external partners to progress the sustainability policy in the supply chain.

[3] This includes joint ventures that also act as suppliers to the Volkswagen Group. Furthermore, temporary employment agencies and self-employed people are included if they are used as part of Group procurement processes. Suppliers in the downstream value chain include recycling companies. However, authorized dealerships and customers are not included and are not covered by the ReSC system.

Responsible supply chain system (ReSC system)



The Volkswagen Group respects and promotes the regulations on protecting human rights worldwide as fundamental and universally valid requirements. The Group rejects all forms of child or forced labor, modern slavery or human trafficking. On this basis, we have set out expectations of our business partners' conduct with respect to key human rights in the Code of Conduct for Business Partners. It also includes environmental, social and compliance standards as well as the obligation to comply with current labor, health and safety laws and with the conventions of the International Labour Organization (ILO), in particular with respect to fundamental rights at work, including provisions on precarious work. To extend the requirements of the Code of Conduct for Business Partners further down the supply chain, the Volkswagen Group also requires its suppliers to pass these requirements on to their direct business partners.

The requirements of the Code of Conduct for Business Partners are based on documents including the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights, the Fundamental Conventions of the International Labour Organization (ILO), the UN Universal Declaration of Human Rights, the Ten Principles of the United Nations Global Compact, and the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. However, the Code of Conduct is not just based on international standards, but also objectives, rules and policies of the Volkswagen Group.

Checks are carried out on an ad hoc basis to determine whether the Code of Conduct for Business Partners is compliant with the international standards and frameworks listed above. Any adjustments are made as required. The confirmation of the Code of Conduct for Business Partners by direct suppliers is integrated into the ReSC system as a standard action, which means that corresponding principles in the context of the management policy are anchored here.

We take the view that continuous dialog between the stakeholders and the Volkswagen Group on principles and implementation issues is important. For businesses, it is often challenging to obtain accurate and objective information enabling a comprehensive assessment of human-rights situations. In order to achieve further progress, we therefore seek cooperation and dialog with relevant national and international players – for examp-

le, through multi-stakeholder initiatives. In addition, we are also in continuous communication with internal stakeholders such as the Sustainability Procurement Network[4], when it comes to issues such as the further development, adjustment, or review of the methodology for supplier sustainability assessment or the ReSC system. Information obtained from industry and supply chain initiatives and internationally recognized standards are also built into the system's continuous development and taken into account in shaping the due diligence obligations. For instance, the views of stakeholders were considered in developing the ReSC system, such as by means of external studies. Examples of sector and multi-stakeholder initiatives through which the views of value chain workers are taken into account are described in "Processes: engaging with value chain workers".

Processes that facilitate remedial action for value chain workers who have been harmed by actual negative impacts are also defined in the context of the ReSC system.

The supply chain grievance mechanism (SCGM) was implemented as part of the ReSC system to systematically process reports of risks or violations. It is used to process hints of violations of the Code of Conduct for Business Partners by the Volkswagen Group's direct or indirect suppliers. Part of this may also include the definition of (remedial) actions once the facts of the case have been established and the corresponding conclusions have been made. The mechanism is available via the channels of the Volkswagen Group's whistleblower system and is open to all potentially affected stakeholders.

In addition, risk-based and ad-hoc on-site audits of suppliers are carried out as part of the ReSC system. If sustainability risks or violations are identified, an action plan is developed depending on the overall result of the audit, and the action plan's implementation is monitored. Detailed information on this is provided in "Actions related to value chain workers".

More information on the existing remediation processes and available channels for value chain workers to lodge complaints can be found in "Processes to remediate negative impacts and channels for value chain workers to raise concerns".

During the reporting year, there were violations of the human rights protected by the *Lieferkettensorgfaltspflichtengesetz* (LkSG – German Supply Chain Due Diligence Act) with regard to supplier workers in the upstream and downstream value chain. These can also be based on hintsreceived by the relevant investigation office in the previous year, but for which a violation was only identified during the reporting year. This also means that there are cases of severe human rights violations within the meaning of the ESRS. Since the LkSG is based on the United Nations Guiding Principles on Business and Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work and the OECD Guidelines for Multinational Enterprises, it can therefore be assumed that the violations against protected legal interests of the LkSG correspond to violations of these frameworks in this respect. Where human rights violations are concerned, the LkSG protects against forced labor and slavery, disregard for occupational safety and health, the withholding of an adequate wage, disregard for the freedom of association and the use of security forces in the context of human rights violations.

Responsibility for the overarching policy rests with the related board level management functions. The Group Management Board Member for Brand Group Core is ultimately responsible for Group Procurement and therefore also for the ReSC system. The Group Procurement Sustainability department at Volkswagen AG conducts the operational management of sustainability topics in the supply chains.

The ReSC system is reviewed by Group Procurement Sustainability in coordination with the members of the Sustainability Procurement Network, Group Compliance and Group Legal, and recommendations for action are developed.

Implementation of the policy is mandatory and is enshrined in a Group policy for Group controlled companies. Sampling of companies is carried out annually to determine whether the ReSC system has been implemented in local policies.

The structures and processes needed to implement the ReSC system are set out in Group policies and process documentation. These are available internally to the individuals responsible for implementing the ReSC system.

[4] Network of procurement sustainability representatives from selected companies for regular communication on topics and strategic development of the ReSC system

Relevant information such as the Code of Conduct for Business Partners is also made publicly available for value chain workers who may be affected, including in the form of external reporting formats.

PROCESSES: ENGAGING WITH VALUE CHAIN WORKERS

The Volkswagen Group uses various formats to incorporate the views of value chain workers when fulfilling its human rights due diligence obligations in order to be able to respond appropriately to material negative and positive impacts. The Head of Group Procurement Sustainability has overarching operational responsibility for implementing the formats and integrating the findings in the company's approach.[5]

Communication formats with representatives of value chain workers

Multi-stakeholder initiatives and local projects: By participating in multi-stakeholder initiatives and local projects, the Volkswagen Group gains insights into value chain workers' views. For instance, the Volkswagen Group is a member of the National Action Plan (NAP) automotive industry dialogue and the Responsible Mica Initiative (RMI), and a project partner of Cobalt for Development and the Responsible Lithium Partnership. At regular working group meetings, the Volkswagen Group works with other members and partners, including representatives of value chain workers such as NGOs or trade union associations, on topics including audit standards and catalogs of actions for improved implementation of due diligence obligations and improved working and living conditions. The results are taken into account in the ReSC system. The views of value chain workers are therefore incorporated into the risk analysis and action development stages of the Volkswagen Group's due diligence process in different ways depending on the initiative. The Cobalt for Development initiative involves regular dialog to assess effectiveness.

External events: The Volkswagen Group is a member of the UN Global Compact (UNGC). In this context, in 2024 representatives of the Group took part in the "Living Wages Roundtable Conference – Implementing Responsible Purchasing Practices along the Supply Chain", in which the representatives of value chain workers such as NGOs, trade union representatives and the Asia Floor Wage Alliance represented the views of value chain workers through talks and dialog formats. In the reporting year, the Volkswagen Group additionally took part in the *Sorgfaltspflichten im Transportbereich – Wege zur Umsetzung* (Due Diligence in the Transport Sector: Implementation Options) conference initiated by the NGO *Südwind*. In this format, solutions for improving working conditions were discussed with company representatives, trade unions and the Federal Office for Economic Affairs and Export Control (BAFA). The findings from these communication formats are incorporated into the further development of the due diligence processes, particularly at the level of developing actions.

[5] The Vice President Procurement Strategy, Capacity and Process Management of Porsche AG has overarching operational responsibility for participation in the Responsible Mica Initiative (RMI) and the integration of findings into the company's approach.

Communication formats with value chain workers

Significant examples of communication formats with value chain workers can be found below:

CASCADE project: Since 2021, Porsche AG has been responsible for the coordination and implementation of the CASCADE project to create capacity in the Jambi province in central Sumatra (Indonesia) as part of the RMDDMS, having initiated this project in collaboration with global tire manufacturer Michelin. In cooperation with local NGOs and rubber processing businesses, the project develops and implements measures to improve working conditions and promote the use of environmental and social practices. Workers' views were also incorporated through an initial risk analysis. The effectiveness of the cooperation is checked by obtaining views from the farmers affected through interviews and questionnaires. The findings from these communication formats are incorporated into the further development of the due diligence processes, particularly at the level of developing actions.

Audit formats: Using supplier audits, the views of value chain workers are directly included in the fulfillment of due diligence obligations in the form of surveys (interviews). To protect suppliers' workers, they are selected at random and assessments are treated anonymously. The surveys of suppliers' workers are used to identify violations or risks as part of the audit, and an action plan is developed based on the deviations identified in the audit. As the results of the interviews can directly impact the action plans, the surveys of suppliers' workers are seen as an effective way of incorporating the views of workers in the value chain.

Findings from the audit are also incorporated into the further development of the risk management system and the risk analysis and the development of appropriate measures. The audit formats include the RSCI audit standard of the Responsible Supply Chain Initiative e. V. (RSCI), and Volkswagen-specific standards such as VOC audits (S-Rating), the social standard audits, which are primarily used in the HRFS, and raw materials audits. Further information on this is provided in "Processes: Engaging with value chain workers".

Supply chain grievance mechanism (SCGM): Volkswagen has also established a mechanism that enables value chain workers (including vulnerable groups) to report their interests and problems at any time. The mechanism is open to all potentially affected stakeholders, such as suppliers' workers and their representatives, trade unions or civil society players, NGOs or representatives of communities in the vicinity of production sites. The SCGM is used to process reports on breaches of the Code of Conduct for Business Partners by the Volkswagen Group's direct or indirect suppliers and can be accessed via the whistleblower system's channels. If risks or breaches are identified, appropriate actions are introduced. Multi-stakeholder initiative working groups (e.g. the Drive Sustainability initiative) and interdisciplinary working groups address the effectiveness of grievance mechanisms in general. Participating in the working groups means that the supply chain grievance mechanism team's experts can identify optimization requirements for the working groups. In some cases, relevant stakeholders such as NGOs, as representatives of value chain workers, are also involved as dialog partners. More information on the existing remediation processes and available channels for value chain workers to lodge complaints can be found in "Processes: Remedy and complaint channels".

PROCESSES: REMEDY AND COMPLAINT CHANNELS

The whistleblower system serves as a central complaint procedure for the Volkswagen Group. The Central Investigation Office in Wolfsburg is responsible for coordinating the Group-wide whistleblower system. The Volkswagen Group whistleblower system's principles, reporting channels and procedures are described in detail in the "Business conduct" chapter.

Employees, business partners and their employees, customers and other third parties can, at any time, report information on potential breaches of the rules (which include violations of applicable law or even the Group's own Code of Conduct) in the company's own business area or in the upstream and downstream value chain – including serious risks and human-rights and environmental violations. They may make such reports anonymously if they so choose.

Possible reporting channels and further information on the whistleblower system – for example, the rules of procedure – are publicly accessible on the Volkswagen Group website. Information on the whistleblower system is also made available to business partners through the Code of Conduct for Business Partners, which requires business partners to provide their employees with unhindered access to the whistleblower system implemented by the Volkswagen Group and to ask their own suppliers to do the same.

In addition to this complaint channel operated by the Volkswagen Group itself, external grievance mechanisms are also available. These are described in the "Employees and non-employees" chapter.

Approaches and procedures for implementing remedial action

When a complaint is received through the reporting channels managed by the whistleblower system, the first step is to document it. If the complaint concerns a situation in the Group's own business area without any employee misconduct, the whistleblower system will immediately forward the complaint to the relevant body within the Group that, based on the complaint's subject matter, is responsible for handling the complaint.

The whistleblower system's Central Investigation Office forwards potential human-rights and environmental violations or risks or breaches of the Code of Conduct for Business Partners by direct or indirect suppliers to the SCGM for further investigation. The hintsare logged in an internal IT system and the handling of these cases is documented.

The processing of hintsin the SCGM up to their closure is uniformly described in a binding process manual and is managed by the Group. Reports are processed together with the companies and relevant regions of the Volkswagen Group. Violationsidentified are categorized by their severity in accordance with the process. Depending on the categorization of theviolation, appropriate measures are then introduced. If risks are identified at indirect suppliers, actions are also initiated, for example an audit to identify possibleviolations. This requires the assistance of the direct supplier with whom a contractual relationship exists. If there are serious violations, it is possible to temporarily block suppliers from eligibility for the award of new contracts or to terminate the business relationship with them.

The effectiveness of remedial actions is selectively reviewed on a case-by-case basis. Where, for example, actions are defined in collaboration with the supplier, they are logged and made available to everyone involved. The effectiveness of and compliance with the agreement will be reviewed in due course by making inquiries after the actions have been taken. Another option is to interview the supplier's workers after the case has been closed, possibly as part of a re-audit.

The violationsor risks identified in audits are not opened as cases in the SCGM. If audits identify sustainability risks or violations, an action plan is developed depending on the overall result of the audit or the risks or violationsthe audit identifies, and the action plan's implementation is monitored. Evidence of the implementation of the actions is needed to obtain a positive S-Rating and thus be eligible for the award of contracts. Detailed information on this is provided in "Actions: Workers in the value chain".

Effectiveness test and value chain workers' trust in the processes

The whistleblower system's effectiveness is tested. Further information on this is provided in the "Employees and non-employees" chapter. Moreover, multi-stakeholder initiative working groups (e.g. the Drive Sustainability initiative) and interdisciplinary working groups address the effectiveness of grievance mechanisms in general. In some cases, relevant stakeholders such as NGOs, as representatives of value chain workers, are also involved as dialog partners. The working groups' findings may help the SCGM team's experts to identify the SCGM's potential optimization requirements.

At the present time, there are no actions aimed at analyzing whether workers in the value chain are aware of and trust the structures and processes of the SCGM.

The publicly available rules of procedure for the Volkswagen Group's grievance mechanism stipulate that the Volkswagen Group must protect whistleblowers or complainants who cooperate in investigations to the best of their knowledge and belief from discrimination and reprisals, as far as the Group is able to. The option of making an anonymous report for the protection of the complainant is also intended to contribute to this. The processing of the hintsand any follow-up questions was also confidential and anonymous, if this is requested.

ACTIONS: WORKERS IN THE VALUE CHAIN

This section covers the sustainability matters specified in ESRS 1 that were identified as material in the materiality assessment: With regard to working conditions for value chain workers, this includes working time, adequate wages, social dialogue, freedom of association, including the existence of work councils, collective bargaining and health and safety. With regard to equal treatment and opportunities for all, the topics of gender equality and equal pay for work of equal value, employment and inclusion of persons with disabilities, measures against violence and harassment, and diversity are material aspects. Furthermore, reference is made to other work-related rights, with the topics of child labor, forced labor, adequate housing, and water and sanitation taken into account here.

Responsible supply chain system

Due to the diversity of its products, the Volkswagen Group's supply chain is extremely complex, globally distributed and subject to constant change. It includes more than 66,000 supplier sites in more than 95 countries around the world. The activities may have potential negative impacts on the environment and on people in the supply chain. At the same time, the size of the Volkswagen Group in the market also means there are opportunities to achieve environmental and social improvements in its suppliers' countries and sites.

For the Countries in which Volkswagen has direct suppliers metric, all the Volkswagen Group's direct suppliers that were reported by the Group companies to the procurement data warehouse in the reporting year are taken into account. A supplier site in each case refers to the site of a direct supplier.

In the 2024 reporting year, the Volkswagen Group took standard and deep-dive actions in the ReSC system in order to minimize and eliminate material potential and actual negative impacts on the workers of direct and indirect suppliers in the upstream and downstream value chain. In addition, actions were taken to achieve positive impacts on these workers and manage the material financial risk arising for the Volkswagen Group if actual negative impacts on other work-related rights such as child labor or forced labor occur. The standard actions are taken for all direct and, in some cases, also indirect suppliers. Deep-dive actions look at high-risk topics and raw materials to address negative and positive impacts that also occur in particular further down the supply chain. The findings from the work on deep-dive actions can also result in the adjustment of standard actions for direct suppliers.

Actions that are used to manage the actual negative impact on other work-related rights of workers can also help to minimize the identified financial risks. It may be possible to reduce the financial risk arising as a result of possible reputational damage or penalties in the event of infringements of the law through management of these impacts. External developments – for example, local legislation such as the LKSG – were taken into account when assessing the financial risk. The risk is monitored in the Volkswagen Group's internal control system.

The internal functions that are involved in implementing the ReSC system's actions comprise, in particular, Group Procurement Sustainability and procurement sustainability representatives from selected companies

(Sustainability Procurement Network). More than 140 experts worldwide are involved in the Sustainability Procurement Network.

All value chain workers who are involved in a regular communication format between the Group companies are taken into account when calculating the number of experts involved in the Sustainability Procurement Network.

Risk analysis for determining necessary and appropriate actions

The regular risk analysis as part of the ReSC system is used to identify potential negative impacts on workers at a specific supplier. The processes for analyzing risk represent the first step of the ReSC system. The analysis is made on the basis of the suppliers' business models and takes account of internal and external data on human-rights and environmental risks. Based on the assessment of these risks, each supplier is assigned a low, medium, or high sustainability risk. This indicator is used as a guide to assess the degree to which identified negative impacts on workers at the relevant supplier may occur. For suppliers with a low sustainability risk, a country risk score is also applied. If the supplier's production site has an increased country risk, it is upgraded to the medium risk category. Based on the risk classification, the supplier is assigned a package of measures to prevent and mitigate the impacts identified. Suppliers with a high risk classification, for example, go through the S-Rating process, while suppliers with a medium risk classification or higher are included in the media screening. Regardless of the supplier's risk classification, other measures such as acknowledging the Code of Conduct for Business Partners and the SCGM apply. A description of the actions is provided below.

Standard actions as the foundation of the Responsible Supply Chain System

Confirmation of the Code of Conduct for Business Partners

Before submitting a quote, direct suppliers must generally confirm that they acknowledge the sustainability requirements in the Code of Conduct for Business Partners. They must consent to this again after twelve months if they wish to submit new quotes. The Code of Conduct for Business Partners is also a component of the agreements under which contracts are awarded. In order to extend the requirements of the Code of Conduct for Business Partners further down the supply chain, we also require suppliers to pass the requirements on to their direct business partners. All material sustainability matters regarding working conditions, equal treatment and equal opportunities, and other work-related rights of value chain workers are enshrined in it. Suppliers confirming that they comply with corresponding sustainability requirements and pass them on to relevant business partners should enable continuous application of the requirements along the upstream and downstream value chain. This should reduce potential negative impacts on working conditions and also promote positive impacts on working conditions, equal treatment and equal opportunities, and other work-related rights of value chain workers.

Supply chain grievance mechanism

The supply chain grievance mechanism (SCGM) is a continuous measure used to process hinzs on violationsof the Code of Conduct for Business Partners by the Volkswagen Group's direct or indirect suppliers. As part of the SCGM, necessary, case-specific appropriate actions to eliminate identifiedviolations, depending on the severity and type of the violations, are identified. These actions are intended to establish an opportunity for value chain workers in the upstream and downstream value chain who are affected by actual negative impacts on working conditions or other work-related rights to be provided with a remedy. The effectiveness of the mechanism and remedial actions is monitored. Further information on this is provided in "Processes:Remedy and complaint channels".

In the reporting year, 213 reports of violationswere dealt with.

The metric on hints from the supply chain grievance mechanism takes all hintsrecorded in the system in the reporting year into account. The plausibility of the hintshas not yet been proven at this stage of the process.

Media screening

Group Procurement Sustainability carries out continuous and risk-based media screening of relevant suppliers[6] using a software tool. If the tool identifies indications of possible breaches of the Code of Conduct for Business Partners by suppliers in the upstream and downstream value chain, these are reviewed and, if necessary, processed in the SCGM. The media screening can identify potential breaches even if there is no direct report in the whistleblower system or no findings are made in supplier audits. This enables these cases to be processed by the SCGM and, where necessary, remedial action to be taken. In 2024, more than 39,500 direct suppliers were part of the media screening. Their share of the total procurement volume in the reporting year was 89%.

The metric on direct suppliers in the media screening indicates the total number of all direct suppliers that were part of the media screening in the reporting year. The media screening covers suppliers who are classified as high or medium risk according to the risk analysis. Detailed information on this is provided in the section "Risk analysis for determining necessary and appropriate actions". The metric is measured using an external service provider's software tool. The metric on the sales revenue percentage of direct suppliers in the media screening in total procurement volume indicates the percentage of the total purchasing volume accounted for by direct suppliers that were in the media screening in the reporting year.

Sustainability rating

The sustainability rating (S-Rating) has been an established process in the Volkswagen Group since 2019. This standardized Group tool allows the degree of compliance with the Volkswagen sustainability requirements by direct suppliers with a high sustainability risk and relevant company size to be verified. Use of the S-Rating is intended to promote the integration of responsible corporate practices at direct suppliers, reveal potential for improvement and create incentives to comply with the sustainability requirements so that they are eligible for the award of contracts. This process is designed to mitigate or prevent potential and actual negative impacts on the working conditions of workers in the supply chain.

The result of the S-Rating is divided into three rating categories: Suppliers with an A or B rating meet requirements of the Volkswagen Group to a sufficient degree, meaning they have a positive S-Rating and are eligible for the award of contracts. If a supplier does not meet the requirements for compliance with sustainability standards (C rating), it is fundamentally not eligible for the award of contracts. This means there is a direct incentive for suppliers to improve their sustainability performance.

The screening for the S-Rating, which involves both risk-based and ad-hoc audits, takes place before new contract awards via a multistage process. Suppliers who are classified as high risk according to the risk analysis that evaluates the areas of environment, social aspects and integrity are taken into account here. Detailed information on this is provided in the section on "Risk analysis for determining necessary and appropriate actions". The review of the level of compliance with the sustainability requirements, pursuant to the Code of Conduct for Business Partners, is carried out through various tools, such as a standardized self-assessment questionnaire

[6] The relevance of a supplier for media screening results from factors including the procurement volume or the risk exposure derived from the type of product or service.

(SAQ) and, risk-based, by audits. The SAQ is mandatory for all supplier sites in the scope of the S-Rating with ten or more workers. The number of direct suppliers who had completed the SAQ was 14,953 in 2023 and the proportion of new suppliers[7] with a completed SAQ was 26%. In the 2024 reporting year, 19,094 direct suppliers completed the SAQ, and the proportion of new suppliers was 20%.

Suppliers have the opportunity to improve their SAQ result by providing further information. Improvements were recorded for 9,357 direct suppliers on the basis of the SAQ in 2023, and for 8,093 direct suppliers in 2024.

In addition, suppliers' sustainability performance is assessed on a risk basis by means of audits. If suppliers pass this audit with less than 100%, they are given improvement measures. If the rating achieved is below 80%, these actions are recorded in an action plan. The implementation of the plan is agreed with the supplier and monitored. Depending on the measure, the supplier has to implement the plan within six months at the latest. If the supplier receives an audit rating of less than 60%, another audit is conducted after the action plan is implemented. The audit findings impact the S-Rating category and, as a consequence, may lead to a C rating. Suppliers with a C rating cease to be eligible for the award of contracts. A total of 89 audits were conducted worldwide in 2023 in connection with the S-Rating, and 85 audits were conducted in 2024. In the reporting year, where necessary, actions were initiated at supplier level in line with the process.

The implementation of corrective actions in connection with the S-Rating audits is intended to provide a remedy for those affected by actual negative impacts on working conditions or other work-related rights in the value chain. This creates the opportunity to simultaneously promote positive impacts on working conditions, equal treatment and equal opportunities, and other work-related rights of value chain workers by checking compliance with the audit's requirements and demanding compliance where necessary.

By the end of the reporting year, we had 14,709 S-Ratings for suppliers. Of these suppliers, 14,682 have a positive S-Rating (A and B rating).[8] 28 suppliers were rated C and are not currently eligible for the award of contracts. Suppliers who do not meet the requirements for compliance with the sustainability standards of the Volkswagen Group are also not eligible for the award of contracts.

The metric on direct suppliers with completed SAQ indicates the number of direct suppliers that had completed the SAQ and been finally assessed. Completed SAQs are taken into account if they have been submitted to the Volkswagen Group by the reporting date in the reporting year, irrespective of whether they were completed in the reporting year or one of the previous years. The metric on the proportion of new suppliers with a completed SAQ indicates the proportion of direct suppliers with a completed SAQ that were assessed by the SAQ for the first time in the reporting year.

The metric on improvements in suppliers based on the SAQ indicates the number of direct suppliers that improved their SAQ score by at least one point by filling in the questionnaire again.

The metric on the number of on-site audits carried out in connection with the S-Rating indicates the absolute number of all audits initiated through the S-Rating process carried out in the reporting year.

The metric on existing direct supplier S-Ratings indicates the absolute number of direct suppliers for which an S-Rating was available in the reporting year. The "of which direct suppliers with a positive S-Rating (A and B rating)" metric indicates the proportion of suppliers that achieved an A or B rating. The "of which direct suppliers with a C rating" metric indicates the absolute number of direct suppliers with a C rating.

[7] Direct suppliers who were assessed for the first time in the reporting year.
[8] Change in methodology: scope widened to B ratings since previous year.

Sustainability training for procurement employees

Continuously and systematically training procurement employees is a central component of the Volkswagen Group's strategy and essential for the improvement of sustainability among suppliers in the upstream value chain. For all procurement employees, the topic of sustainability is an established part of the skills profile. Defined procurement employees need to be trained in the relevant processes (e.g. S-Rating) or receive introductory training on human rights due diligence. This is intended to enable employees to implement processes with the aim of, for example, also identifying potential negative impacts on the working conditions of suppliers' workers and auditing the mitigation of these potential impacts at suppliers. In 2024, the training we provided on the topic of sustainability was used by procurement staff worldwide a total of 5,129 times.

The metric Procurement staff participation in training on the topic of sustainability indicates the absolute number of Volkswagen Group buyers who have completed the training courses on sustainability in full.

Sustainability training for suppliers

To enable continuous supplier development, we invite direct suppliers to attend sustainability training courses and workshops on specific topics at selected sites or online and also offer web-based training. A total of 9,818 suppliers were trained accordingly in the reporting year. Deep-dive human rights training for suppliers has also been available since 2021. The training includes the legally required aspects, such as training on child labor, forced labor or discrimination. Since 2023, the training has been systematically rolled out to primarily direct suppliers with a high sustainability risk. We pressed ahead with further relevant activities in 2024. In addition to the training courses, the Volkswagen Group provides an e-learning module on sustainability for current suppliers in eight languages. Training courses enable suppliers to develop relevant expertise to identify, prevent, reduce, or avoid potential negative impacts on their own workers' working conditions.

The metric on direct suppliers who have received training on the topic of sustainability indicates the absolute number of suppliers who have taken part in a training course on the topic of sustainability in the 2024 reporting year. If a supplier has participated in a web-based training course or on-site supplier training in the reporting year and has completed at least 50% of the training time, the supplier is taken into account when calculating the metric. Training courses completed by both existing and potential direct suppliers are included.

Deep-dive actions as further elements of the Responsible Supply Chain System

Human rights focus system

In the sustainable supplier management, the Volkswagen Group is also involved in protecting groups of people who may be affected by negative impacts along the upstream and downstream supply chain. In order to achieve more impact here, we introduced the human rights focus system (HRFS). We use the HRFS to identify topics that may be associated with human rights and environmental risks. These topics require more in-depth analysis and are continuously addressed. The tools and actions implemented in the HRFS are intended to minimize and stop identified negative impacts on value chain workers. In addition, the aim is to promote positive impacts on these workers. The actions are described in more detail below.

As part of the HRFS, in-depth social standard audits were conducted in 2024 to support an analysis of relevant topics in greater depth. The focus of these risk-based and ad hoc audits was primarily the workers' rights of suppliers' workers. The relevance of a supplier for the performance of a social standard audit was determined by an external service provider in 2022 by conducting a risk analysis and identifying increased human-rights risks. In order to increase the primarily direct suppliers' social sustainability, we tied new contract awards to the findings of these audits in a pilot phase. If sustainability risks or breaches are identified through on-site screening, the supplier is asked to draw up an action plan and provide evidence to the auditor that the actions have been taken. In the reporting year, this approach was implemented accordingly and the implementation of action plans was consequently initiated. The social standard audits are thus used as a tool to provide a remedy for those affected by actual negative impacts on working conditions or other work-related rights. At the same time, the aim is to promote positive impacts on working conditions, equal treatment and equal opportunities (gender equality, and equal pay for work of equal value, and measures against violence and harassment in the workplace), and other work-related rights of value chain workers by checking compliance with requirements for suppliers in this area and improving compliance where necessary.

The social standard audits increasingly identified excessive overtime as an actual negative impact, especially in the procurement market in China. In addition to eliminating risks and breaches through the audit's action plan, the Volkswagen Group has set itself the goal of examining the topic in a structured way and developing appropriate actions to mitigate the identified negative impact. In this context, the Volkswagen Group engages in the NAP automotive industry dialog. As other companies in the automotive industry have also identified comparable impacts in their value chain, this underlines the need for a joint approach. The working group on reducing overtime in China, for example, was therefore initiated in connection with the industry dialog in 2024. Based on interviews with various interest groups, such as local NGOs, and the analysis of statutory regulations, guidelines for companies are currently being drawn up to reduce overtime in supplier businesses. This cooperation and the future use of the guidelines developed are intended to reduce negative impacts on the working conditions of value chain workers. The plan is to finish the guidelines in 2025 and then take them into account for the Volkswagen Group's procurement processes.

To identify further relevant issues associated with human-rights and environmental risks and requiring a more in-depth analysis, we assess aggregate internal data from the SCGM and the audits together with external data from studies and NGOs in an analysis as a rule, the plan is to carry this out every two to three years. In 2023, we identified three focus topics using this method: forced labor, living wages and supplier management. The topics are addressed in collaboration with the Audi and MAN brands and Porsche AG.

In the next step, the root causes of the respective issues were investigated in a structured way in order to develop and implement suitable actions. An action toolbox has been developed to help to define actions. This is intended to provide the working group on the HRFS with guidance on what type of actions may be suitable and appropriate if the actions do not result directly from analysis of the topic. The basic approach for dealing with focus topics always starts with a structured investigation of the causes in order to develop and then implement measures based on the findings. The individual topics are dealt with as follows:

Forced labor: An internal working group has been tasked with creating solutions to develop suitable preventive and remedial actions on forced labor, in particular in the upstream value chain. In 2024, various multi-stakeholder initiatives were analyzed to this end in order to find suitable partners for developing and implementing preventive and remedial actions. In this context, the Volkswagen Group decided to become a member of the Responsible Business Alliance (RBA). To combat forced labor, the RBA offers a range of tools, including IT-supported mapping for comprehensive risk analyses, an initiative with a focus on worker rights and combating forced labor, and targeted training modules for suppliers. The current plan is for the initiative's tools to be implemented in the Volkswagen Group's procurement processes from 2025. The implementation of tools and actions against forced labor, which are to be made accessible by the RBA, and the implementation of improvement actions for our own procurement and due diligence processes, are intended to create the opportunity to provide future remedial action for value chain workers affected by forced labor.

Living wage: The Code of Conduct for Business Partners requires suppliers to pay their workers an adequate wage. An adequate wage is at least the minimum wage set by applicable law and is otherwise determined by the law of the place of employment. This wage should, if possible, cover the basic needs of workers and enable a decent standard of living for workers and their families. This includes adequate food, clothing, and shelter, as well as continuous improvement of living conditions. In 2024, an internal working group developed a calculation method for living wages for direct suppliers within the Group. Analysis was also conducted to identify the sector- or country-specific risks that hinder the implementation of a living wage. The findings from the analysis are to be progressively integrated into standard procurement processes through suitable actions – for example, calculating the living wage since 2024 as the minimum threshold for pay. This is intended to minimize potential negative impacts on the working conditions of direct suppliers' workers by helping to ensure the direct supplier can make appropriate wage payments.

Supplier management: In 2023, an internal analysis was carried out in an internal working group to determine which sectors are particularly at risk of not implementing the Volkswagen Group's sustainability requirements further down the supply chain effectively and comprehensively. The logistics industry was determined to be a high-risk sector. For this reason, this working group is now increasingly focusing on working conditions in the

logistics sector and intends to advance this topic by means of stakeholder engagement as part of the preparation for a roundtable of the NAP automotive industry dialog.

As part of the "improving working conditions in the logistics sector" working group initiated there in 2024 to improve working conditions in the logistics sector, discussions take place several times a year to identify suitable preventive and remedial actions in the logistics sector. The aim is to develop improvement actions for our own grievance mechanisms and reviewing our own due diligence processes. Regular cooperation is planned by the start of 2025. There are also plans for a discussion on implementing the actions. This cooperation and the implementation of improvement actions for our own due diligence processes are intended to minimize potential negative impacts on the working conditions of value chain workers. Following the round table in January 2025, it will be determined which of the actions developed there will be integrated into procurement processes.

Raw materials due diligence management system

With regard to the responsible sourcing of raw materials, the Volkswagen Group implements the five steps of the OECD Due Diligence Guidance for Responsible Business Conduct and the requirements of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas on an ongoing basis. In 2020, we implemented the RMDDMS based on the OECD guidance. It serves to identify, assess and avoid actual and potential human rights risks in the upstream raw material supply chains and to develop and implement mitigation actions. In total, the management system currently covers 18 raw materials. These include the battery raw materials cobalt, lithium, nickel and graphite, the conflict minerals tin, tungsten, tantalum and gold (3TG), and aluminum, copper, leather, mica, steel, natural rubber, platinum group metals, rare earths, cotton and magnesium. By adopting this risk-based approach, the Volkswagen Group prioritizes its activities on the basis of the severity and likelihood of occurrence of the relevant sustainability risks and the ability of the Company to influence them. In doing so, we consider that sustainability risks may vary between raw materials. We also systematically use our Group structure for developing and implementing specific prevention and mitigation measures, whose effectiveness we audit. Corresponding action toolboxes are used to help select appropriate actions. Depending on the previous analysis of the cause of a negative impact, corresponding actions are chosen or, if necessary, additional actions are developed. New report structures and toolboxes have been developed, and existing tools, such as the SCGM, have been integrated in the management system. Depending on the results of the due diligence process, the measures are adapted and improved on an ongoing basis. This approach is intended to identify and mitigate or prevent potential negative impacts on value chain workers' working conditions, particularly at indirect suppliers.

In 2024, audits were an important tool in the RMDDMS for assessing risks in the upstream supply chains and identifying suitable actions. Due to the complexity and large number of suppliers, particularly in the battery supply chain, the Volkswagen Group conducts various types of risk-based and ad hoc audits to audit suppliers' sustainability performance. On-site audits are carried out on both direct and indirect suppliers, and can identify both gaps in suppliers' sustainability performance and negative impacts on workers at the sites. Direct suppliers must close the gaps and reduce the negative impacts, even when audits are performed on indirect suppliers. All audits at direct suppliers carried out on behalf of the Volkswagen Group are accompanied by an action plan. The auditor assesses the effectiveness of the actions taken in re-audits (in a desktop review or another on-site audit). The audit program is risk-based and covers the upstream value chain, from the battery supplier to mine sites. The audit criteria are based on the OECD Guidelines for Multinational Enterprises. The audit verifies whether the supplier has set up a relevant management system to identify, prevent, or mitigate negative impacts on workers. In the reporting year, this approach was put into practice and, where necessary, corresponding actions were initiated at supplier level. The remedial process in these audits is intended to provide a remedy for those affected by actual negative impacts on working conditions (working time and health protection) or other work-related rights (child labor, forced labor, access to water and sanitation). At the same time, this is intended to promote positive impacts on value chain workers when suppliers' sustainability performance is audited and, if necessary, improved.

In the raw materials audits, the Volkswagen Group also uses, for example, the audit standard developed by the Initiative for Responsible Mining Assurance (IRMA). This enables an independent audit of mines in the mining

industry in terms of protecting human rights, including health protection measures, occupational safety and environmental protection. When developing the audit standards, stakeholders (e.g. NGOs or trade union spokespersons) were publicly consulted.

In connection with the RMDDMS, the Volkswagen Group is also involved in various initiatives and on-site projects – both cross-industry and with regard to specific raw materials – in order to achieve potential and actual positive impacts for value chain workers.

Cobalt for Development: In the Cobalt for Development project in the Democratic Republic of the Congo, the Volkswagen Group works with project partners to improve working and living conditions for small-scale cobalt miners and their communities. The cooperation in the pilot project, which has so far been open-ended, aims to strengthen compliance with laws and improve health and safety conditions and social well-being for people locally. The aim is to promote a positive impact on working conditions of artisanal, small-scale miners, for example by training them in occupational health and safety and providing protective work clothing.

CASCADE project: Since 2021, Porsche AG has been responsible for the coordination and implementation of the CASCADE project to create capacity in the Jambi province in central Sumatra (Indonesia) as part of the RMDDMS, having initiated this project in collaboration with the global tire manufacturer Michelin. The program, which was initially set up for four years, includes training courses for more than 1,000 local smallholders to help them improve their livelihood by improving their cultivation practice, enabling them to increase their yields and income. This is intended to promote positive impacts on these workers by enabling them to generate an income that allows them to cover their basic needs and finance an adequate living.

Responsible Mica Initiative (RMI): In 2020, on behalf of the Volkswagen Group, Porsche AG joined the Responsible Mica Initiative, a multistakeholder initiative to promote transparency and better working conditions in mica mining and processing in India and Madagascar. The initiative particularly aims to empower people in the local villages to eliminate child labor and improve their livelihood within a lawful and legal mica supply chain. To achieve this, alternative sources of income for parents were created in the 2024 reporting year so that their children do not have to work (e.g. from pottery). At the same time, the initiative funded the construction of schools and provision of teachers. In addition, communities were linked to Indian government funding projects, which can supplement the income of local families. Identifying alternative sources of income for financing livelihoods without the use of child labor is intended to promote positive impacts on the groups of persons concerned. The cooperation in the RMI is to be continued.

In the 2024 reporting year, steps were taken to adapt the RMDDMS to evolving regulatory requirements – for example, the EU Battery Regulation (EUBR) and the EU Deforestation Regulation (EUDR). In this context, internal working groups analyzed the legal requirements to develop policies to further develop the due diligence system. Internal procedures and documentation systems for actions were also adapted, and the management system's targets were specified. Existing key metrics for priority raw materials were reviewed and, where necessary, adjusted, and new metrics for additional raw materials were also developed.

Effectiveness test for actions

The effectiveness of the ReSC system's standard actions is reviewed once a year using the input-output-outcome-impact methodology.[9] As far as possible, one or more measurement indicators were defined for the standard actions for every measurement category. These are gathered and documented.

Within the ReSC system's deep-dive actions, further mechanisms are in turn implemented to test the effectiveness of actions: The aim of both the HRFS and RMDDMA is for an action to be considered effective if it can also actually improve the situation of people, protect the environment, or contribute to these goals.

Measurement of the effectiveness of the actions in question is a fundamental component of the HRFS. An action is effective if it can also actually improve the situation of people or protection of the environment or contribute to this. An action is also effective if it achieves a reduction in the risk and the Volkswagen Group's causal contribution. This depends on the action's objective. The timetable and indicators for the effectiveness test must be worked out specifically for each action. The same applies to the RMDDMS – a timetable and success indicators for each action are drawn up and tracked from the action selection stage onwards. The results of the effectiveness test can be incorporated into the risk analysis for the 18 raw materials in the following year.

In the case of actions that go beyond standard and deep-dive actions and are set specifically for a supplier as part of the supplier audit or the SCGM and implemented by the supplier, the implementation and effectiveness of the specific action is audited by the auditor or case handler in the SCGM. This is done, for example, in a desktop review or a repeat on-site audit.

[9] For each standard action within an impact chain, the resources deployed are examined, along with the quantifiable steps through which performance achieves impact, the type of impact achieved by performance and, as far as possible, whether a change in the target group can be recognized through performance.

TARGETS: MANAGING MATERIAL NEGATIVE IMPACTS, ADVANCING POSITIVE IMPACTS, AND MANAGING MATERIAL RISKS

The ReSC system aims to avoid or minimize potential and actual negative impacts on workers along the Volkswagen Group's supply chain. The policy's processes should also help to end breaches and continuously improve suppliers' sustainability performance. Moreover, the actions within the ReSC system directly serve to implement the Group sustainability strategy regenerate+, which aims to structure its supply chain responsibly, minimize negative impacts, and provide positive input for all business partners.

In order to measure progress on strategy implementation in connection with the management policy, we have set ourselves the relative target of, in terms of sales revenue, more than 95% of our direct suppliers[10] having a positive S-Rating (A or B rating) by 2040. As an intermediate target, we aim to achieve 85% in 2025.

A positive S-Rating is intended to show that, by meeting the minimum criteria of the S-Rating, a direct supplier fulfills the requirements for being able to reduce or avoid potential negative impacts on its own workers' working conditions and eliminate actual negative impacts on working conditions and other work-related rights. In addition, the implementation of the minimum standards is intended to promote positive impacts on working conditions, equal treatment and equal opportunities, and other work-related rights.

The methodology described in the S-Rating is used as the basis for the target, with the degree of compliance with the sustainability requirements by suppliers being calculated through a multistage process. This comprises an initial risk analysis, a standardized self-assessment questionnaire (SAQ version 5.0) and risk-based supplier audits. When determining a supplier's risk exposure, an assessment of the relevant country risk is also undertaken with the aid of a specialized service provider, so that local conditions in which impacts may occur are taken into account.

When the strategy was being developed, the objective for the proportion of suppliers with a positive S-Rating was formulated by an interdisciplinary working group. Value chain workers are not involved, either directly or indirectly through representatives, in the formulation of objectives, the pursuit of objectives, or the determination of findings or improvement opportunities. Since the target was set, no changes have been made to the target itself or to the underlying methodology.

Target achievement is continuously reviewed and monitored as part of the Group TOP 10 program. In 2023, the proportion of sales revenue contributed by direct suppliers with a positive S-Rating (A and B rating) amounted to 79% of the total procurement volume. In the 2024 reporting year, the proportion of sales revenue amounted to 83% of the total procurement volume. The progress on target achievement has to date been in line with the original plan. As part of the Group TOP 10 program's status monitoring, an analysis is made of trends and material changes concerning target achievement. No significant changes in target achievement versus the planning were identified.

[10] Relevant suppliers of the Volkswagen Group are taken into account here. The relevance of a supplier for the S rating results from factors such as the size of the company or the risk exposure derived from the type of product or service.

Corporate Citizenship

Society and the Volkswagen Group are inextricably linked, each shaping and influencing the other. As a global company, we stand for social engagement.

MATERIAL IMPACT AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact on society

The Volkswagen Group's materiality assessment has identified an actual and potential positive impact on affected communities through the Group's Corporate Citizenship projects. Through the promotion of education, health, social participation and sustainable infrastructure, Corporate Citizenship projects can have an actual and potential positive impact on affected communities because they aim to improve the quality of life of affected communities and create long-term development opportunities.

As a globally operating company and good corporate citizen, the Volkswagen Group aims to be a source of economic impetus for local structural development and equal opportunities. The Group has always believed in the importance of recognizing its social responsibilities.

Within the Volkswagen Group, Corporate Citizenship is assigned to the new focus area of Societal Impact. Societal Impact means the overall impact of the Group's own activities and initiatives on society, including economic, social and environmental matters. Corporate Citizenship is a key element of the Volkswagen Group's social engagement and includes philanthropic activities and the funding of environmental, educational and social projects at numerous sites. The focus areas are based on the Group's regenerate+ sustainability strategy, and projects that have a direct positive impact on the environment, employees and non-employees, or society are implemented and reported in a targeted manner. The following section includes the full range of Societal Impact topics, with Corporate Citizenship being treated as a material focus, but not the sole focus.

The philanthropic activities are carried out at the Volkswagen Group's sites. The communities include people or groups who live and work near the Volkswagen Group's operating sites and are or could be affected by the undertaking's operations. These also include communities whose living conditions are positively affected by projects or investments. For example, there are community projects at the Group's production sites. These will continue to exist in the future and can make a positive contribution to the environment and society. The duration of the potential impact is classified as medium term.

Interaction with strategy and business model

The impacts identified in the materiality assessment have an influence on the Group's business model, strategy and value chain. The topic of Societal Impact is enshrined at an overarching level in regenerate+ under the aspect of society. The focus in the 2024 reporting year was on developing an overarching Societal Impact strategy.

The Volkswagen Group is responding to the effect of its material impacts on its business model, strategy and value chain in the area of Corporate Citizenship by implementing global Corporate Citizenship activities, setting up a Sustainability Impact Fund and making Group-wide donations. These actions are intended to maintain and strengthen the positive impact.

In the area of Societal Impact, the Group also responds to the effect on the strategy through various actions. The brands and local units carry out global Corporate Citizenship projects, and donations are made to social, philanthropic, culture and education projects. The Sustainability Impact Fund will be operationalized for the first time in 2025, having so far only been initiated.

A detailed description of all actions in the area of Corporate Citizenship is provided under "Actions: Societal Impact and Corporate Citizenship".

POLICIES: SOCIETAL IMPACT AND CORPORATE CITIZENSHIP

The Volkswagen Group employs more than 670,000 people in 35 countries in Europe and 37 countries in North and South America, Asia, Australia and Africa, and operates 114 production sites around the world. In all these places, the Group assumes responsibility for employees and non-employees and their families, but also for social and economic development around the sites. The Volkswagen Group handles its business activities' positive impacts on society with interlinked strategies and Group-wide policies. These policies are set out in Group policies.

A specific policy for Societal Impact is currently still being developed. However, the following section explains which strategies and management policies already address the subtopics of corporate social responsibility at the Volkswagen Group.

Embedding Societal Impact

During the reporting year, the strategic direction of the Societal Impact focus area was initiated within the scope of regenerate+, a strategy that incorporates Corporate Citizenship activities. The initial focus in the 2024 reporting year was on developing an overarching Societal Impact strategy.

In the past, the corporate social responsibility initiatives (the fourth target area with the impact dimension "We@Volkswagen and the world around us") were presented within the Group People Strategy, which is the cornerstone for strategic expansion and its embedding in regenerate+ (society dimension, Societal Impact focus area).

The Volkswagen Group is pursuing two aims with regenerate+: to be a socially responsible employer for its employees and to assume corporate social responsibility. As an active partner in society, the Group aims to work responsibly with local and international organizations in a spirit of partnership and trust. The aim is to use resources and skills for the public good, by taking actions that promote a fair, inclusive and open society and supporting healthy and intact natural ecosystems. At the same time, all communities should have the same opportunities to participate in a forward-looking economy and benefit from sustainable mobility systems.

In addition to the strategic conclusions of the global basic understanding, a new framework consisting of three subtopics has been created. This has a potential effect on the Volkswagen Group's Societal Impact.

The framework and actions consist of the following topics:

- Global Corporate Citizenship activities
- Sustainability Impact Fund
- Group-wide donations

Through Group sustainability, a common framework is being developed that covers the Volkswagen Group's social engagement and facilitates actions to make a positive contribution to society and the environment.

A detailed description of regenerate+ is provided in the "General information" chapter under "Business model, value chain and strategy".

Policies on the management of Societal Impact

Group-wide policies are used to implement the principles and fields of focus anchored in the strategies. The policies relating to corporate social responsibility are described in the following Group policies. The Group policies apply to all the Volkswagen Group's controlled companies. The department responsible checks whether they are up to date at least once a year and amends them if necessary. The Group policies can be accessed on the intranet by those who are responsible for implementing them.

As previously mentioned, there is currently no policy for the Societal Impact focus area. This will, however, be prepared in the medium term within the framework of the core processes of sustainability management and is also to include management of the material positive impact. For the major components of the framework, however, the existing Group policies relating to sustainability topics, reporting on corporate responsibility and donations are presented below.

As part of Societal Impact, the implementation and description of Corporate Citizenship projects is set out in a Group policy. This Group policy on sustainability management in the Volkswagen Group defines various core processes designed to enable efficient management of and reporting on sustainability in the Group with the aim of continual improvement of the sustainability performance. The CEO of Volkswagen AG has overall functional responsibility for sustainability management, while Group Sustainability is responsible for implementing the policy and the management system at operational level. The reporting requirement for local engagement activities in the form of Corporate Citizenship projects by the respective brands and production sites is also defined in the sustainability reporting process. A detailed description of Group sustainability management and the associated structures, processes and responsibilities is provided in the "General information" under "Sustainability management".

The rules governing donations and sponsorship, which are part of Societal Impact, are also set out in a Group policy, which has the aim of ensuring that such activities take place within the framework of the applicable legal regulations and the undertaking's integrity standards. The Group policy therefore describes the requirements as well as the underlying processes and procedures for the initiation, review and approval of donations and sponsorship, taking into account the respective approval limits and responsibilities. The CEO of Volkswagen AG has overall functional responsibility for donations, sponsorship and agreements with brand ambassadors, while the Group Communications – Management and Events department is responsible for implementing the policy and the management system at operational level.

ACTIONS: SOCIETAL IMPACT AND CORPORATE CITIZENSHIP

For the Volkswagen Group, Societal Impact refers to the impacts that projects or investments can have on society. Strategic work on this focus area only began in the reporting year, so it is not yet possible to take actions to measure or quantify the impacts. However, the actions related to Corporate Citizenship that have a positive impact on local communities and the local environment are described below.

Global Corporate Citizenship activities

These are local initiatives tailored to the requirements of the production sites that aim to bring about positive change in society in the medium and long term. These actions and projects are implemented in various areas such as health, education, the environment, social justice and economic development, and contribute to the four dimensions of regenerate+. They encompass a wide variety of activities ranging from provision of resources to the running of programs and the implementation of technology by the Volkswagen Group or its units. These projects are managed locally under the responsibility of the competent units.

In 2024, the Volkswagen Group started to use a standardized questionnaire to collect information annually on the projects implemented by the individual brands and regions.[11] This collects information on existing projects that were being implemented during the reporting year. The Global Corporate Citizenship activities metric takes account of all the Volkswagen Group's individual brands and regions that carried out relevant projects here in the reporting year and reported them accordingly.

In the reporting year, more than 200 global projects were reported as local engagement activities at Volkswagen Group sites around the world. Around 69% of the projects have a potential positive impact on the community or region directly adjacent to the site, such as Wolfsburg, Ingolstadt/Germany, Bologna/Italy, Verona/Italy, Aurangabad/India, Chattanooga/USA, Puebla/Mexico, Guanajuato/Mexico or Polkowice/Poland. In addition, approximately 25% of the projects have a potential positive impact at national level (for example within China, France, Spain, or the Czech Republic) and around 4% even at international level.

There are over 200 global projects that contribute to one or more impact categories of regenerate+ at an overarching level and are intended to promote positive impacts on society and the environment. The focus of the outcome is on the "Strengthening local communities and resilience" and "Poverty reduction and social security" Societal Impact categories. In addition, the projects are expected to have positive impacts on the Group's own employees (for example in the areas of "Education and knowledge transfer," "Health and well-being" or "Gender equality and inclusion") and on nature (for example in the categories of "Healthy ecosystems and biodiversity" or "Climate change mitigation").

Sustainability Impact Fund

In the reporting year, the Volkswagen Group set up a Sustainability Impact Fund to achieve positive impacts on local communities and the local environment by supporting internal projects promoting environmental, social and economic sustainability at production sites. The Sustainability Impact Fund can promote not only positive environmental effects, such as the optimization of energy and water consumption, increased use of renewable energy, insulation of buildings and sustainable mobility, but also social advantages, such as local recycling programs and partnerships with NGOs. These actions strengthen social cohesion and reduce social inequalities.

The Sustainability Impact Fund will be operationalized in 2025 and is intended to support projects and actions by the Volkswagen Group that help to attain the Group's sustainability goals. A project or action must cover one of the four dimensions – nature, our people, society and business. This means that from 2025 onward, the exact outcome can be derived in more detail on the basis of the projects supported.

Group-wide donations

Donations are voluntary contributions to a scientific, charitable, cultural, political, or religious cause which are made without receiving anything in return from the recipient. Donations can have beneficial effects – for example, in tackling social problems, responding to humanitarian crises, reducing negative environmental impacts, and strengthening the resilience of communities. The Group-wide donations metric takes account of all the Volkswagen Group's companies that are subject to mandatory reporting and made donations in the reporting year. The donation amounts are reported centrally through the finance tool in accordance with the Group policy.

[11] In past years, the methodology was adapted to collect data on global projects. A standardized questionnaire was drawn up in the 2024 reporting year that recorded the direct reference to the Group sustainability strategy and the scope of the project, as well as the input used and the output achieved. Along with predefined metrics, project-specific indicators can be specified here. In addition, the responsible person also matches the project to the Sustainable Development Goals (SDGs) and provides a subjective assessment of the project's impact.

The Volkswagen Group made donations totaling €61.37 million in 2024.[12] This includes large donations as part of emergency humanitarian aid, which were decided on and provided immediately. Donations are made annually. In 2023, i.e. before the scope changed, Volkswagen AG donated a total of €27.69 million to these types of projects.

TARGETS: SOCIETAL IMPACT AND CORPORATE CITIZENSHIP

The targets in the area of Societal Impact will be developed on the basis of the Group sustainability strategy in the future. The Societal Impact Strategy, which is part of the Group sustainability strategy, has been approved by the Group Board of Management with the involvement of experts from the Group Sustainability department and other Group departments, as well as from the brands' specialist and sustainability departments.

There are currently no tax-related targets with regard to Societal Impact, including the underlying topics of global Corporate Citizenship activities and Group-wide donations. Phased targets were also developed for the Sustainability Impact Fund. The Volkswagen Group aims to make an annual allocation of up to €20 million through this fund through 2029. In 2025, cost allocations of up to €5 million are to be made to promote sustainable development in all dimensions of the regenerate+ strategy.

The setting of these strategic (intermediate) targets and their further development for measuring the impact, and hence the effectiveness of the policies and actions in relation to the material sustainability-related impacts, is planned for a medium-term time horizon.

[12] In relation to the amount donated, the scope was expanded to the Group, which means that this is now requested centrally from the consolidated companies via the financial metrics.

Customers

The protection of road users and the safety of our customers are a focus of the Volkswagen Group.

MATERIAL IMPACTS AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impacts in the area of customers' personal security

During its materiality assessment, the Volkswagen Group identified an actual and potential positive impact in the downstream value chain in the area of customers' personal security, including in relation to the protection of health in vehicles. In the following, the term 'customers' is used as an umbrella term for consumers and (end) users within the meaning of the ESRS. The types of customer taken into consideration include vehicle drivers and occupants. A further focus is placed on the protection of vulnerable road users (such as cyclists and pedestrians) and other groups who could potentially be involved in accidents. Active and passive safety and security systems make a positive contribution to reducing the number of fatalities and serious injuries resulting from road traffic accidents. The duration of the potential positive impact is classified as long term.

Furthermore, the materiality assessment identified an actual and potential negative impact in the area of product safety in the form of individual incidents in the downstream value chain. When driving in traffic, users of vehicles from all manufacturers have the potential to be involved in accidents, which could result in the vehicle driver and occupants sustaining a negative impact on their health. The Volkswagen Group is aware of its responsibility and is constantly working on avoiding accidents and mitigating the consequences of accidents. For the evaluation of impacts, various groups of users and occupants are considered and it is examined whether special requirements apply to certain user groups and whether these need to be taken into consideration. As the relevance of software and connectivity in vehicles increases, the abstract risk of unauthorized access rises, with potential impacts on the safety of the vehicle and thus also for the associated legal interests of customers. The potential impact is classified as long term.

Interaction with strategy and business model

The impacts identified in the materiality assessment have an influence on the Group's business model, strategy and value chain. At an overarching level, the topic of vehicle safety is embedded in the safety strategy. Thus, the safety of our customers is a focus around the world. The *Arbeitskreis Sicherheitssystem* (AKS - Safety System Working Group) has been set up for this purpose, coordinates safety issues on a cross-brand basis within the Volkswagen Group and sets out requirements.

The Volkswagen Group takes the following actions in the area of customers to exert influence over the impacts on its business, strategy, business model and value chain identified during the materiality assessment: Internal safety provisions and the implementation of safety technology are intended to enhance the positive impact on customers in the area of personal security.

The safety strategy is developed by the AKS and presented to the Group Board of Management Committee for Technology for approval. The *Ausschuss Produktsicherheit* (APS - Product Safety Committee) is responsible for ensuring the safety of products placed on the market. The product safety and conformity policy to be implemented Group-wide sets out that the responsible manufacturers are required to establish their own APS, but also imposes an obligation that the APS must be called on whenever safety-related incidents occur.

An extensive overview and explanation of actions in this action area are provided under "Actions: personal safety of customers".

POLICIES: PERSONAL SAFETY OF CUSTOMERS

In order to continuously reduce the number and severity of road traffic accidents involving its vehicles, the Volkswagen Group has set up a variety of interlinked management systems, which constitute a Group-wide governance policy for vehicle safety. The policy forms the basis for a high standard of product quality and for adherence to legal and official regulations, internal safety provisions and consumer protection requirements, among other things.

This includes the ongoing focus on high safety standards for mechanical, mechatronic and electronic systems, as well as the functional safety of vehicles. Building on this, a number of management systems are codified in Group policies, which systematically embed these safety standards, applicable norms and the state of the art into the design, development, production and testing of vehicles at the brand companies. These policies always address all three levels: legal requirements, internal safety provisions and consumer protection standards. This section introduces the safety strategy and Group policies.

Safety strategy

In an effort to embed existing systems for vehicle safety even further into the Volkswagen Group's strategic policy, a Group-wide safety strategy is in place that has been approved by the Board of Management.

The vision behind the safety strategy is to make a contribution to global road safety. This involves reducing the number of severe injuries and fatalities in accidents involving vehicles from Volkswagen Group brands. Relevant and topical safety issues are compiled and developed for the purposes of accident prevention (active safety) and mitigation of the consequences of accidents (passive/integral safety).

The safety strategy aims to work towards a high level of protection for customers and others involved in accidents through the application of modern technology. As a result, the consolidated expertise available within the Group enables consumer protection requirements to be addressed, along with internal and external safety provisions and statutory requirements, and it can also be applied across the Group in a market-specific approach. Actual and potential negative impacts on customers' health and safety can arise as a result of deficiencies or quality problems, for example. By complying with the safety requirements addressed, the Volkswagen Group counteracts these impacts. The aim of this is to reduce the number of fatalities and serious injuries and, as a result, achieve the actual and potential positive impact.

The safety developments in the brands set the strategic direction based on the safety strategy, which is pursued in bodies including the Group AKS Committee.

Should any need for updates to the safety strategy arise, this is reviewed by the heads of safety development at the brands and the strategy is refined as required.

Automotive cybersecurity management system Group policy

To counteract the risk of unauthorized access to vehicles and their digital offerings, the Volkswagen Group has developed requirements for an automotive cybersecurity management system (ACSMS) in its automotive cybersecurity management system Group policy. This mitigates the potential negative impact on customer's health and safety in the form of manipulation of digital systems. Legal regulations – including regulation 155, cybersecurity and cybersecurity management system (UN-R 155) of the United Nations Economic Commission for Europe (UNECE) – define the requirements for vehicle and software development. These also have an extensive impact on our IT systems.

To be able to manage the risk of cyberattacks on vehicles and take appropriate action to mitigate these both now and in the future, the Volkswagen Group continuously optimizes the automotive cybersecurity management systems in all Group brands. Information on procedures and products is shared across the brands. The primary focus during this approach is on the protection of customers.

A further goal of the ACSMS is to increase automotive cybersecurity across the product lifecycle of a vehicle and its digital ecosystem. As the level of digitalization in the vehicle, connectivity, and shared mobility increases, the topic of cybersecurity becomes more of a concern for customers' health and safety.

The ACSMS employs policies and control measures to define how automotive cybersecurity should be established and maintained in order to prevent unauthorized access. The effectiveness of the ACSMS with corresponding certification has been confirmed in each case by the type approval authorities responsible for the Group brands. This was always preceded by an external audit to verify compliance with the UNECE regulation, UN-R 155. Annual monitoring audits are performed during the validity period.

The ACSMS Group policy applies as a minimum standard for all controlled companies in the Volkswagen Group that obtain type approvals for vehicles, that have interfaces or relevant processes with companies that apply for type approval and/or develop or operate parts of the digital ecosystem for these vehicles, or provide and execute software updates for vehicles.

The Head of Group Quality Management, Digitalization and IT is responsible for defining this ACSMS Group policy. The most senior level of management (Board of Management or managing directors) at each relevant Group company is responsible for its implementation.

Product safety and conformity Group policy

The product safety and conformity Group policy has an important function, particularly with regard to the personal safety of customers. It defines uniform Group-wide standards in order to comply with legal obligations and achieve our own ambitions in terms of taking responsibility for the products brought onto the market. For this reason, the applicable legal and official regulations and other legally binding standards must be observed, a system for the active and passive observation of the products put on the market must be maintained, and any risks liable to arise from such products must be averted to the extent that this is possible and reasonable.

The Volkswagen Group companies that manufacture vehicles or have them produced and place them on the market as the responsible manufacturers are responsible for implementing the product safety and conformity Group policy. In the Volkswagen Group those are the brand companies and full-function companies or co-entrepreneurs. They are responsible for transposing and implementing the policy into their own regulations, e.g. an organizational guideline, and standards.

Responsibility for the safety and conformity of products lies with the manufacturing brands and full-function companies or co-entrepreneurs. The board of the brand company delegates responsibility for ensuring that any requisite action to guarantee the safety and conformity of products brought onto the market is initiated in good time to a respective APS set up or to be set up at the brand company. The board or the management of a full-function company or co-entrepreneur delegates these tasks via a service contract with the brand controlling company of its brand to the APS of the corresponding brand company.

Commitment to human rights

Respect for human rights is of paramount importance to the Volkswagen Group. We are convinced that sustainable economic activity is only possible by acting ethically and with integrity. Within the framework of our entrepreneurial activities, we are fully committed to our responsibility regarding human rights. A detailed description of human rights commitments can be found in the chapter "Employees and non-employees" under "Policies: employees and non-employees". The whistleblower system and the introduction of remedial actions are used to communicate with any parties affected. A detailed description of this is provided in the "Business conduct information" chapter under "Whistleblower system".

PROCESSES: ENGAGING WITH CUSTOMERS

Consideration of the activities of consumer protection organizations

In order to familiarize itself with the interests, experiences and perspectives of its vehicles' users and also take these into account, the Volkswagen Group works at brand level with various national and international consumer protection organizations as credible proxies of vehicle users. The AKS is responsible for any overarching organization of cooperation with consumer protection authorities and industry groups with regard to safety matters. The Group works in cooperation with the Insurance Institute for Highway Safety (IIHS) and the China Insurance Safety Index, for example, as well as the respective national and regional associations within the New Car Assessment Program (NCAP).

The Volkswagen Passenger Cars brand, for instance, has regulations in place to ensure that contact partners or liaison offices with suitable contacts for consumer protection organizations are implemented. This responsibility is assigned to the person responsible for Global Safety Affairs within the main Safety System Development department at Volkswagen AG. Any resulting requirements are dealt with in liaison with all Group brands as part of the AKS to ensure that all information available within the Volkswagen Group is known to all parties. Updates or changes to the rating process are dealt with and reported on in the AKS.

As part of the ongoing adjustment of their standards, the respective NCAPs publish regular updates, which are known as road maps. Updates are communicated at industry meetings, in announcements on their websites, or via e-mail. The Group communicates and meets with consumer protection organizations with regard to specific topics and projects. The frequency of this communication depends on the respective NCAP's road map. Information and requirements from the NCAPs form part of the safety strategy and are applied during product development. These processes are described under "Processes: remedial processes and reporting channels".

The effectiveness of cooperation can be verified by the vehicle ratings awarded by consumer protection organizations, such as the star ratings assigned by NCAP.

Cooperation on remedial processes

Two additional forms of dialog with customers who are affected by a security matter and cybersecurity failings exist as part of the passive product observation process and, where required, through investigations and the implementation of action. The remedial process including dialog formats for both processes is described under "Processes: remedial processes and reporting channels".

PROCESSES: REMEDIAL PROCESSES AND REPORTING CHANNELS

Remedial process for security matters

Any indications of a safety-relevant matter that arise from passive or active product observation are analyzed by the divisions (for example Technical Development, Production). This analysis covers factors such as frequency of occurrence, the cause of the damage, the components affected and any other Group models affected.

If the case is confirmed as being safety-relevant, the APS must be consulted, in line with the regulations applicable in the Group. It then decides on any requisite and expedient measures to guarantee the safety and conformity of products brought onto the market. This can include, for example, the decision to run a recall campaign, launch a workshop service campaign, extend warranty services, or halt production.

The implementation of any action approved by the APS is initiated and coordinated by the Product Safety department. This department's primary duties include identifying the vehicles affected, preparing and coordinating any work instructions, commissioning the stocking of replacement parts, and defining the action's start date.

Operational responsibility for implementation depends on the type of action to be taken. Most cases relate to field measures, which are implemented by the dealership organizations and their partner workshops. The importers are responsible for supervising and controlling the implementation process. The measure's effectiveness is recorded through active and passive product observation. It is also monitored based on the measure's implementation rate.

Any orders and measures passed by the APS are binding for all divisions, including any companies affected by the case. The APS office is responsible for monitoring any orders and measures passed by the APS to make sure they are implemented on time. Where necessary, the APS office reports the current status to the APS.

Dialog formats

Dialog with customers takes place at various stages of the process. For instance, through passive product observation, customer complaints that are submitted to dealerships or workshops or posted on social media or online forums are taken into account in investigations, as is any contact via the customer hotline or with the brands' Customer Care departments. Throughout the entire process, responsibility for communication with customers lies with the departments in question, such as After Sales, Marketing and Communication.

Further dialog can take place as remediation is taking place on the market. Where the APS decides on action to be taken, importers have a duty under their importer contract to implement the measures through their partner businesses. During this process, affected vehicle owners are informed about what action is needed to remedy the potential safety issue (e.g. they are informed by post or in a face-to-face conversation at the workshop). The action can, for example, involve having a faulty component replaced at the workshop.

Remedial process for cybersecurity matters

Customers are able to contact authorized dealerships with any concerns related to the field of cybersecurity. The dealerships record these reports and, if necessary, forward them to the importer, who in turns passes them on to the manufacturer. Processes are put in place at the manufacturer so that the complaints are passed on to the responsible Incident Management department. If this department decides on and initiates any remedial measures, the remedial process described for field campaigns under the APS is employed. For changes to the product, the standard measures from the development processes apply, such as tests and quality assurance measures. Reviews are established to check whether cases within the support structure have been dealt with correctly. Based on these analyses, adjustments can be made to the processes and support structure.

Awareness measures and training for importers and dealerships have been put in place so that local employees know how to respond in an appropriate manner. Sample cases, which the local employees can use to follow the process more effectively, are one of the training strategies employed.

Dialog formats

Through the Security contact point set up, customers and security researchers (for example, non-governmental organizations or private individuals) are able to report suspected security vulnerabilities at https://www.volkswagen.de/de/mehr/rechtliches/kontakt-cyber-security.html. Customers can also report their concerns to their authorized dealership or the customer support hotline. Using an established support structure, such cases are forwarded to the responsible Incident Management department, where they are analyzed and assigned with appropriate actions. If specific actions need to be taken by the APS, the vehicle owner concerned is notified of the necessary steps to remedy the potential security issues, which could require a software update, for example. The goal of the cooperation is to identify and remedy cybersecurity vulnerabilities in the products at an early stage and take action to prevent the vulnerability being exploited by third parties. Operational responsibility for the car security incident process (CSI) is assigned to each brand's Quality Assurance division. Customers interact with the departments responsible, e.g. Customer Experience or After Sales.

Reporting channels

The whistleblower system can also be used to report breaches of product safety and registration regulations. Safety-relevant reports are transferred to the remedial processes described. The availability of the whistleblower system and the protection of whistleblowers are described in more detail in the "Business conduct information" chapter.

Customers are also able to contact the Volkswagen Group via e-mail or a telephone hotline if they have complaints or feedback about its vehicles and services. Each brand's website also lists contact channels that enable customers to report their concerns directly. In this context, each brand holds sole responsibility for assessing the effectiveness of its channels.

In the area of cybersecurity, the Volkswagen Group endeavors to identify security vulnerabilities and deal with these accordingly. It accepts reports from its customers and security researchers in relation to this. If customers detect any indication of a security vulnerability in their product, they are able to use the channels to communicate this directly to the respective brands. These reports are then tracked by the brands as part of their established clarification processes.

- vulnerability@volkswagen.de (Volkswagen Passenger Cars and Volkswagen Commercial Vehicles)
- vulnerability@audi.de (AUDI)
- security@skoda-auto.cz (Škoda)
- vulnerability@seat.es (SEAT)
- security@porsche.de (Porsche)

The safety-related complaints that customers submit through the brands' reporting channels are tracked and monitored by the brands. In this context, each brand holds sole responsibility for assessing the effectiveness of its channels.

A review of whether customers know and trust the customer portals and are protected against retaliation therefore does not take place at Group level.

ACTIONS: PERSONAL SAFETY OF CUSTOMERS

In addition to the policies described and the safety and security strategy, the Volkswagen Group also takes action to help keep its vehicles' safety and security technology up-to-date, particularly in relation to avoiding accidents and mitigating their effects. This action includes researching vehicle safety and security, studying safety-relevant issues – including under the structure of the AKS – and integrating relevant content into projects in the *Product Development Process* (PEP - Produktentwicklungsprozess). Through its cooperation with regional consumer protection organizations, the Volkswagen Group is committed to safety and security standards. As a result, the Volkswagen Group brings about an actual and potential positive impact on vehicle safety and security standards, which can influence the health of our customers by preventing accidents and mitigating their effects. Within the context of the ESRS, the Volkswagen Group regards any actions that contribute to compliance with safety and security requirements as actions that contribute to the prevention, mitigation and remedy of any potential and actual negative impacts caused by its products. All actions that contribute to safety and security standards that go beyond the minimum standards required by law are regarded as actions that make a positive contribution to vehicle safety and security. Through its cooperation with consumer protection organizations and its increased internal safety requirements, the Volkswagen Group is helping to raise general vehicle safety and security standards, thus contributing to better road safety. In matters of vehicle safety and security, the prevailing law provides the Volkswagen Group with its minimum baseline for action. As such, there are no internal processes that contradict compliance with these provisions.

If security weaknesses still manage to arise, there are a range of measures that apply to vehicles already brought onto the market and that can provide a remedy in the event of a security risk. Through this, the Group counteracts the potential and actual negative impact on customers' health and safety, which arises and can arise due to security vulnerabilities. In matters related to cybersecurity, the Group has the option of working with customers and security researchers, who are able to report potential security vulnerabilities. These are evaluated in the CSI process and remedied if required. As a result of the lessons learned process, the clarification of a particular matter can generate remedial action and also have impacts for the strategy, the ACSMS or product

development. Incident Management interfaces with Product Development, which enables lessons learned that are relevant to the development of future products to be integrated directly. The dialog takes place on an ad hoc basis in the context of the evaluation. Through active and passive product observation, vehicles already brought onto the market are monitored for previously undetectable product risks. The APS decides on any requisite measures to guarantee the safety and conformity of products brought onto the market. APS members independently inform their respective divisions of the activities of the APS and on any lessons learned for the division in question as a result of the matter. Via the lessons learned process, any knowledge gained can flow back into upstream processes (e.g. the development of new products), thus enabling the entire process to be improved on an ongoing basis.

Within the Volkswagen Group, the AKS, the ACSMS, the APS are responsible for defining and implementing actions in the areas of vehicle safety and cybersecurity. Due to their personnel resources, these bodies have a continuous positive influence over material impacts on customers. In some cases, the brands are also responsible for implementation. Plans are in place to retain all the actions described in the future.

Actions related to the safety strategy

The following actions related to the safety strategy contribute to the management of both negative and positive impacts on the safety and security of our customers in the area of product development. In this context, the Group cooperates with parties including consumer protection organizations, suppliers, research institutes and other stakeholders relevant to vehicle safety, as well as with other internal stakeholders such as Development, Quality Assurance, Legal, etc.

Safety System Working Group

The cross-group *Arbeitskreis Sicherheitssystem* (AKS - Safety System Working Group) deals with the coordination and definition of the cross-brand safety requirements set out in the safety strategy. The committee is made up of representatives from the brands' Safety System Development departments and various additional participants depending on the agenda. The committee focuses on the following topics and duties in particular:

- Definition and coordination of safety requirements for all topics related to integral safety (including: active and passive safety and pre- and post-crash) and their allocation to topic-specific interface areas and the responsible organizational units within the brands' Development divisions
- Synchronization on issues from consumer protection organizations, for example
- Development of a stance on new requirements or development and coordination for new consumer protection requirements
- Identification and coordination of global pre-development, component development and function development
- Coordination and tracking of research on all topics related to integral safety

The committee's quarterly meetings and the content discussed in these form a central action in the implementation of the safety strategy. Since the committee works on both external and internal safety requirements and consumer protection regulations, its work affects vehicle safety and security.

Current safety-relevant issues are dealt with in individual topic-specific working groups and in a cross-sectional working group, which are also made up of representatives from the brands' Product Development divisions. Topics can either be addressed proactively by the working groups and added to the AKS's agenda, or they are commissioned by the central AKS team. Topic-related investigations can result, for example, from the reassessment of rating-relevant topics, an examination of the impact of legislative changes, tests on new safety technology, or topic-specific competitive analyses. There are a total of 19 different working groups and cross-sectional working groups, each of which deals with different areas of safety, such as child safety, pedestrian protection, e-mobility and airbags. They meet three to four times a year to work on these topics.

Meeting and implementing safety objectives

The implementation of safety objectives (internal, external and those specified by consumer protection bodies) is integrated into the *Product Development Process* (PEP - Produktentwicklungsprozess). The PEP contains processes to define how safety objectives are developed and created and, as such, to transfer the safety strategy into the product. For example, the safety measures required during the development of a new model are set out in the form of a technical product description and communicated so that they can be implemented.

In this context, the preparation of a technical product description is an important step in the PEP. It systematically records which legal, internal and consumer-protection objectives need to be met. According to the requirements that need to be met, the document defines which active and passive safety technology needs to be installed in a model.

The PEP is a recommendation from the Volkswagen Group, which has to be adapted in accordance with the legal and organizational characteristics of the respective company and implemented by integrating it into the corresponding quality management system.

Group Accident Research

Just like the main Safety System Development department, Group Accident Research is guided by the vision of a road traffic system with zero serious injuries or fatalities – bound by the limits of what is technically feasible. It works on research topics that are conducive to this vision.

Various topics are actively researched for this purpose. Noteworthy topics include safety for groups of people with different attributes (for example safety for different bodily weights, heights, ages) and compatibility in different accident configurations (for example vehicle against pedestrian, heavy Sport Utility Vehicle (SUV) against lightweight urban car) to provide context to existing research outcomes and derive conclusions.

Group Accident Research actively receives requests for research from the Development departments of the Group companies or proactively puts forward its own topics. Safety System Development often approaches Accident Research with topics that it is already aware of and has specific questions about, and Accident Research then responds to these according to scientific standards. Group Accident Research is active across the brands as a Group-wide function.

Actions related to the automotive cybersecurity management system Group policy

Car security incident process

The CSI process is intended to ensure that the cause of a vehicle safety incident is identified, assessed by an expert and rectified by implementing suitable measures. The principles of our automotive cybersecurity management system include reviewing and monitoring vehicles and their digital ecosystem for cyber threats throughout their life cycle. Adequate risk assessment of cybersecurity risks must continue to be maintained so that the Volkswagen Group can identify cybersecurity incidents and act when they occur. These principles flow into the cross-brand CSI process. The company becomes aware of potential incidents through the ongoing monitoring of internal (e.g. Technical Development) and external (internet, reports) sources. The process also serves as a driving force and coordinator between the supporting areas for analyzing vulnerabilities and taking appropriate remedial action. Risks are assessed and response plans are drawn up and tracked. If a field campaign is identified as necessary, the process is passed on to the responsible APS. Methods for identification, tracking and follow-up have been developed and decision-making and control committees have been established to support implementation of the process. The process has been fully implemented and is applied across the Group.

This action focuses on products that have already been brought onto the market and applies to all markets where Volkswagen Group products are sold. The CSI is designed to be event-oriented based on incidents and reports. In contrast, vulnerability monitoring is an ongoing process. The aim of this approach is to help ensure that, where possible, no vulnerability related to Volkswagen Group products remains undetected.

The processes leading up to remedial action are described in more detail under "Processes: remedial processes and reporting channels".

Actions related to the product safety and conformity Group policy

Product observation

The Volkswagen Group has implemented a comprehensive product observation system, which is run by the responsible organizational units in accordance with set regulations. This action involves both active and passive product observation to guarantee the safety and conformity of products brought onto the market.

Active product observation includes the regular and automatic capture and evaluation of data and information relating to issues that may be relevant to safety and security. This is achieved by implementing suitable assessment measures, such as spot checks, analyzing vehicle-related mass data, monitoring trade press and the internet, including social media, and monitoring reports from market surveillance authorities.

Passive product observation involves the systematic logging of issues that may be relevant to safety and security arising from individual safety-relevant reports, such as indication of a risk to life, limb or health or to personal property, reports from importers and dealerships, customer complaints, complaints from authorities, and accident reports.

The goal of these actions is to identify potential safety risks in vehicles already on the market at an early stage. As soon as there is indication of a safety-relevant matter, the logged data and information is immediately subjected to a more in-depth technical analysis and, if necessary, a risk assessment. Based on the facts determined, actions are taken that serve to protect the people who come into contact with the product.

This responsibility for product observation is borne by one or more organizational units defined by the board of the respective Volkswagen Group company. The scope of product observation and the scope of the actions derived from this are based on the level of risk, with motor vehicles and their replacement parts and accessories requiring closer and more extensive monitoring than other products given their increased potential for danger.

TARGETS: PERSONAL SECURITY OF CUSTOMERS

No measurable, outcome-oriented targets within the meaning of the ESRS are defined in relation to vehicle safety.

The effectiveness of the policies and actions in relation to the positive and negative impacts identified through the double materiality assessment performed this year for the first time are currently not monitored.

Nevertheless, the sum of the policies and actions presented contribute to the Group's efforts to ensure road traffic safety for customers. With this, the Volkswagen Group pursues the vision of its safety strategy. The following actions and processes are established for determining effectiveness.

Product development

Effectiveness and the ambition level are tracked through compliance with internal and external safety regulations and through the monitoring of vehicle ratings issued by consumer protection organizations, such as the Euro NCAP star ratings. During the model development process, the technical product description sets out the objectives for safety standards. These objectives, among other things, are used as a guideline during product development.

Group Accident Research

The effectiveness of safety technology is determined, on the one hand, via a 24/7 on-call service, which the federal states of Lower Saxony and Saxony-Anhalt use to log accidents. To this end, the Group works closely with both states' Ministries for Interior and Sport and their state police forces. On the one hand, any vehicles involved in accidents are carefully assessed by Accident Research and the effectiveness of their safety technology is examined. On the other hand, accident research data is also reviewed and evaluated, such as accident statistics from various states and countries and accident databases, including the German In-Depth Accident Study (GIDAS) database. Both positive feedback – for instance, when measures achieve their intended outcome – and negative feedback in the form of suggested improvements are evaluated at regular intervals. The results are communicated to both the relevant departments as well as to the AKS and the specially established Accident Research Conference.

Car security incident process

As part of an effectiveness assessment, checks are carried out to determine whether actions have reached the relevant parties, e.g. Development, and been incorporated into vehicle production. After an incident has been dealt with, the CSI committees run through a lessons learned process if necessary so as to review the CSI process itself.

Business conduct information

Sustainable, responsible and transparent corporate governance is a top priority for the Volkswagen Group.

CORPORATE CULTURE

MATERIAL IMPACT AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact in the area of corporate culture

In the area of corporate culture, the Volkswagen Group identified an actual positive impact on the appropriate protection and development of its employees through the materiality assessment in the 2024 fiscal year. The Volkswagen Group has a broader understanding of corporate culture than the ESRS definition, extending it to topics such as diversity and co-determination. These topics are reported in the section on social information. The positive impact in this chapter on business conduct stems, for example, from the promotion of integrity, equal treatment, ethical conduct, responsible decision-making processes and the emphasis on fairness by the employee representatives.

Interaction with strategy and business model

The impact in the area of corporate culture identified in the materiality assessment has an effect on the Volkswagen Group's strategy and business model. The overarching topic of corporate culture is anchored in the Group strategy and the Group regenerate+ sustainability strategy. The Volkswagen Group uses various actions in the area of corporate culture to emphasize the influence of its material impact on the business model and strategy. In this respect, the focus of the chapter is on topics relating to integrity and compliance (I&C), such as the Code of Conduct and Code of Conduct training, the Group Essentials in conjunction with the role model program, the opinion survey (*Stimmungsbarometer*) and additional training and awareness-raising actions.

An in-depth description of all actions in the area of corporate culture is provided in "Actions: Corporate culture".

POLICIES: CORPORATE CULTURE

Code of Conduct and Volkswagen Group Essentials

Integrity and compliance are the basis for correct and value-oriented behavior at the Volkswagen Group. We have set out the relevant guidelines in the Code of Conduct and the Group Essentials. The Code of Conduct forms the ethical and values-based foundation for integrity and compliance in the Volkswagen Group. As a key tool, it promotes awareness of responsible conduct and decision-making, provides support in forming opinions, can be used as a way of finding the right contact persons and is binding for all Group brands and companies. The Code of Conduct is based on international conventions and declarations, particularly the International Bill of Human Rights, the Fundamental Conventions of the International Labour Organization (ILO), and the United Nations Convention against Corruption.

As part of the Code of Conduct, the Volkswagen Group Essentials define the shared underlying values across all of the Volkswagen Group's brands and companies. They form the basis of the corporate culture and define what the Volkswagen Group represents globally across all its brands and companies: We take on responsibility for the environment and society; we are honest and speak up when something is wrong; we break new ground; we live diversity; we are proud of the work we do; we not me; we keep our word. These statements are a promise to customers, shareholders, business partners and employees. The Code of Conduct and the Group Essentials can be found on the Volkswagen Group website.

In cooperation with the relevant departments, the Group Chief Integrity & Compliance Officer is responsible for the content of the Code of Conduct. The Group Chief Integrity & Compliance Officer heads the Group-wide Integrity & Compliance organization, which is part of the Integrity and Legal Affairs function of the Board of Management. The brands and companies are responsible for local implementation throughout the workforce.

The Group Integrity & Compliance organization helps the Group and brand companies to comply with the rules when conducting their business activities and to comply with the relevant legislation and internal regulations. The focus of its work includes anti-corruption and the prevention of embezzlement, fraud and money laundering. The point of departure is the internal compliance risk assessment (ICRA).

Internal compliance risk assessment and minimum standards for integrity and compliance training and communication

As part of the operational implementation of integrity and compliance, potential risks in the Group (excluding the Porsche AG Group which conducts its own compliance risk analysis) are identified through actions including the internal compliance risk assessment, and relevant areas of focus are defined. The controlled companies of the Volkswagen Group are allocated risk profiles – categorized as low, medium or high – and packages of measures that also include training and communication requirements. On this basis, actions such as increasing awareness and providing training must be implemented for the Group's employees to promote integrity in day-to-day business, ensure responsible actions and prevent misconduct. Through this risk-based approach, employees, members of management and relevant stakeholder groups receive regular training on integrity and compliance topics, processes and conduct requirements specific to their area of activity. Auditors also assess the effectiveness of the I&C actions as part of a monitoring and improvement process. Moreover, the integrity and compliance management system (ICMS) is optimized on a continuous basis.

The Porsche AG Group conducts an independent internal compliance risk assessment in its main departments to identify risk potential, determine key focus areas, and develop preventive actions.

In addition to the ICRA packages of measures, the minimum standards provide a more detailed framework for designing and implementing I&C training and are provided centrally by Group Integrity & Compliance. They are intended to provide the brands and companies with guidance on the training topics, the target groups and the minimum content. These Group-wide minimum standards ensure a consistent level of homogeneity in Group-wide I&C training. The respective brands and companies are responsible for developing an effective training program and organizing and implementing training courses, such as Code of Conduct training, taking account of the minimum standards.

The Code of Conduct training is aimed at all employees in the controlled companies, including management. The training must be repeated every three years for employees in non-production areas (full-time and part-time employees and managers). The system records attendance. Some employees, such as interns, student workers and doctoral candidates, are exempt.

At the end of the 2024 fiscal year, 261,707 employees had a valid qualification on the Code of Conduct. This is equivalent to 97% of the active workforce eligible for training. Scania AB's figures are not included in reporting for 2024, as it is currently updating its monitoring system. A total of 19,324 employees of Porsche AG (95.1% of the relevant Porsche AG employees) completed the "Code of Conduct" digital training module in fiscal year 2024. The training module introduces the actual Code of Conduct and provides information on the whistleblower system and contact details for the Compliance Helpdesk. The training also covers the content of the Group Policies on avoiding conflicts of interest and corruption, and on human rights.

Employees in production-related areas receive the relevant training every four years. The training is based on the principles of the Code of Conduct brochure and includes topics such as environmental compliance, product compliance and the prohibition of corruption. The content is updated regularly. The Group-wide implementation of the mandatory training measures on the Code of Conduct is reported to the Group Board of Management on an ad hoc basis and at least once a year.

ACTIONS: CORPORATE CULTURE

Code of Conduct training

The Code of Conduct training educates Volkswagen Group employees on the topics of integrity and compliance, with a focus on the prohibition and, specifically, the prevention of corruption. An in-depth description of the Code of Conduct training is provided in "Policies: Corporate culture".

Employees from senior management upwards are certified on the Code of Conduct every two years, with the aim of recognizing their function as role models, raising their employees' awareness accordingly and making it easier for them to find relevant information in the Code of Conduct. As part of the certification, participants are made aware of their reporting obligation under the employment contract in the event of serious compliance breaches and their obligation to disclose any conflicts of interest.

Code of Conduct brochure

The Code of Conduct brochure is used to communicate the Code of Conduct to all employees and external stakeholders. It aims to ensure a clear understanding of the Code of Conduct throughout the Volkswagen Group.

All employees receive the brochure when appointed. It can also be accessed online at any time, both internally and externally. The document is published across the Group, regularly updated, and supported by relevant communication campaigns. In the reporting year, an updated Code of Conduct 3.0 was publicized throughout the Group. This was followed in October 2024 by the Code of Conduct 3.1, updated with respect to the reporting channels for the whistleblower system.

Role model program

Encouraging and empowering managers to contribute to a successful transformation and act as role models is an important part of the Volkswagen Group's philosophy. Managers who lead by example motivate their staff, encourage resilience in the face of change, boost their teams' effectiveness and create trust. These are key factors for successful collaboration. The role model program helps managers to reinforce these factors.

A toolbox of easy-to-follow team activities gives managers suggestions and instructions that can be implemented easily and without any additional budget and are easy to integrate into day-to-day work. In all activities, it is about making management dynamic and engaging, decreasing distances between hierarchy levels, promoting innovation, and reinforcing mutual trust and communication. The methods and instructions contained in the toolbox are assigned to the seven Group Essentials. In addition to the centrally suggested methods and instructions, the managers have the option to develop their own methods and tools and to implement them as actions in the program using wild cards.

The binding framework, with its minimum requirements for managers, supports the implementation of this program to improve the corporate culture. The role model program is run annually across the Group. It is targeted at all employees with management or team leadership functions in the Group.

Opinion survey

The Group-wide opinion survey (*Stimmungsbarometer*) offered employees the opportunity to express their opinion, assessment, and criticism. It measured sentiment in the Group on an annual basis and also internal employer attractiveness in the Volkswagen Group. Employees' opinions on the topics of integrity and cooperation are of particular interest. Managers are informed of the results of the opinion survey, highlighting areas for improvement within their departments. They are then asked to take action to make further improvements. The Group team responsible for the opinion survey supports managers in defined processes using various tools, including the methods toolbox. The progress of actions is regularly discussed in the teams and also reviewed in a top-down approach, from the highest to the lowest management level, with the aim of ensuring sustainable implementation of the measures derived by the organizational units.

In 2023, 129 companies across 48 countries in which the Group operates participated in the opinion survey. This is equivalent to a participation rate of 86% of the entire workforce including the Chinese joint ventures. Of the 588,072 employees in the participating companies, 464,749 (79%) participated. The employee satisfaction index calculated from 22 questions is the main parameter of the opinion survey. It is calculated from the total of all the related answers in the survey and, in 2023, stood at 82.5 index points in the Volkswagen Group and at 75.8 in Volkswagen AG out of a possible total of 100 index points.

In 2024, the opinion survey was temporarily suspended across the Group for revision purposes. For this reason, no employee satisfaction index score was calculated for 2024. However, the activities initiated based on the results of the 2023 opinion survey continued to have an effect in 2024 and will also continue to do so in subsequent years. The revision of the Group employee survey includes a new IT system, a new questionnaire concept and improved follow-up processes for evaluating the results. The objective of the revision is to reinforce continuous dialog and further boost employee loyalty and motivation. After its revision, it will continue to be provided to all the companies as a tool.

The result of the employee satisfaction index influences the level of the annual bonus as part of the variable remuneration for the Board of Management. For fiscal year 2024, the Supervisory Board used the option provided for fiscal years 2024 and 2025 to apply only the diversity index for the social subtarget and to suspend the employee satisfaction index as an ESG criterion, as the measurement method for the employee satisfaction index is currently being revised.

TARGETS: CORPORATE CULTURE

No measurable, outcome-oriented targets within the meaning of the ESRS are currently defined in relation to corporate culture. The effectiveness of the policies and actions in relation to the positive impact identified through the materiality assessment performed this year for the first time is currently not monitored. The Code of conduct and the related training are an important expression of the corporate culture. An update of the Code of Conduct was publicized throughout the Group on January 1, 2024. Relevant additional content and an overarching, Group-wide narrative convey a clear, values-oriented attitude and ensure ease of integration of future developments.

PROTECTION OF WHISTLEBLOWERS

MATERIAL IMPACT AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact in the area of whistleblower protection

The materiality assessment identified whistleblower protection as material in fiscal year 2024 due to its actual and potential positive impact. The Volkswagen Group achieves a positive impact through a corporate culture built on trust and integrity, reinforcing the willingness of employees and other stakeholders along the entire value chain to report unethical behavior and misconduct. The existing impact is set to be further expanded in the medium term, enabling the Volkswagen Group to positively influence whistleblower protection going forward and encourage all stakeholders to continue to report misconduct.

Interaction with strategy and business model

Protection of whistleblowers falls under the umbrella of integrity and compliance and is therefore also part of the Group strategy. Both employees and third parties can submit anonymous reports via the whistleblower system, which is why whistleblower protection is applicable throughout the entire value chain.

The impacts identified in the materiality assessment have an effect on the Group's business model and value chain. The Volkswagen Group uses various actions in the area of whistleblower protection to emphasize the influence of its material impacts on the business model and value chain. These are intended to help to maintain and reinforce the positive impact, particularly through training on the whistleblower system and the consequences of misconduct.

An in-depth description of all actions in the area of corruption and bribery is provided in "Actions: Corruption and bribery".

POLICIES: PROTECTION OF WHISTLEBLOWERS

Compliance with legal requirements, internal rules, the Code of Conduct and the Code of Conduct for Business Partners has top priority in the Volkswagen Group. The Volkswagen Group's success is based on integrity and compliance. To achieve this aim, it is important to identify any potential misconduct by the Group's own workforce or its business partners' staff and take step to prevent it. The Volkswagen Group's Central Investigation Offices therefore operates an independent, impartial and confidential whistleblower system, among other things, in order to review any potential employee misconduct. The whistleblower system is addressed in various Volkswagen Group policies, particularly in the Code of Conduct and Code of Conduct for Business Partners, which are freely accessible on the Volkswagen Group website.

Whistleblower system

The Volkswagen Group's whistleblower system is a key component of business ethics and is based on the principles of protection, fairness and trust. The whistleblower system is the central point of contact for reporting cases of rule-breaking by employees of the Group or by suppliers. This includes in particular white collar crimes, acts of corruption, tax offenses, environmental offenses, human rights violations, infringements of antitrust and competition legislation, money laundering and terrorism financing, breaches of product safety and licensing regulations, and serious breaches of data privacy. The reporting channels of the whistleblower system are also a means of providing information relevant to the *Lieferkettensorgfaltspflichtengesetz* (LkSG – German Supply Chain Due Diligence Act) on the Group's own operations or those of the supply chain. The whistleblower system is for the entire Volkswagen Group and was enacted by the Group Board of Management. The whistleblower system's objectives are to protect the company, the whistleblower, and everyone who helps to uncover, investigate and stop misconduct and compliance breaches. Breaches of the prohibition of discrimination are treated as serious breaches of the rules.

Departments that act as key contact points (KCPs) play a central role in the whistleblowing process for reporting, investigating and sanctioning employee misconduct. These departments are frequently the first point of contact for reports of possible breaches of laws, regulations, or the Code of Conduct. The departments' contacts include local compliance officers, internal auditors, representatives of the Human Resources department, and decision-making and escalation committees for product safety and technical conformity regulations.

As set out in the Group policy on the whistleblower system, active elements of the whistleblower system include the Legal department, Internal Audit, the Security department, HR, and the Compliance department.

The reporting channels are available around the clock and accept reports in all languages, including on supplier-related risks and breaches of human rights and environmental standards. They include an online reporting channel, which accepts reports in different languages, an app, an international 24-hour telephone hotline and an external attorney who acts as an ombudsman. The reporting channels are communicated to employees in all mandatory compliance training and through other communication formats. The whistleblower system is intended to avert damage to the company, the entire workforce and other stakeholders through binding principles and regulated procedures. The Central Investigation Office in Wolfsburg is responsible for coordinating the Group-wide whistleblower system.

The employees there process whistleblower information concerning Volkswagen AG and any of its subsidiaries that do not have their own investigation office and also process reports with relevance for the Volkswagen Group. Employees from the Audit, Security and Legal Affairs departments investigate the cases. AUDI AG, Dr. Ing. h.c. F. Porsche AG (Porsche AG) and TRATON SE each have separate investigation offices for themselves and their subsidiaries. There is also a regional investigation office at Volkswagen (China) Investment Company Ltd. It processes whistleblower information concerning Volkswagen AG's and Audi AG's Chinese subsidiaries.

In individual cases, the relevant investigation office also commissions investigations by independent and external third parties, such as law firms or auditors. This may occur especially when the information concerns members of the Board of Management or if cases are exceptionally complex – particularly with imminent legal consequences for the Volkswagen Group (e.g. in the event of particularly serious corruption or possible breaches of antitrust and anti-competitive law).

Events in the departments complement the range of services provided by Group Integrity & Compliance. One separate external format is ComplianceXChange, in which experts share information with other DAX or European companies on various focal points, such as whistleblower systems and the prevention of money laundering.

An IT system, internal controls and multiple-party verification assist employees in handling suspicious activity reports. Whistleblower system metrics are reported to the Board of Management and the Supervisory Board at regular intervals.

The Volkswagen Group's Group Integrity & Compliance organization is responsible for the topic of whistleblower protection. It belongs to the Integrity and Legal Affairs function of the Board of Management.

ACTIONS: PROTECTION OF WHISTLEBLOWERS

The whistleblower system's primary objective is to enable suspected misconduct, particularly serious compliance breaches, to be reported and investigated in a fair, transparent and efficient way. At the same time, the protection of the whistleblowers, employees, people supporting the whistleblowers or the investigation, and those affected must be ensured.

The Group policy on the protection of whistleblowers applies to all controlled companies and employees of the Volkswagen Group and must be implemented in all controlled Group companies. It conclusively and comprehensively regulates the activities both of the investigation offices and of the investigating units in the investigation of potential compliance breaches that are received through the whistleblower system's channels. It contains standards and general codes of practice for implementing, creating and executing whistleblower systems and internal investigations in the Volkswagen Group, and sets out the competencies, responsibilities, and cooperation requirements to be established within the Volkswagen Group. The investigating units can define additional regulations, provided that this policy and its provisions do not conflict with the Group policy.

Training on the whistleblower system

To ensure that all employees are informed about the whistleblower system, the company provides training on its use. The Code of conduct compliance training, which is mandatory for all employees, includes an explanation of the whistleblower system and the protection mechanisms for whistleblowers. This training also clarifies the legal consequences of discriminating against whistleblowers. Employees who might frequently come into contact with serious breaches of rules due to their work receive in-depth training. This includes, for example, employees in the Audit, Security, Human Resources, and Legal Affairs departments or those in Group Integrity & Compliance.

Consequences of misconduct

Proven misconduct may, depending on its severity, be sanctioned by a warning, a reprimand, or dismissal. Following serious breaches of rules that are sanctioned, structured root cause analyses are conducted in order to prevent similar incidents in the future.

The Volkswagen Group assures all whistleblowers and people who support the whistleblowers or the investigations of their protection from any reprisals they could experience due to their reports. This protection is set out in the Group policy "Volkswagen Group whistleblower system" and described in the Code of Conduct. Breaches of this ban on discrimination are treated as serious compliance breaches. The Volkswagen Group also takes account of international laws on whistleblower protection, such as the EU directive on whistleblower protection, its national implementation acts, and the *Lieferkettensorgfaltspflichtengesetz* (LkSG – German Supply Chain Due Diligence Act), through the provisions in this Group policy.

TARGETS: PROTECTION OF WHISTLEBLOWERS

No measurable, outcome-oriented targets within the meaning of the ESRS are currently defined in relation to the protection of whistleblowers. The effectiveness of the policies and actions in relation to the positive impact identified through the materiality assessment performed this year for the first time is currently not monitored.

Within the Volkswagen Group, regular communication takes place on the topics of integrity and compliance in order to increase employee awareness of appropriate conduct and the Group's rules and values. This particularly entails communications concerning the whistleblower system, such as internal and external communication of the whistleblower reporting channels.

The Volkswagen Group has defined minimum standards based on various legal and professional requirements and best practices that apply depending on the location of the company – inside or outside the EU. Each company is required to check whether there are country-specific or other local legal requirements and to adapt the corresponding information if necessary.

The Central Investigation Office prepares detailed statistical analyses on the Volkswagen Group's global whistleblower system at least once a quarter to ensure the risk assessment and ongoing optimization of the compliance management system.

The Group Board of Management and the Audit Committee of the Supervisory Board receive an updated statistical report on the whistleblower system once a quarter at their meetings. This report includes data on new whistleblower reports, their categorization, and the development of open cases in the Central Investigation Office, the brand-specific investigation offices of AUDI AG and TRATON Group, and the regional investigation office in China. Figures on the Porsche AG Group's whistleblower system are reported to the Porsche AG Board of Management at regular intervals.

CORRUPTION AND BRIBERY

MATERIAL IMPACT AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact in the area of avoidance of corruption and bribery

The Volkswagen Group identified an actual and potential positive impact through the materiality assessment in the area of avoidance of corruption and bribery in the 2024 fiscal year. The Volkswagen Group already has a positive impact by promoting a culture of integrity and strengthening the trust of stakeholders along the entire value chain through its engagement and an effective compliance management system in the battle against corruption and bribery. This fight will be continued so that the impact can potentially also have an effect in the medium term.

Interaction with strategy and business model

Our impacts identified in the materiality assessment have an effect on the Group's strategy, business model and value chain. Integrity and compliance are cornerstones of the Group strategy to achieve sustained success as an enterprise. The Code of Conduct forms the ethical and values-based foundation for integrity and compliance in the Volkswagen Group.

The Volkswagen Group uses the instruments of the compliance management system in the battle against corruption to emphasize the influence of its material impacts on the business model, strategy and value chain. Here, particular focus is placed on ethical business practices as well as on anti-corruption and anti-bribery – also along the value chain – with a view to maintaining and reinforcing positive impacts.

Actions to fight corruption and bribery are part of the Group strategy and may in turn have an effect on the value chain.

An in-depth description of all actions in the area of corruption and bribery is provided in "Actions: Corruption and bribery".

POLICIES: CORRUPTION AND BRIBERY

The Volkswagen Group is fully committed to acting lawfully and responsibly and pursues a strict zero-tolerance policy against corruption. This principle is firmly anchored in the corporate values. This is also reflected in the publicly accessible anti-corruption guideline, the Code of Conduct for Employees and the Code of Conduct for Business Partners, and thus forms the yardstick for the Volkswagen Group's actions. Further Group policies set out how to deal with conflicts of interest, donations and sponsorship or benefits in the form of gifts or invitations.

The Volkswagen Group follows up on reports of potential violations of its principles to ensure compliant and lawful conduct within the Volkswagen Group. Managers and HR are responsible for investigating the compliance breaches reported. In serious cases, the investigation offices are also consulted. Employees who are involved in unfair business practices are sanctioned.

The Volkswagen Group's Group Integrity & Compliance department is responsible for the topics of corruption, bribery and prevention of money laundering. It belongs to the Integrity and Legal Affairs function of the Board of Management.

ACTIONS: CORRUPTION AND BRIBERY

Written guidelines

The Code of Conduct is available to all Volkswagen Group employees and third parties on the Group website. In addition, the Integrity & Compliance communication team organizes information and communication activities such as awareness campaigns, film and dialog formats, newsletters and interactive games, with the aim of raising awareness of integrity and compliance topics.

The basis of the activities on the topic of corruption prevention is the Group-wide policy on benefits and gifts, which sets out clear rules for dealing with gifts, invitations, and other benefits. It also helps to avoid conflicts of interest and even the appearance of undue influence. The aim of these activities is to ensure that the Volkswagen Group's business practices are as transparent as possible and comply with the applicable regulations.

Advice

The integrity & compliance information point has established itself as a central advisory office. The team can be contacted in person, by email or using the Volkswagen 360° app. It answers questions on integrity and compliance, particularly on the Code of Conduct and the topic of anti-corruption, and is in close communication with other advisory bodies in the Group.

Training and certification

In order to avoid corruption risks, communication and training measures on the topic of anti-corruption are implemented regularly on the basis of risk. These measures not only cover the prohibition of corruption and how to deal with officeholders and mandate holders in this regard, but also cover topics related to the prevention of money laundering. A detailed description of the Volkswagen Group's compliance training is provided in "Training programs".

Employees from senior management upwards are certified on the Code of Conduct every two years. By signing the certificate, they confirm their knowledge of the Code of conduct, and of their obligation to report potential conflicts of interest and serious breaches of regulations.

Business partner due diligence

As part of business partner due diligence (BPDD), the integrity of sales partners, with a focus on anti-corruption, is reviewed using a risk-based approach. The due diligence is carried out prior to entering into a business relationship and continued for the entire business relationship. Early identification of potential risks enables preventive and reactive mitigating actions to be taken to ensure the reliability and stability of business relationships. Automated daily integrity monitoring of business partners is another key component of this. Sales partners are also subjected to more in-depth risk-based checks, such as audits. Business partners receive support in various formats, such as compliance dialogs, so that they meet the necessary standards. Group Integrity & Compliance supports the sales entities with operational responsibility in conducting the business partner due diligence process. It includes regular media screenings, risk assessments, sanction list checks and the identification of warning signs regarding business partners. The Volkswagen Group checks whether business partners have a compliance management system (CMS) or have implemented any compliance actions. The aim is to identify risks for breaches of the law and disregard of ethical standards at an early stage, avoid high-risk business partners and define actions to minimize risk and implement these with business partners. In individual cases, business partners are contacted directly to resolve potential violations. If this is not possible, the Group refrains from entering the business relationship or terminates it as the law allows. The business partner in question may be blacklisted from doing business with the Volkswagen Group, its brands and its companies.

In addition to automated, continuous integrity monitoring of the business partner in the BPDD tool, the implementation of any mitigation actions agreed with the business partner prior to the conclusion of the contract is also monitored. Furthermore, the business partners are regularly assessed to determine whether further actions such as, in particular, compliance dialog, on-site visits, or external audits are required to ensure a compliant and lawful business relationship. If necessary, these actions are taken in collaboration with the responsible compliance officers as part of a risk-based approach.

Handling violations

In the case of breaches by employees, a systematic investigation is carried out and – if required – sanctions are imposed on the employees in question. Suspected cases can be reported confidentially and also anonymously through the Group-wide whistleblower system at any time. These cases are thoroughly investigated by the responsible investigation offices, which operate independently of management.

The Volkswagen Group conducts investigations with the utmost confidentiality after a thorough review and in the event of firm indications of rule-breaking. There is a presumption of innocence. Those involved are interviewed as soon as possible, and their names are cleared if they have been wrongly accused. Proven misconduct may, depending on its severity, be sanctioned by a warning, a reprimand, or dismissal. Following serious breaches of rules that are sanctioned, structured root cause analyses are conducted in order to prevent similar incidents in the future.

The Group Board of Management and the Audit Committee of the Supervisory Board receive an updated statistical report on the whistleblower system once a quarter at their meetings. This report contains the aggregated figures for the investigation offices and an overview of the serious breaches of rules sanctioned in the respective quarter.

Training programs

The Volkswagen Group offers its employees and suppliers the following training programs on the topic of corruption and bribery:

For employees in the Volkswagen Group

Anti-corruption

The Volkswagen Group has a strict zero-tolerance policy toward any form of active or passive corruption. Companies with high exposure to risk pursuant to the ICRA are obliged to conduct anti-corruption training for their staff. This training includes special modules on dealing with officeholders and mandate holders and on handling benefits.

Within the Volkswagen Group, the functions at increased risk of corruption and bribery as a result of their tasks and responsibilities are defined at company level. In the Group, these functions at increased risk as a result of their tasks and responsibilities comprise the companies to which the ICRA assigns a high risk profile. These companies are deemed to be functions-at-risk in the context of the ESRS. The level of implementation of the training on anti-corruption and the prevention of money laundering in the functions-at-risk defined for the Volkswagen Group is 100%. Within the Porsche AG Group, the functions at increased risk of corruption and bribery as a result of their tasks and responsibilities are defined at company level. As regards anti-corruption, these are the companies that regularly employ indirect workers, among other things. A training program on anti-corruption has rolled out to 97.3% in the risk functions defined for anti-corruption for the Porsche AG Group.

As a rule, members of the Board of Management are part of the target group for the mandatory integrity & compliance training. In addition, after being appointed they receive one-off, in-depth, and personal training on the topics of the Code of Conduct, anti-corruption, and the prevention of money laundering. Carrying out this one-off training is the responsibility of the competent integrity & compliance officer.

A deep-dive training session on corruption prevention was organized for members of the Supervisory Board in the 2024 fiscal year.

Prevention of money laundering

Companies with high risk exposure pursuant to the ICRA have to provide money laundering prevention training with a focus on dealing with money laundering risks. The training format is the responsibility of the respective companies.

For suppliers

Training on the Code of Conduct for Business Partners on the topics of anti-corruption and prevention of money laundering is also made available to business partners from sales and procurement. The Code of Conduct for Business Partners has been a component of agreements with suppliers and service providers since 2020.

TARGETS: CORRUPTION AND BRIBERY

No measurable, outcome-oriented targets within the meaning of the ESRS are defined in relation to corruption and bribery. The effectiveness of the policies and actions in relation to the positive impacts identified through the materiality assessment performed this year for the first time is currently not monitored. An internal compliance risk assessment of the companies in the Volkswagen Group's own business area (excluding the Porsche AG Group which conducts its own compliance risk analysis) is conducted with the aim of achieving risk-based management of prevention measures. The ICRA serves to systematically identify, assess, and minimize compliance risks – including corruption risks. Risk-based packages of measures for targeted prevention are rolled out to the companies after an analysis of the risks taking account of various factors such as geographic risks, sector specifics, and past incidents. In the case of Group companies with a high level of risk exposure, external audits are conducted on the implementation and effectiveness of the prevention measures.

METRICS: CORRUPTION AND BRIBERY

In 2024, the investigation offices received a total of 3,555 reports, most of which were either not anonymous, or anonymous with the option to contact the whistleblower. The total number and type of identified cases of corruption are also determined by the Volkswagen Group's investigation offices. The types of cases include corruption, bribery, fraud, extortion, collusion and money laundering. Convictions of Group employees for violations of anti-corruption and anti-bribery laws committed in the course of their work for the Group are taken into account if and to the extent that the Group is aware of the convictions. Fines are reported if they are directly related to the conviction. In fiscal year 2024 the Group became aware that one former Group employee had been convicted of violating anti-corruption and anti-bribery laws. The conviction was based on a breach of the rules that came to light in 2022; the former employee left the company in 2021. The Group is not aware of any fines in connection with a conviction in fiscal year 2024.

CORRUPTION AND BRIBERY

		CONTROLLED COMPANIES
Cases of corruption or bribery ascertained in 2024 (including fraud, extortion, collusion and money laundering)	Number	5
Convictions for violation of anti-corruption and anti-bribery laws in 2024	Number	1

LOBBYING ACTIVITIES

MATERIAL IMPACT AND RISK AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact in the area of lobbying activities

The Volkswagen Group is an active participant in various networks of experts and decision-makers who have a significant influence on economic conditions and the sociopolitical agenda.

The Volkswagen Group's political engagement was identified as material via an actual positive impact in the materiality assessment conducted in fiscal year 2024. The Volkswagen Group has a positive impact on the focus on sustainable mobility through lobbying activities, particularly in the upstream and downstream value chain, but also in its own operations.

Financial risk in the area of lobbying activities

In connection with the Volkswagen Group's lobbying, the material risk of reduced influence on political decision-making processes was identified. A decline in the social significance of the automotive industry or legal restrictions on lobbying activities in the coming years could lead to a reduction in the Volkswagen Group's influence on political decision-making processes.

As a result, the Volkswagen Group may be negatively impacted by political decisions without the opportunity to actively influence them (in good time). This may result in negative regulatory consequences that impact the Group's long-term business operations and profitability due to factors such as cost increases to comply with new legal requirements.

Interaction with strategy and business model

The positive impact and the risk identified in the materiality assessment have an influence on the Group's business model, strategy and value chain. The Volkswagen Group uses various actions in the area of lobbying to emphasize the influence of the material positive impact and respond to the effect of its material risk on its business model, strategy and value chain. For instance, in addition to the one-voice policy, we carry out lobbying as well as risk assessment and strategic forecasts.

Strategic business decisions can affect the opportunities for lobbying. The Volkswagen Group represents its interests worldwide; these are listened to in the context of political decisions and have an influence on the business model and the value chain.

What is more, the Volkswagen Group's business model and the value chain are inherently influenced by structural change and geopolitical developments.

An in-depth description of all actions in the area of lobbying activities is provided in "Actions: Lobbying activities".

POLICIES: LOBBYING ACTIVITIES

As part of society, the Volkswagen Group can strategically integrate the positions of the Group into decision-making processes through lobbying – for example, on legislative proposals. Lobbying is organized centrally and in line with the principles of openness, transparency, and responsibility. Neutrality in dealing with political parties and stakeholder groups is standard practice for the Volkswagen Group. Any unfair influence on policy and legislation conflicts with the Volkswagen Group's Code of Conduct and is not permitted.

Lobbying is defined in various documents, including the internal Public Affairs Group Policy and the publicly available "Principles and Guidelines (including Annex) for Public Affairs". This policy is aimed at the brands and companies of the Volkswagen Group and their political officers. The Group policy's requirements must be implemented in each company's own regulations. The Group External Relations department, particularly the Head of Public Affairs, has process responsibility for a one-voice policy within the framework of the Public Affairs Group Policy. The Head of Public Affairs regularly informs the Board of Management on the status and messages of the Group's lobbying. In their function as the chair of a cross-brand public affairs steering committee, the Head of Public Affairs can escalate topics to the Board of Management if required, with the aim of establishing the Group's position.

The aim of the one-voice policy is to define a standardized, coordinated, and binding position for political issues relevant to the Group. This is communicated to the respective audiences worldwide with consistent messages from the Group, brands, and companies. As a result, the Group's interests are represented with the same, internally agreed content, objectives, and statements. The Group policy is intended to ensure transparent lobbying in the political decision-making process. The policy communicates the fulfillment of statutory requirements and the inclusion of other external stakeholder expectations to all controlled companies, with the aim of avoiding financial and legal risks, erosion of confidence, and reputation risks. In addition, any exclusion from public orders due to strict regulations and/or noncompliance with political obligations is to be minimized or prevented.

With regard to dealing with officeholders and mandate holders, strict regulations apply nationally and internationally to prevent corruption. The internal policies on benefits take these fully into account.

As an active participant in the social environment, the Volkswagen Group makes donations and provides sponsorship for social purposes. Donations are voluntary contributions for which nothing is received in return, whereas sponsorship money is provided in return for a contractually agreed service. To avoid conflicts of interest and ensure uniformity of behavior within the Group, donations and sponsorship measures are only permitted within the framework of the relevant legal system and in accordance with the current internal requirements. The Volkswagen Group only provides these measures within the framework of an authorization process.

In addition, it supports scientific, charitable or cultural causes with donations in cash and in kind. Furthermore, donations are only made to accredited non-profit organizations or organizations specifically endorsed to receive donations.

The Volkswagen Group strives to create sustainable, environmentally friendly, and resource-conserving products and production facilities. The Group is therefore committed to ambitious, yet economically feasible environmental and climate targets. This requires workable guidelines in various topic areas.

The Volkswagen Group currently focuses on the following issues:

- Promoting e-mobility

  The Volkswagen Group believes that promoting e-mobility is vital if climate-related targets are to be achieved, and that this requires a well-maintained charging infrastructure in particular. Its expansion must be accelerated and pursued with commitment.

  The Volkswagen Group believes that funding instruments in the early phases of the ramp-up are a critical element in the success of e-mobility in increasing the market acceptance of electric vehicles.

  In addition, alternative and lower-carbon fuels should be further developed and used to decarbonize the transport sector and specifically the vehicle fleet.
- Regulation of batteries

  Given its strategic orientation, battery-specific regulations are extremely important for the Volkswagen Group. These govern factors including the systems and methodologies for determining a battery's carbon footprint, which should be flexible and fair.
- Regulated trade

  As a multinational enterprise, the Volkswagen Group relies on open regulated international trade. In the Group's view, measures that restrict trade, such as the introduction of countervailing duties/protective tariffs are generally inappropriate for strengthening the long-term competitiveness of the automotive industry. Instead, the transformation of the automotive industry needs to be underpinned through a suitable regulatory environment and the creation of competitive structures. The conclusion of both previously negotiated and new trade agreements and partnerships may help to minimize trade barriers and the distortion of competition. The Volkswagen Group supports this.
- Cybersecurity, data and digitalization

  Cybersecurity, digitalization and AI are major topics in the automotive industry at present. The Volkswagen Group champions responsible handling of all types of data and advocates for access to vehicle data as the bedrock for new value creation based on existing laws.

- Automated driving
  Automated driving will become an integral part of the development of future mobility. To advance its development activities in this area, the Volkswagen Group believes it is essential to create uniform regulations and remove restrictions.
- Climate policy and emissions
  The Volkswagen Group's goal is to develop sustainable, environmentally friendly and resource-efficient products and production facilities, which is why it is committed to ambitious yet economically viable environmental and climate targets. The Group believes that this requires, among other things, practicable guidelines in various topic areas such as recycling rates and end-of-life regulations.
- Competitiveness of the automotive industry
  The Volkswagen Group is committed to strengthening the economy and reducing red tape in the EU's automotive sector. The aim is to not only accelerate innovations but also scale them up for industrial production. The industry needs access to cheaper energy. It is important to diversify the sources of raw materials and enter into partnerships with third countries. Furthermore, regulations or red tape must not put European companies at a disadvantage.

Volkswagen AG (R001681), Dr. Ing. h.c. F. Porsche AG (R001768), TRATON SE (R001565), VW Financial Services AG (R001704), PowerCo (R006923), AUDI AG (R001702), MAN Truck & Bus SE (R001638), Cariad (R006271), MOIA (R000349), MAN Energy Solutions SE (R001653), and Volkswagen Group Charging GmbH (R001890) are registered in the Lobbying Register of the German Bundestag.

Volkswagen Aktiengesellschaft (REG number: 6504541970-40), Scania AB (publ) (REG number: 3305029916-47), MAN Energy Solutions SE (REG number: 101247832736-33) and MAN Truck & Bus SE (REG number: 06093891220-52) are registered in the EU Transparency Register.

ACTIONS: LOBBYING ACTIVITIES

In the reporting year, the Volkswagen Group introduced various measures that will continue to be implemented in the future. These serve the purpose of managing and ensuring consistency in the Group's lobbying.

Lobbying

In order to support the Volkswagen Group's strategy, the Public Affairs department influences the political framework. Active lobbying is reinforced primarily by regular association work and contact with policymakers via the headquarters or external offices. The department's aim is to ensure standardized global management and consistency in the Group's external lobbying.

Risk assessment and strategic forecast

In its risk assessment, the Volkswagen Group has identified and assessed relevant political developments and regulatory measures. Recommendations for action for Group management were derived with the involvement of a network of policymakers, external networks, and through association work, topic responsibilities, and priority markets.

One-voice policy

An in-depth description of the one-voice policy is provided in "Policies: Lobbying activities".

The Volkswagen Group's one-voice policy is organized through Group and brand guidelines, the Group Public Affairs steering committee, lobby guidelines, and information and voting cascades (group calls, regular conference calls). This approach takes regulatory requirements into account, such as the Lobbying Register of the German Bundestag or EU regulations such as the CSRD or the EU Foreign Subsidies Regulation. In addition, requirements due to ESG ratings or from other processes are included.

With regard to the Group policy, all controlled companies are required to implement it within a set period of time. If a company is unable to implement the policy, it must report this.

TARGETS: LOBBYING ACTIVITIES

No measurable, outcome-oriented targets within the meaning of the ESRS are defined in relation to lobbying activities. The effectiveness of the policies and actions in relation to the positive impact and the risk identified through the materiality assessment performed this year for the first time is currently not monitored.

The objectives in the Public Affairs department are shaped by internal management tasks and supporting activities for the Group. The management and consistency of lobbying in the Group are decisive in ensuring uniform and strategic communication toward policymakers and non-governmental organizations (NGOs). The Group must, of course, ensure that all legal requirements are met. In addition, operational support is offered to all areas of the Group in official processes in special cases, ensuring targeted and efficient handling.

METRICS: LOBBYING ACTIVITIES

The Group's total political contributions comprise the financial contributions made directly and indirectly by the Group and the monetary value of the in-kind contributions. Direct contributions are those made directly to political parties, their elected representatives or persons seeking political office. Indirect contributions are those made to parties such as lobbyists or associations that are linked to or support certain political parties or causes. The total amount of political contributions is not broken down by region as none were granted, except in the USA. Due to the specific definitions in the ESRS, the figures in this report differ from those entered in lobby registers. As such, this report does not include all the figures from entries in lobby registers.

The value of financial and in-kind political contributions made directly and indirectly by the fully consolidated companies amounted to €92 thousand in 2024.

MANAGEMENT OF RELATIONSHIPS WITH SUPPLIERS AND PAYMENT PRACTICES

MATERIAL IMPACT AND THEIR INTERACTION WITH STRATEGY AND BUSINESS MODEL

Impact in the area of management of relationships with suppliers including payment practices

The Volkswagen Group's business partners play a role in shaping the Group's success. The spirit of partnership creates long-lasting business relationships characterized by mutual benefit.

The Volkswagen Group has identified an actual and potential positive impact through the double materiality assessment in connection with the management of relationships with suppliers. The Volkswagen Group's fair business conduct has a positive impact on the partnership- and trust-based business relationships with suppliers along the value chain. This trust is to be maintained in the long term.

Interaction with strategy and business model

The Volkswagen Group endeavors to be able to show by 2040 that, in terms of sales revenue, over 95% of direct suppliers have a positive sustainability rating (S-Rating). The framework for this is provided by the Group´s regenerate+ sustainability strategy, which aims to design the Volkswagen Group's supply chain responsibly, minimize risks and provide positive input for all partners.

The impacts identified in the materiality assessment have an influence on the Group's business model, strategy and value chain.

The Volkswagen Group uses various actions in the area of management of supplier relationships to respond to the influence of its material impacts on the business model, strategy and value chain. These enable the positive impact to be maintained and reinforced, particularly through the Code of Conduct for Business Partners, specifications and the S-Rating.

All actions in the area of supplier relationship management are described in detail in "Policies, actions and targets: Management of relationships with suppliers and payment practices".

POLICIES, ACTIONS AND TARGETS: MANAGEMENT OF RELATIONSHIPS WITH SUPPLIERS AND PAYMENT PRACTICES

As one of the world's largest automotive manufacturers, the Volkswagen Group has a great responsibility toward its partners, stakeholders and society. The Volkswagen Group not only recognizes its responsibility, it also considers it important to have a positive impact. The holistic approach of the Group's regenerate+ sustainability strategy provides the basis for advancing sustainability in conjunction with partners and stakeholders.

Responsible supply chain system

A key approach in the Volkswagen Group's procurement strategy is the responsible supply chain system (ReSC system). It begins before a contractual relationship is entered into, i.e. before the negotiation of specific delivery times and purchase prices. This policy aims to avoid and minimize human-rights, social, or environmental risks and to counteract them with preventive and reactive mitigating measures. The ReSC system and its components are described in detail in the "Workers in the value chain" chapter.

The ReSC system is based on the following standard measures:

Risk analysis in accordance with the responsible supply chain system

The ReSC system's first step is regular risk analysis. This is performed before contract award on the basis of direct suppliers' business models and takes account of internal and external data on human-rights and environmental risks. Based on the risk classification, the supplier is assigned a package of measures to prevent and mitigate the negative impacts identified.

Business Partner Due Diligence Process

Activities for checking the integrity of business partners are described in detail in "Actions: Corruption and bribery".

In the first third of the 2024 fiscal year, procurement was also still within the scope of the BPDD. The process was adjusted as of April 2024 and replaced by continuous media screening for procurement.

Ordering products and services is the responsibility of the relevant procurement organization of the brands and companies and must be mapped and coordinated in the Group committees and systems in accordance with applicable regulations.

Code of Conduct for Business Partners

The Code of Conduct for Business Partners is a key action to promote fair business conduct at the Volkswagen Group. The Group creates transparency and reliability by setting clear expectations for the conduct of business partners with respect to human-rights, environmental, social, and compliance standards. This reinforces trust in business partnerships and ensures their long-term stability.

The Code of Conduct for Business Partners is binding for suppliers, sales partners and all other B2B business partners who maintain a business relationship with the Volkswagen Group. Sustainability topics identified as material can then also be taken into account in the supply chain.

Specifications

In addition to the Code of Conduct for Business Partners, there are additional product-specific requirements for suppliers. These are set out in the specifications and stipulate the way in which certain products must be manufactured. The requirements of the specifications include, for example, achieving maximum transparency in the supply chains for cobalt, nickel, lithium and natural graphite used in battery cells.

For new vehicle projects, the Volkswagen Group intends to make CO_2 emissions a technical feature for relevant components in the future. This means that suppliers are given binding CO_2 targets, compliance with which must be proved on request. Only suppliers who manufacture products in accordance with the requirements of the specifications are considered eligible for the award of contracts.

The specifications are regarded as an ongoing measure.

Sustainability Rating

The S-Rating has been an established process in the Volkswagen Group since 2019. It is a Group-wide tool used to assess the sustainability performance of suppliers with a high sustainability risk in the fields of the environment, social aspects, and integrity, and to mitigate risks.

The Volkswagen Group endeavors to be able to show by 2040 that, in terms of sales revenue, over 95% of direct suppliers have a positive S-Rating. The framework for this is provided by regenerate+. The aim of the strategy is to design the Volkswagen Group's supply chain responsibly, minimize risks and provide positive input for all partners. This includes being able to report that more than 95% of suppliers have a certified environmental management system, such as ISO 14001 or EMAS.

The Volkswagen Group has set an intermediate target that direct suppliers with a positive S-Rating must represent 85% of the total procurement volume by 2025. Target achievement is continuously reviewed and monitored as part of the Group TOP 10 program.

METRICS: PAYMENT PRACTICES

The standard procurement conditions of Volkswagen AG and the other Group companies govern the terms of payment vis-à-vis suppliers. These are publicly available at https://www.vwgroupsupply.com/one-kbp-pub/en/kbp_public/information/procurement_conditions_new/procurement_conditions_new.html. For Volkswagen AG suppliers, payment shall be made within 30 days. The conditions for the brands and companies in the markets and regions with relevance for the Volkswagen Group have different payment terms, in each case in compliance with national legal requirements. The periods here range from 30 to 120 days. The standard payment terms are generally applied; however, individual deviations as part of a negotiated supplier agreement are possible. There is no standard deviation for a particular group of suppliers. The Volkswagen Group settles its liabilities within the payment periods described.

On average, the Volkswagen Group takes 53 days to pay invoices. This information was calculated for the Volkswagen Group using the following definition of days payable outstanding (DPO), which is also used for internal control purposes:

$$\frac{\textit{Liabilities}^{13}\ \textit{as of Dec.}\ 31}{\textit{Sales revenue in fiscal year}} \times 365$$

As of December 31, 2024, a small number of court-ordered summary proceedings for late payment were pending against the large, publicly traded German companies of the Volkswagen Group, against which no objection has yet been filed. Pending legal proceedings due to late payment are handled by the Legal department and the amounts involved at year-end were not significant.

[13] Liabilities include individual non-current and current other liabilities beside trade payables.

Annex to the sustainability Report

DISCLOSURES ON DUE DILIGENCE

DUE DILIGENCE INDEX IN THE SUSTAINABILITY REPORT

Core elements of due diligence	Section
Embedding due diligence in governance, strategy and business model	> "Sustainability management" > "Sustainability-related aspects in the remuneration system for the members of the Board of Management of Volkswagen AG" > Other elements of the respective topical standards
Engaging with affected stakeholders in all key steps of the due diligence	> "Interests and views of stakeholders" > "Sustainability management" > "Procedure for and results of the double materiality assessment" > Other elements of the respective topical standards
Identifying and assessing negative impacts	> "Procedure for and results of the double materiality assessment" > Other elements of the respective topical standards where material negative impacts have been identified.
Taking actions to address those negative impacts	> Description of the actions in the topical standards where material negative impacts have been identified.
Tracking the effectiveness of these efforts and communicating	> Description in the topical standards as to whether and how the effectiveness of these efforts is tracked and how this is communicated

ESRS INDICES

INDEX OF ESRS DISCLOSURE REQUIREMENTS

		Chapter/section of the report	Page number (from)
ESRS 2 – General disclosures		General information	
BP-1	General basis for preparation of the sustainability statement	About this sustainability report	229
BP-2	Disclosures in relation to specific circumstances	About this sustainability report	229
GOV-1	The role of the administrative, management and supervisory bodies	Information on the Board of Management and Supervisory Board	243
GOV-2	Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	Information on the Board of Management and Supervisory Board; Sustainability management	243 246
GOV-3	Integration of sustainability-related performance in incentive schemes	Information on the Board of Management and Supervisory Board	243
GOV-4	Statement on due diligence	Annex: Disclosures on due diligence	444
GOV-5	Risk management and internal controls over sustainability reporting	Risk management and internal controls over sustainability reporting	249
SBM-1	Strategy, business model and value chain	Business model, value chain and strategy	230
SBM-2	Interests and views of stakeholders	Interests and views of stakeholders	239
SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model	Sustainability management; Procedure for and results of the double materiality assessment; In all topical standards, in each case under "Material impacts, risks and opportunities and their interaction with strategy and business model": Climate change Pollution Water Biodiversity and ecosystems Resource use and circular economy Employees and non-employees Workers in the value chain Corporate Citizenship Customers Business conduct information Climate change: Strategy: Climate change resilience; Biodiversity and ecosystems: Impacts and dependencies in or near biodiversity-sensitive areas	246 249 264 298 311 318 327 362 392 411 416 426 269 320
IRO-1	Description of the process to identify and assess material impacts, risks and opportunities	Procedure for and results of the double materiality assessment	249
IRO-2	Disclosure Requirements in ESRS covered by the undertaking's sustainability statement	Procedure for and results of the double materiality assessment; Index of ESRS Disclosure Requirements; Index of ESRS datapoints that derive from other EU legislation	249 445 449

ESRS E1 – Climate change		**Climate change**	
E1-1	Transition plan for climate change mitigation	Strategy: Climate change and transition plan	267
E1-2	Policies related to climate change mitigation and adaptation	Policy: Decarbonization	270
E1-3	Actions and resources in relation to climate change policies	Actions and resources: Climate change	278
E1-4	Targets related to climate change mitigation and adaptation	Targets: Climate change	272
E1-5	Energy consumption and mix	Metrics: Climate change	287
E1-6	Gross Scopes 1, 2, 3 and Total GHG emissions	Metrics: Climate change	288
E1-7	GHG removals and GHG mitigation projects financed through carbon credits	Metrics: Climate change	295
E1-8	Internal carbon pricing	Metrics: Climate change	297
ESRS E2 – Pollution		Pollution	
E2-1	Policies related to pollution	Policy: Pollution	301
E2-2	Actions and resources related to pollution	Actions and resources: Pollution	304
E2-3	Targets related to pollution	Targets: Pollution	304
E2-4	Pollution of air, water and soil	Metrics: Pollution	307
E2-5	Substances of concern and substances of very high concern	Metrics: Pollution	309
ESRS E3 – Water and marine resources		Water	
E3-1	Policies related to water and marine resources	Policy: Water	312
E3-2	Actions and resources related to water and marine resources policies	Actions and resources: Water	314
E3-3	Targets related to water and marine resources	Targets: Water	313
E3-4	Water consumption	Metrics: Water	315
ESRS E4 – Biodiversity and ecosystems		Biodiversity and ecosystems	
E4-1	Transition plan and consideration of biodiversity and ecosystems in strategy and business model	Transition plan and consideration of biodiversity and ecosystems in strategy and business model	319
E4-2	Policies related to biodiversity and ecosystems	Policy: Biodiversity and ecosystems	322
E4-3	Actions and resources related to biodiversity and ecosystems	Actions and resources: Biodiversity and ecosystems	324
E4-4	Targets related to biodiversity and ecosystems	Targets: Biodiversity and ecosystems	324
E4-5	Impact metrics related to biodiversity and ecosystems change	Metrics: Biodiversity and ecosystems	326
ESRS E5 – Resource use and circular economy		Resource use and circular economy	
E5-1	Policies related to resource use and circular economy	Policy: Resource use and circular economy	329
E5-2	Actions and resources in relation to resource use and circular economy	Actions and resources: Resource use and circular economy	331
E5-3	Targets related to resource use and circular economy	Targets: Resource use and circular economy	330
E5-4	Resource inflows	Metrics: Resource use and circular economy	337
E5-5	Resource outflows	Metrics: Resource use and circular economy	341

ESRS S1 – Employees and non-employee workers		**Employees and non-employee workers**	
S1-1	Policies related to own workforce	Processes: Engaging with employees and workers' representatives about impacts Policy: Employees and non-employees	365 370
S1-2	Processes for engaging with own workforce and workers' representatives about impacts	Processes: Engaging with employees and workers' representatives about impacts	365
S1-3	Processes to remediate negative impacts and channels for own workforce to raise concerns	Processes: Remediation of negative impacts and complaint channels	367
S1-4	Taking action on material impacts on own workforce, and approaches to managing material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	Working conditions	374
S1-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	Working conditions Occupational health and safety	374 383
S1-6	Characteristics of the undertaking's employees	Working conditions	374
S1-7	Characteristics of non-employee workers in the undertaking's own workforce	Working conditions	374
S1-8	Collective bargaining coverage and social dialog	Working conditions	374
S1-9	Diversity metrics	Equal treatment and equal opportunities	385
S1-10	Adequate wages	Working conditions	374
S1-13	Training and skills development metrics	Working conditions	374
S1-14	Health and safety metrics	Occupational health and safety	383
S1-16	Remuneration metrics (pay gap and total remuneration)	Equal treatment and equal opportunities	385
S1-17	Incidents, complaints and severe human rights impacts	Other work-related rights	389
ESRS S2 – Workers in the value chain		Workers in the value chain	
S2-1	Policies related to value chain workers	Policy: Workers in the value chain	395
S2-2	Processes for engaging with value chain workers about impacts	Processes: Engaging with value chain workers	398
S2-3	Processes to remediate negative impacts and channels for value chain workers to raise concerns	Processes: Remedy and complaint channels	400
S2-4	Taking action on material impacts on value chain workers, and approaches to managing material risks and pursuing material opportunities related to value chain workers, and effectiveness of those actions	Actions: Workers in the value chain Policy: Workers in the value chain	401 395
S2-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	Targets: Managing material negative impacts, advancing positive impacts, and managing material risks	410
ESRS S3 – Entity-specific disclosures on corporate citizenship in connection with societal impact		Corporate Citizenship	
Entity specific disclosures: Policies related to corporate citizenship in connection with societal impact		Policies: Societal Impact and Corporate Citizenship	412
Entity specific disclosures: Actions related to corporate citizenship in connection with societal impact		Actions: Societal Impact and Corporate Citizenship	413
Entity specific disclosures: Targets related to corporate citizenship in connection with societal impact		Targets: Societal Impact and Corporate Citizenship	415

ESRS S4 Consumers and end-users		**Customers**	
S4-1	Policies related to consumers and end-users	Policies: Personal safety of customers	417
S4-2	Processes for engaging with consumers and end-users about impacts	Processes: Engaging with customers Processes: Remedial processes and reporting channels	419 419
S4-3	Processes to remediate negative impacts and channels for consumers and end-users to raise concerns	Processes: Remedial processes and reporting channels	419
S4-4	Taking action on material impacts on consumers and end-users, and approaches to managing material risks and pursuing material opportunities related to consumers and end-users, and effectiveness of those actions	Actions: Personal safety of customers	421
S4-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	Targets: Personal safety of customers	424
ESRS G1 – Business conduct		Business conduct information	
G1-1	Corporate culture and business conduct policies	Corporate culture Protection of whistleblowers Corruption and bribery	426 430 433
G1-2	Management of relationships with suppliers	Management of relationships with suppliers and payment practices	441
G1-3	Prevention and detection of corruption and bribery	Corruption and bribery	433
G1-4	Incidents of corruption or bribery	Corruption and bribery	433
G1-5	Political influence and lobbying activities	Lobbying activities	437
G1-6	Payment practices	Management of relationships with suppliers and payment practices	443

Disclosure requirement	Datapoint	Description	SFDR reference (1)	Pillar 3 reference (2)	Benchmark Regulation reference (3)	EU Climate Law reference (4)	Location
ESRS 2 GOV-1	21 (d)	Board's gender diversity	Indicator number 13 Table 1 of Annex 1		Commission Delegated Regulation (EU) 2020/1816 (5), Annex II		General information: Information on the Board of Management and Supervisory Board
ESRS 2 GOV-1	21 (e)	Percentage of board members who are independent			Commission Delegated Regulation (EU) 2020/1816, Annex II		General information: Information on the Board of Management and Supervisory Board
ESRS 2 GOV-4	30	Statement on due diligence	Indicator number 10 Table 3 of Annex 1				Annex to the Sustainability Report: Disclosures on due diligence
ESRS 2 SBM-1	40 (d) i	Involvement in activities related to fossil fuel activities	Indicators number 4 Table #1 of Annex 1	Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453 (6), Table 1: Qualitative information on environmental risk, and Table 2: Qualitative information on social risk	Commission Delegated Regulation (EU) 2020/1816, Annex II		General information: Business model, value chain and strategy
ESRS 2 SBM-1	40 (d) ii	Involvement in activities related to chemical production	Indicator number 9 Table 2 of Annex 1		Commission Delegated Regulation (EU) 2020/1816, Annex II		Not material
ESRS 2 SBM-1	40 (d) iii	Involvement in activities related to controversial weapons	Indicator number 14 Table 1 of Annex 1		Delegated Regulation (EU) 2020/1818 (7), Article 12(1) Delegated Regulation (EU) 2020/1816, Annex II		Not material
ESRS 2 SBM-1	40 (d) iv	Involvement in activities related to cultivation and production of tobacco			Delegated Regulation (EU) 2020/1818, Article 12(1); Delegated Regulation (EU) 2020/1816, Annex II		Not material
ESRS E1-1	14	Transition plan to reach climate neutrality by 2050				Regulation (EU) 021/1119, Article 2(1)	Climate change: Strategy: Climate change and transition plan
ESRS E1-1	16 (g)	Undertakings excluded from Paris-aligned benchmarks		Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453, Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and	Delegated Regulation (EU) 2020/1818, Article12(1) (d) to (g), and Article 12(2)		Climate change: Strategy: Climate change and transition plan

				residual maturity		
ESRS E1-4	34	GHG emission reduction targets	Indicator number 4 Table 2 of Annex 1	Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453, Template 3: Banking book – Climate change transition risk: Alignment metrics	Delegated Regulation (EU) 2020/1818, Article 6	Climate change: Targets: Climate change
ESRS E1-5	38	Energy consumption from fossil sources disaggregated by sources (only high climate impact sectors)	Indicator number 5 Table 1 of Annex 1 and Indicator no. 5 Table 2 of Annex 1			Climate change: Metrics: Climate change
ESRS E1-5	37	Energy consumption and mix	Indicator number 5 Table 1 of Annex 1			Climate change: Metrics: Climate change
ESRS E1-5	40–43	Energy intensity associated with activities in high climate impact sectors	Indicator number 6 Table 1 of Annex 1			Climate change: Metrics: Climate change
ESRS E1-6	44	Gross Scopes 1, 2, 3 and total GHG emissions	Indicators number 1 and 2 Table #1 of Annex 1	Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453, Template 1: Banking book – Climate change transition risk: Credit quality of exposures by sector, emissions and residual maturity	Delegated Regulation (EU) 2020/1818, Article 5(1), 6 and 8(1)	Climate change: Metrics: Climate change
ESRS E1-6	53–55	Gross GHG emissions intensity	Indicator number 3 Table #1 of Annex 1	Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453, Template 3: Banking book – Climate change transition risk: Alignment metrics	Delegated Regulation (EU) 2020/1818, Article 8(1)	Climate change: Metrics: Climate change

ESRS E1-7	**56**	**GHG removals and carbon credits**				**Regulation (EU) 2021/1119, Article 2(1)**	**Climate change: Metrics: Climate change**
ESRS E1-9	66	Exposure of the benchmark portfolio to climate-related physical risks			Delegated Regulation (EU) 2020/1818, Annex II; Delegated Regulation (EU) 2020/1816, Annex II		Phased-in Disclosure Requirements; not relevant for reporting year 2024
ESRS E1-9	66 (a); 66 (c)	Disaggregation of monetary amounts by acute and chronic physical risk; location of significant assets at material physical risk		Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453 (46) and (47), Template 5: Banking book – Climate change physical risk: Exposures subject to physical risk			Phased-in Disclosure Requirements; not relevant for reporting year 2024
ESRS E1-9	67 (c)	Breakdown of the carrying value of its real estate assets by energy-efficiency classes		Article 449a of Regulation (EU) No 575/2013; Commission Implementing Regulation (EU) 2022/2453 (34), Template 2: Banking book – Climate change transition risk: Loans collateralized by immovable property – Energy efficiency of the collateral			Phased-in Disclosure Requirements; not relevant for reporting year 2024
ESRS E1-9	69	Degree of exposure of the portfolio to climate-related opportunities			Commission Delegated Regulation (EU) 2020/1818, Annex II		Phased-in Disclosure Requirements; not relevant for reporting year 2024
ESRS E2-4	28	Amount of each pollutant listed in Annex II of the E-PRTR Regulation (European Pollutant Release and Transfer Register) emitted to air, water and soil	Indicator number 8 Table 1 of Annex 1, Indicator number 2 Table 2 of Annex 1, Indicator number 1 Table 2 of Annex 1, Indicator number 3 Table 2 of Annex 1				Pollution: Metrics: Pollution

ESRS E3-1	**9**	**Water and marine resources**	**Indicator number 7 Table 2 of Annex 1**	**Water: Policy: Water**
ESRS E3-1	13	Dedicated policy	Indicator number 8 Table 2 of Annex 1	Water: Policy: Water
ESRS E3-1	14	Sustainable oceans and seas	Indicator number 12 Table 2 of Annex 1	Not material
ESRS E3-4	28 (c)	Total water recycled and reused	Indicator number 6.2 Table 2 of Annex 1	Water: Metrics: Water
ESRS E3-4	29	Total water consumption in m3 per net revenue on own operations	Indicator number 6.1 Table 2 of Annex 1	Water: Metrics: Water
ESRS 2- SBM-3 - E4	16 (a) i		Indicator number 7 Table 1 of Annex 1	Biodiversity and ecosystems: Impacts and dependencies in or near biodiversity-sensitive areas
ESRS 2- SBM-3 - E4	16 (b)		Indicator number 10 Table 2 of Annex 1	Biodiversity and ecosystems: Impacts and dependencies in or near biodiversity-sensitive areas
ESRS 2- SBM-3 - E4	16 (c)		Indicator number 14 Table 2 of Annex 1	Biodiversity and ecosystems: Impacts and dependencies in or near biodiversity-sensitive areas
ESRS E4-2	24 (b)	Sustainable land / agriculture practices or policies	Indicator number 11 Table 2 of Annex 1	Biodiversity and ecosystems: Policy Biodiversity and ecosystems
ESRS E4-2	24 (c)	Sustainable oceans / seas practices or policies	Indicator number 12 Table 2 of Annex 1	Not material
ESRS E4-2	24 (d)	Policies to address deforestation	Indicator number 15 Table 2 of Annex 1	Biodiversity and ecosystems: Policy: Biodiversity and ecosystems
ESRS E5-5	37 (d)	Non-recycled waste	Indicator number 13 Table 2 of Annex 1	Resource use and circular economy: Metrics: Resource use and circular economy
ESRS E5-5	39	Hazardous waste and radioactive waste	Indicator number 9 Table 1 of Annex 1	Resource use and circular economy: Metrics: Resource use and circular economy
ESRS 2- SBM3 - S1	14 (f)	Risk of incidents of forced labor	Indicator number 13 Table 3 of Annex I	Employees and non-employees: Material impacts and their interaction with strategy and business model
ESRS 2- SBM3 - S1	14 (g)	Risk of incidents of child labor	Indicator number 12 Table 3 of Annex I	Employees and non-employees: Material impacts and their interaction with strategy and business model
ESRS S1-1	20	Human rights policy commitments	Indicator number 9 Table #3 and Indicator number 11 Table #1 of Annex I	Employees and non-employees: Policies: Employees and non-employees

ESRS S1-1	**21**	**Due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8**		**Commission Delegated Regulation (EU) 2020/1816, Annex II**	**Employees and non-employees: Policies: Employees and non-employees**
ESRS S1-1	22	Processes and measures for preventing trafficking in human beings	Indicator number 11 Table 3 of Annex I		Employees and non-employees: Policies: Employees and non-employees
ESRS S1-1	23	Workplace accident prevention policy or management system	Indicator number 1 Table 3 of Annex I		Employees and non-employees: Policies: Employees and non-employees
ESRS S1-3	32 (c)	Grievance/complains handling mechanisms	Indicator number 5 Table 3 of Annex I		Employees and non-employees: Processes: Remediation of negative impacts and complaint channels
ESRS S1-14	88 (b) and (c)	Number of fatalities and number and rate of work-related accidents	Indicator number 2 Table 3 of Annex I	Commission Delegated Regulation (EU) 2020/1816, Annex II	Employees and non-employees: Occupational health and safety
ESRS S1-14	88 (e)	Number of days lost to injuries, accidents, fatalities or illness	Indicator number 3 Table 3 of Annex I		Phased-in Disclosure Requirements; not relevant for reporting year 2024
ESRS S1-16	97 (a)	Unadjusted gender pay gap	Indicator number 12 Table 1 of Annex I	Commission Delegated Regulation (EU) 2020/1816, Annex II	Employees and non-employees: Equal treatment and equal opportunities
ESRS S1-16	97 (b)	Excessive CEO pay ratio	Indicator number 8 Table 3 of Annex I		Employees and non-employees: Equal treatment and equal opportunities
ESRS S1-17	103 (a)	Incidents of discrimination	Indicator number 7 Table 3 of Annex I		Employees and non-employees: Other work-related rights
ESRS S1-17	104 (a)	Non-respect of UNGPs on Business and Human Rights and OECD guidelines	Indicator number 10 Table #1 and Indicator number 14 Table #3 of Annex I	Delegated Regulation (EU) 2020/1816, Annex II Delegated Regulation (EU) 2020/1818, Art 12 (1)	Employees and non-employees: Other work-related rights
ESRS 2- SBM3 - S2	11 (b)	Significant risk of child labor or forced labor in the value chain	Indicator numbers 12 and 13 Table 3 of Annex I		Workers in the value chain: Material impacts and risks and their interaction with strategy and business model
ESRS S2-1	17	Human rights policy commitments	Indicator number 9 Table #3 and Indicator number 11 Table #1 of Annex 1		Workers in the value chain: Policy: Workers in the value chain

ESRS S2-1	**18**	**Policies related to value chain workers**	**Indicator numbers 11 and 4 Table 3 of Annex 1**		**Workers in the value chain: Policy: Workers in the value chain**
ESRS S2-1	19	Non-respect of UNGPs on Business and Human Rights and OECD guidelines	Indicator number 10 Table 1 of Annex 1	Delegated Regulation (EU) 2020/1816, Annex II; Delegated Regulation (EU) 2020/1818, Art 12 (1)	Workers in the value chain: Policy: Workers in the value chain
ESRS S2-1	19	Due diligence policies on issues addressed by the fundamental International Labor Organisation Conventions 1 to 8		Commission Delegated Regulation (EU) 2020/1816, Annex II	Workers in the value chain: Policy: Workers in the value chain
ESRS S2-4	36	Human rights issues and incidents connected to its upstream and downstream value chain	Indicator number 14 Table 3 of Annex 1		Workers in the value chain: Policy: Workers in the value chain
ESRS S3-1	16	Human rights policy commitments	Indicator number 9 Table #3 and Indicator number 11 Table #1 of Annex 1		Not material
ESRS S3-1	17	Non-respect of UNGPs on Business and Human Rights, ILO principles or and OECD guidelines	Indicator number 10 Table 1 of Annex 1	Delegated Regulation (EU) 2020/1816, Annex II; Delegated Regulation (EU) 2020/1818, Art 12 (1)	Not material
ESRS S3-4	36	Human rights issues and incidents connected to its upstream and downstream value chain	Indicator number 14 Table 3 of Annex 1		Not material
ESRS S4-1	16	Policies related to consumers and end-users	Indicator number 9 Table #3 and Indicator number 11 Table #1 of Annex 1		Customers: Policies: Personal safety of customers
ESRS S4-1	17	Non-respect of UNGPs on Business and Human Rights and OECD guidelines	Indicator number 10 Table 1 of Annex 1	Delegated Regulation (EU) 2020/1816, Annex II; Delegated Regulation (EU) 2020/1818, Art 12 (1)	Not relevant

ESRS S4-4	**35**	**Human rights issues and incidents**	**Indicator number 14 Table 3 of Annex 1**		**Not relevant**
ESRS G1-1	10 (b)	United Nations Convention against Corruption	Indicator number 15 Table 3 of Annex 1		Not relevant
ESRS G1-1	10 (d)	Protection of whistleblowers	Indicator number 6 Table 3 of Annex 1		Business conduct information: Protection of whistleblowers
ESRS G1-4	24 (a)	Fines for violation of anti-corruption and anti-bribery laws	Indicator number 17 Table 3 of Annex 1	Commission Delegated Regulation (EU) 2020/1816, Annex II	Business conduct information: Corruption and bribery
ESRS G1-4	24 (b)	Standards of anti-corruption and anti-bribery	Indicator number 16 Table 3 of Annex 1		Business conduct information: Corruption and bribery

1 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (OJ L 317, 9.12.2019, p. 1).

2 Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 (Capital Requirements Regulation "CRR") (OJ L 176, 27.6.2013, p. 1).

3 Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds and amending Directives 2008/48/EC and 2014/17/EU and Regulation (EU) No 596/2014 (OJ L 171, 29.6.2016, p. 1).

4 Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law') (OJ L 243, 9.7.2021, p. 1).

5 Commission Delegated Regulation (EU) 2020/1816 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards the explanation in the benchmark statement of how environmental, social and governance factors are reflected in each benchmark provided and published (OJ L 406, 3.12.2020, p. 1).

6 Commission Implementing Regulation (EU) 2022/2453 of 30 November 2022 amending the implementing technical standards laid down in Implementing Regulation (EU) 2021/637 as regards the disclosure of environmental, social and governance risks (OJ L 324, 19.12.2022, p.1.).

7 Commission Delegated Regulation (EU) 2020/1818 of 17 July 2020 supplementing Regulation (EU) 2016/1011 of the European Parliament and of the Council as regards minimum standards for EU Climate Transition Benchmarks and EU Paris-aligned Benchmarks (OJ L 406, 3.12.2020, p. 17).

ANNEX: SITES NEAR OR IN BIODIVERSITY-SENSITIVE AREAS

		Core brand group					
	No.	1	2	3	4	5	6
General information	Site	Volkswagen Anchieta plant	Volkswagen Bratislava plant	Volkswagen Chattanooga plant	Volkswagen Curitiba plant	Volkswagen Emden plant	Volkswagen GM Dresden plant
	Category	Production	Production	Production	Production	Production	Production
	Country	Brazil	Slovakia	USA	Brazil	Germany	Germany
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles
	Plant area [ha]	165.3	243.7	443.5	128.8	412.9	13.2
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	27	33.4	45.6	46.1	40.8	36.2
	Mean species abundance (GLOBIO) [%]	26.3	26.3	21.5	27.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	4	7	1	1	6	3
	Names of the protected areas	- Parque Estadual Águas Da Billings - Parque Natural Municipal Do Pedroso - Parque Natural municipal Estorit - Virgílio Simionato - Área De Protecao Ambiental Haras Sao Bernardo	- Zahorske Pomoravie - Devinske aluvium Moravy - Morava - March-Thaya-Auen - Stokeravska vapenka - Devinska Kobyla - Devinske Jazero	- Enterprise South Park	- Área De Proteção Ambiental Do Iguaçú	- Lower Ems and Outer Ems - Lake Waddenzee - Emsmarsch marshland from Leer to Emden - Krummhörn - Lower Saxon Wadden Sea and adjacent coastal sea - Lower Saxon Wadden Sea National Park	- Elbe Valley between Schöna and Mühlberg - Prießnitzgrund - Valleys of Vereinigter and Wilder Weißeritz

		Core brand group				
General information	No.	7	8	9	10	11
	Site	**Volkswagen Osnabrück plant**	**Volkswagen Palmela plant**	**Volkswagen Wolfsburg plant**	**Volkswagen Zwickau plant**	**Volkswagen Commercial Vehicles Hanover plant**
	Category	Production	Production	Production	Production	Production
	Country	Germany	Great Britain and Northern Ireland	Germany	Germany	Germany
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles, Energy generation from fossil fuels	Manufacture of motor vehicles	Manufacture of motor vehicles
	Plant area [ha]	48.1	140.5	1624.3	190.6	138.1
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH]; - Area of land use [H] - Greenhouse gas emissions [H] - Emissions of non-GHG air pollutants [H] - Generation and release of solid waste [H] - Volume of water consumption [M] - Extraction of other biotic resources [M] - Emissions of nutrient-containing soil and water pollutants [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [H]; - Regulation of water flow [H] - Global climate regulation [M] - Soil and sediment retention [M] - Degradation of solid waste [M] - Water treatment [M]; - Flood protection [M] - Soil and sediment retention [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	35.5	32.2	27.6	44.9	35.50
	Mean species abundance (GLOBIO) [%]	26.3	26.3	26.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	1	1	4	3	1
	Names of the protected areas	- Great Crested Newt Biotope Palsterkamp	- Arrábida / Espichel	- Aller (with Barnbruch), lower Leine, lower Oker - Deciduous forests between Braunschweig and Wolfsburg - Drömling - Barnbruch	- Mittleres Zwickauer Muldental - River valleys in the Upper Pleißeland - Am Rümpfwald Glauchau	- Aller (with Barnbruch), lower Leine, lower Oker

		Core brand group				
General information	No.	12	13	14	15	16
	Site	**Volkswagen Commercial Vehicles Poznan plant**	**SEAT Barcelona plant**	**SEAT El Prat plant**	**SEAT Martorell plant**	**Škoda Mladá Boleslav plant**
	Category	Production	Production	Production	Production	Production
	Country	Poland	Spain	Spain	Spain	Czech Republic
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles, Energy generation from fossil fuels
	Plant area [ha]	46.8	39.4	18.5	287.2	663
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) (VH) - Emissions of toxic soil and water pollutants (M)	- Disruption (e.g. noise, light) [VH] - Area of land use [H] - Greenhouse gas emissions [H] - Emissions of non-GHG air pollutants [H] - Generation and release of solid waste [H] - Volume of water consumption [M] - Extraction of other biotic resources [M] - Emissions of nutrient-containing soil and water pollutants [M] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [H] - Regulation of water flow [H] - Global climate regulation [M] - Soil and sediment retention [M] - Degradation of solid waste [M] - Water treatment [M] - Flood protection [M] - Soil and sediment retention [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	37.8	28.4	30.2	36	34.8
	Mean species abundance (GLOBIO) [%]	26.3	26.3	26.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	2	2	2	2	3
	Names of the protected areas	- Dolina Cybiny - Fortyfikacje w Poznaniu	- Delta del Llobregat - Espacio marino del Baix Llobregat-Garraf	- Delta del Llobregat - Espacio marino del Baix Llobregat-Garraf	- Montserrat-Roques Blanques-riu Llobregat - Serres del Litoral central	- Radouc - Chlum u Neprevázky - Bezdecin

		Core brand group	Volkswagen Group Technology				
	No.	17	18	19	20	21	22
General information	Site	Škoda Vrchlabi plant	Volkswagen Braunschweig plant	Volkswagen Chemnitz plant	Volkswagen Kassel plant	Volkswagen Martin plant	Volkswagen São Carlos plant
	Category	Production	Production	Production	Production	Production	Production
	Country	Czech Republic	Germany	Germany	Germany	Slovakia	Brazil
Activity	ISIC Group (ENCORE)	Manufacture of parts and accessories for motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of parts and accessories for motor vehicles
	Plant area [ha]	35.1	116.9	25.9	322.2	28.1	73
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	43	38.5	37	29.6	45.1	40.1
	Mean species abundance (GLOBIO) [%]	26.3	26.3	26.3	26.3	26.3	29.1
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	1	3	2	4	2	1
	Names of the protected areas	- Krkonose	- Aller (with Barnbruch), lower Leine, lower Oker - Riddagshäuser Teiche ponds - Deciduous forests between Braunschweig and Wolfsburg	- Zwönitztal - Separate bat roosts in the Chemnitz and Freiberg area	- Fulda floodplain around Kassel - Baunsberg - Dönche - Habichtswald Forest and Seilerberg near Ehlen	- Mala Fatra - Uholniky	- Apa Corumbataí, Botucatu E Tejupá Perimetro Corumbataí

		Progressive brand group				
General information	No.	23	24	25	26	27
	Site	**Audi Brussels plant**	**Audi Győr plant**	**Audi Ingolstadt plant**	**Audi Neckarsulm plant**	**Audi Münchsmünster site**
	Category	Production	Production	Production	Production	Sign. Op. site
	Country	Belgium	Hungary	Germany	Germany	Germany
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of parts and accessories for motor vehicles
	Plant area [ha]	56.2	516.1	286	142.2	54.1
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	31.5	30	29.7	33.7	
	Mean species abundance (GLOBIO) [%]	26.3	26.3	26.3	26.3	
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	3	2	4	2	1
	Names of the protected areas	- Zones Boisées et ouvertes au Sud de la Région bruxelloise – complexe Verrewinkel – Kinsendael - Hallerbos en naije boscomplexen met brongebieden en heiden - La Forêt de Soignes avec lisières et domaines boisés et la Vallée de la Woluwe – complexe Forêt de Soignes – Vallée de la Woluwe	- Gönyüi-homokvidék - Szigetköz	- Danube floodplains between Ingolstadt and Weltenburg - Danube floodplains with Gerolfinger Oak Forest - Ingolstadt training grounds – Hepberg	- Lower Jagst and Lower Kocher rivers - Jagst with tributary valleys	- Danube floodplains between Ingolstadt and Weltenburg

		Progressive brand group					Sport Luxury brand group
	No.	28	29	30	31	32	33
General information	Site	Audi Neuburg site	Audi Neustadt site	Lamborghini S'Agata Bolognese plant	Bentley Crewe plant	Ducati Bologna plant	Porsche Leipzig plant
	Category	Sign. Op. site	Sign. Op. site	Production	Production	Production	Production
	Country	Germany	Germany	Italy	United Kingdom of Great Britain and Northern Ireland	Italy	Germany
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles / proving grounds	Manufacture of parts and accessories for motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles
	Plant area [ha]	46.60	259.6	50	55.1	11.6	429.3
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) (VH) - Emissions of toxic soil and water pollutants (M)	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	48	55	32.3	36.9	25.1	33.1
	Mean species abundance (GLOBIO) [%]	20	21	26.3	20.8	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	3	2	2	1	2	3
	Names of the protected areas	- Danube fens, Zucheringer Wörth and Brucker Forest - Danube floodplains with Gerolfinger Oak Forest - Danube floodplains between Lechmündung and Ingolstadt	- Danube floodplains between Ingolstadt and Weltenburg - NATO training grounds Siegenburg	- Manzolino - Torrazzuolo	- Sandbach Flashes	- Golena San Vitale e Golena del Lippo - Boschi di San Luca e Destra Reno	- Brösen Glesien and Tannenwald pine forest - Leipzig alluvial forest - Leipzig alluvial system

		Sport Luxury brand group		MAN Energy Solutions			
	No.	34	35	36	37	38	39
General information	Site	**Porsche Stuttgart plant**	**Porsche development center in Weissach**	**MAN Energy Solutions Augsburg plant**	**MAN Energy Solutions Berlin plant**	**MAN Energy Solutions Deggendorf plant**	**MAN Energy Solutions Frederikshavn plant**
	Category	Production	Sign. Op. site	Production	Production	Production	Production
	Country	Germany	Germany	Germany	Germany	Germany	Denmark
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of special-purpose machinery	Manufacture of special-purpose machinery	Manufacture of special-purpose machinery	Manufacture of special-purpose machinery
	Plant area [ha]	71.8	100.2	30.6	3.1	5.8	12.4
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M] - Volume of water consumption [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M] - Volume of water consumption [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M] - Volume of water consumption [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M] - Volume of water consumption [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	35.5		36.9	38.7	50.2	40.7
	Mean species abundance (GLOBIO) [%]	26.3		26.3	26.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	2	1	3	4	3	3
	Names of the protected areas	- Glemswald Forest and Stuttgarter Bucht - Island of Birds Max Eyth Lake	- Strohgäu and Lower Enz Valley	- Lech floodplains north of Augsburg - Lech floodplains between Königsbrunn and Augsburg - Höh- Hörgelau- and Schwarzgraben, Lechbrenne north of Augsburg	- Tegel waterworks - Tegeler Fließtal Valley - Baumberge - Spandau Forest	- Danube floodplains between Straubing and Vilshofen - Isar estuary - Extensive meadows east of Deggendorf	- Hirsholmene - Hirsholmene, havet vest herfo og Ellinge A's udlob - Bangsbo Ada log omliggende overdrevsomrader

		MAN Energy Solutions	
General information	No.	40	41
	Site	MAN Energy Solutions Copenhagen plant	MAN Energy Solutions Saint-Nazaire plant
	Category	Production	Production
	Country	Denmark	France
Activity	ISIC Group (ENCORE)	Manufacture of special-purpose machinery	Manufacture of special-purpose machinery
	Plant area [ha]	5.5	5.1
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M] - Volume of water consumption [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M] - Volume of water consumption [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Water supply [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Water supply [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	34.1	29.1
	Mean species abundance (GLOBIO) [%]	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	1	5
	Names of the protected areas	- Vestamager og havet syd for	- Estuaire de la Loire Nord - Estuaire de la Loire – Baie de Bourgneuf - Estuaire de la Loire - Grande Brière, marais de Donges et du Brivet - Grande Brière et marais de Donges

		TRATON Group					
	No.	42	43	44	45	46	47
General information	Site	Scania Angers plant	Scania Luleå plant	Scania Meppel plant	Scania São Paulo plant	Scania Slupsk plant	Scania Södertälje plant
	Category	Production	Production	Production	Production	Production	Production
	Country	France	Sweden	Netherlands	Brazil	Poland	Sweden
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles
	Plant area [ha]	37.3	15.8	11.1	43.2	14.2	421.3
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	38.2	45.8	48.3	29	46.5	29.9
	Mean species abundance (GLOBIO) [%]	26.3	11.2	26.3	26.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	1	1	1	1	1	3
	Names of the protected areas	- Basses vallées angevines, aval de la rivière Mayenne et prairies de la Baumette	- Gammelstadsviken	- De Wieden	- Área De Proteção Ambiental Haras São Bernardo	- Dolina Slupi	- Kvedesta - Brant syd Lanaren - Stangberget

		TRATON Group					
	No.	48	49	50	51	52	53
General information	Site	**Scania Zwolle plant**	**MAN T&B Krakow plant**	**MAN T&B Munich plant**	**MAN T&B Nuremberg plant**	**MAN Pinetown plant**	**MAN Salzgitter plant**
	Category	Production	Production	Production	Production	Production	Production
	Country	Netherlands	Poland	Germany	Germany	South Africa	Germany
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles
	Plant area [ha]	37	116.1	94	35.5	5.4	71.5
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) (VH) - Emissions of toxic soil and water pollutants (M)	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	38.1	37.8	35	33.9	26.4	40.7
	Mean species abundance (GLOBIO) [%]	26.3	26.3	26.3	26.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	3	1	3	4	3	1
	Names of the protected areas	- Rijntakken - Uiterwaarden Zwarte Water en Vecht - Veluwe	- Puszcza Niepolomicka	- Allacher Forest and Angerlohe - Dykes and remnants of fenland in Dachauer Moos - Nymphenburg Park with avenue and Kapuzinerhölzl forest	- Nuremberg Reichswald forest - Rednitz Valley in Nuremberg - Nuremberg Zoo with Schmausenbuck - Sandy heaths in the Middle Franconian basin	- Marion Wood Nature Reserve - New Germany Nature Reserve - Krantzkloof Nature Reserve	- Heerter See lake

		TRATON Group				
	No.	54	55	56	57	58
General information	Site	**MAN Starachowice plant**	**International Motors Huntsville plant**	**International Motors Springfield plant**	**International Motors Tulsa plant**	**Volkswagen Truck & Bus Resende plant**
	Category	Production	Production	Production	Production	Production
	Country	Poland	USA	USA	USA	Brazil
Activity	ISIC Group (ENCORE)	Manufacture of motor vehicles	Manufacture of parts and accessories for motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles	Manufacture of motor vehicles
	Plant area [ha]	29.9	34.4	180.6	51	108.4
Screening of potential impacts and dependencies of activities (ENCORE)	Potential impacts of activity (ENCORE) [M: medium, H: high, VH: very high]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [M] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]	- Disruption (e.g. noise, light) [VH] - Emissions of toxic soil and water pollutants [M]
	Potential dependency of activity on ecosystem services (ENCORE) [M: medium, H: high]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]	- Soil and sediment retention [M] - Water treatment [M] - Regulation of water flow [M] - Flood protection [M] - Storm mitigation [M]
Ecological status of the area	Biodiversity Intactness Index (BII) [%]	45.2	33.1	40.1	24.8	45
	Mean species abundance (GLOBIO) [%]	26.3	27.2	26.3	26.3	26.3
Biodiversity-sensitive areas	Number of protected areas (radius 4,500 m)	2	1	1	1	1
	Names of the protected areas	- Ostoja Sieradowicka - Uroczska Lasów Strachowickich	- Beaver Dam Nature Trail	- Cedar Bog Nature Preserve	- Oxley Nature Center	- Refúgio De Vida Silvestre Estadual Da Lagoa Da Turfeira

2024 non-financial indicators of Volkswagen AG

In the sustainability report, the combined presentation was chosen for the non-financial statement to be submitted in the reporting year in accordance with section 289b through 289e HGB. As regards the information provided above in the sustainability report, all disclosures, regulations, processes described and metrics consistently apply to the Volkswagen Group, including Volkswagen AG. No additional aspects under the *CSR-Richtlinie-Umsetzungsgesetz* (German CSR Directive Implementation Act) were identified that apply exclusively to Volkswagen AG. As the parent of the Volkswagen Group, Volkswagen AG is fundamentally subject to the same expected developments and risks and opportunities. The table below shows the material non-financial indicators of Volkswagen AG.

MATERIAL NON-FINANCIAL INDICATORS OF VOLKSWAGEN AG

	2024
People	
Total workforce (as of December 31)	112,091
Proportion of women in the workforce in %	18.9
Proportion of women at top-management level in %	10.3
Average number of training hours per employee per year	10.3
Total recordable injury rate (TRIR)	12.5
Lost time injury frequency rate (LTIFR)	7.4
Environment	
Total energy consumption in million MWh	1.75
Scope 1 GHG emissions in million t CO_2e	1.37
Scope 2 GHG emissions (market-based) in million t CO_2e	0.09
Total water consumption in million m^3	0.70
Total waste in million t	0.57