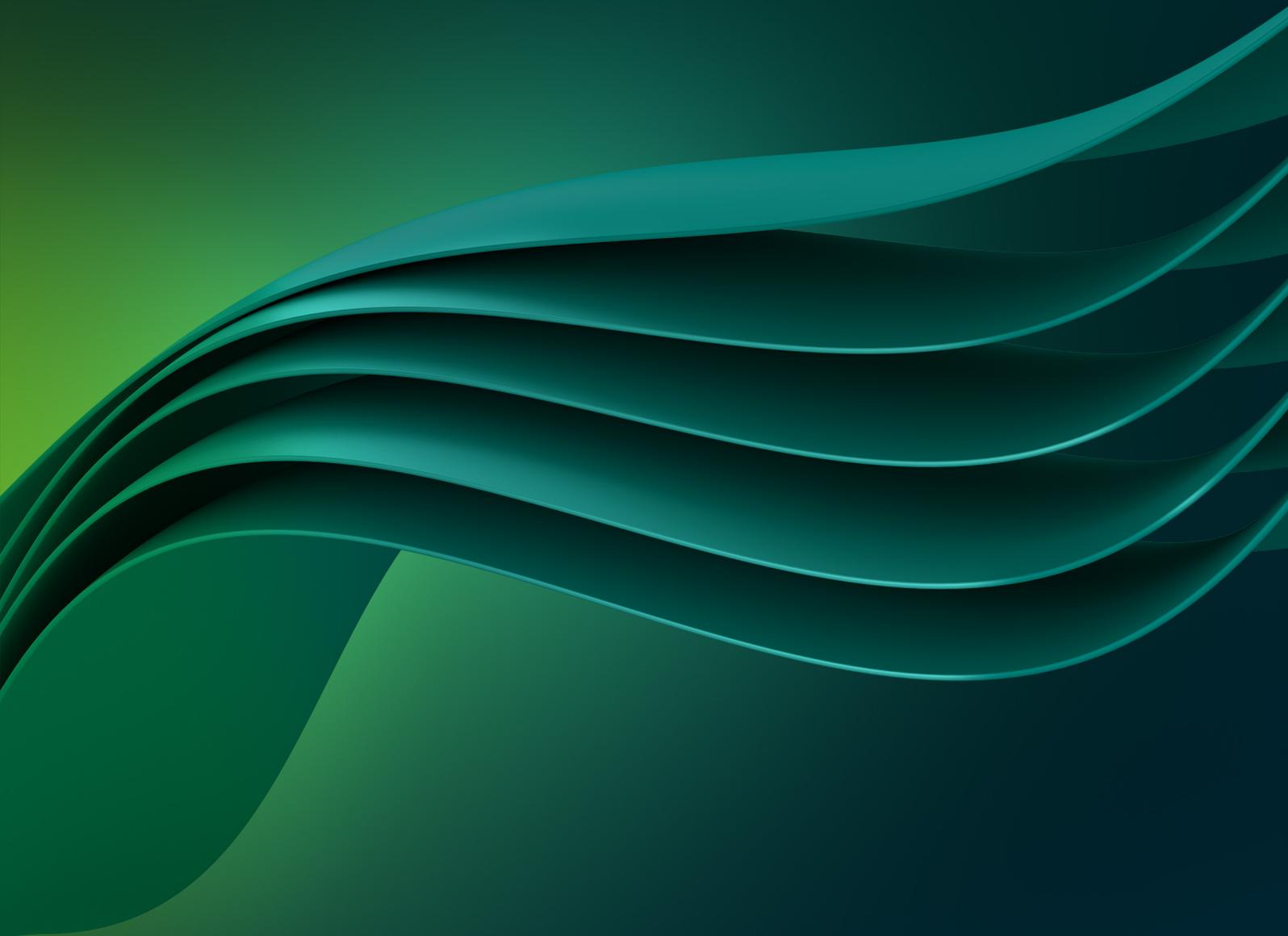


VOLKSWAGEN GROUP

SUSTAINABILITY REPORT

2023



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# Volkswagen Group Sustainability Communication



## Information Accompanying the Reporting

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### ESG KPIs

Indicators along our focus topics are clearly presented in Excel.

### GRI index

GRI content index (with reference)

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Factual information on current and ongoing controversies

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### Responsible Raw Materials Report

Progress on transparency and risk mitigation in the raw material supply chain (annual)

### Association Climate Review Report

Overview of climate policy positions

### Green Finance Report

Implementation of sustainable financing strategies (annual)

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Information on further topics of importance for sustainability and ESG

## International Initiatives

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### UN Sustainable Development Goals

Activities and projects that help achieve the sustainability goals (annual)

### UN Global Compact

Implementation of the Ten Principles of the UN Global Compact (annual)

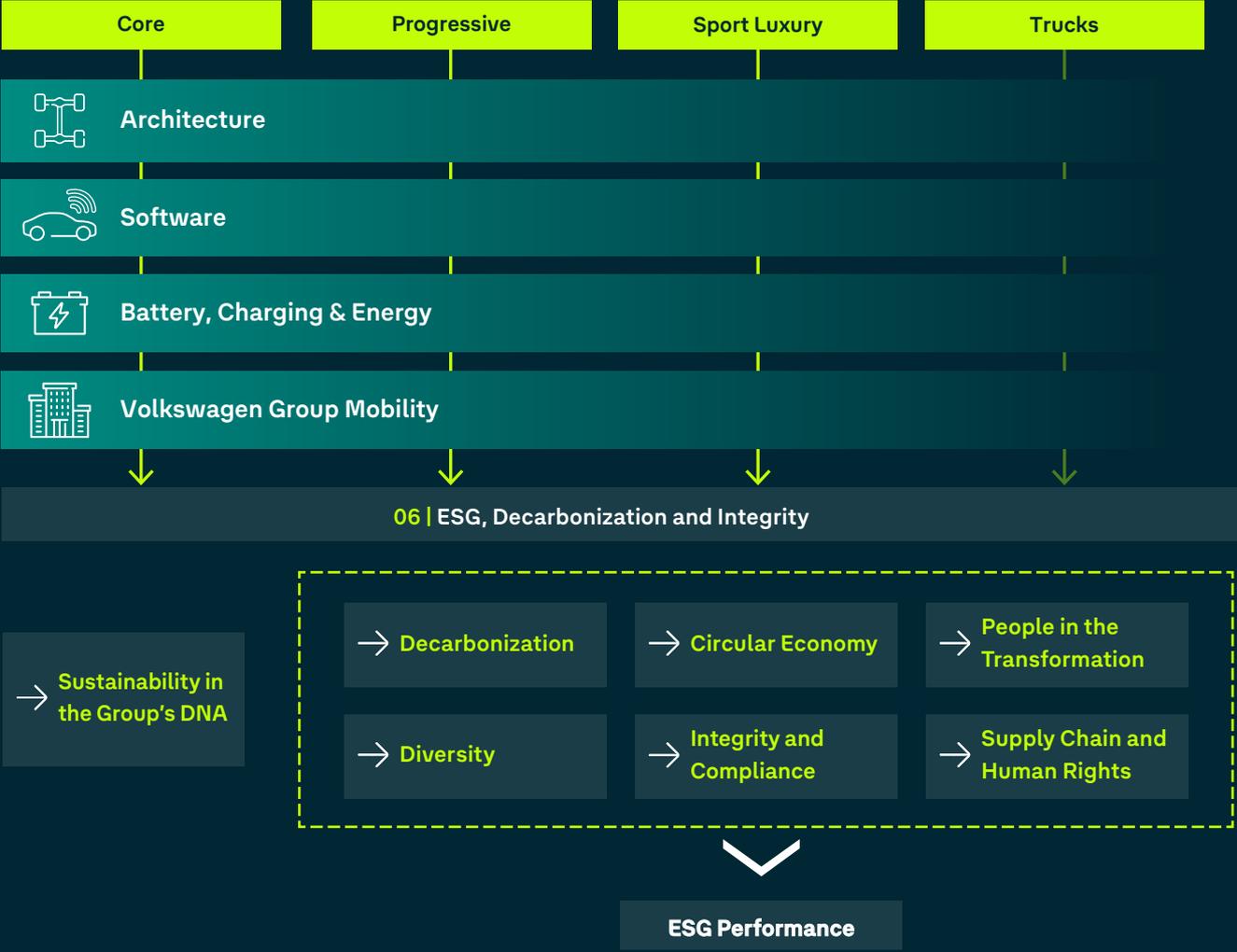
### CDP Score Report – Climate Change

Assessment of climate-related risks, goals and measures

### CDP Score Report – Water Security

Assessment of water resources

# Sustainability and ESG Are Part of the Group Strategy



The aim is to improve performance in the capital market's ESG ratings and rankings so as to increase the ability to invest and optimize the cost of capital.

As we transition from automotive manufacturer to mobility group, we are resetting our priorities with the NEW AUTO Group strategy and positioning ourselves for the future. We are keeping our aim of being a world-leading provider of sustainable mobility firmly in our sights and making the Group more focused, efficient, innovative, customer-oriented and sustainable, as well as systematically gearing it toward profitable growth.

The NEW AUTO Group strategy defines the six key focus issues shown above for the area of sustainability and ESG in Group initiative 6. This Sustainability Report including nonfinancial report is structured in accordance with these.

In addition, the Sustainability in the Group's DNA chapter provides a definition of sustainability for the Group and an insight into topics such as risk management, environmental management, stakeholder management and corporate citizenship.

# Highlights 2023<sup>1</sup>

## → Decarbonization

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Access to  
**600,000 charging points**  
in Europe

By 2030, the whole dealer network's carbon footprint is to be decreased by **at least 30%**.

## → Circular Economy

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More than  
**850,000 metric tons of CO<sub>2</sub>**  
have been saved in net terms since 2017 through the Aluminum Closed Loop.

In 2023, we processed  
**77,090 tools**  
to make them suitable to return to use.

## → People in the Transformation

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**14.3 million**  
training hours in the  
Volkswagen Group

**72 locations**  
are certified in accordance  
with ISO 45001.

## → Diversity

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**94%**  
of managers have taken part in the  
Diversity Wins@Volkswagen program.

**Proportion of women**  
in management worldwide and  
internationality of top management  
increased.

## → Integrity and Compliance

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In 2023, more than  
**4,100 business partners**  
were audited.

**1,551**  
inquiries were processed at the  
compliance information point.

## → Supply Chain and Human Rights

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**7,791**  
direct suppliers worldwide  
were trained on sustainability.

Suppliers with a positive S rating  
account for  
**79% of revenue**  
in the total procurement volume.

<sup>1</sup> Further information on the figures on this page, such as definitions and scope, can be found in the relevant chapters.

# Foreword

GRI 2-22



Oliver Blume,  
Chairman of the Board of Management of Volkswagen AG



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

## Dear stakeholders and colleagues,

Values create value. We in the Volkswagen Group remain true to this principle. It's an important compass for our actions. And this stance lets us sustainably create long-term added value. For our staff, for our customers, for our investors – and for society as a whole. As one of the world's largest industrial groups, we carry a special responsibility. We can make a difference. We want to and will seize this opportunity.

We think of sustainability holistically – in terms of nature, people, society and value-adding entrepreneurship. From the supply chain through our production to the delivery and use of our products. Our goal is to help to shape nature and society positively. That's ambitious. And it will take a great deal of work. At the same time, achieving this goal is an obligation – internally to our colleagues and externally to our customers, society and, in particular, future generations.

**Sustainability Strategy: Clear Goals, Clear Responsibility**  
Sustainability is one of our top priorities. As a strategic field, we set ourselves clear goals and plans for sustainability – which are binding with clear responsibilities. The focus is on implementing our strategic measures.

We also leverage the synergies in the Volkswagen Group here: All goals are systematically broken down into goals for the brands and Group companies. Management has personal responsibility for complying with these.

### **Decarbonization: What Drives Us**

The Volkswagen Group is clearly committed to electric mobility. Inspirational product innovations of recent weeks and months – such as the Audi Q6 e-tron, the VW ID.7, the Porsche Macan electric or the long wheelbase version of the ID. Buzz – show that e-mobility is synonymous with emotion and fascination. Our delivery figures confirm this trend too. In 2023, the Volkswagen Group delivered 771,100 all-electric vehicles. This is equivalent to a year-on-year rise of 34.7%. The share of deliveries accounted for by all-electric vehicles increased to 8.3%.

A key lever for reducing emissions is production: Our aim is to reduce production-related CO<sub>2</sub> emissions from passenger cars and light commercial vehicles 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 degrees Celsius with this objective for the production phase (Scope 1 and 2). SBTi has confirmed that the aim of reducing CO<sub>2</sub> emissions by 30% in the use phase (Scope 3) is in line with limiting global warming to two degrees Celsius. This confirmation spurs us on.

The Volkswagen Group is aiming to reduce the average CO<sub>2</sub> emissions per vehicle (passenger cars and light commercial vehicles) over the entire life cycle by 30% by 2030 compared with 2018.

Ramping up electric mobility and expanding renewable energies go hand in hand here. That's why we are supporting the construction of wind farms and solar parks on an industrial scale. New wind farms and solar parks are to be constructed in several regions of Europe by 2025. In Germany, for example, Volkswagen supported the construction of a solar plant with a total capacity of 170 million kWh a year. The plant in Tramm-Göthen in Mecklenburg in northeastern Germany is the largest of its kind in Germany with around 420,000 solar panels.

### **The Team: Engine of the Transformation**

Employees are any company's most valuable asset. The Volkswagen Group is only as strong as the people who work for it. Particularly in times of skills shortages, employer attractiveness is vital for companies' future viability.

Our sector's shift toward e-mobility but also toward new business models and digitalization brings with it considerable changes for many workers. Jobs are being realigned, and new fields of work are emerging, while others permanently disappear. We are managing and monitoring these changes in a sustainable and socially responsible manner in the interests of our colleagues. This is also very much intended to ensure corporate success. Because employer attractiveness

has long been more than a question of salary. Talented individuals also assess potential employers on factors such as flexibility, work-life balance, diversity, social benefits and personal responsibility.

What do these changes mean for the Volkswagen Group? The responsibility for "people in the transformation" is at the core of our current and future activities in human resources. The "Transform to Tech" Group People Strategy, which the Group Board of Management adopted in 2021, plays a key role.

When it comes to training, the Volkswagen Group's focus is on training colleagues on future technologies. This includes closely supporting them in the transformation process. For example, Volkswagen specifically added courses on e-mobility to its professional training program with the aid of the Volkswagen Group Academy. Newly designed and innovative programs from our Health department look after our employees' psychological safety during the transformation. And where major changes are planned in a factory or office, we have transformation offices on hand. They are intended to give people an outlook for the future and provide a clear direction for the change process in the transformation. Job security until 2029 at Volkswagen AG gives employees the support they need.

### **Holistic Responsibility: The Supply Chain at a Glance**

In addition to responsibility for its own employees, the Volkswagen Group also has a global responsibility. The German Supply Chain Due Diligence Act, which has been in force in Germany for more than a year, has a special role here. Focuses include protecting human rights and minimizing environmental risks – both topics the Volkswagen Group identifies with through and through. The Sustainability Procurement Network shares information between our brands and regions, which serves as a component in managing sustainability in our supply chains. More than 110 experts from five continents work together in the network. The network allows the identification of current developments and challenges in the regions of the world and enables joint solutions to be developed. This is crucial because Volkswagen has over 63,000 direct suppliers in more than 95 countries.

### **Technology: The True Key to Sustainability**

The Volkswagen Group has been a technology company for many decades. This is expertise we will also use in sustainability because we believe that technology is the key to progress in the sustainability strategy. As the Volkswagen Group, we are one of the few companies in the world that is taking the strategic expansion of technology leadership in electric mobility fully into its own hands – from cell and battery research to the development and production of breathtaking electric vehicles.

Since PowerCo was launched in July 2022, the battery company has already defined three sites (Salzgitter, Valencia and St. Thomas), introduced the concept of the unified cell, founded a joint venture with Umicore to produce cathodes and introduced activities to secure the supply of raw materials. We are also taking on the task of expanding the charging infrastructure. By 2025, the Volkswagen Group wants to enable more than 40,000 fast-charging points in China, North America and Europe to be put into operation.

The Volkswagen Group stands for tradition and for strong brands. For advancing developments and overcoming challenges. Today, we are undergoing automotive history's greatest transformation: We want to enable sustainable mobility for generations. Sustainability is deeply rooted in the Volkswagen Group's identity. It is an integral part of our Group strategy. For 2024, we are providing important and targeted new impetus. The Volkswagen Group is aware of its role, importance and responsibility. Together, we will do everything we can to make our important contribution – with team spirit, fairness and passion.

Daniela Cavallo and Oliver Blume

# About This Report

## Report Structure

This 2023 Group Sustainability Report is based on internationally established frameworks and requirements, such as the standards of the Global Reporting Initiative (GRI, see also following section), the German CSR Directive Implementation Act (*CSR-Richtlinie-Umsetzungsgesetz* - CSR-RUG), ESG sustainability ratings (Environmental, Social, Governance) and stakeholder expectations. The report is supplemented by a detailed description of the sustainability activities of our brands and regions and of the Volkswagen Group's corporate citizenship projects.

Further information, particularly information relevant to ESG investors - for example, ESG KPIs - is available on the Group's corporate website and is not part of this report.

 → [www.volkswagen-group.com > ESG-Performance & Reporting](http://www.volkswagen-group.com > ESG-Performance & Reporting)

For reporting year 2023, Volkswagen AG is issuing a non-financial statement at Company level and a nonfinancial Group declaration, which are being published together as a combined separate nonfinancial report within the meaning of

German Commercial Code (*Handelsgesetzbuch* - HGB) sections 289b para. 3 and 315b para. 3. The nonfinancial report is drawn up in accordance with HGB section 315c, in conjunction with sections 289c through 289e. In line with the German CSR Directive Implementation Act (CSR-RUG), this nonfinancial report concentrates on the focus issues necessary for an understanding of the Volkswagen Group's business development, overall performance and position as well as the Volkswagen Group's impact on nonfinancial aspects. We are again reporting on our climate protection activities in line with the requirements of the Task Force on Climate-related Financial Disclosures (TCFD).

Furthermore, the GRI Standards are used as the framework for drawing up the nonfinancial report. In this Sustainability Report, Volkswagen systematically uses the GRI Standards (with reference) as the underlying structure for reporting on management approaches and the specific standard disclosures. The GRI Content Index has been separated from the 2023 Sustainability Report and can be found as a separate document in the Group portal:

 → [www.volkswagen-group.com > Reporting](http://www.volkswagen-group.com > Reporting)

## Volkswagen Group Sustainability Communication



As a member of the United Nations Global Compact, we also continuously report how we are putting the Ten Principles into corporate practice. Our current progress report can be found on the UN Global Compact's website:



The strategy chapter and the six following chapters on focus issues in the report each consist of a text section plus a consolidated KPI table at the end of each chapter.

References to disclosures outside the nonfinancial report are supplementary information and do not form part of this report. The following passages are also not part of the non-financial report:

- Volkswagen Group Sustainability Communication (pp. 3–4)
- Foreword (pp. 6–8)
- The German Corporate Governance Code – A Blueprint for Successful Corporate Governance (p. 15)
- Further Information; The Volkswagen Value Chain (p. 16)
- Making the Social and Environmental Impact of Our Actions Measurable (p. 24)

The information in this report relates to the Volkswagen Group as a whole. Where information relates to individual Group divisions only, this is clearly indicated in the text. Unless indicated otherwise, any information provided for the Group also applies to Volkswagen AG. In addition to Volkswagen AG, the Group includes all major subsidiaries inside and outside Germany that are directly or indirectly controlled by Volkswagen AG.

In the financial data, our joint ventures in China are reported using the equity accounting method. However, they are included in full (100%) in volume-related data (sales, production and workforce) and in production-related environmentally relevant data. The management approaches described in this report (e.g., the environmental compliance management system) apply to all the Volkswagen Group's controlled companies. With our non-controlled companies – i.e., companies that are not controlled by a company of the Volkswagen Group as the majority owner – we work to the extent feasible and permitted by law toward implementation of the adjusted management approaches. The Chinese joint ventures are included in the information on the Volkswagen Group in the KPIs and the associated targets on the topics of reduction of the environmental impact of production (UEP), the decarbonization index (DCI), the Opinion Survey, the diversity index, training hours per employee, accident indices and accident figures. The risks of the Chinese market are assessed by Volkswagen China Investment Company Ltd.

The KPIs presented in this report build on the indicators presented in previous years. Any material changes to data collection or to measurement methods for our sustainability performance are explicitly disclosed by the respective KPIs. All figures shown in the report are rounded, so minor discrepancies may arise from addition of these amounts.

## Report Auditing

EY GmbH & Co. KG Wirtschaftsprüfungsgesellschaft conducted a voluntary, limited assurance engagement in accordance with ISAE 3000 (Revised) on the combined separate nonfinancial report prepared in accordance with HGB sections 289b para. 3 and 315b para. 3 to verify that its disclosures comply with the relevant statutory requirements. Further information on the engagement can be found in the independent practitioner's report on a limited assurance engagement on the nonfinancial reporting.

## Disclosures in Connection with the Annual Financial Statements

No material special items in connection with the diesel issue were recognized in fiscal year 2023.

To hedge the currently known legal risks related to the diesel issue, the provisions for litigation and legal risks as of December 31, 2023 include an amount of around €0.9 (1.4) billion, based on existing information and current assessments. Insofar as these can be adequately measured at this stage, contingent liabilities relating to the diesel issue were disclosed in the notes to the consolidated financial statements in an aggregate amount of €4.0 (4.2) billion, whereby €3.8 (3.6) billion of this amount results from lawsuits filed by investors in Germany. The provisions recognized, the contingent liabilities disclosed, and the other latent legal risks in the context of the diesel issue are in part subject to substantial estimation risks given the complexity of the individual relevant factors, the ongoing coordination with the authorities, and the fact that the fact-finding efforts have not yet been concluded. Should these legal or estimation risks materialize, this could result in further substantial financial charges. In particular, adjustment of the provisions recognized in light of knowledge acquired or events occurring in the future cannot be ruled out.

The remaining provisions relate to a wide range of identifiable individual risks, price risks and contingent liabilities, which are factored in in the amount of their probable occurrence. Depending on the jurisdiction concerned, risk provisions for any non-compliance with statutory emissions limits are also included. Their measurement takes into account,

among other things, the respective sales volume and the legally defined fee or the cost of acquiring emission rights from other manufacturers. Advantage has been taken of synergies between individual brands of the Volkswagen Group by establishing emission pools where possible. Additional information on this matter and the valuation assumptions and bases can be found in the Annual Report in the notes to the consolidated financial statements.

### Additional Reporting within the Group

By referencing this combined separate nonfinancial report, all Group companies that are required by national legislation to disclose nonfinancial and diversity-related information pursuant to Directive 2014/95/EU but do not issue their own nonfinancial statement are exempted from the obligation to submit their own nonfinancial reports.

### Terminology Relating to Climate Protection

The use of the term CO<sub>2</sub> emissions in this report includes the consideration and identification of additional climate-damaging greenhouse gases such as methane (CH<sub>4</sub>) and laughing gas (N<sub>2</sub>O) (CO<sub>2</sub> equivalents). All figures in this report on CO<sub>2</sub> emissions correspond to CO<sub>2</sub> equivalents, except for fleet emission figures.

Net carbon neutrality is achieved when anthropogenic CO<sub>2</sub> emissions are balanced worldwide through avoidance, reduction and offsetting over a specific period of time. With regard to climate protection, in addition to CO<sub>2</sub> emissions, Volkswagen also pays attention to other relevant greenhouse gases. Avoidance and reduction have priority over offsetting for the Volkswagen Group. For offsetting measures, the Group follows internationally established standards.

### Editorial Notes

Whenever this report uses the term Sustainability Report, this expression includes the nonfinancial report each time it is mentioned, to the extent described on page 10.

### Reporting Practices

The nonfinancial report is published annually. The last nonfinancial report was published on March 12, 2023. In addition to information about the Group's sustainability activities in the 2023 fiscal year (January 1 to December 31, 2023), this 2023 nonfinancial report also contains selected information from the 2024 fiscal year.

### About This Report

The editorial deadline was February 14, 2024. The Group Sustainability Report is published in the first quarter of 2024 and is also available in the original German. In the event of any discrepancies, the German authoritative version of the document takes precedence over the English translation.

### Legal Information

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

# Sustainability in the Group's DNA

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# Corporate Governance

GRI 2-1, 2-6

## Outline of the Legal Structure of the Group

Volkswagen AG is the parent company of the Volkswagen Group. It develops vehicles and components for the Group brands, but 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 Bank GmbH 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 German Commercial Code (*Handelsgesetzbuch* – HGB), which can be accessed on the website and is part of the annual financial statements.



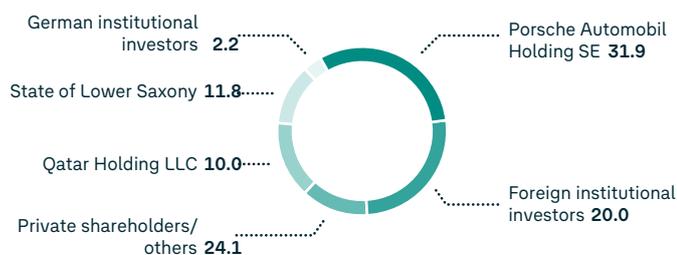
→ [www.volkswagen-group.com](http://www.volkswagen-group.com) > Annual Financial Statements

Volkswagen AG is a vertically integrated energy supply company as defined by section 3 no. 38 of the German Energy Supply Industry Act (*Energiewirtschaftsgesetz* – EnWG) 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.

The Volkswagen AG Board of Management has sole responsibility for managing the Company. The Supervisory Board appoints, monitors and advises the Board of Management; it is consulted directly on decisions of fundamental significance for the Company.

## Volkswagen AG Shareholder Structure

as of December 31, 2023, in % of voting capital



## Employees by Market

as of December 31, 2023, in %



## Organizational Structure of the Group

The Volkswagen Group is one of the leading multi-brand groups in the automotive industry. The Group's business activities comprise the Automotive and Financial Services divisions. 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 and vehicle software, 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, production and sale of trucks and buses, the corresponding 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 Financial Services Division's activities comprise dealer and customer financing, leasing, direct banking and insurance activities, fleet management and mobility services.

With its brands, the Volkswagen Group is present in all of the markets around the world that are relevant for the Group. The key sales markets currently include Western Europe, China, the USA, Brazil, Türkiye, Mexico, Poland and the Czech Republic.

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" (formerly "Finance"), "Human Resources and Trucks brand group" (formerly "Human Resources and Truck & Bus"), "Integrity and Legal Affairs", "Progressive brand group" (formerly "Premium"), "Sport Luxury brand group" (formerly "Sport & Luxury"), "IT", "China", and "Core brand group" (formerly "Volume"). 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 helps the Board of Management to focus on key tasks such as strategy, central decisions on the Company's direction, capital allocation and financial requirements. 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, human resources and management issues. In addition to the responsible members of the Board of Management, the relevant central departments and the relevant functions of the

divisions are also represented on the committees. 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 corporate strategy and to further increase the efficiency of their decision making. This reduces complexity and reinforces governance within the Group.

As part of the "Group Steering Model" base initiative from the NEW AUTO Group strategy, a new leadership model for the Group was presented at the Capital Markets Day in June 2023 that will sharpen the focus on customer orientation, entrepreneurship and team spirit. It follows the "value over volume" principle, prioritizing sustainable value creation over volume growth. As part of this, the brand groups will receive a new steering model. In addition, the brand positioning and the product range are to be sharpened. The realignment also included a renaming of the brand groups: Volume has become Core, Premium is now called Progressive, Sport & Luxury has been changed to Sport Luxury, and Truck & Bus to Trucks.

The Core brand group comprises the Volkswagen Passenger Cars, Škoda, SEAT/CUPRA and Volkswagen Commercial Vehicles brands. The Progressive brand group comprises the Audi, Lamborghini, Bentley and Ducati brands. The Sport Luxury brand group consists of the Porsche brand. The company responsible for this brand, Dr. Ing. h.c. F. Porsche AG (Porsche AG), has been listed on the stock market since the end of September 2022. In the Trucks brand group, TRATON SE acts as the umbrella for the Scania, MAN, Volkswagen Truck & Bus and Navistar commercial vehicles brands. TRATON SE is also a listed company.

In addition to the strengthening of the brand groups, the reorganization and expansion of new units also enabled substantial progress to be made with the "Architecture", "Software", "Battery, Charging & Energy", and "Volkswagen Group Mobility" technology platforms in the reporting year. The structures and product processes at the software subsidiary CARIAD will be optimized further.

We are convinced that our corporate structure, which efficiently 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. Clear responsibilities and a high degree of business responsibility in the brand groups and technology platforms will enable comprehensive implementation of the Group's NEW AUTO strategy.

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 with 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 be agreed upon, to the extent permitted by law. 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 interests 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.

### Material Changes in Equity Investments

In May 2023, the Volkswagen Group completed the sale of its shares in OOO Volkswagen Group Rus (Volkswagen Group Rus), Kaluga/Russia and its local subsidiaries (OOO Volkswagen Components and Services, Kaluga/Russia, OOO Scania Leasing, Moscow/Russia, OOO Scania Finance, Moscow/Russia, OOO Scania Insurance, Moscow/Russia) to OOO ART-FINANCE, Moscow/Russia, which is supported by the Russian automotive dealer AO Avilon Automotive Group, Moscow/Russia. On registration of the transaction – also in May 2023 – ownership of the shares in Volkswagen Group Rus was transferred from the seller to the buyer. The transaction includes the production facilities in Kaluga, the importer structure of the Group brands Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Audi, Škoda, Bentley, Lamborghini and Ducati for potential after-sales business and the warehousing activities as well as Scania financial services activities with all associated employees.

### Legal Factors Influencing Business

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

### The German Corporate Governance Code – A Blueprint for Successful Corporate Governance

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

The Group Corporate Governance Declaration is available in the Annual Report and is permanently accessible on our website.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Declaration of Conformity

## Further Information

Explanations of the composition, working methods and diversity concept of the Board of Management and the Supervisory Board and information on voting rights are available in the Corporate Governance chapter in the 2023 Annual Report.

 → [2023 Annual Report > Corporate Governance](#)

Extensive explanations of the remuneration system and the individual remuneration of the members of the Board of Management and Supervisory Board can be found in the Remuneration Report for fiscal year 2023, which forms part of the 2023 Annual Report, in the notes to Volkswagen's 2023 consolidated financial statements and in the notes to the 2023 annual financial statements of Volkswagen AG.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Remuneration

The Volkswagen AG Group Board of Management has adopted an update of the tax strategy principles, which has been published on Volkswagen AG's website.

Each year, Volkswagen AG sends the German Federal Central Tax Office a country-by-country report, which includes information on tax payments and tax expenses/income by country.

The Volkswagen Group has the ambition of implementing its marketing and communication activities transparently and responsibly. This includes attentiveness toward our environment and requires us to treat all individuals with respect and honesty and as equals. This applies internally and externally, online and off. To this end, the Group has developed principles that serve as a compass for implementing the Volkswagen Group's values with regard to marketing and communication activities.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Policies

## The Volkswagen Value Chain

### Research & Development

The Automotive Division's research and development costs in the reporting year totaled €21.7 billion and were thus 14.8% higher than in the previous year. In addition to new models, our activities focused above all on the electrification of our vehicle portfolio, digitalization, new technologies and enhancements of our modular and all-electric toolkits and platforms.

### Procurement

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

### Production

The Volkswagen Group manufactured an average of more than 26,660 vehicles globally every working day in 2023. Efficient production ranks alongside environmental protection and employee health and safety as one of our core goals.

### Marketing & Sales

Business relationships with fleet customers are often long-term and stable partnerships. The Volkswagen Group's share of commercial fleet customers is 47.0% in Germany and 27.6% in the rest of Europe.

### After Sales & Financial Services

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

### Recycling

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

# NEW AUTO Group Strategy

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In the context of the fast-changing environment and the challenges resulting from it, the Group Board of Management adopted the Group strategy "NEW AUTO – Mobility for generations to come" in May 2021 with the approval of the Supervisory Board. The strategy's focus is the world of mobility in 2030.

As technology advances, the automotive industry is rapidly forging ahead with its transformation toward e-mobility and digitalization. We therefore expect the market for electric vehicles 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.

The shift to connected, intelligent and eventually self-driving vehicles, will, however, bring more wide-reaching changes for the automotive industry. Autonomous driving will change the customer's mobility experience forever and lay the ground for new business models. Sources of revenue will gradually shift and will expand beyond the core product of the automobile. Increasing software development capabilities in order to excite customers with constantly improving digital functionality is the prerequisite for this.

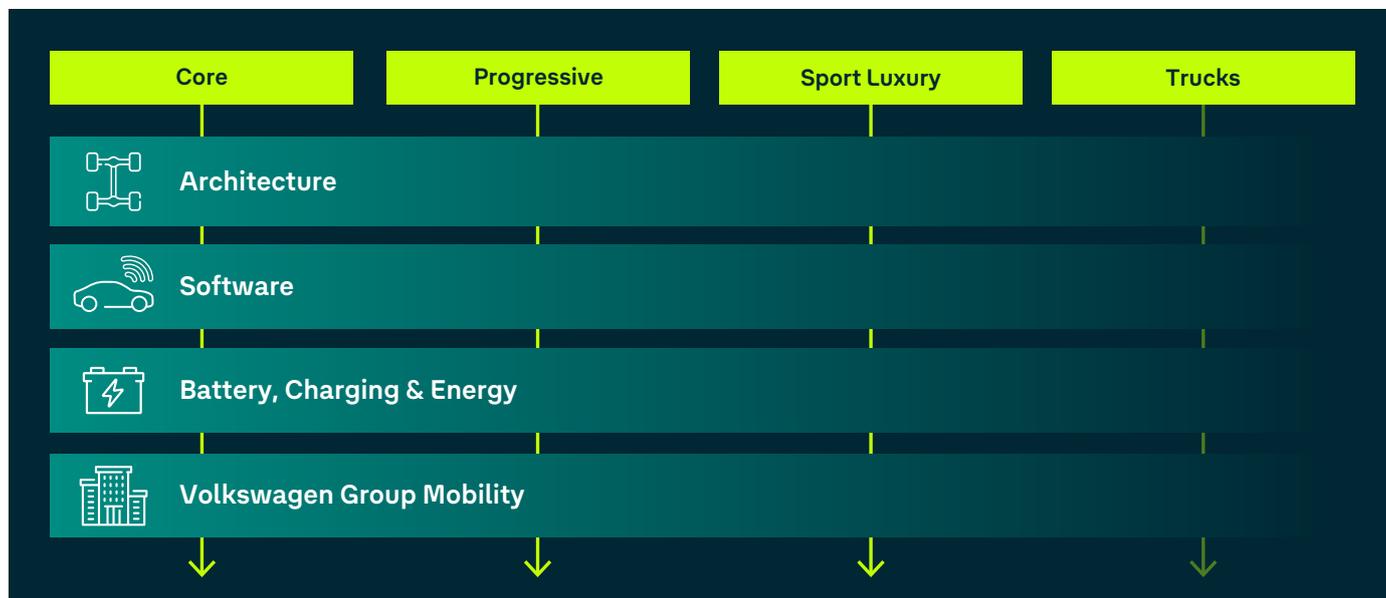
In equal measure to technological trends, the global economic and geopolitical environment is also posing increased challenges for the automotive industry. These include, for example, the economic influence of the largest mobility markets, China, the USA and Europe, and their diverging development.

Sustainability will continue to be a recurring theme in the business world and will gain further pertinence, driven by the increasingly noticeable consequences of climate change, a greater consciousness of sustainable lifestyles on the part of the customer and, not least, underlying factors such as the Paris Climate Agreement. As we transition from automotive manufacturer to mobility group, we have reset our priorities with NEW AUTO and are positioning ourselves for the future. We are keeping our aim of being a world-leading provider of sustainable mobility firmly in our sights and making the Group more focused, efficient, innovative, customer-oriented and sustainable, as well as systematically gearing it toward profitable growth.

To this end, we have established clearly defined Group initiatives across the brand groups, with a focus on our central technology platforms: "Architecture", "Software", "Battery, Charging & Energy", and "Volkswagen Group Mobility". Furthermore, base initiatives form the foundation for the Volkswagen Group's strategic realignment. These are "ESG, Decarbonization & Integrity", "Business Model 2.0", "North America (NAR) Region", "China Region", "Group Steering Model", "People & Transformation" and "Financing the Transformation", which are described below.

The most important targets for each calendar year are defined, and a Top 10 program is developed at Group level so that the strategy can be implemented in operations throughout the year. Priorities in the Group's Top 10 program for 2023 were financial robustness and planning, products, the China and North America regions, software, technologies, battery and charging, mobility solutions, sustainability, and capital markets. This Top 10 program methodology has been adopted by many business units in their functional area strategies, and it is being used to accelerate the implementation of the strategy with a high level of focus.

## NEW AUTO with Focus on Technology Platforms



To make the progress in our focus topics – consisting of the initiatives of the NEW AUTO strategy and the objectives of the Group’s Top 10 program applicable to the fiscal year – as transparent as possible for management and employees, the Group Board of Management decided to structure and regularly measure the strategic objectives and milestones using the OKR (Objectives and Key Results) method. Accordingly, strategic objectives and envisaged key results are defined for all focus topics. These are to be realized largely through time-limited projects and work packages, each of which is measured by specific key performance indicators. The degree of achievement is usually presented to the Board of Management three times a year. As such, 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 or integrated into standard operations.

We report on the main targets achieved and key results in the fiscal year in the “Management and Key Figures”, “Structure and Business Activities” and “Sustainable Value Enhancement” chapters of the Annual Report.

### Architecture

A future-oriented mechatronics platform will form the backbone for innovations, technology and lasting competitiveness at Volkswagen. With the Scalable Systems Platform (SSP), we are creating the next generation of an all-electric, fully digital and highly scalable mechatronics platform on the basis of a standardized software architecture. With this standardized platform, which can be scaled from the smallest vehicles all the way up to the premium segment, the Volkswagen Group aims to rapidly and efficiently provide its customers with innovative functions and technologies in their vehicles, across all brands. By reducing complexity and the number of versions, the SSP will offer us maximum synergy effects and make fast, regular technology updates possible, while lowering investment costs and ensuring the necessary differentiation between the products of the individual brands in the Group’s portfolio.

 → [2023 Annual Report > Group Management Report](#)

## Software

The purpose of the Group's own software and technology company CARIAD is to create the technical basis for data-based business models, new mobility services and automated driving (Level 4) and to leverage cross-brand synergies. Here we are pursuing the following strategy: We intend to develop software for central control points in the vehicle either in-house or together with third parties in strategic partnerships. CARIAD is collaborating with leading technology companies to integrate further innovative solutions. Together with the Porsche and Audi brands, CARIAD is working to introduce the new E3 1.2 platform, which optimizes the interaction between the hardware and the vehicle software and is also intended to serve as a key lever for data-driven development and for the introduction of new services even after vehicle production has begun.

In the long term, the standardized E<sup>3</sup> 2.0 software architecture is to form the basis of a complete digital ecosystem, offering customers a wide range of software-based services throughout the entire product life cycle. The software-centric approach of the E<sup>3</sup> 2.0 architecture constitutes a paradigm shift in vehicle development. This is to form the basis for the Volkswagen Group's software-defined vehicles. The aim is for every function that is needed or requested, and for every service, to be customized for the customers in the various markets and to be available for download at any time. This will also open up new sources of revenue for us.

Applications at various levels of automated driving (up to Level 4) are to be gradually introduced to the new vehicle models in the Group brands. In this context, CARIAD is responsible for developing software and a technology stack for automated driving.

## Battery, Charging & Energy – Cell and Battery Strategy

The battery is a key component in an electric vehicle and an important cost factor. The appeal and market success of e-mobility is determined not only by the price, but also by the vehicle's range and its charging speed. In order to achieve our objective of transforming into a world-leading provider of sustainable mobility, we intend to become a profit-generating expert across the entire battery life cycle. To this end, the Cell and Battery Strategy tech initiative pools expertise across the Group and is driving the transformation process in cooperation with our strategic partners.

The aspects covered include battery development, cell production, vertical integration, large-scale storage systems, and recycling. Our primary aim is to develop battery cell technology into a core competence in the Group, and we are also working with partners to achieve this. At the heart of this strategy is the unified cell, which can contain differing chemistries and is to be used in up to 80% of Group models by 2030. The economies of scale this generates are expected to reduce costs by up to 50% and put us in a leading cost position. To cover the high demand for battery cells, Volkswagen plans to build its own gigafactories around the world. The cornerstone for these activities was laid in Salzgitter/Germany. Using the standard factory concept to optimize investment, further factories are to follow swiftly in Valencia/Spain and St. Thomas/Canada. The aim is to meet about half of the rapidly growing need for battery cells ourselves by 2030.

## Battery, Charging & Energy – Charging and Energy Services

A sustainable, stable charging and energy infrastructure is a key prerequisite for accelerating the transformation to the battery-electric mobility of the future. It is therefore our intention to also become a comprehensive charging and energy service provider in future, and we are investing heavily in the worldwide development of an open, fast-charging network. By 2025, we and our partners plan to create around 45,000 high-power charging points in Europe, China and the USA. The product portfolio also includes the full range of charging solutions for private customers and companies. In addition to our own wall box and flexible fast-charging station (Flex-pole), the focus is particularly on contract-based charging services and smart green electricity tariffs. The aim is for charging processes to be controlled in such a way that they tap into renewable energy, thus reducing the pressure on the power grids. In a next step, Volkswagen intends to use the electric vehicle as a mobile power bank, and thus help to enable electric vehicles to act as additional storage units and become an active part of the energy system in the future. In this way, Volkswagen wishes to make its customers part of the smart-charging and energy ecosystem for decarbonized mobility. Our goal here is farsighted use of scarce resources in the electric power industry.

### **Volkswagen Group Mobility**

In keeping with its mission statement, "Mobility for generations to come", the Volkswagen Group is developing mobility solutions for the future, taking into account global trends and changes in customer needs. The Group plans to bring together all of its brands' mobility services on one mobility platform over the coming years. Autonomous driving combined with new mobility solutions is expected to mark Volkswagen's transformation into a leading provider of sustainable mobility. A vehicle fleet covering all of the many services, from vehicle rental to car subscription and ride pooling, is to ensure high availability, usage and profitability. With these solutions, we plan to gain market shares and generate long-term competitive and attractive margins.

### **ESG, Decarbonization and Integrity**

ESG (Environmental, Social, and Governance) refers to the basic principles of doing business sustainably. The Group's stakeholders (e.g., investors, employees, customers and non-government organizations) have high expectations of the Company's ESG performance, including in areas such as decarbonization, circular economy and integrity, and also of its conduct as an employer and as part of society. The Group's ESG performance therefore directly affects its market capitalization, cost of capital and investing activities. We aim for a top position relative to our competitors in sustainability ratings. We are committed to the Paris Climate Agreement and align our own activities with the 1.5 degree target. We aim to achieve net carbon neutrality by 2050. By 2030, we have also set ourselves the target of reducing CO<sub>2</sub> emissions from passenger cars and light commercial vehicles over the total life cycle by 30% compared with 2018. As part of this effort, we are looking for ways to increase the proportion of renewable energy sources used in the product emergence process and the proportion of recyclable materials in our vehicles. We also wish to be perceived as a benchmark for ethical corporate conduct. Volkswagen sees itself as an equal opportunities employer. The intention is therefore for at least a fifth of Group management positions to be held by women by 2025, and for at least a quarter to be held by international managers.

### **Business Model 2.0**

The Business Model 2.0 base initiative is developing a Group-wide portfolio of services, the purpose of which is to create a seamless and innovative product experience to connect brands, customers, dealerships, our partners and whole markets. The aim is for the key technologies needed for this to be integrated into a majority of the platform-based vehicles by 2030. Using connected vehicles, the Group's brands are to be able in the future to remain in contact with their customers throughout the entire vehicle life cycle and thus to offer them services and functions for their individual needs. This will allow us to build a competitive, data-driven service portfolio that also maintains our strong position in the automotive market in future.

### **North America (NAR) Region**

For the Volkswagen Group, the North America region, and particularly the USA, has a great growth potential, especially where e-mobility is concerned. We intend North America to become our third core region alongside Europe and China by 2030. Our aim there is to achieve a very strong increase in total market share for the Volkswagen Group by then.

We aspire to further expand our presence in the region with strong brands and prepare ourselves for the future with market-specific products.

We also wish to participate to a disproportionately high extent in the growth of the increasingly electrified markets in the USA and Canada. We will therefore substantially expand our range of all-electric models across the Group and develop models specifically for these markets. With our new vehicle brand Scout, we intend to address the core segments of the North American electric vehicle market with tailor-made products. The proportion of battery-electric vehicles in our sales in the USA and Canada is to increase to 55% by 2030.

In addition, we wish to maximize the potential for synergies in the region and build more expertise, industrial capacity and vertical value chains in the North America region.

### China Region

China is of major strategic significance to the Volkswagen Group as its largest single market. All key measures are therefore brought together in this strategic base initiative in order to continue Volkswagen's success story in China. These include localized development activities that are tailored to the market (the in China for China approach), competitive products, the deepening of our existing partnerships and forging of new ones, and a comprehensive program of measures for achieving a permanent reduction of costs to safeguard long-term profitability.

Our aim for 2030 is to take a leading role in China as an international mobility provider and manufacturer of fully connected vehicles. As part of our localization strategy (in China for China), we therefore want to pool and expand our local development capacity to a greater extent in the coming years. In so doing, we want to considerably speed up the development of intelligent connected vehicles (ICVs) and be in a position to offer tailor-made products to our Chinese customers faster. In the market for vehicles with conventional drive systems, we want to further strengthen our share of the market with new vehicles and secure it for the long term, as these vehicles' high unit sales will also make a corresponding contribution to profitability in future.

### Group Steering Model

To achieve the objectives of the Group strategy and thereby safeguard the Volkswagen Group's long-term success, we are extensively optimizing our Group Steering Model. It is essential that we establish a consistently high level of mechanisms that facilitate swift decision-making, the development and use of platform technologies and the exploitation of synergies, and that we constantly enhance these. The updated Group Steering Model places the brand groups and technology platforms center stage in order to scale up the latter while maximizing synergies across the entire Group product portfolio. A new strategy and product planning process that has been optimized for efficiency is being developed on the basis of this approach. The package of measures for this initiative hones the definition of roles and responsibilities in the Group and improves transparency in this respect both inside and outside the Company. It also promotes the entrepreneurship of the independent units and brands and at the same time strengthens collaboration across the Group.

### People & Transformation

As it becomes a global tech company, the Volkswagen Group will see the biggest transformation of its workforce in its corporate history. To ensure the Group remains competitive in the future, we need to attract top talent and support existing employees by providing extensive training where required. Our aim is to retain staff for the long term. It is therefore fundamental that we address the changing needs of our employees and offer them an outstanding employee experience. To achieve our Group's ambitious objectives, we must also create and promote an environment for productive teams, resulting in a strong, sustainable and socially responsible corporate culture that fosters a sense of belonging and loyalty to the Company. A further focus is on aligning the Company with society and the environment.

### Financing the Transformation

The transformation being driven by digitalization and electrification will require extensive investment. To meet this need for financing, the Financing the Transformation base initiative aims to leverage even more Group-wide synergies across all functional areas along the value chain, focusing on costs and efficiency. The Group has therefore set itself the objective of lasting improvements to its fixed-cost structure, plant productivity, procurement costs, distribution expenses and working capital management.

Strategic Financial Performance Indicators	2022	2030 target
Operating return on sales	8.1%	9 to 11%
Automotive investment ratio	13.6%	~9%
Cash conversion rate in the Automotive Division <sup>1</sup>	29.2%	> 60%
Net liquidity in the Automotive Division	€43.0 billion <sup>2</sup> 15.4%	~10% of consolidated sales revenue
Return on investment (ROI) in the Automotive Division	12.0%	> 18%

<sup>1</sup> Net cash flow as a percentage of the operating result in the Automotive Division.

<sup>2</sup> Including cash inflows from the IPO of Dr. Ing. h.c. F. Porsche AG.

# ESG Performance Management and Materiality Analysis

GRI 2-19, 3-1, 3-2

## Materiality Analysis Linked with Group Strategy and ESG Performance

The materiality process is used to identify and evaluate the most important sustainability issues for the Group. Based on the business model and its impact on society, the focus is on key ESG requirements, stakeholder expectations, and compliance with legal requirements and internationally established reporting standards.

The Group conducted a materiality analysis in 2022. In reviewing a large number of potentially material issues, we considered both external and internal company perspectives. For the external side, 80 topic clusters were derived from 700 topics and weighted along 330 criteria. This was based on:

- Results of dialog processes with the Sustainability Council and the Stakeholder Panel
- Reputation surveys
- Requirements of relevant international and national frameworks such as the EU Taxonomy, the German Commercial Code (*Handelsgesetzbuch* – HGB), the UN Global Compact, the Sustainability Accounting Standards Board (SASB), the Global Reporting Initiative (GRI) or the Sustainable Development Goals (SDGs)
- Key ESG ratings
- AI-supported trend analyses and management studies

For the internal dimension, we primarily took account of all Group policies on sustainability management, materiality analyses of the Group brands and country-specific risk analyses of Volkswagen Group production sites.

The focus topics prioritized for the NEW AUTO Group strategy were confirmed with the 2022 materiality analysis and classified as material by the Group Sustainability Steering Committee. The five nonfinancial matters arising from the German CSR Directive Implementation Act (*CSR-Richtlinie-Umsetzungsgesetz* – CSR-RUG) are covered by the six focus issues. In addition, these six focus areas, in turn, cover a significant part of the assessment criteria of ESG ratings:

- Decarbonization
- Circular economy
- People in the transformation
- Diversity
- Integrity and compliance
- Supply chain and human rights

The focus topics identified were reviewed in 2023, taking into account the requirements of the German Supply Chain Due Diligence Act (*Lieferkettensorgfaltspflichtengesetz* – LkSG) and changes in the material ESG ratings. Ultimately, the six focus topics were reconfirmed. A comprehensive materiality analysis in accordance with the requirements of the European Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS) is being conducted in a separate process to prepare for the 2024 reporting.

Each focus issue is – to the extent currently possible – linked with clear targets and milestones and with KPIs and packages of measures. ESG-related KPIs such as the decarbonization index (DCI), the diversity index, and the governance factor are already reflected in the remuneration of members of the Board of Management.

 → [2023 Annual Report > Remuneration Report](#)

The topics classified as material also provide the foundation for the structure of this sustainability report and serve as the basis for managing the Volkswagen Group's sustainability program.

## Action Program for Optimized ESG Performance

The NEW AUTO Group strategy focuses not only on technological and product-related initiatives but also on improving the Group's ESG performance. This is because this directly and indirectly impacts Volkswagen's market capitalization, costs of capital and attractiveness to investors. This is partly due to increasing density of regulations on sustainability as a result of frameworks such as the EU Taxonomy, CSRD, or regulations on the responsible shaping of supply chains. Moreover, capital market players such as institutional investors not only expect transparency on the Group's sustainability performance but also an effectively implemented strategy that leads to continuous improvement in sustainability performance. A significant share of globally managed assets is already oriented toward ESG criteria.

In the past reporting year, we significantly expanded our action program that targets improvement of our results in ESG ratings by 2025. It consists of four pillars:

1. **ESG performance management:** We close existing gaps in ESG performance and create additional transparency by disclosing our measures and key performance indicators.
2. **ESG engagement:** We are intensifying our communication on ESG and sustainability in the capital market by communicating our messages and results in roadshows, investor conferences and other formats. In this way, we explain our current performance and at the same time benefit from the learning effects and knowledge transfer that this dialog makes possible.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Financial Calendar

3. **Management of controversies:** We aim to reduce the negative impact of legal or media controversies regarding the Volkswagen Group on our rating results. Our own web-based information on existing ESG controversies around Volkswagen makes a contribution to clarification and objectivization.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > ESG Controversies

4. **Internal ESG data infrastructure:** We are working on establishing comprehensive ESG data reporting tools for better data-supported infrastructure and aim to create comprehensive ESG information offerings for relevant stakeholders in the future.

Compared with prior years, the Group's score in the ESG rating from ISS improved from C to C+. The Volkswagen Group's Sustainalytics rating remained stable in 2023 at a rating level of "medium risk" (2022: 26.1; 2023: 26.4). In fiscal year 2023, Volkswagen continued to have a score of B from MSCI and had a climate rating of A- from CDP. Volkswagen reported material content in the Water Disclosure Project (WDP) but was not assessed in fiscal year 2023.

A change in valuation methods meant that, at the end of 2022, financial services provider MSCI ESG Research gave Volkswagen AG a red flag in its ESG Controversies report for alleged human rights violations in a plant in Ürümqi in the Xinjiang region that is operated by a subsidiary of Volkswagen's Chinese joint venture SAIC Volkswagen Automotive Co. Ltd. No signs of human rights violations were found either during the visit by the member of the Board of Management of Volkswagen AG for China, Ralf Brandstätter, in February 2023 or after Loening – Human Rights & Responsible Business GmbH conducted an independent audit of the plant in November 2023. On December 11, 2023, MSCI ESG Research raised Volkswagen AG's rating from red flag (score 0) to orange flag (score 1).

	2021	2022	2023	
<b>MSCI</b>	B	B	B	→
<b>Sustainalytics<sup>1</sup></b>	29.6 (medium risk)	26.1 (medium risk)	26.4 (medium risk)	→
<b>ISS</b>	C	C	C+	↗

ESG rating scales  
MSCI: CCC-AAA; Sustainalytics: 100-0; ISS: D- - A+

<sup>1</sup> Disclaimer: <https://www.sustainalytics.com/legal-disclaimers>.

## Making the Social and Environmental Impact of Our Actions Measurable

The Volkswagen Group wants to measure the impact of its actions even more comprehensively in quantitative terms in the future and, if possible and reasonable, to monetize this. This involves assessing positive and negative effects on, among other things, the environmental and social systems for the purpose of the inside-out perspective. This impact relates to the Group's entire business, including its supply chains and its products and services. This means we are not only taking on board impetus from regulatory developments as it emanates from the requirements of the CSRD or the EU Green Bond Standard, but also impetus from international initiatives and organizations such as the Organisation for Economic Co-operation and Development (OECD) and the World Business Council for Sustainable Development (WBCSD). At the same time, like other global companies, we are endeavoring to make even greater use of an impact assessment in our decision-making and management processes, risk management, reporting and communication with our stakeholders. Impact assessments already represent tried-and-tested tools at Volkswagen, particularly for the assessment of mobility concepts. Here, new options are continuously investigated for their sustainability impact and readjusted as necessary.

 → Sustainability Impact of New Mobility Options

We are currently developing a Group-wide concept for valuing impact with the name of "Impact Valuation @ Volkswagen Group." The concept is based on the successful implementation of two pilot projects at site and brand level.

In order to advance the topic of impact valuation and develop comparable concepts, the Volkswagen Group is a member of the Value Balancing Alliance (VBA) together with the Porsche brand. This initiative champions the development of uniform assessment standards for impact valuation and the financial balancing of sustainability impacts on an international level across sectors. In addition to the Volkswagen Group, the VBA's members include numerous global companies, such as Bosch, BASF, BMW, Michelin and SAP.

 → [Value Balancing Alliance](#)

# Sustainability Management

GRI 2-9, 2-12, 2-13, 2-14

## Structure and Tasks of the Sustainability Organization

Sustainability means maintaining intact environmental, social and economic systems with long-term viability at global, regional and local level. The Volkswagen Group can influence these systems in various ways and actively takes responsibility to make a contribution to preserving their sustainability. An extensive sustainability management system was set up for this purpose. The related structures, processes and responsibilities are codified in a specific Group policy. We view sustainability management as a continuous improvement process.

The Chairman of the Board of Management of Volkswagen AG has cross-functional overall responsibility for sustainability. Additional responsibility is taken by members of the Board of Management with their responsibility for specific management systems relating to sustainability and by the newly appointed Chief Sustainability Officer at Group level.

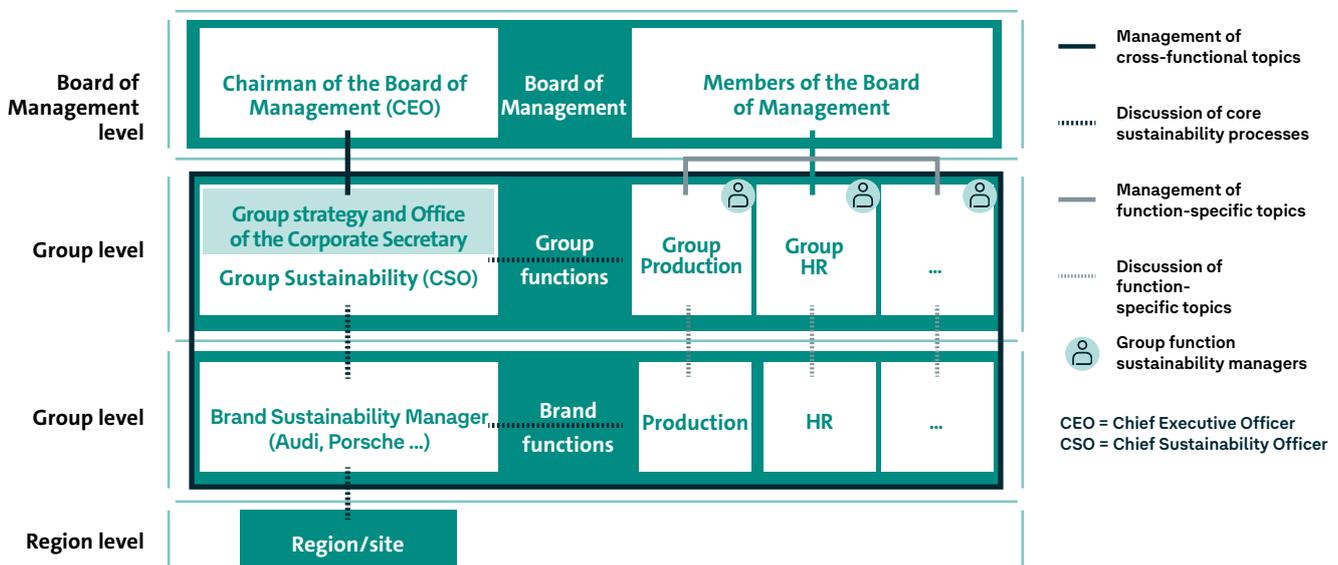
Sustainability is part of the Top 10 program and is managed through the NEW AUTO strategy's strategic management

structure. The content is regularly evaluated and reported in the Board of Management.

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

In the reporting period, the Volkswagen Group began revising its structure and workflows in light of new and upcoming regulatory requirements and is expected to complete this process in 2024.

## Sustainability Embedded in the Volkswagen Group



At brand level, the brand sustainability managers carry out the cross-functional coordination of sustainability topics, develop the sustainability strategy, are responsible for content and reporting on sustainability topics within the brand, represent the brand on sustainability topics externally and coordinate with Group Sustainability.

### The Sustainability Committee as an Independent Driving Force and Partner

At Group level, the Sustainability Council has a prominent position. This advisory committee, which was created in 2016, supports the Volkswagen Group with important strategic sustainability topics and is made up of internationally renowned experts from the academic world, politics and society. The committee establishes its own working methods and areas of focus independently, has extensive rights for the purposes of exchanging information, consultation and initiating action, and consults regularly with the Board of Management, top management and the employee representatives. The previous Sustainability Council's mandate ended at the end of 2022. In the reporting period, we began to reorganize its strategy and composition. Further information is available on the Sustainability Committee's website:

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Sustainability Council

### UN Global Compact

Volkswagen AG is a participant in the UN Global Compact, the world's largest corporate sustainability initiative, and participates in national and international initiatives together with other Group companies, including AUDI AG, MAN Truck & Bus SE, Dr. Ing. h.c. F. Porsche AG, Scania AB and TRATON SE. Fund managers in the capital markets view membership of the UNGC as an important factor when deciding to invest in shares and bonds of Volkswagen. Sustainability-oriented funds have grown in recent years and have become indispensable as stakeholders. As part of the annual Communication on Progress, the Volkswagen Group and its brands report on their progress in implementing the ten UNGC principles and their activities to support the Sustainable Development Goals (SDGs). The progress reports of Volkswagen AG, AUDI AG, Dr. Ing. h.c. F. Porsche AG and TRATON SE, which comprise all other participants in the Group, can be viewed on the UN Global Compact website.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > UN Global Compact > Volkswagen

### Green Finance Framework for Investments in Sustainability

Massive investment is needed to transform the Volkswagen Group. At the same time, investors are looking for sustainable investment options. Volkswagen AG has had a Green Finance Framework for various forms of financing such as green bonds since 2020. This document defines the framework for financial instruments geared to sustainability. In the reporting year, we refinanced fiscal year 2022 capital expenditure aligned with the EU Taxonomy on the basis of the Green Finance Framework newly published in 2022 by issuing €3.5 billion in green bonds. The Volkswagen Group has thus issued a total of €9.5 billion in green bonds to refinance capital expenditure for all-electric vehicles (BEVs) since 2020. In 2022, the Volkswagen Group published a new 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 BEVs in sustainable financing. Under the new Green Finance Framework, the only investments that will be considered are investments for BEVs produced by the Volkswagen Group that are aligned with the EU Taxonomy. This systematically 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 goals of the United Nations and the European Union for sustainable development. Sustainability has confirmed again for the new Green Finance Framework that the framework complies with the ICMA's Green Bond Principles and the Green Loan Principles of the Loan Market Association (LMA).

Volkswagen published its third Green Finance Report, which contains the Allocation Report and the Impact Report, during the reporting year. More information is available on our corporate website.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Green Finance

# Sustainability Impact of New Mobility Options

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## Mobility Solutions with Measurable Benefits for People and the Environment

Our global society today faces the major challenge of finding the right balance when shaping mobility. The pressures of noise, traffic jams, accidents, traffic areas or air quality need to be reduced in many areas. At the same time, many people do not have sufficient, affordable and accessible transportation, limiting their participation in society. This is not only the case in economically weaker regions but also in rural areas and suburbs.

The Volkswagen Group offers both innovative vehicle technologies and forward-looking mobility services. Through these, the Group wants not only to meet its customers' requirements but also to help to solve local environmental and traffic problems and protect the climate. The global cooperation with partners outside the Group plays an important role. We are guided here by the "Mobility for generations to come" vision that our NEW AUTO Group strategy describes.



→ NEW AUTO Group Strategy

Our expectation is that most people will still prefer individual mobility by 2030, but their focus will be more on using vehicles than on owning them. In light of this, Volkswagen Financial Services AG is developing a platform for the Volkswagen Group and its brands that covers customers' different mobility needs – from using a vehicle for a few minutes to a subscription for multiple years. The Europcar Mobility Group will be an important element of this platform.

## Assessing the Sustainability of Mobility Services Using Simulations

It has been shown many times that new mobility concepts increase the range of options in urban areas but are not automatically sustainable. Creating a basis of assessment is therefore important so that mobility solutions can be assessed for their sustainability impact and also influenced. This is because determining the right framework conditions and regulations is of decisive importance to make substantial contributions to sustainable cities and tap into business models for the Group. Political players and cities are also increasingly requiring early proof that mobility solutions actually have sustainability effects, and operating licenses may be conditional on this proof.

Against this background, the Volkswagen Group is continuously developing the mobility simulation framework. Its focus is on impact assessments that digitally replicate mobility on the basis of real data. Technologies such as data analytics and machine learning help us to virtually pilot certain services in advance on a large scale in what is known as a digital twin. This means that possible improvements – and also any undesirable side effects – can be discovered early and taken into account when developing mobility solutions.

We also developed the Mobility Impact Analyzer (MIA) in the reporting year to present the complex effects of a solution such as ride pooling over time and geographically for cities or public transportation operators. This data-supported cloud application shows how a mobility solution can be integrated into a city's mobility system and what effects certain scenarios have. MOIA, our on-demand ride pooling provider, presented MIA to an expert audience at the UITP Global Public Transport Summit in Barcelona in June 2023.

We endeavor to regularly communicate with stakeholders on mobility solutions and analyze trends on an ongoing basis so that we can update targets and criteria as needed. The methods and models for mobility simulation are also being continuously developed. For example, in the reporting year we developed a new method that reduces a simulation's lengthy computing times. It was presented at the meeting of the Transportation Research Board in the USA. In addition, we aim to steadily improve the quality of our results by comparing these with mobility providers' real data and experience.

We use various key figures that are scientifically recognized and also reflect the requirements of various players to evaluate mobility services. Customers value short and reliable journey times, while access for citizens and the reduction of CO<sub>2</sub> emissions is important for society. Towns and cities for their part want traffic to occupy as little space as possible and to improve air quality, while good utilization of its services is essential to the mobility provider.

### MOIA: Recognizing and Serving Mobility Needs

Measures for increasing efficiency and better capacity utilization continue to be important steps on the path to sustainable mobility. In the case of ride pooling services such as MOIA, the transport needs of various customers must be linked as optimally as possible in order to balance detours and waiting times with high utilization of capacity. Modeling and impact assessments provide valuable services here in order to represent the high level of complexity. It should be noted that these analyses always take an overarching view of traffic. This is because users take other options into account when making decisions. Central to the sustainability assessment is what users of new services – for example, ride pooling, e-scooters or car sharing – would otherwise use or have previously used. For example, there is a much debated question about whether ride pooling might ever overtake public transportation. Initial fears are, however, proving wrong. MOIA's accompanying research instead proved the opposite: The research showed that the mobility network – and especially public transportation – would benefit from the expansion of ride pooling.

MOIA expanded its revenue model in the reporting year. The company has introduced a licensing model for ride pooling and established a new business unit – Mobility Analytics. As a result, MOIA will no longer operate exclusively in the customer market but also offers cities, public transportation operators and local authorities all the services necessary

to implement ride pooling within the framework of public transportation. In addition to service design and consulting, the new licensing model includes operating models, the fully integrated ride-pooling and operating software required for this and, where applicable, the use of the MOIA brand.

In Hamburg, MOIA has been providing its ride pooling service in close partnership with the transportation company Hamburger Hochbahn since 2019. Since the start of 2023, the company has been integrated in Hamburg's local public transportation system as a self-sustaining on-demand ride pooling service licensed under the amended Passenger Transportation Act. MOIA has carried more than 8.9 million passengers in Hamburg to date.

### Achieving More with Comprehensive Solutions

The intermodal impact assessments and analyses provide important pointers to which levers can be used to improve the sustainability impact of new mobility solutions. One factor that impacts the effectiveness of an individual solution is its integration into the transportation and energy system. A good example of this is an e-car sharing pilot project in southern Germany, in which AUDI AG is involved as a partner. The project is being run in our rural area where, for the most part, private vehicles predominate and car sharing has so far barely gained acceptance. It aims to close mobility gaps in public transportation services and contribute to reliable mobility. In addition to electric vehicles, other partners from the Group are also contributing solutions for charging infrastructure (Elli) and booking systems (SEAT:Code).

The value of solutions that do not isolate the energy and mobility systems but take a holistic view of them was also evident in another context. As a long-standing member of the World Business Council for Sustainable Development (WBCSD), in 2023 the Volkswagen Group continued its involvement in the "Transport and Mobility Pathway" – one of the new action areas in the WBCSD's Vision 2050. The energy sector focal issue of charging infrastructure was considered together with mobility behavior here. The result was that the location and power of public charging points should also take account of the real routes taken by e-vehicle drivers so that they can charge their e-vehicles without unnecessary detours and as close to the destination as possible. During the vehicle's idle time, charging or feedback of power into the grid should be synchronized with the availability of renewable energy.

## Improving Participation in Society

In addition to environmental and economic objectives, social aspects, such as access to and participation in society, also play an important role for mobility solutions. This includes attractive public transport, especially in urban areas. Our MAN brand, for example, makes a contribution that benefits the population as a whole with electric, efficient, digital, and, in the future, also automated transportation solutions. In addition, for example, Volkswagen Passenger Cars and Volkswagen Commercial Vehicles provide people with disabilities with barrier-free access to their own vehicle – for example, through hand controls. So that passengers with mobility restrictions – such as wheelchair users – can also spontaneously and conveniently get from A to B, MOIA has been operating 15 accessible vehicles in Hamburg with appropriately trained drivers since the start of 2023. And like in Hamburg public transportation, people with severe disabilities also travel for free with MOIA. AUDI AG's electric car-sharing project described above goes a step further when it comes to inclusion. The plan is to found an inclusion company together with partners to help people with impairments to find their way into permanent employment.

## Astypalea: Transformation to a Smart and Green Island

Astypalea is a living lab for smart and sustainable mobility solutions in Europe. The Greek island is located in the Aegean Sea, has 1,300 inhabitants and is similar in size to the German island of Sylt. In addition, 36,000 tourists on average visit the island every year. Astypalea is now to be transformed into a smart and green island by 2026. To this end, the Volkswagen Group has joined forces with the Hellenic Republic. Traffic on Astypalea will be converted to e-mobility. This includes the public transport system, local authority vehicles

(e.g., police), company vehicles and the private vehicles of the inhabitants. All new vehicles registered here are now exclusively electric vehicles. At the same time, an extensive network of private and public charging stations is being set up. The all-electric vehicle-sharing service astyGO and the ride-sharing service ASTYBUS have been launched. Unlike the previous bus system, ASTYBUS operates the whole year and can call at all the hot spots on the island. In the first year of operation since June 2022, it has completed more than 200,000 customer kilometers, and a fourth of the inhabitants use the service regularly. E-cars, e-scooters and e-bikes make up the vehicle-sharing service. Bookings are made by smart phone using the integrated astyMOVE app. The results of an independent, accompanying scientific study show a high level of approval from the people of Astypalea: In general, 80% see the transformation positively and ASTYBUS even has an approval rating of 97%. The energy system of Astypalea will also be gradually converted to solar and wind energy under the leadership of the Hellenic Republic: In 2024, the existing solar park will be expanded to an output of 3.5 MW and a storage battery will be added to not just supply the e-vehicles with green energy but also cover up to 60% of the island's entire energy needs with renewable energy.

# Stakeholder Management

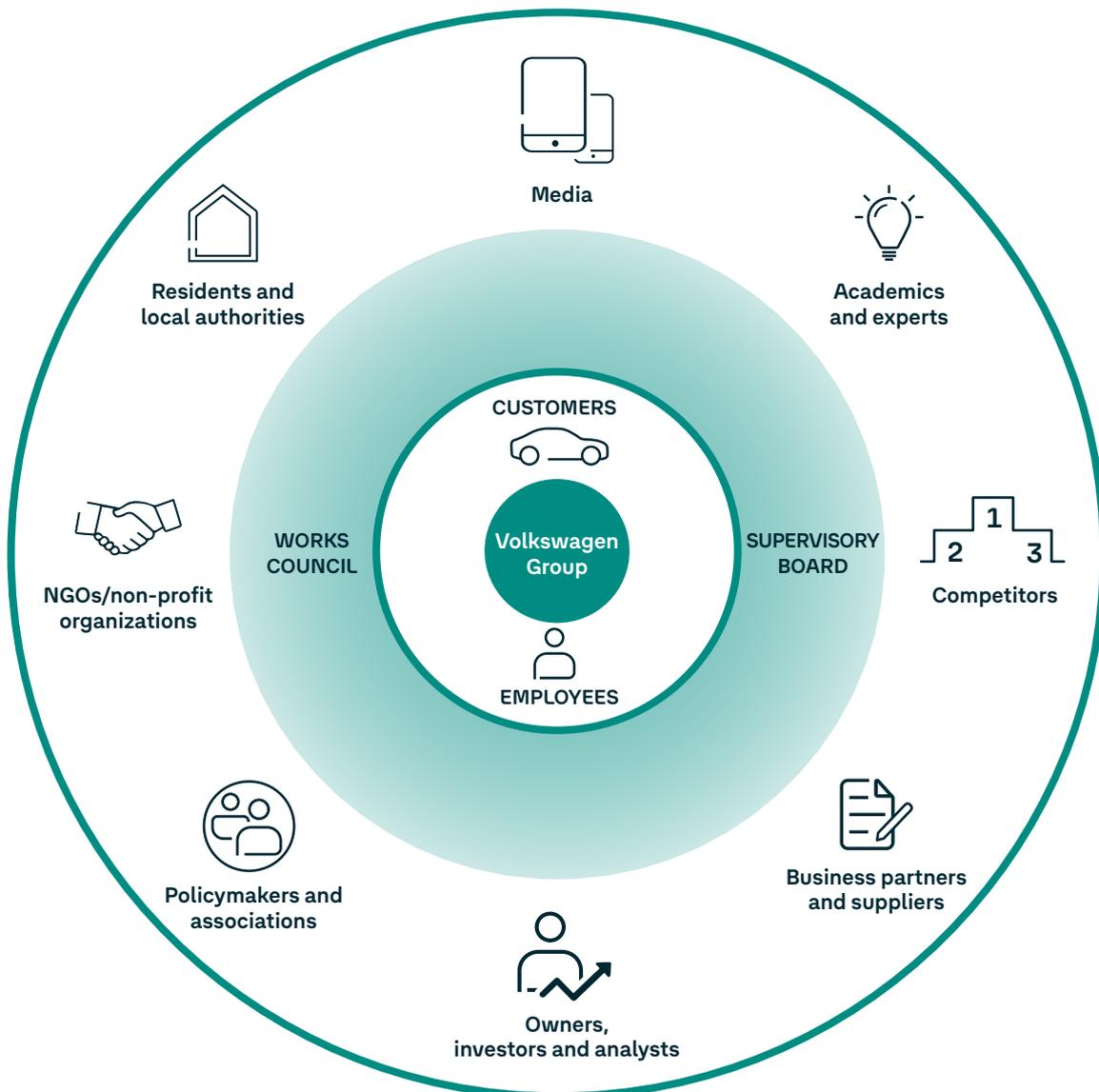
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## Strategic Stakeholder Management

Our stakeholders are individuals, groups or organizations who have a material influence on or are materially influenced by the way in which the Group reaches its corporate decisions and the implications of those decisions. Our employees and customers are at the center of our stakeholder network.

In addition, we have identified eight further groups. Continuous communication between internal and external stakeholder groups is important to us. 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.

## Volkswagen Group Stakeholders



For us, stakeholder management means interacting with the Company's key stakeholder groups systematically and continuously as part of the Group initiative with the focus topics of ESG performance, decarbonization and integrity, which is part of the NEW AUTO Group strategy. Our aim is open, constructive and also critical communication with the stakeholder groups listed in the diagram about their requirements and expectations of us, as well as central issues of our Group strategy and its implementation. Our brands and regions have their own stakeholder management strategies. The Group's task is to bring together and orchestrate these activities in an integrated framework. This framework includes:

- Stakeholder engagement on a Group level with specific committees, 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

Stakeholder management is one of the core processes of sustainability management in the Group. Tasks, responsibilities and organization are set out in the Group policy on sustainability management.

 → Sustainability Management

As an international group, our business activities impact the lives of a large number of different people. Appropriately aligned stakeholder management is essential so as to determine the sustainability strategy's material areas for action and become aware of stakeholders' changing expectations of us at an early stage. It also involves continuously informing and regularly communicating with all business areas. This communication not only helps us to identify our stakeholders' requirements, it also plays a key role in achieving corporate goals and complying with reporting standards and legal requirements.

The transformation of the Volkswagen Group from a vehicle manufacturer to a world-leading, software-driven mobility provider is being expanded through new areas of expertise such as autonomous driving, battery technology, charging infrastructure and energy services. This changes the range of relevant stakeholder groups and their expectations and requirements of the Group. Here, too, our aim is to take all stakeholders into consideration equally. We want to inform them in

a way appropriate to the target audience, actively involve them in the transformation process by requesting and encouraging their feedback and suggestions for the sustainable development of our Group and society. Our aim is to position our Group robustly for the future amid ever faster and more strongly changing economic, environmental and social framework conditions and sustainably improve its acceptance and reputation.

The Volkswagen Group is a player in numerous networks of experts and decision-makers who have a significant influence on our business and the agenda in the sociopolitical environment. An overview of the Group's most important memberships is available online.

 → [www.volkswagen-group.com > Memberships](http://www.volkswagen-group.com > Memberships)

### Reputation KPI Measures Stakeholder Trust

The reputation key performance indicator (KPI) makes a decisive contribution to anchoring stakeholder management in the sustainability strategy. The indicator reflects the degree to which external stakeholders trust the Volkswagen Group. Since 2017, we have asked annually for an assessment of the Volkswagen Group's reputation. Eliciting this KPI enables a holistic view of attitudes and opinions on the Group and allows us to identify whether and how evaluations change over the course of time.

The Audi, Porsche and Volkswagen Passenger Cars brands are consistently represented in the survey. The survey data are based on personal telephone interviews conducted with representatives of importance to the Volkswagen Group from the fields of politics and associations, media, academia, NGOs, investors and analysts and also business partners. Fundamentally, representatives of the highest possible decision-making level are surveyed in all the stakeholder groups.

→ In Germany, the 2023 reputation KPI for the Volkswagen Group is

**83%.**

From 2017 through 2022, the survey was conducted in the three markets of Germany, China and the USA. Due to the homogeneous competitive environment, there were no significant changes in the results in the USA or China in the past few years from which we were able to derive important impetus for action for the markets. This particularly applies to China, where, since the start of the study, the Volkswagen Group has gained and held the top position. The situation is different in Germany, where the competitive environment is becoming increasingly varied and thus more challenging due to international competitors. As one of the Group's most important and sensitive core markets, closely monitoring the market is vital here for future decisions and activities. For this reason, the 2023 survey was only conducted in Germany. Additional open questions were added to the reputation study in 2023. The aim was to proactively obtain individual feedback from stakeholders by these means in order to be able to identify and validate requirements and expectations even more specifically and include these in future decision-making processes.

The Group obtained the following results in 2023: 83% of stakeholders in Germany stated that they trust the Volkswagen Group (2022: 78%). The reputation KPI thus improved significantly compared with 2022. In contrast to the previous year's results, this is not in line with the overall competitive environment in Germany and is partly due to stable business performance despite the economically and politically challenging situation. A fundamental revision and realignment of the study is planned for 2024 in line with the changing economic, social and regulatory framework conditions.

## Stakeholder Panel as a Critical Companion

The Volkswagen Group has also established a Stakeholder Panel, which has now overseen the Group sustainability activities for over 20 years. The whole panel (Germany/Austria/Switzerland; EU) currently comprises more than 200 institutions and organizations. In 2023, the Volkswagen Group started to develop a systematic analysis process for stakeholders, which is to be implemented in 2024. Following the interruption caused by the pandemic in 2020 and 2021 and the resumption of our communication activities in 2022, we started to restructure and redesign our stakeholder management in the reporting year. We want to incorporate our stakeholders' suggestions and recommendations even better in the future through the introduction of new formats intended to create the opportunity for even more interactive and transparent communication on important sustainability issues relevant to corporate strategy and society.

# Environmental Compliance Management

## Consistent Compliance with Environmental Requirements

Compliance with environmental laws and requirements at all our sites is a high priority for Volkswagen. Our effective environmental compliance management is intended to ensure that we not only meet legal requirements but also the requirements of other internal or external stakeholders. At the same time, it allows us to live up to our binding commitments on environmental matters and compliant behavior. The environmental compliance management system is, in particular, a risk provision against breaches of regulations that may be associated with damage to the environment, our Group and society. It helps us to continuously improve our environmental performance and reduce our environmental impact.

One of the focuses of the NEW AUTO Group strategy is the Group's ESG performance. In environmental protection, decarbonization and circular economy are the focus issues. At the same time, the environmental compatibility of our products, services and processes is one of our Group Essentials. With electric drives, digital connectivity and autonomous driving, we want to make the car cleaner, more intelligent, quieter and safer. We use our innovative power in order to reduce our environmental footprint – over the entire life cycle

of our products and mobility solutions. Our innovations are at the same time intended to help our customers to be more environmentally friendly.

## The goTOzero Mission Statement: Minimization of Negative Effects on the Environment

The goTOzero environmental mission statement serves as the framework for all the Volkswagen Group's environmental activities. With this mission statement, we aspire to reduce environmental impact along the entire life cycle – from raw material extraction until end-of-life – for all our products and mobility solutions in order to keep ecosystems intact. Compliance with environmental regulations, standards and voluntary commitments is a basic prerequisite of our actions. The Group mission statement combines all strategic and compliance-related aspects of the Group's environmental activities and forms the basis for linking targets, key performance indicators, programs and measures. The mission statement is continuously reviewed, and its objectives are adjusted to new requirements and changes in conditions. The mission statement puts the Group's focus on the four fields for action presented in the diagram below and their underlying objectives.

## goTOzero Environmental Mission Statement: Action Areas

<p><b>PROTECTING the climate</b> </p> <p>We are committed to the Paris Climate Agreement and aim for an ambition level of 1.5 degrees Celsius.</p> <p>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.</p> <p>We want to be a net carbon-neutral company by 2050 at the latest.</p>	<p><b>CONSERVING resources</b> </p> <p>We reduce the volumes of primary raw materials needed by using recycled material and renewable raw materials.</p> <p>We maximize our energy and resource efficiency and establish closed loops for materials and water.</p> <p>Together with our business partners we cut down on the amount of natural resources utilized throughout our supply chain.</p>	<p><b>CONSERVING ecosystems</b> </p> <p>We reduce harmful emissions in air, soil and water.</p> <p>We mitigate the impact of our business operations on biodiversity and ecosystem performance and support projects to conserve these.</p>	<p><b>ENSURING environmental compliance</b> </p> <p>Where integrity and compliance are concerned, we aim to be a role model for a modern, transparent, successful enterprise.</p> <p>We use effective environmental compliance management systems to identify and manage environmental risks and opportunities throughout the lifetime of our mobility solutions.</p> <p>We conduct open dialog with our stakeholders and incorporate their expectations into our decisions.</p>
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## Management and Compliance in Matters of the Environment

Volkswagen 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 sets guiding principles for the conduct and working methods of managers and employees with regard to five topics: management conduct, compliance, environmental protection, cooperation with stakeholders and continuous improvement. In its environmental policy, the Group commits to reducing the environmental impacts of our processes, products and services, to meeting binding obligations and to continuously improving its environmental compliance management system and environmental performance.

We use the environmental compliance management system to regularly check the effectiveness of our measures. We regularly train our employees on environmental protection and environmental compliance.

A Group policy for the environmental compliance management system sets out the requirements, tasks and responsibilities with regard to the environment and compliance. It provides the framework for implementing environmental compliance management systems across all phases of the business and the entire life cycle of vehicles in our brands and companies. The policy defines the minimum requirements for operating organizations regarding implementing an environmental compliance management system and gives them the flexibility to implement this in a manner in line with their business activities.

In general, all production and development sites in the Group are required to have their environmental management systems certified to ISO 14001 or validated to the Eco-Management and Audit Scheme (EMAS). In 2023, 106 of our 115 sites, including central development units, have ISO 14001 certification or EMAS validation. In terms of employee numbers, this equates to more than 99%. In addition, 64 of the production sites have certified their energy management systems in accordance with ISO 50001, meaning 88% of the energy consumption of the Group's production sites is currently covered by a certified energy management system. SEAT S.A.'s development is also certified in accordance with ISO 14006.

These standards do not, however, answer the question of how to avoid misconduct and how to respond appropriately to it. The Volkswagen Group has therefore expanded the established environmental management systems to include important compliance aspects. The intention of our environ-

mental compliance management systems is to ensure that environmental aspects and obligations are recognized and appropriately taken into account in our business operations. We consider disregard of environmental obligations, fraud or misconduct to be serious compliance breaches and prosecute these. Compliance with our Environmental Policy Statement and with other Group environmental requirements is evaluated annually and reported to the Board of Management of Volkswagen AG and the respective brand boards of management.

The Volkswagen AG Board of Management is the highest internal decision-making level for environmental matters. Both it and the brands' boards of management take not only business, but also social and environmental criteria into account when making key company decisions. The Group-wide management of environmental protection is the responsibility of the Group Steering Committee for the Environment and Energy. This includes implementing the resource-efficiency programs and monitoring target achievement. It is the highest environmental committee in the Volkswagen Group and is responsible for reporting to the Group Board of Management or the environmental officer in the Group Board of Management. Other bodies take responsibility for steering key individual aspects. They include the Group CO<sub>2</sub> Steering Committee and the Group Steering Committee for Fleet Compliance.

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

## Compliance in Chemicals Management

As a world-leading carmaker and provider of mobility services, we are 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 we operate. Our Chemical Compliance Governance Model (CCGM) therefore introduces a framework for dealing with chemical substances. The CCGM covers, for example, defined roles and responsibilities, processes and IT systems.

We are aware of the fundamental risk that chemicals can pose for customers, employees, local residents and the environment. We want to further improve the management of chemical substances and are strongly committed to complying with existing regulations and to handling chemical substances that we need for our products, activities and services responsibly. To this end, we are in constant dialog with our employees, suppliers, industry associations and supervisory authorities to reduce the use of hazardous chemicals – from research and development through design, production, sales and logistics to the reuse and recycling of our products. We conduct regular audits of our Group and brand functions to assess the effectiveness of our processes for complying with regulations on chemicals and identify potential for improvement. In 2023, the Volkswagen Group also commissioned a benchmarking of our program for compliance with regulations on chemicals compared with other companies in the chemicals, electronics and automotive sectors. The results of external studies showed that our processes are among the best in the sector.

### Life Cycle Approach Determines Analysis and Actions

We consider the environmental impact our products cause throughout the entire life cycle and at all stages of the value chain of our products. This includes the manufacturing process with the associated extraction of raw materials, supplier processes and our own production operations 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. For detailed, ISO-standardized life cycle assessments (LCAs), we use Sphera's LCA for Experts software with the LCA database LEAD (Life Cycle Environmental Assessment Database), which is based on Sphera's Professional Database. This enables the exchange of harmonized data throughout the Group and a standardized basis for calculating our life cycle assessments. Volkswagen AG also commissioned TÜV NORD CERT Umweltgutachter GmbH as an independent external body to carry out the review of the vehicle life cycle assessments in accordance with the applicable standards DIN EN ISO 14040 and DIN EN ISO 14044. Based on these life cycle assessments for our vehicles, we identify hot spots in the life cycle and derive suitable solutions to reduce the environmental impact. In line with our life cycle approach, we involve our suppliers in our efforts to minimize our environmental impact early on. It should be noted that the methodology and state-of-the-art for preparing life cycle assessments in the automotive industry are constantly evolving. This includes ge-

neric data and assumptions increasingly being replaced by vehicle- and company-specific information, with the result that future calculations may lead to significant deviations from previous life cycle assessment figures. A life cycle assessment should therefore always be understood as a snapshot at the date it is prepared under the assumptions in question, does not represent a product characteristic and is not currently suitable for comparisons with other manufacturers' life cycle assessments. The EU has announced corresponding harmonization requirements for 2025.



### Reduction of the Environmental Impact of Production (UEP)

In connection with the production strategy, we have defined the KPI "reduction of the environmental impact of production (UEP)" and underpinned it with targets for the Group and its brands. By 2025, the production-related environmental impact at all sites where we produce passenger cars and light commercial vehicles is to be reduced by 45% per vehicle compared to 2010. The figures below show the development from 2010 to 2023 (data: 11+1 months):<sup>1</sup>

→ **UEP: -44.2%<sup>2</sup>**  
(2022: -37.4%)

In the reporting year, we achieved the following improvements compared with 2010 for the five indicators of the higher-level KPI of UEP:

- Energy requirements per vehicle: -21.0% (2022: -14.2%)
- CO<sub>2</sub> emissions per vehicle: -51.0% (2022: -43.0%)
- Water consumption per vehicle: -24.7% (2022: -17.4%)
- Waste for disposal per vehicle: -75.9% (2022: -68.5%)<sup>3</sup>
- VOC emissions per vehicle: -68.7% (2022: -66.0%)

At 9.31 million vehicles, the Volkswagen Group's global vehicle production in fiscal year 2023, including the Chinese joint ventures, was 6.8% up on the prior-year figure. More stable utilization of the production sites' capacity and successfully implemented measures to further improve the environmental impact of our factories had a positive impact on the specific environmental KPIs per vehicle in 2023. The UEP improved significantly overall from -37.4% to -44.2%.

<sup>1</sup> Data for December of the reporting year may be based on estimates. Any estimated figures for the prior year were replaced when the current data was collected.

<sup>2</sup> Scope: Passenger Cars and Light Commercial Vehicles.

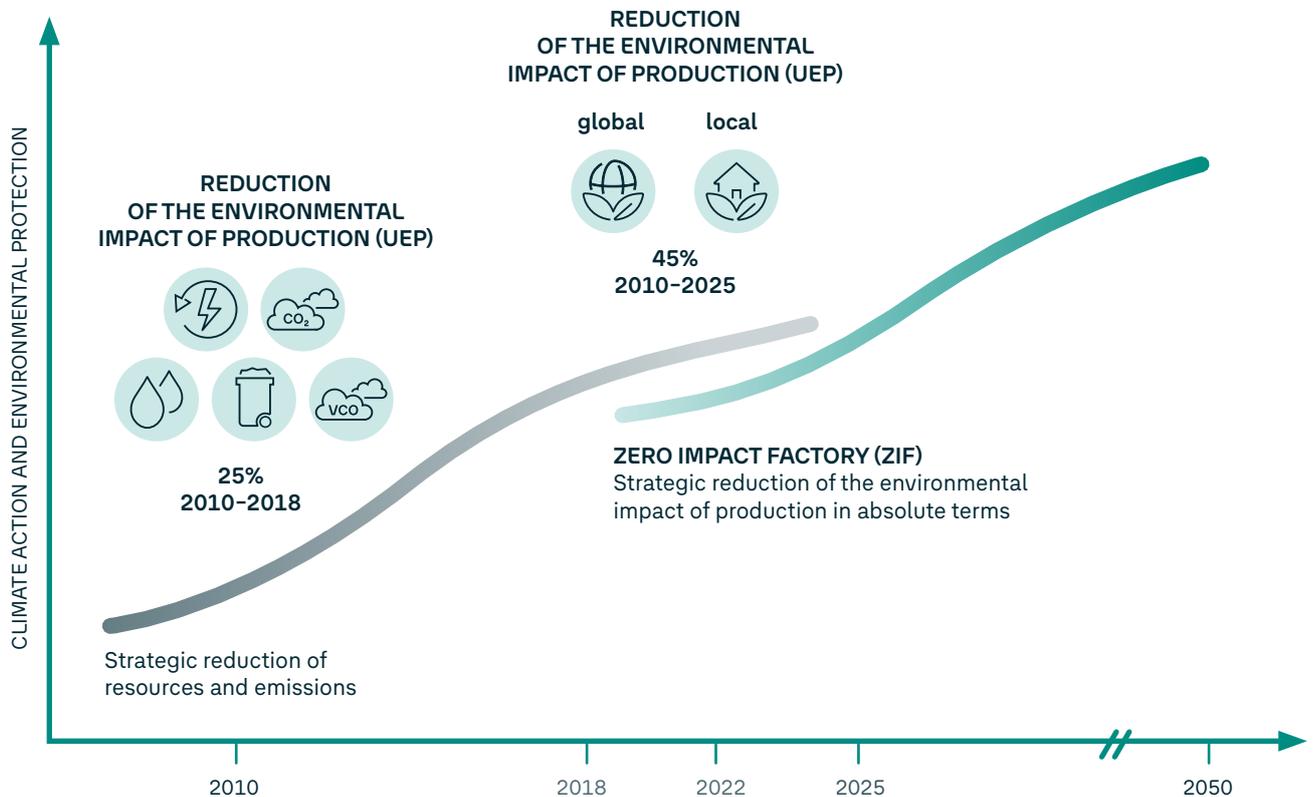
<sup>3</sup> Scope: Waste for disposal includes only production-specific volumes.

## Anchoring Environmental Protection in Manufacturing: Zero Impact Factory

We are planning the production of tomorrow with our one.PRODUCTION functional area strategy. The use of resources and emission levels at Volkswagen Group sites require particular attention. In the Zero Impact Factory program, we are developing specific steps towards more sustainable production, guided by the vision of creating a factory that has no adverse environmental impact. The brands have been using the measurement methods and management tools developed for this since 2022. These enable us to record and reduce the quantitative environmental impact of our production sites, particularly in the areas requiring action of climate protection and energy, emissions, water and waste. We are also focusing on qualitative aspects such as the appearance of our factories, our commitment to biodiversity, protection of the soil, a functioning environmental compliance management system, improvement of our resource efficiency, and environmentally friendly mobility management for employee and goods transport.

A further important milestone was reached in 2023: As part of an internal test phase, 22 quantitative environmental indicators – for example, CO<sub>2</sub> emissions, solvent emissions, fresh water requirements, wastewater loads and different types of waste – are now being measured at all sites where we produce passenger cars and light commercial vehicles and converted into impact points according to their environmental relevance. This makes the environmental impacts comparable with each other and means targeted reduction methods can be applied where they have the greatest impact for the environment. We use a site checklist to continuously review the implementation status of a further 143 environmental criteria. Examples of these include projects and measures for retaining biodiversity, for creating conditions for environmentally friendly employee mobility, or for promoting the circular economy.

### Zero Impact Factory – Environmental Transformation of Group Production



From 2025, the Zero Impact Factory method will replace the existing KPI system measuring the UEP. This represents a shift away from steering based on purely performance-based and vehicle-specific indicators to a reduction in the environmental impact of our production activities in absolute terms. Our goal is to achieve zero-impact status for all of our manufacturing plants for passenger cars and light commercial vehicles by 2050.

### Responsible Use of Water

Water is a valuable resource, which we want to use as sparingly as possible. We focus on the following areas of activity in sustainable water management:

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

The supply chain, in particular obtaining and processing raw materials, is responsible for the greater part of our water use. Because we cannot influence these aspects directly – despite our sustainability requirements for suppliers – we focus on our own production sites. Of all freshwater that we use for manufacturing passenger cars and light commercial vehicles, 50.6% (around 15.6 million m<sup>3</sup>) is used by sites in risk zones. These are regions with water shortages, such as our locations in Mexico. Closed-loop circulation or recirculation of cooling and process water means the need for freshwater and the quantity of wastewater can be reduced considerably. The San José Chiapa (Mexico) Audi site, which can be considered a wastewater-free site due to closed-loop circulation, provides a good example of this.

At all our Group's locations, we promote water-saving processes in production through Group-wide specifications. In addition, Volkswagen participates in the Water Disclosure Project (WDP), which was launched by the Carbon Disclosure Project (CDP) and asks companies to manage water transparently. Volkswagen reported material content in 2023 but was not assessed. Our Group's absolute freshwater use has decreased in recent years. From 2010 to 2023, the specific freshwater consumption for the manufacture of passenger cars and light commercial vehicles decreased by 24.7% per vehicle thanks to a wide range of recycling measures and

the introduction of manufacturing processes requiring little water. The amount of wastewater produced is in line with the amount of freshwater withdrawn. Differences in quantities between fresh- and wastewater are the result of, for example, evaporation in cooling towers and during the manufacturing process.

### Group-wide Communication and Dialog on Environmental Issues

Facilitating regular dialog on environmental issues and bringing relevant players together is important to us. In the current reporting year, we held an Environment Week at various sites and regions to this end – in Group Logistics, in the China Region and at Škoda. The aim of the Environment Week was to share knowledge and for employees to network in the context of environmental protection. The program included participatory events, talks by experts, and workshops and information programs on the topics of decarbonization, energy, biodiversity, water, waste and circular economy.

We have been presenting the Zero Impact Factory Award to recognize particularly innovative environmental projects and increase awareness of the Zero Impact Factory initiative since 2021. We record and catalog measures in an IT system and make these available for a Group-wide exchange of best practices. In the reporting year, approximately 1,540 implemented measures in the area of environment and energy were tracked and documented via the Maßnahmen@Web system. They serve to improve infrastructure and production processes for passenger cars and light commercial vehicles and are incorporated into the decarbonization index (DCI), for example.

### Commitment to Biodiversity

The manufacture and operation of our vehicles impact biodiversity through immissions, land use and transportation – from raw material extraction through the use phase to recycling. Volkswagen is aware of its responsibility and has been involved in protecting and retaining biological diversity through conservation projects since 2007. As a founding member of 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. This is documented every two years in our progress report on the initiative.

 → [Business and Biodiversity > Volkswagen AG Progress Report](#)

In connection with the CBD and the 15th World Nature Conference (CBD COP 15), in 2022 we further concretized our Biodiversity Commitment with its six action areas. This highlights our commitment to protecting and preserving biodiversity.



→ [www.volkswagen-group.com](https://www.volkswagen-group.com) > Biodiversity Commitment

Furthermore, we support CBD's Action Agenda for Nature and People initiative by publishing our commitment on the CBD page of the German Business for Biodiversity platform set up by the German Federal Ministry for the Environment (BMUV).

### Promoting Local Biodiversity

In addition to supporting conservation projects around the world, we have set ourselves the target of increasing biodiversity at our production sites as well. Local measures include creating wildflower meadows, planting trees and shrubs and installing nesting aids for bats, birds and insects. In order to make biodiversity at the production sites transparent and gradually increase it, we have developed a biodiversity KPI and an internal assessment tool. The tool assesses both direct measures to increase biodiversity at the site and also indirect measures, such as integrating biodiversity into the strategy or communication. It also enables the comparison of various biodiversity measures and thus provides sites and brands with a basis for making decisions on the implemen-

tation of projects. The imminent introduction of the biodiversity KPI will also make it possible to track developments in biodiversity at site and brand level. Our methodology is currently being assessed by an external consultant so that we can use and communicate the KPI as a valid metric.

Examples of the conservation projects we support around the world can be found on our website.



→ [www.volkswagen-group.com](https://www.volkswagen-group.com) > Engagement

Environmental Compliance Management KPIs <sup>1</sup>	Unit	2023	2022	Notes and comments
<b>"Maßnahmen@Web" measures implemented</b>				
Volkswagen Group	number	1,540	1,431	
of which Volkswagen AG	number	567	466	
<b>Sites certified pursuant to ISO 14001 or with EMAS validation</b>				
Volkswagen Group	number	106	105	
in relation to number of employees	in %	99.9	98.3	Headcount at all production sites across the Group
Volkswagen AG	number	6	6	
in relation to number of employees	in %	100	100	Headcount at all Volkswagen AG production sites
<b>Sites certified pursuant to ISO 50001</b>				
Volkswagen Group	number	64	61	
based on the production sites' energy consumption	in %	88.5	80.0	
Volkswagen AG	number	6	6	
based on the production sites' energy consumption	in %	100	100	
<b>Reduction of the environmental impact of production (UEP)   GRI 302-5</b>				
Volkswagen Group				Passenger cars and light commercial vehicles
Total change in overall environmental impact of production (UEP)	in %	-44.2	-37.4	
Change in specific energy requirements	in %	-21.0	-14.2	
Change in specific CO <sub>2</sub> emissions	in %	-51.0	-43.0	
Change in specific VOC emissions	in %	-68.7	-66.0	
Change in specific water consumption	in %	-24.7	-17.3	
Change in specific waste for disposal	in %	-75.9	-68.5	Only production-specific volumes
Volkswagen AG				
Total change in overall environmental impact of production (UEP)	in %	-21.1	-2.0	
Change in specific energy requirements	in %	-11.5	6.7	
Change in specific CO <sub>2</sub> emissions	in %	-23.7	3.8	
Change in specific VOC emissions	in %	-18.8	-15.2	
Change in specific water consumption	in %	-10.2	13.1	
Change in specific waste for disposal	in %	-49.7	-37.0	Only production-specific volumes

<sup>1</sup> Scope: The following sites are not included in the Group assessment in the reporting year: the four Scania Service Centers (Johannesburg, Narasapura, Kuala Lumpur, Taoyuan City); one MAN Truck & Bus SE site (Serendah); one site in China (Suzhou) and one site currently still under construction in China (Changchun) with planned production start at the end of 2024. Data for December of the reporting year may be based on estimates. Any estimated figures for the prior year were replaced when the current data was collected.

Environmental Compliance Management KPIs <sup>1</sup>	Unit	2023	2022	Notes and comments
<b>Total energy consumption<sup>2</sup>   GRI 302-1, 302-3</b>				
Volkswagen Group	in million MWh/year	20.79	21.07	
of which passenger cars and light commercial vehicles	in million MWh/year	18.59	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
of which Volkswagen AG	in million MWh/year	4.56	4.47	
of which other divisions	in million MWh/year	2.2	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
Volkswagen Group (specific)	in kWh/vehicle	1,991	2,162	Passenger cars and light commercial vehicles
Volkswagen AG (specific)	in kWh/vehicle	5,309	6,404	
<b>Electricity   GRI 302-1</b>				
Volkswagen Group	in million MWh/year	11.09	11.07	
of which passenger cars and light commercial vehicles	in million MWh/year	9.82	9.73	
of which Volkswagen AG	in million MWh/year	2.09	2.04	
of which other divisions	in million MWh/year	1.27	1.34	
<b>Proportion of electricity in final energy consumption</b>				
Volkswagen Group	in %	53.3	52.6	
Volkswagen AG	in %	45.8	45.7	
<b>Heat   GRI 302-1</b>				
Volkswagen Group	in million MWh/year	5.32	5.74	
of which passenger cars and light commercial vehicles	in million MWh/year	4.65	4.98	
of which Volkswagen AG	in million MWh/year	1.54	1.56	
of which other divisions	in million MWh/year	0.67	0.75	
<b>VOC emissions   GRI 305-7</b>				
Volkswagen Group	in metric tons/year	13,149	13,272	
of which passenger cars and light commercial vehicles	in metric tons/year	11,636	11,808	
of which Volkswagen AG	in metric tons/year	1,381	1,179	
of which other divisions	in metric tons/year	1,513	1,464	
Volkswagen Group (specific)	in kg/vehicle	1.29	1.40	Passenger cars and light commercial vehicles
Volkswagen AG (specific)	in kg/vehicle	1.69	1.77	

<sup>2</sup> The KPIs contain incomplete data for the MAN Truck & Bus SE sites.

Environmental Compliance Management KPIs <sup>1</sup>	Unit	2023	2022	Notes and comments
<b>Water withdrawal   GRI 303-3</b>				
Volkswagen Group	in million m <sup>3</sup> /year	37.41	39.18	
of which passenger cars and light commercial vehicles	in million m <sup>3</sup> /year	30.84	31.63	
of which Volkswagen AG	in million m <sup>3</sup> /year	3.51	3.62	
of which other divisions	in million m <sup>3</sup> /year	6.57	7.55	
Volkswagen Group (specific)	in m <sup>3</sup> /vehicle	3.42	3.76	Passenger cars and light commercial vehicles
Volkswagen AG (specific)	in m <sup>3</sup> /vehicle	4.30	5.42	
<b>Water withdrawal in areas with water stress   GRI 303-3</b>				
Volkswagen Group	in million m <sup>3</sup> /year	16.36	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
of which passenger cars and light commercial vehicles	in million m <sup>3</sup> /year	15.61	16.06	
of which Volkswagen AG	in million m <sup>3</sup> /year	0.00	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
of which other divisions	in million m <sup>3</sup> /year	0.74	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
<b>Reused water<sup>3</sup></b>				
Volkswagen Group	in million m <sup>3</sup> /year	3.88	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
of which passenger cars and light commercial vehicles	in million m <sup>3</sup> /year	3.82	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
of which Volkswagen AG	in million m <sup>3</sup> /year	0.37	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
of which other divisions	in million m <sup>3</sup> /year	0.06	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
<b>Waste for disposal (production-specific)   GRI 306-5</b>				
<b>Non-hazardous waste</b>				
Volkswagen Group	in metric tons/year	48,841	32,352	
of which passenger cars and light commercial vehicles	in metric tons/year	15,123	17,680	
of which Volkswagen AG	in metric tons/year	1,560	1,373	
of which other divisions	in metric tons/year	33,718	14,672	
Volkswagen Group (specific)	in kg/vehicle	1.68	2.10	Passenger cars and light commercial vehicles
Volkswagen AG (specific)	in kg/vehicle	1.91	2.06	
<b>Hazardous waste</b>				
Volkswagen Group	in metric tons/year	57,756	57,212	
of which passenger cars and light commercial vehicles	in metric tons/year	35,546	44,095	
of which Volkswagen AG	in metric tons/year	7,326	7,723	
of which other divisions	in metric tons/year	22,209	13,117	
Volkswagen Group (specific)	in kg/vehicle	3.94	5.24	Passenger cars and light commercial vehicles
Volkswagen AG (specific)	in kg/vehicle	8.98	11.58	

<sup>3</sup> The KPIs do not include any data for the MAN Truck & Bus SE sites.

# Risk Management

## Risk Management as an Early Warning System

Promptly identifying the risks and opportunities arising from our operating activities and taking a forward-looking approach to managing them is crucial to our Company's long-term success. Appropriate and effective risk-management and internal control systems are therefore vitally important to us.

## Risk Management System and Internal Control System

A comprehensive risk management system and internal control system (RMS and ICS) helps us to handle risks responsibly. It defines the primary principles and elements of our Group, forming the basis for the appropriate and effective management and control of material risks. This applies to risks with consequences for the Volkswagen Group and/or for the environment and society. It is thus also directly applicable to

the assessment of nonfinancial risks. These could arise when pursuing goals and implementing measures in our Group strategy's focus areas.

 → ESG Performance Management and Materiality Analysis

The organizational design of the Volkswagen Group's RMS and ICS is based on the internationally recognized COSO Enterprise Risk Management framework (COSO = Committee of Sponsoring Organizations of the Treadway Commission). Through a Group risk management policy, all business divisions and units are obliged to implement an RMS and ICS. The Board of Management receives quarterly and ad-hoc risk reports.

Another core element of the RMS and ICS is the three lines model, which is designed to protect us from the occurrence of material risks. The model is a basic element required by, among others, the European Confederation of Institutes of Internal Auditing (ECIIA).

## The Volkswagen Three Lines Model



The first line comprises the operational risk management and internal control systems at the Group companies and business units. The RMS and ICS is an integral part of the Volkswagen Group's structure and workflows. Incidents that could constitute a risk are identified on a decentralized basis in the divisions and Group companies and assessed with regard to the likelihood of occurrence, financial loss, reputational damage and the potential threat to adherence to external legal requirements. Countermeasures are introduced, the residual potential impact is assessed, and the information is incorporated into planning in a timely manner.

Material risks are reported to the relevant committees on an ad-hoc basis. The results of the operational risk management process are incorporated into budget planning and financial control on an ongoing basis. The targets agreed in the budget planning rounds are thus subject to constant review in revolving planning updates. At the same time, the results of risk mitigation measures are promptly incorporated into the monthly forecasts regarding further business development. This means that the Board of Management also has access to an overall picture of the current risk situation via the documented reporting channels during the year.

The second line is the risk management organization, which, among other things, sets standards for the RMS and ICS, provides support to the divisions in the form of relevant training and coordinates the quarterly risk survey. It reports quarterly to the Group Board of Management and the Audit Committee of the Supervisory Board on any material risks, which are defined using quantitative and qualitative assessment criteria and given probability ratings. The additional annual governance, risk and compliance (GRC) control process, with a focus on internal control activities, will be gradually replaced by a standardized ICS by 2025. In the standardized ICS, standardized control targets are now set for the key Group companies to cover process risks. Key controls to cover process risks and control objectives are also regularly tested for their effectiveness and the ICS is thus improved.

The third line of defense is Group Internal Audit. It helps the Board of Management to monitor the various divisions and corporate units within the Group. It regularly checks the risk early warning system and the structure and implementation of the RMS, ICS and compliance management system (CMS) as part of its independent audit procedures.

The Volkswagen Group continuously develops its risk management in order to take account of constantly increasing internal and external requirements in the field of corporate responsibility.

## Risks Relating to the Focus Issues

Risks relating to our focus issues are taken into account in both the methodology and the content of our RMS and ICS. The standardized ICS uses master control catalogs. These contain standardized process risks and associated control targets as a specification for internal controls to be carried out in the Group companies. We check whether the master control catalogs are up to date each year and adjust them if necessary. Risks and requirements in relation to product or environmental compliance are addressed in various master control catalogs, e.g., for production.

In addition, the content of the focus issue of decarbonization is taken into account, for example, in the environment and sustainability master control catalog via the risk that "the material environmental and sustainability risks of our products, production and services along the entire life cycle are not/insufficiently identified." In the compliance master control catalog, the risk that "compliance breaches and risks (whistle-blower information) are not addressed or not sufficiently addressed or not promptly/correctly dealt with" serves to take account of the focus issue of integrity and compliance. In the quarterly risk process, the risks are classified into risk clusters. For example, risk clusters involving environmental risks, emission risks, compliance risks or CO<sub>2</sub> risks, or product-related risks that address these focus issues are specified.

Risks that could impact on our bottom line also include general environmental risks and climate-change risks. These include risks that could result from different CO<sub>2</sub> and emissions regulations, but also extreme weather, storms or floods with effects on production, infrastructure and supply chains. To further safeguard supply chains, we are extending our procurement systems to identify dependencies or insufficient substitutability of suppliers at an early stage and counteract them.

The risks relevant from the Volkswagen Group's perspective are presented in the report on risks and opportunities in the Group management report. In fiscal year 2023, risks continued to be identified with regard to compliance with regulations on fleet CO<sub>2</sub> emissions in individual brands and markets that may result in charges for the Volkswagen Group. A more detailed description is available in the report on risks and opportunities in the Annual Report under the heading "Environmental Protection Regulations." Further risks may arise from the assertion of environmental policy objectives in court.

 → [2023 Annual Report > Report on Risks and Opportunities](#)

The Volkswagen Group produces CO<sub>2</sub> emissions with its business and products. We are committed to the Paris Climate Agreement and align our own activities with the 1.5 °C goal. We aim to achieve net carbon neutrality by 2050. To this end, decarbonization has also been firmly anchored as a focus area in the NEW AUTO Group strategy. More information on the effects, targets and measures can be found in the Decarbonization chapter.

 → [Decarbonization](#)

In addition, no further material risks within the meaning of section 289c (3) no. 4 of the German Commercial Code (*Handelsgesetzbuch* – HGB) relating to the focus issues have been identified.

# Corporate Citizenship

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## Assumption of Social Responsibility Worldwide

As a global company and good corporate citizen, we want to fulfill our social responsibility worldwide – at our sites and beyond. We have incorporated this aim in our Group-wide Group People Strategy: It includes the strategic target of “Aligned with Society and Environment” in the fourth target area, the impact dimension “We@Volkswagen and the world around us.”

We use various levers to achieve this aim: We donated a total of €27.69 million for social, philanthropic, culture and education projects from Volkswagen AG in 2023. This includes large donations as part of the emergency humanitarian aid directly decided by the Group Board of Management and made on behalf of the entire Group. Other Group brands in Germany have their own budget for donations and social sponsorship. Some of our Group brands have also established and are responsible for their own foundations. For example, AUDI AG created the Audi Environmental Foundation in 2009, while Dr. Ing. h.c. F. Porsche AG initiated the charitable Ferry Porsche Foundation in 2018 and is the body responsible for it.

At Group level, we coordinate Volkswagen's decades-long involvement in the International Youth Meeting Center in Oświęcim/Auschwitz and the Auschwitz Memorial and have for some years coordinated Volkswagen's involvement in Yad Vashem. Volkswagen AG trainees regularly work on the grounds of the Auschwitz Memorial and thus contribute to maintaining this site of global-historical significance.

Since 2015, helping refugees and supporting them in integrating has been a focus of our social engagement activities. The Group-wide organizational unit set up for this, which coordinates aid projects for humanitarian crises, was transferred to Human Resources in the reporting year. The primary aim is to provide aid in humanitarian emergencies quickly,

comprehensively and across brands. This is achieved, for instance, by supporting aid organizations in the crisis regions with the transportation of goods, through financial donations and the provision of housing and food, and by supporting cities and municipalities in Germany with the accommodation, care and integration of refugees. In addition, the refugee assistance program organizes opportunities for refugees to meet our employees and coordinates fundraising campaigns. Since the start of the Russian war on Ukraine, Volkswagen employees have donated more than €2 million to alleviate the suffering of Ukrainian refugees. Donations from Volkswagen Group companies to improve the humanitarian situation in Ukraine have reached more than €15 million since the war started. In 2022, the activities of Volkswagen's refugee assistance program were strengthened by the specially established Refugee Aid Ukraine Group Task Force.

As an important part of our engagement activities, we also support initiatives by our workforce or elected employee representatives. The Volkswagen Belegschaftsstiftung (Volkswagen Employees' Foundation) promotes flagship education, health and integration projects. At Volkswagen AG, workforce donation and the Donate your Cents campaign are also established tools for promoting civil-society and charitable projects at the locations in Germany and children's projects at our global production locations. For this purpose, we work together with local associations and initiatives and have a long-standing partnership with the children's aid organization terre des hommes e.V.

Our employees' involvement in voluntary work is also important to us. To this end, Volkswagen AG has been running the “Together Engaged” project since 2022. It uses a matching platform to bring together requests for assistance from civil society organizations with the expertise and skills of both our active employees and our employees in the passive phase of semi-retirement at the Wolfsburg, Kassel, Emden,

Braunschweig, Salzgitter and Hanover sites. Once a year, we hold a central volunteering day at Volkswagen AG, when whole teams and organizational units pool their strengths and expertise for specific assignments in civil-society or aid organizations. Volkswagen AG is thus making a positive contribution to society and the environment at its locations and bringing people who are looking for help together with helpers in an uncomplicated way. Audi and Porsche in Germany provide similar solutions.

Another component is local engagement at the Volkswagen Group's locations around the world. Numerous production sites in Volkswagen's global network are involved locally in the form of donations, volunteering or self-initiated projects for social, societal or cultural issues. These projects are managed locally under the responsibility of the competent units.

Further information on our social engagement activities can be found on our website:



[www.volkswagen-group.com](http://www.volkswagen-group.com) > Corporate Citizenship  
Projects

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# Decarbonization

GRI 201-2

## On the Path to Becoming a Net Carbon-Neutral Company

Since industrialization began, the global average temperature has already risen by around 1.2 degrees Celsius – with drastic consequences for nature, society and business. For example, the number of extreme weather events in Germany has tripled in the last 50 years. The transportation and mobility sector is one of the biggest contributors to climate change: According to the Intergovernmental Panel on Climate Change's calculations, it currently accounts for around 23% of global energy-related greenhouse gas emissions. As one of the world's largest automotive manufacturers, Volkswagen is aware of the responsibility this entails. The Group is committed to the Paris Climate Agreement, which aims to keep the increase in global temperature by 2050 to well below two degrees Celsius.

Volkswagen wants to become a net carbon-neutral company by 2050. We have set an intermediate goal for ourselves along the way: By 2030, we want to reduce the carbon footprint of our passenger cars and light commercial vehicles by 30% per vehicle (compared with 2018). We want to achieve this goal purely through reduction measures and switching to renewable energies – i.e., without any offset measures. In addition to the Group's electric offensive, we are concentrating to a greater extent on integrating renewably generated electricity in the use phase and switching the entire power supply for our plants to renewable energy.

Whether in regard to regulatory requirements, the performance of our products or our Group's ongoing transformation process, climate-related topics have an important strategic and operational significance for Volkswagen. This is something we also emphasize with our investment decisions. For example, more than two thirds (68%) of the investments planned between 2023 and 2027 will be made in the future fields of digitalization and electrification. In the previous five-year plan, it was only 56%.

Decarbonization of the Group's business activities occupies a key position in the NEW AUTO Group strategy and is one of six focus topics in the ESG, decarbonization and integrity

Group initiative. The commitment to climate protection is also a core part of our goTOzero environmental mission statement, which stands for a net carbon-neutral way of doing business. You can find further information on our environmental mission statement in the Environmental Compliance Management chapter.

 → Environmental Compliance Management

## Reporting According to TCFD Recommendations

This year, too, the chapter on decarbonization is based on the guidelines of the Task Force on Climate-related Financial Disclosures (TCFD), which was set up by the G20's Financial Stability Board. These guidelines create a coherent framework for voluntary and consistent reporting of entities' climate-related financial risks and opportunities. We report along the four requirement categories that companies should take into account in their reporting according to the TCFD: governance, strategy, risk management, metrics and targets.

## Management of Group-Wide Climate Protection Measures

The Volkswagen Group has established Group-wide sustainability management. The related structures, processes and responsibilities are set out in a specific Group policy. The Chairman of the Board of Management of Volkswagen AG has cross-functional overall responsibility for sustainability. Additional responsibility is taken by members of the Board of Management with their responsibility for specific management systems relating to sustainability and by the newly appointed Chief Sustainability Officer at Group level. Sustainability is part of the Top 10 program and is managed through the NEW AUTO strategy's strategic management structure. The content is regularly evaluated and reported in the Board of Management. Product portfolio topics are managed by the Group Steering Committee for Fleet Compliance, which informs the Group Board of Management at least twice a year on topics such as product-related greenhouse gas emissions.

### Clear Responsibilities

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

You can find further information on responsibilities and management in the Environmental Compliance Management chapter.

 → Environmental Compliance Management

Volkswagen's Group Head of Environment provides reports to the Group Board of Management on environment- and energy-related topics in their capacity as Head of the Group Steering Committee for the Environment and Energy. The Division Head of Group and Product Strategy, General Secretariat provides reports on the Top 10 program to the Chair of the Board of Management and regularly informs the Group Board of Management on sustainability- and environment-related topics. The positions described have the task of coordinating and managing the sustainability, environmental and CO<sub>2</sub> activities decided by the Group Board of Management.

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. Internal and external stakeholder engagement also plays an important role in this context. For example, we use the feedback from regular stakeholder dialogs to review our strategies and approaches and adjust them where necessary.

 → Stakeholder Management

 → Sustainability Management

### Decarbonization Progress Linked with Board of Management Remuneration

The decarbonization index (DCI) operationalizes the Volkswagen Group's climate protection targets and is therefore the core key indicator in the Group related to climate protection. The DCI covers the CO<sub>2</sub> emissions over the entire vehicle life cycle for the brands that manufacture passenger cars and light commercial vehicles in the EU27+3 region,

China and the USA. The Volkswagen Group has linked the remuneration of the members of its Board of Management to, among other things, the development of the DCI to create additional incentives here. The Volkswagen Group's Remuneration Report provides further information on how key sustainability criteria are taken into account in the Board of Management's remuneration.

 → [2023 Annual Report > Remuneration Report](#)

In addition, from 2023 the achievement of the target for the DCI has been anchored in management remuneration by introducing an ESG factor in the annual bonus.

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

The Group identifies both risks resulting from climate change (physical risks) and risks and opportunities due to the shift toward a decarbonized economy (transitional risks and opportunities). They are not only identified but also assessed and handled in accordance with the procedures explained in the Risk Management chapter.

 → Risk Management

The following analysis shows an excerpt from the internal assessment of significant risks and opportunities.

#### I. Transitional risks

##### Politics & law

###### *Emissions standards*

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

###### *Carbon pricing*

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

*Climate-related lawsuits*

Requirements for greater climate-protection performance or incomplete disclosures on the impact of climate change may potentially result in lawsuits for companies. The Group counters this risk firstly through certification of its self-imposed decarbonization targets by independent and internationally recognized organizations and secondly through consistently aligning its nonfinancial reporting with legal and capital-market requirements.

a. Technology

*Increasing model diversity*

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

*Stranded assets*

Production capacity and technical equipment that are limited to the manufacture of high-emission products run the risk of losing value and becoming "stranded assets" during the transition to a low-carbon way of doing business. The Group counters this risk by focusing its investment program on capacity that serves the transformation of the Group to a leading provider of sustainable mobility.

b. Market

*Emissions-based vehicle taxation*

Potential increases in vehicle taxes based on CO<sub>2</sub> emissions – as is already the case in many European countries – may lead to demand shifting in favor of smaller segments and engines and have an adverse financial impact for the Group. The Group counters this risk by constantly developing new and fuel-efficient vehicles and alternative drive technologies. The electrification of the portfolio and the Group's drive and fuel strategy form the basis for this.

*Availability of renewable energies*

The transition to a low-emission way of doing business is leading to market participants switching their energy supply to non-fossil sources and a concentration of

demand for renewable energies. Excess demand for electricity from non-fossil sources potentially arising from this may result in higher market prices. This could result in additional costs for the Group and threaten the achievement of its decarbonization targets if the quantities required for achieving the targets cannot be provided by suppliers. The Group counters this risk with targeted support for the construction of additional generation capacity for electricity from renewable sources and entering into long-term contracts for existing resources.

c. Reputation

*Reporting and communication*

Critical media reports or defensive communication by the Group in relation to its CO<sub>2</sub> emissions, reduction targets and the decarbonization strategy might lead to reputational damage and, as a consequence, to reductions in the demand for the Group's products. The Group counters the risk through regular communication of its carbon footprint, emission reduction targets, and electrification and decarbonization strategy in the annual and sustainability reports and in its stakeholder management. In addition, the Group promotes the credibility of communication content of this nature through quality assurance measures as part of internal auditing of the Group and through embedding its decarbonization targets and management systems.

**II. Physical risks**

a. Acute

*Extreme weather events*

Extreme weather events in the form of floods, hurricanes and the like may cause disruptions of our own ability to operate or of the supply of critical input factors such as semiconductors or battery systems as key components of electrification. These may lead to production stoppages and thus have financial ramifications for the Group. The Group counters risks caused by extreme weather firstly through adapted business continuity management and secondly through allocation strategies for distributing production-critical input factors to the brands accompanied by a prioritization of components and through the intensification of business relationship management with suppliers.

b. Chronic

*Water availability*

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

*Rising sea levels*

The rise in sea levels may be accompanied by permanent flooding of low-lying coastal areas and increased threat by storm surges in coastal areas, particularly if these are not well enough protected. The Group's production sites near to the coast run the risk of being affected by business interruptions with increasing probability and frequency, and consequently of being impacted by climate-related losses in value creation. The Group counters this risk through systematic analyses of the impact of climate change on its production sites in order to assess potential risks and derive recommendations for countermeasures.

recording and assessing reduction measures to be implemented on the basis of various decision-making criteria as part of the decarbonization program. Furthermore, the Group has a tool that provides additional incentives for implementing efficiency measures in the form of its CO<sub>2</sub> fund.

c. Market

*Capital market performance*

A positive performance on CO<sub>2</sub> and reporting in line with capital market requirements may positively impact rating outcomes and the Group's capital market conditions. ESG criteria are therefore an integral component of the NEW AUTO Group strategy with the aim of achieving sustainable improvements in capital market performance. Furthermore, the Group is gearing its reporting even more systematically to capital market requirements (e.g., TCFD). Volkswagen published its third Green Finance Report during the reporting year. The Green Finance Framework links our corporate objective of carbon neutrality by 2050 with our financing strategy.

d. Resilience

*Climate-related adaptation measures*

Implementing measures to adapt to the impact of climate change may strengthen the resilience of production sites – for example, against extreme weather events but also against chronic effects such as the rise in sea levels – and thus prevent business interruptions. For this reason, in a first step the Group conducted an analysis of physical climate risks for 33 EU-Taxonomy-relevant production locations, derived recommendations for implementing specific adaptation measures based on this and sent these to the individuals in charge locally for validation.

III. Opportunities

a. Products

*Sales potential*

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

b. Efficiency

*Cost savings*

Decarbonization measures can go hand in hand with tapping efficiency potential. These include, for example, measures for more efficient LED lighting, modernized heat supply and cooling at the sites or also optimized washing and drying processes in production. The Group identifies and taps such potential by systematically

**Scenario Analysis as a Decision-Making Basis for Climate Protection**

Volkswagen uses model data and assumptions in a variety of contexts to make forward-looking statements. As a member of the Mobility Model (MoMo) working group of the International Energy Agency (IEA), we use, for example, IEA Energy Technology Perspectives scenarios (ETP scenarios), including the 2 °C scenario (2DS) and the beyond 2 °C scenario (B2DS).<sup>1</sup> We concentrate on the target year of 2030 here, which represents a milestone on the path to Group net carbon neutrality by 2050 and consequently acts as a reference for internal KPIs.

<sup>1</sup> According to the IEA, the 2DS sets out a transformation pathway for the energy sector consistent with at least a 50% chance of limiting the average global temperature increase by 2100 to 2 degrees Celsius. The B2DS examines the extent to which the use of existing or future technologies could limit the average global temperature increase to 1.75 degrees Celsius.

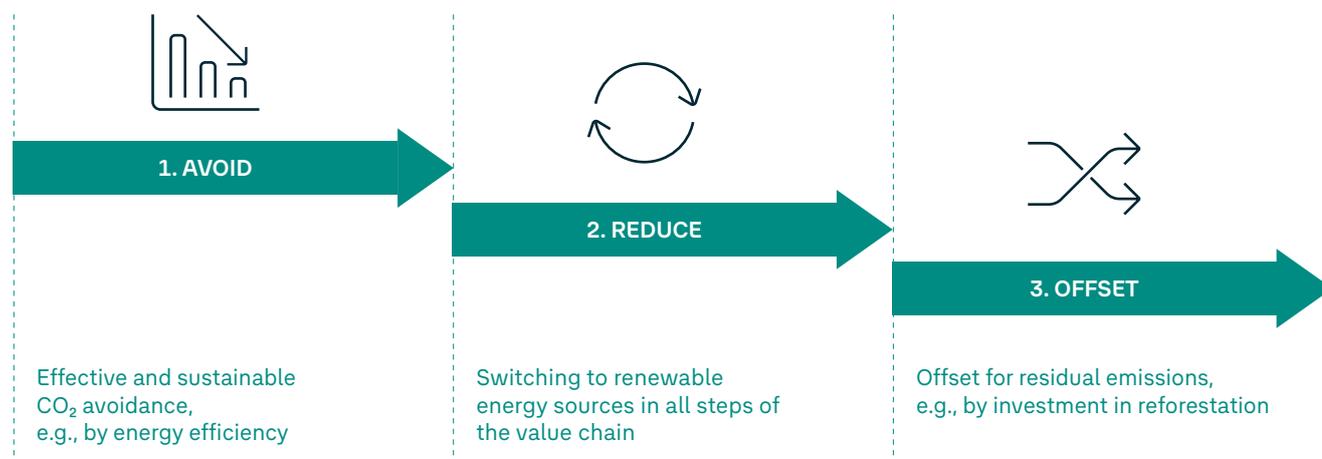
The scenario analysis focuses on the areas of production, sales and technology, the impact of products, and materials procurement. It shows that a significant reduction in emission intensity per vehicle is needed to achieve the UN climate goals, particularly in view of increasing unit sales. At the same time, the importance of electrification will grow considerably. In passenger cars and light commercial vehicles, combustion engines will, however, retain more than half the market share through 2035 even in a B2DS.

We use the analysis results to make decisions regarding our sales planning and materials production – e.g., through their integration into our DCI scenarios. The market- and product-related results support and affirm our decision reinforced by the NEW AUTO Group strategy to invest decisively in electric mobility and in increasing the efficiency of the internal combustion powertrain.

## Decarbonization Program Takes Account of the Entire Life Cycle

Our comprehensive decarbonization program includes the whole life cycle of the vehicles and is characterized by a clear hierarchy of measures: The top priority is measures with which CO<sub>2</sub> emissions can be avoided. In second place follow measures with which we can gradually shift the energy supply in all steps of the value chain to renewable energy. Finally, unavoidable CO<sub>2</sub> emissions are offset in selected cases through climate protection projects that meet the highest international standards.

### Prioritization of Decarbonization Measures



### Internal CO<sub>2</sub> Pricing as a Decarbonization Tool

We want to integrate emissions-related risks into strategic decision-making processes as far as possible and optimize reduction paths of CO<sub>2</sub> fleet compliance. To this end, when managing the portfolio, we work with shadow prices and internal emissions trading. In the decarbonization program, we assess the efficiency of reduction measures using

abatement costs and aggregate these in an abatement cost curve. As part of this, we are currently working with an internal carbon price or abatement costs of up to €20 per metric ton of CO<sub>2</sub>. This figure is reviewed annually based on target achievement and adjusted by a resolution of the Board of Management. The cost rate in the reporting year has not changed compared with the previous year.

### No Decarbonization without E-Mobility

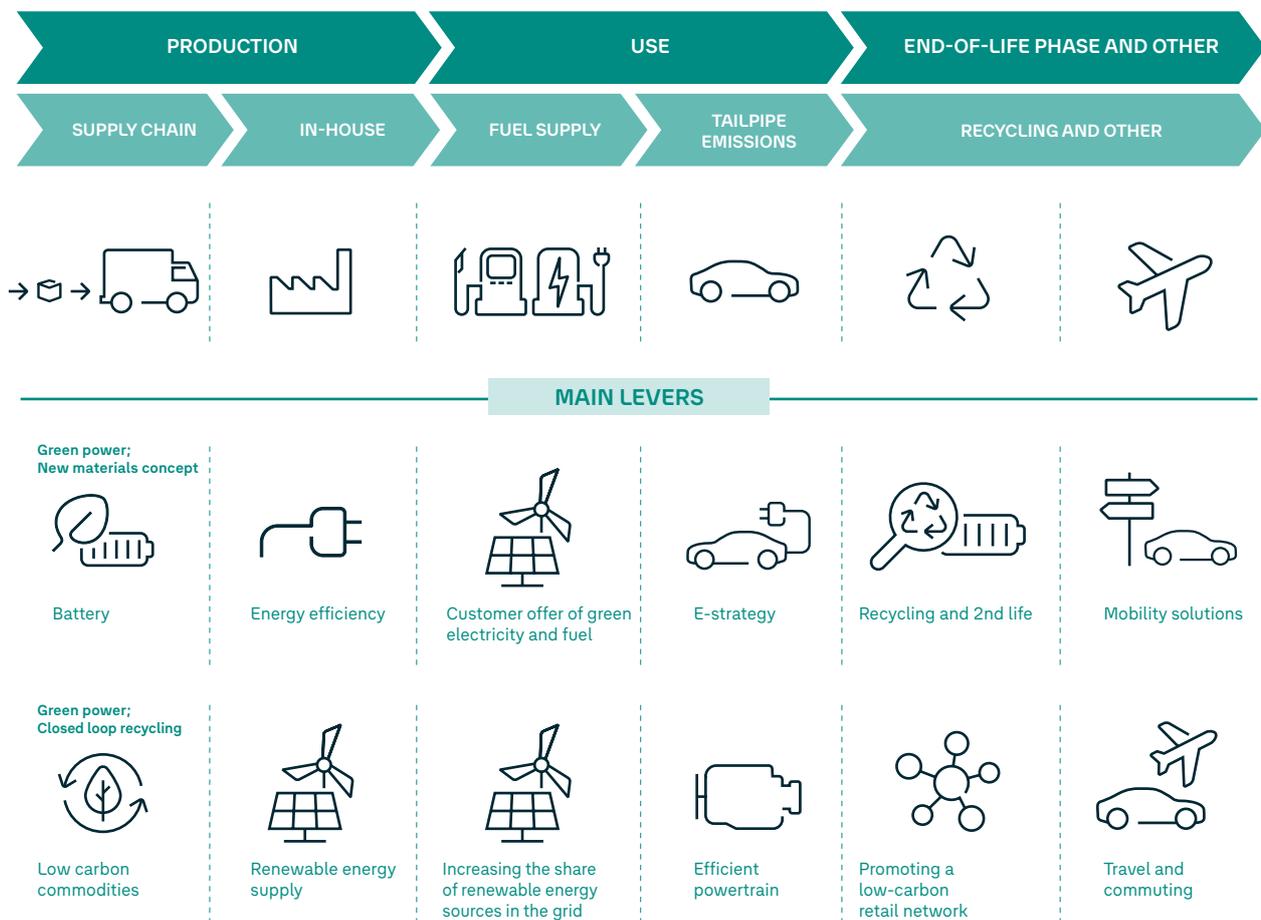
From today's perspective, around 90% of the decarbonization targeted by the Volkswagen Group can be realized through electrification of the fleet and switching to renewably generated energy. Electric vehicles therefore play a key role in this context. These do not cause any local emissions during use – and therefore have an advantage compared to cars with combustion engines in terms of tailpipe emissions. The same applies to the entire life cycle: Current calculations show that the carbon footprint of electric vehicles is already better on average in Europe in most markets than comparable gasoline or diesel vehicles.

The consistent electrification of our vehicle fleet opens up the path to net carbon-neutral mobility for our customers. The new electric vehicles are manufactured at 18 sites in Europe, China and the US. The modular electric drive matrix (MEB) serves as the technical backbone of the e-offensive and is used in many more of our electric models. In the

second half of the decade, the e-offensive will be supplemented by the Scalable Systems Platform (SSP).

2023 saw the market launch of additional e-models from various brands, including the Volkswagen ID.7 and the ID. Buzz LWB (long wheelbase). In addition, some models have been upgraded in terms of their sustainability and efficiency. These include the Volkswagen ID.3, ID.4 and ID.5, the Tiguan eHybrid and the Škoda Kodiaq. Moreover, the all-electric compact car ID.3, for example, is delivered in a net carbon-neutral way. In addition, the vehicle interior of the ID.3 will now no longer include materials of animal origin. The ID.4 and ID.5 have a more powerful and efficient electric drivetrain that has up to 60 kW more power, whereas the third-generation of the Tiguan eHybrid now has an all-electric range of up to around 100 km thanks to a larger battery and higher charging capacity. And for the second generation of the Škoda Kodiaq, we are also offering a plug-in hybrid drive for the first time.

### Decarbonization along the Life Cycle



### Net Carbon-Neutral Use Phase Thanks to Renewable Energy

It is important to us to make in particular the use phase of our vehicles net carbon-neutral in the long term. This is because around 75% of a car's CO<sub>2</sub> emissions arise in use ("well to tank" and "tank to wheel"). E-vehicles and consistent charging with 100% renewably generated electricity play a key role in achieving carbon-neutral e-mobility. That alone would reduce all CO<sub>2</sub> emissions by almost half compared to the normal EU power mix. Thanks to the supply of electricity from 100% renewable sources organized by VW Kraftwerk across Europe, we can provide almost net carbon-neutral mobility for the entire e-vehicle fleet even during the use phase.

### Volkswagen Supports the Construction of Wind Farms and Solar Parks

The Volkswagen Group is the first automotive manufacturer to directly support the expansion of renewable energy on an industrial scale. New wind farms and solar plants are to be created in various regions of Europe by 2025. In Germany, Volkswagen holds a stake in a solar plant with typical generation capacity of 0.17 terawatt hours (TWh) each year. The plant in Tramm-Göthen in Mecklenburg in northeastern Germany has nearly 420,000 solar modules and is thus one of the largest independent solar projects in Germany. In Sweden, for example, Volkswagen has a 70% involvement in a wind farm with typical generation capacity of around 1 TWh per year. The plant, which is near Stockholm, is one of the largest onshore wind farms in Europe. In Spain, Volkswagen is involved in a solar park with 50 MW of installed capacity. The solar park has typical generation capacity of 0.1 TWh per year.

It is planned that all projects together will generate around 7 TWh of additional green electricity by 2025. This means that emissions from our e-vehicle fleet's use phase can be reduced in net terms.

### Clear Requirements for Decarbonization in the Supply Chain

The Volkswagen Group's decarbonization begins in our supply chains. During the transition to electric mobility, higher CO<sub>2</sub> emissions will initially arise there, and shares from the use phase will shift to production. Against this background, we are systematically identifying the biggest drivers of CO<sub>2</sub> emissions in the supply chain and defining measures to reduce them. The difficulty of raw material extraction and the energy-intensive processes in manufacturing batteries are key drivers here. Around a third of CO<sub>2</sub> emissions that arise when manufacturing an electric car come from manufacturing high-voltage battery cells. All suppliers (new contract awards) of high-voltage batteries are already contractually obliged to use certified power from renewable sources in

their production processes. In addition, there are further requirements for upstream stages of the value chain, such as the CO<sub>2</sub> limits explained in the following paragraph. CO<sub>2</sub> emissions in battery manufacturing are therefore falling. More information on decarbonization measures in the upstream levels of the value chain can be found in the Supply Chain and Human Rights chapter.

 → Supply Chain and Human Rights

For new vehicle projects, the Volkswagen Group is going to make CO<sub>2</sub> emissions a technical feature for relevant components in the future. This means that we will set binding CO<sub>2</sub> targets for suppliers, and they must be able to prove compliance with these at all times. One example concerns the new SSP mechatronics platform. For example, the SSP platform's batteries have a CO<sub>2</sub> limit. To be able to achieve these limits, suppliers need to implement measures in their own production processes and pre-supply chains – for example, the use of renewable energy. Measures like these can reduce the carbon footprint of many electric vehicle models. For the ID. models, the Volkswagen Passenger Cars brand will use additional sustainable components, including battery cases and wheel rims made of CO<sub>2</sub>-reduced aluminum. In this way, the ID. family's carbon footprint can be improved by around two metric tons per vehicle in the next years.

Volkswagen Group China<sup>2</sup> 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 switching to 100% renewable energy by 2030. To date, more than 500 suppliers have already signed a declaration committing to switching to electricity from renewable energy sources.

### Capacity for Battery Manufacturing Further Increased

The Volkswagen Group is one of the few automotive manufacturers around the world that is taking the battery as a core e-mobility technology into its own hands – from the procurement of raw materials to recycling. PowerCo SE means the development and production of our own battery cells is integrated into the value chain and a significant part of the added value of the e-vehicle is thus kept within the Group.

Through PowerCo Volkswagen is creating a global supplier in the battery business that supports the e-offensive through technological independence and opens up a lever for reducing cell costs. We are expecting greater flexibility and economies of scale from the strategic key concepts of a unified cell, a standard cell factory, and vertical integration.

<sup>2</sup> Including Chinese minority shareholdings.

In the reporting year, three Group-owned sites for battery cell production were already under construction: the main plant in Salzgitter with planned start-up in 2025, Valencia in Spain (2026) and St. Thomas in Canada (2027).

The total production potential is a prospective capacity of up to 200 gigawatt hours (GWh). All sites are consistently operated with electricity from renewable sources. In Spain, an adjacent photovoltaic park will cover up to 30% of the electricity needs on 250 hectares of land.

The PowerCo cell factories have been designed on the basis of a technology matrix that will factor in more than 30 foreseeable product and process innovations by the end of the decade. These include, for example, more sustainable cell chemicals without cobalt or nickel, solid-state technology or significantly faster stacking processes for electrodes.

PowerCo has made an important step on the way to sustainably producing its own battery cells through successful tests of the new dry coating production process, which can save around 30% of the energy used for cell manufacturing, 15% of the factory space and manufacturing costs running into millions. PowerCo is working with, for example, German printing machine manufacturer Koenig & Bauer AG on further developing and industrializing this manufacturing process. With dry coating, there is no need for electrodes to be wet-coated and then undergo a lengthy drying process. This means that not only is the most energy-intensive part of current cell manufacturing unnecessary, so is the use of large quantities of chemical solvents.

In the future, the PowerCo cell factories will be designed to maximize material use within production through close-to-production recycling of production surpluses (scrap and end of line). In addition, the Group and PowerCo also focus on systematic end-of-life recycling and the use of recycled materials. You can find further information on the battery raw materials closed loop in the Circular Economy chapter.

 → Circular Economy

For the supply of raw materials, PowerCo relies on three instruments: long-term supply contracts, investments with partners in PowerCo's own mines, and procurement on the spot market – with financial hedging. Because the Group is set to cover more than half of its raw materials requirements itself or purchase them directly in the future, it will have a much more direct lever for improving mining conditions than most of its competitors.

Responsible raw materials procurement is also the basis of the IONWAY joint venture that PowerCo founded with Belgian materials technology group Umicore. The partners aim to grow annual cell production capacity for cathode material and precursor materials to 160 GWh by 2030 – enough for 2.2 million battery-electric vehicles. Cathode active materials are the key technological lever for battery performance. They are the single biggest contributor to overall battery cost and define its carbon footprint. IONWAY is to supply PowerCo's European battery cell factories with key battery materials and cover a large part of PowerCo's EU demand. This should accelerate the creation of regional, sustainable and transparent value chains for batteries and help the EU achieve its Green Deal targets. The first site for the production of cathode material is Nysa in Poland, where around 900 jobs will be created by 2030.

**Zero Impact Logistics**

In the joint Zero Impact Logistics initiative, the Group and brand logistics departments work together to achieve the goals of the goTOzero environmental mission statement. Continuously optimizing the transport network and logistics processes means transportation can be avoided and emissions reduced – including by means of digitalization. In addition, the use of new, low-emission technologies for transporting production materials and vehicles is analyzed, piloted and accelerated.

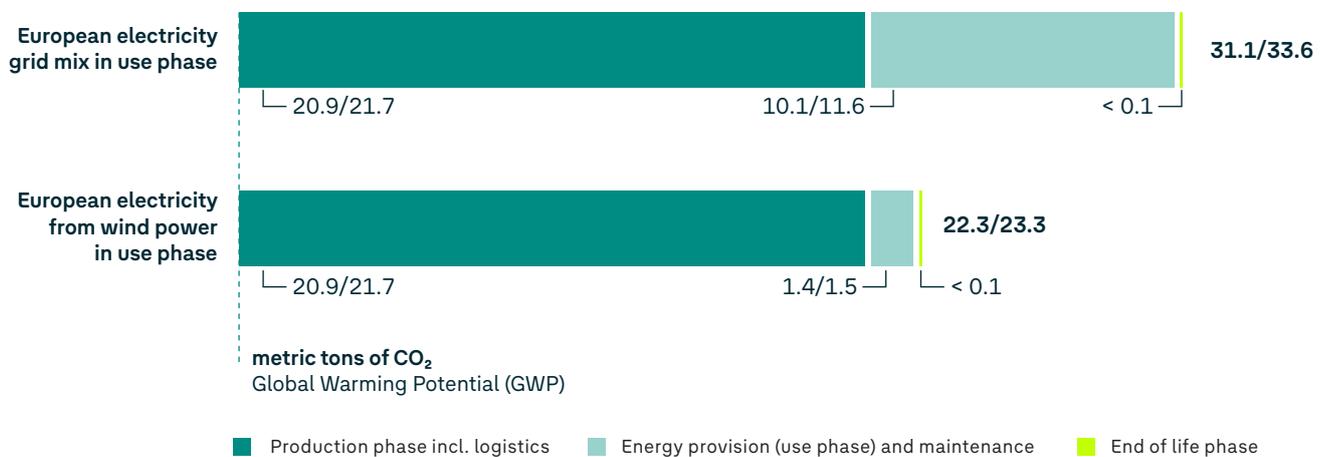
The measures the Volkswagen Group is taking to achieve future carbon-neutral logistics include, for example, moving shipments from road to rail and almost complete CO<sub>2</sub> avoidance through the use of green power in rail transport in Germany and other countries in collaboration with rail transportation companies. Volkswagen also transports high-voltage batteries for electric vehicles in an environmentally conscious and efficient manner, for example at the Volkswagen component site in Braunschweig. The batteries are fully automatically loaded onto trains there and then transported to the Volkswagen plant in Zwickau using electricity from renewable sources.

To transport vehicles across the North Atlantic, Group Logistics uses two roll-on/roll-off charter ships powered by low-pollution liquefied natural gas (LNG). Since the end of 2023, it has successively put four more car carriers with the same propulsion system into operation on this route and thus replaced 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

allows almost no methane to escape. The dual-fuel engines will also enable non-fossil fuels such as biogas (bio-LNG), e-gas (synthetic gas) based on renewable sources or biofuel to be used in the future. This means carbon emissions can be reduced even further. Group Logistics also sees further carbon reduction potential in the long term from the use of other alternative fuels.

It permanently operates two charter ships on European sea routes using biofuel, which produces less CO<sub>2</sub> than conventional fossil fuels. The raw material for the biofuel is provided by used cooking oils and fats. These are waste and residual materials from the catering and food industries, which, for example, cannot be used for further processing into food or animal feed.

## CO<sub>2</sub> Emissions by Life Cycle Phases (ID.7 Pro, Standard/Maximum)



An overview of the technical details of the life cycle analysis of the ID.7 Pro is available in the Green Finance Report.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Green Finance Report

### Contribution to Climate-Friendly Logistics outside the Group

Beyond its own value chain, the Volkswagen Group also wants to advance decarbonization in other industries together with MAN Energy Solutions. For example, the Group also 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 off with solutions in areas including carbon capture, utilization and storage; hydrogen; and heat pump technology.

### Climate Protection in Manufacturing

Volkswagen wants to reduce greenhouse gas emissions in production by 50.4% in absolute terms compared to 2018 by 2030. According to the Science Based Targets initiative (SBTi), this corresponds to a 1.5 °C target path. By 2023, absolute greenhouse gas emissions had already been decreased by 33.7% compared with 2018. Key to this are increasing energy efficiency and switching to a renewable power supply as important components of the decarbonization strategy. The Volkswagen Group has set itself the goal of implementing energy efficiency measures from 2018 to 2030 that save a total of 4.9 million MWh of energy at the production sites. By 2023, 7,822 measures totaling 3.0 million MWh had already been implemented.

Volkswagen is also paying particular attention to converting its own electricity generation. For example, the conversion of the power plants in Wolfsburg from coal to natural gas for the Wolfsburg-Nord/Süd cogeneration plant, which commenced in 2018, was completed at the end of 2021. The trial operation of the new gas and steam turbine facilities in the Wolfsburg-West cogeneration plant began in 2023. The decommissioning of the coal units in the Wolfsburg-West cogeneration plant is planned for March 31, 2024. Volkswagen believes that the originally announced annual savings of 1.5 million metric tons of CO<sub>2</sub> can be realized annually from the second quarter of 2024.

Further progress is being made in supplying plants with electricity from renewable energies. For example, the percentage of electricity purchased externally rose from 99.6% to 100% at EU production sites within one year. By 2030, the same target is planned for all global sites.<sup>3</sup> Volkswagen is also driving the energy transition at its own sites. For example, we have set ourselves the goal of generating 1.2 million MWh of power from renewable energies ourselves or in the immediate vicinity of the production sites by 2030. In 2023, 478,634 MWh of electricity was already generated from renewable energy in this way. To date, 56 Group production sites have been supplied with external electricity from 100% renewable energy sources. Of these, 39 sites are within the EU and 17 sites are outside the EU.

In 2023, 56.3% of the Group's total global electricity consumption at its production sites (including China) was accounted for by electricity from renewable sources. Compared with the previous year, this is a rise of 1.5%. As a result of our efforts in energy efficiency and renewable energy supply, we already operate eight production sites on a carbon-neutral basis (taking offset measures into account). These are the sites in Brussels and Győr (Audi), Zwickau and Dresden (Volkswagen), Zuffenhausen and Leipzig (Porsche), Crewe (Bentley) and Vrchlabí (Škoda). You can find further information on the certifications of our production sites' energy management systems (pursuant to ISO 50001 and ISO 14006) in the Environmental Compliance Management chapter.

 → Environmental Compliance Management

### Expanding Fast-Charging Infrastructure for Passenger Cars

The Volkswagen Group further expanded its global fast-charging infrastructure in the reporting year. The Volkswagen Group's global charging and energy business has been under new management since July 1, 2023. The Group function is playing a leading role in driving the expansion of the fast-charging network and the establishment of Volkswagen's own smart energy platform. In the course of a strategic realignment, the Charging and Energy division also wants to strengthen cooperation between the Group brands and create even more closeness to private and fleet customers.

→ More than  
**600,000**  
charging points for e-vehicles  
across Europe

The Volkswagen subsidiary Elli is one of the largest mobility service providers in Europe. In the reporting year, Elli significantly expanded its European charging network. Elli customers can now charge their e-cars through around 900 different providers in 27 European countries irrespective of brand. Throughout Europe, the Group already offers its customers access to more than 600,000 charging points with its Elli brand as a mobility service provider. The focus is increasingly on not only the quantity but also the quality of the charging network. With this in mind, Elli now offers its customers access to the so-called Selected Partner Network – a network of charging point operators that have been selected according to comprehensive quality criteria. The result is charging stops that combine high-performance charging infrastructure, on-site convenience (e.g., cafés, restaurants, sanitary facilities) and excellent operational reliability.

Elli Fleet Charging, an intelligent software solution for managing charging for electric vehicle fleets in Europe, was launched in the reporting year. Companies can use it to cost-optimize the charging of their entire electric vehicle fleet and make the best use of Elli's own infrastructure and public charging infrastructure. In a market introduction phase lasting several months, around 650 German companies and fleet managers have already successfully used Elli's product.

<sup>3</sup> Sites in China: 100% renewable/net carbon-neutral energy supply.

In 2023, Elli also introduced an easy-to-install charging station: the Elli Flexpole. Thanks to the integrated battery system, it can be connected to the low-voltage network without a special transformer or expensive construction work being required. Depending on the vehicle, the charging station charges a range of up to 160 km within ten minutes. In addition, Elli was admitted to trading on the largest European power exchange, EPEX Spot, in the reporting year. The basis for this is a stationary storage system that, in the future, will store the energy traded on the electricity market and a new, digital energy trading platform. For Elli, these are key steps on the path to the planned smart energy platform.

Together with other original equipment manufacturers (OEMs), Volkswagen founded the joint venture IONITY in 2017. IONITY set up 2,800 fast-charging stations on major highways across Europe by the end of 2023. Along with its partners, the Group wants to operate around 18,000 public fast-charging points in Europe by 2025 – five times as many as today and about one third of the total demand predicted for 2025 on the continent. This will be achieved through a series of strategic partnerships in addition to IONITY:

- BP wants to build fast-charging points across Europe with Volkswagen, including in Germany, the Netherlands and the UK – further markets will follow.

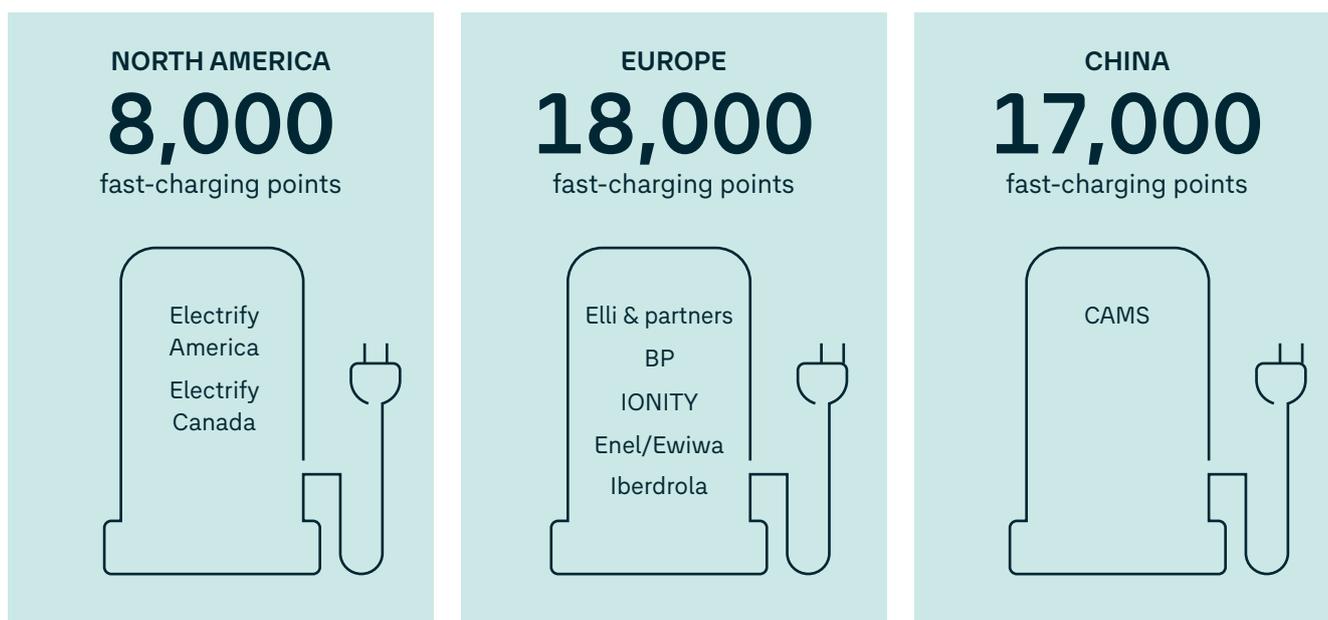
- Shell is going to install Elli Flexpole fast-charging points in various European markets.
- E.ON plans to expand its charging infrastructure network with the Elli Flexpole and wants to make the flexible fast-charging solution available to its customers to buy as well.
- In cooperation with Iberdrola, Volkswagen will, in particular, cover main traffic routes in Spain.
- In Italy, Volkswagen is collaborating with Enel X Way to establish a nationwide high-power charging network (Ewiva).

Volkswagen plans to expand the public fast-charging network in the US and China too:

- In North America, Electrify America's charging infrastructure is to be expanded to more than 8,000 locations by 2025.
- In China, Volkswagen is planning a total of 17,000 fast-charging points by 2025 through the CAMS joint venture.

By 2025, we and our partners plan to create a total of more than 40,000 fast-charging points in Europe, China and the USA. Around half of them are already active. Volkswagen wants to spend about €400 million for the European program as a whole by 2025.

## Fast-Charging Points by 2025



### Pilot Projects for Smart Network Integration

Volkswagen plans to integrate the electric car into private, commercial and public energy systems in the future. This will allow green power from the solar energy system to be stored in the vehicle and fed back into the home network if needed. The Group has already launched several pilot projects in connection with this. For example, Elli and the regional distribution grid operator MITNETZ STROM trialed the smart network integration of e-vehicles in Saxony from July to September 2022. At the start of 2023, those involved reached a positive verdict: Smart network integration increases the proportion of electricity from renewable energy sources fed into the grid, reduces the cost of charging e-vehicles and takes pressure off local power grids.

### TRATON SE Makes Charging Electric Trucks Easier

TRATON SE has been offering its brands' customers access to charging stations with a new service, TRATON Charging Solutions AB, since 2023 – making it easier for them to switch to battery-electric commercial vehicles. The service comprises the currently largest network of public charging stations in 12 European countries and bundles contracting, invoicing, route planning and utilization information. Through this new service, TRATON SE wants to help meet the growing demand for charging facilities outside depots that comes with the rise in electric commercial vehicles.

### Increasing Vehicle Efficiency

Options in the system are intended to promote the efficiency of vehicle operation in terms of energy consumption. For example, driving mode selection supports fuel-efficient driving via one option. In addition, in the case of manual-transmission vehicles, there are recommendations for changing gear, the selection of environmental route planning in navigation systems and tips for saving gasoline.

### Carbon-Neutral Delivery of Electric Vehicles

In 2022, we decided to take the voluntary measure of making the delivery of a number of the Group's electric vehicles to our customers in Europe carbon-neutral. In this way, we want to make almost completely net carbon-neutral mobility possible for them, providing they choose a contract for renewable energy for charging the vehicle. For as long as we cannot avoid CO<sub>2</sub> emissions and cannot use renewable energies everywhere, we will do this by voluntarily offsetting the remaining greenhouse gas emissions from our supply chain, production and logistics. This applies to MEB vehicles from the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Audi, SEAT and Škoda brands in Europe. We expect the need for offsetting to increase for the next few years as a result of electrification and net carbon-neutral delivery in Europe. In 2023, this amounted to 8.45 million metric tons of CO<sub>2</sub> for the Group.

As part of net carbon-neutral delivery, we offset unavoidable emissions from the life cycle phases, such as from the supply chain or production, through climate protection projects with high certification standards. These include the Verified Carbon Standard (VCS), the Climate, Community and Biodiversity Standards (CCB Standards) or the Gold Standard. In addition to external certification standards, we also assess offsetting projects for quality assurance in accordance with our own criteria, which are outlined in the next but one paragraph.

### Decarbonization of the Dealer Networks

To ensure high proximity to customers, the Volkswagen Group's sales network extends globally to more than 150 markets with more than 17,000 dealer and service locations. However, this is associated with CO<sub>2</sub> emissions. As part of the goTOzero retail project, the Volkswagen Group is working on decarbonizing the entire sales network and increasing the network's ESG performance. Since it was set up in 2021, the cross-brand team behind goTOzero retail has already achieved important milestones. For example, a target pathway for decarbonization was defined and has been confirmed by the competent committee. Accordingly, the entire dealer network's carbon footprint is to be reduced by at least 30% by 2030, at least 55% by 2040 and at least 75% by 2050 – taking 2020 as the baseline. These targets are to be achieved through appropriate reduction measures. In a final step, residual CO<sub>2</sub> emissions will be offset. Since 2022, the carbon footprint of the entire dealer and service network has been recorded annually in the "Franchises" category of Scope 3 GHG emissions.

To identify and successfully implement the correct measures for decarbonization, the businesses have manuals, training and marketing materials available to them, such as a comprehensive guidebook, web-based training and videos on communication with customers. In addition, the project team has developed a cross-brand certification system for the entire dealer network: the goTOzero retail certification, which is based on established systems such as the ISO 14001 standard, building certifications and rating systems. It has been used in 11 markets since 2023. From 2024, all 50 key dealer markets will successively be included in the certification. They cover 95% of the global dealer and service network. An energy and resource consulting concept is currently being developed. This will be available to all markets and partner companies from 2024. The Volkswagen Group aims for the highest possible energy efficiency and the use of renewable energy for newly constructed and existing buildings to the extent this is economically and technically feasible. Progress on the goTOzero retail project is regularly communicated internally and externally.

### Joint Venture for Offset Projects

We consider protecting natural carbon sinks to be an important task. Measures in this area should be both scalable and able to guarantee the additionality and permanence of atmospheric carbon sequestration. To underpin our commitment to climate protection projects and be able to develop our own projects in accordance with the highest standards, VW Kraftwerk GmbH and ClimatePartner GmbH have established a joint venture (JV): Volkswagen ClimatePartner GmbH. It develops and funds certified climate protection projects that serve the recognized offsetting of CO<sub>2</sub> emissions. One key requirement for all projects is that they meet the highest quality standards. For this reason, the JV also takes control with regard to quality assurance. Core aspects include additionality, accuracy and permanence of the emission reductions, the socioeconomic and environmental advantageousness for the region, and regular audit by independent third parties. The initial project standards are the Verified Carbon Standard and Gold Standard. The JV 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.

 → [Volkswagen ClimatePartner GmbH](#)

### Expanding Capital Expenditure and Partnerships

No single company can solve the great challenges of our time alone. This requires solid partnerships and cross-sector alliances. The Volkswagen Group also relies on collaboration with third parties in the context of decarbonization.

#### Promoting Innovations: Confirmation and Expansion of the Collaboration with EIT InnoEnergy

In addition to its own activities, Volkswagen is increasingly focusing on collaboration with innovative start-ups to promote new technologies and business models. For example, in the reporting year, we further expanded the strategic partnership we initiated in 2021 with EIT InnoEnergy SE, a world-leading innovation driver for the energy and mobility transition. This new capital expenditure continues our successful collaboration and will help accelerate innovation in the areas of e-mobility and renewable energy.

#### Volkswagen Group Innovation Becomes New Member of the MIT Future Energy Systems Center

Since the start of 2023, Volkswagen Group Innovation has been a member of the Future Energy System Center of the Massachusetts Institute of Technology Energy Initiative (MITEI). The aim is to facilitate intensive dialog between MIT's lecturers and researchers and the member companies to address urgent challenges in the energy sector and develop solutions for decarbonization. The center pursues a range of research activities geared toward the development of the electricity sector and the mobility transition.

#### Strategic Cooperation with Chinese E-Car Manufacturers

The Volkswagen Group announced two partnerships in China in the reporting year: a strategic cooperation between the Volkswagen Passenger Cars brand and XPENG, and the expansion of the existing collaborations between Audi and SAIC. This further advances our local electrification strategy as part of the "In China for China" strategy, paving the way for the joint development of intelligent, fully connected electric vehicles for the Chinese market. The China-specific vehicles supplement the existing product portfolio. The aim is to open up new customer and market segments in the Chinese market and thus exploit the potential of China's dynamically growing electric market.

#### Driving Decarbonization: Venture Capital Fund

Volkswagen has additionally been investing in decarbonization within and outside the Group since 2023 with a venture capital fund. The fund has a volume of \$300 million and is intended to promote innovation along the entire mobility value chain. Innovation solutions are considered for all areas that have a measurable impact on CO<sub>2</sub> savings – from supply chain and production topics to battery development and sustainable materials. The fund primarily invests in early- and growth-stage start-ups in the US and Europe (including Israel). It was set up with a term of ten years, which is customary in the market, and is managed by an independent management team. In addition to Volkswagen, the fund will also be open to other selected investors.

#### Making the EU a Pioneer for Climate Protection: Involvement in the CEO Alliance

Volkswagen is a member of the CEO Alliance for Europe's Recovery, Reform and Resilience, a pan-European and cross-sector alliance of large corporations based in Europe that expressly support the EU's Green Deal and the associated climate protection targets. The CEO Alliance supports the goal of making the EU the leading region in the world in climate protection, accelerating investment, driving innovation and thus creating future-proof jobs.

Nine member companies are currently working on a range of projects. These include a commitment to CO<sub>2</sub>-neutral company buildings by 2030, the development of a charging network for heavy goods vehicles on certain freeways in Europe, a project on energy storage in buildings and one on the value chain for green hydrogen. The CEO Alliance also supports the European Commission's Fit for 55 program and is proposing rapid measures for decarbonizing mobility and transport, the transformation of the building sector and a rapid decarbonization of the energy system in the EU. The CEO Alliance also expresses support for carbon pricing across industries and countries and is calling for political decision-makers in Europe to set a strong price signal and continuously develop the EU emissions trading system.

### Defining and Pursuing Ambitious Decarbonization Targets

The Volkswagen Group wants to become a net carbon-neutral company by 2050. To achieve this goal, offset action is also planned alongside carbon reduction measures and converting to renewable energies.

→ **50.4%**

**reduction targeted in production-related CO<sub>2</sub> emissions by 2030.**

The Group has set itself the objective of reducing CO<sub>2</sub> emissions from the production of its passenger cars and light commercial vehicles by 50.4% by 2030 - compared with the base year of 2018. The Science Based Targets initiative (SBTi) confirmed to the Volkswagen Group in the reporting year that the Company is fulfilling the conditions for limiting global warming to 1.5 degrees Celsius with its objective for the production phase (Scope 1 and 2). Group-wide production also makes a contribution to achieving Volkswagen AG's overall climate goals with its stricter CO<sub>2</sub> saving targets. SBTi has confirmed the aim of reducing CO<sub>2</sub> emissions by 30% in the use phase (Scope 3) to the Volkswagen Group as in line with the limitation of global warming to two degrees Celsius. By 2030, the Group wants to emit 30% less CO<sub>2</sub> on average per vehicle (passenger cars and light commercial vehicles) over the entire life cycle than in 2018. The targets are to be achieved through pure CO<sub>2</sub> reduction.

Decarbonization targets were also formulated in the area of heavy trucks and buses, and these represent sub-targets for the Group. For example, Scania is committed to reducing its absolute Scope 1 and Scope 2 greenhouse gas emissions by 50% by 2025 compared with the base year of 2015. In 2022, the company also announced its intention to decarbonize its supply chain as far as possible by 2030. This involves the most important production materials and largest sources of emissions: batteries, steel, aluminum and cast iron. The Scope 3 greenhouse gas emissions from the use of vehicles sold are to be reduced by 20% per vehicle kilometer by 2025 at Scania, also compared with a 2015 baseline. The SBTi confirmed to Scania that these targets are at a level that allow global warming to be limited to 1.5 degrees Celsius. MAN also received SBTi certification of its decarbonization target in the reporting year. Compared with 2019, by 2030 the Group wants to reduce its Scope 1 and Scope 2 emissions by 70% and its Scope 3 emissions by 28%. In addition, Scania and MAN have committed to the SBTi's Net-Zero Standard. Volkswagen Truck & Bus and Navistar have also set reduction targets and are working on having these validated by the SBTi.

#### Decarbonization Index for Target Achievement Measurability

In the DCI, we have a meaningful measuring instrument that makes our progress and interim results in this area public and verifiable. The DCI is calculated on the basis of emissions of CO<sub>2</sub> and CO<sub>2</sub> equivalents (jointly referred to as CO<sub>2</sub>e) 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. The use phase is calculated over 200,000 km and with reference to region-specific fleet values without legal flexibilities. The intensity of the CO<sub>2</sub> emissions from the electricity used to charge electric vehicles is also calculated on the basis of region-specific energy mixes. Maintenance of the vehicles is not taken into account here. Our vehicle life cycle assessments, which are used as the data basis for calculating supply chain and recycling emissions, have been verified externally and independently in accordance with the ISO 14040 and ISO 14044 standards. Scope 3 also includes emissions from additional Group entities and regions in some categories that are not directly product-related.

The DCI calculation methodology is regularly adjusted depending on internal and external requirements, such as new test cycles for fleet emissions. In order to present a methodologically consistent time series, published DCI values may therefore also be adjusted to the new methodology and thus changed.

→ The **DCI** measures the average emissions of CO<sub>2</sub> and CO<sub>2</sub> equivalents of the brands of the Europe (EU27, UK, Norway and Iceland), China and USA regions that manufacture passenger cars and light commercial vehicles over the entire life cycle and is expressed in metric tons of CO<sub>2</sub> per vehicle. It includes not only the direct and indirect CO<sub>2</sub> emissions of the individual production sites (Scope 1 and 2) but also other direct and indirect CO<sub>2</sub> emissions in the life cycle of the vehicles and beyond (Scope 3).

In the reporting year, the DCI value averaged 47.3 metric tons of CO<sub>2</sub> per vehicle. This represents a reduction of 0.5 metric tons of CO<sub>2</sub> per vehicle compared with the previous year. This is primarily due to lower emissions in the use phase as a result of, for example, the increase in the share of electric vehicles. The electrification of the portfolio combined with the use of renewable energies in production and the use phase is thus showing an impact.

For 2024, Volkswagen plans to adjust the CO<sub>2</sub> figures reported for the base years. The Greenhouse Gas Protocol provides for a recalculation of corporate emissions if there have been significant new findings or changes. There may be various reasons to recalculate the emissions of past years to enable a fair comparison with current emissions: structural changes in the Group, changes in the calculation method, increase in the precision of emission factors or activity data, findings regarding significant errors, etc. The Volkswagen Group decides calculation changes once a year in a predefined process. Based on these decisions, we are currently working on recalculating historical emissions for the baseline years of the current climate protection targets and having the recalculation audited. Examples of changes to the calculation assumptions for the DCI since 2018 that are currently being evaluated include: availability of region-specific life cycle assessments for the China market (since 2022), use of company-specific

cutting rates for steel and aluminum components in production instead of generic data (since 2022 for aluminum and 2023 for steel), use of Worldwide Harmonized Light Vehicles Test Procedure (WLTP) instead of New European Driving Cycle (NEDC) consumption figures for the calculation of the use phase (since 2020), use of specific data for the emissions of Group franchises (particularly authorized Volkswagen dealers) instead of generic figures (since 2022), calculation of generic life cycle assessments with 0% recycled aluminum content (since 2022).

### Transparency on CO<sub>2</sub> Emissions as a Basis for Improvements

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

Additional CO<sub>2</sub> offset projects – e.g., for the carbon-neutral delivery of electric vehicles – are not shown in the DCI or the Scope 1 to 3 inventory. The offset volume in the reporting period ran to around 9.0 million metric tons of CO<sub>2</sub>. This equates to 1.2 metric tons of CO<sub>2</sub> per vehicle for all vehicles included in the DCI.

In line with the Scope 3 standards published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), we are reporting CO<sub>2</sub> emissions for 13 out of a total of 15 Scope 3 categories in 2023. According to this, around 22% of all Scope 3 emissions are in the "Purchased goods and services" emissions category, while 72% are in the "Use phase" emissions category (well to wheel). To calculate use-phase emissions in the DCI and in the Scope 3 GHG inventory, fleet values not including any legal flexibilities are used.

The calculation of CO<sub>2</sub> emissions in the use phase of the Scope 3 GHG inventory is based on a Group fleet value, which is represented by the new vehicle fleet (passenger cars and light commercial vehicles) in the three regions (Europe [EU27, UK, Norway and Iceland], the USA and China). In order to provide a picture that is as complete as possible, we also collect data on emissions in this category that are produced during the production and transportation of fuels ("well to tank" emissions).

### CO<sub>2</sub> Fleet Emissions in Europe (EU27+2)

We use the strategic indicator of CO<sub>2</sub> fleet emissions in Europe and the United States to evaluate the effectiveness of our measures to reduce CO<sub>2</sub> emissions emitted by our vehicles. The Volkswagen Group's new passenger car fleet in the 27 EU member states excluding Malta but including Norway and Iceland (EU27+2) emitted an average of 119 g CO<sub>2</sub>/km (WLTP) in the reporting period in accordance with the statutory measurement bases. The statutory target is 122 g CO<sub>2</sub>/km (WLTP). This means that the Volkswagen Group outperformed the EU's fleet CO<sub>2</sub> target. All the figures mentioned are subject to confirmation of the CO<sub>2</sub> data in the context of official publication by the European Commission. The targets will be tightened from 2025: The European Commission has thus set a target of a 15% reduction in CO<sub>2</sub> compared with 2021, which corresponds to a CO<sub>2</sub> target of less than 100 g CO<sub>2</sub>/km for our EU new passenger car fleet. A 55% reduction has been set for 2030, which corresponds to a CO<sub>2</sub> target of less than 50 g CO<sub>2</sub>/km. We assume that our new passenger car fleet in the EU will meet the target for 2025 and more than meet the target for 2030. A CO<sub>2</sub> reduction target of 100% for passenger cars has been set for 2035.

The Volkswagen Group's new light commercial vehicles fleet in the EU emitted an average of 187 g CO<sub>2</sub>/km (WLTP) in the reporting period as per statutory measurements bases, compared with a statutory target of 204 g CO<sub>2</sub>/km (WLTP). This means that the Volkswagen Group outperformed the EU's fleet CO<sub>2</sub> target. All the figures mentioned are subject to confirmation of the CO<sub>2</sub> data in the context of official publication by the European Commission. The targets will be tightened from 2025: The European Commission has thus stipulated a 15% reduction of CO<sub>2</sub> emissions compared with 2021, which corresponds to a CO<sub>2</sub> target of less than 180 g CO<sub>2</sub>/km for our new light commercial vehicle fleet in the EU. A 50% reduction has been set for 2030, which corresponds to a CO<sub>2</sub> target of less than 105 g CO<sub>2</sub>/km. We assume that our new light commercial vehicles fleet in the EU will meet this target for 2025 and more than meet the target for 2030. A CO<sub>2</sub> reduction target of 100% for light commercial vehicles has been set for 2035. In the United Kingdom and Switzerland/Liechtenstein markets, the Volkswagen Group's new passenger car fleet met the statutory requirements for the reporting period. The Volkswagen Group's new light commercial vehicle fleet met the statutory requirements for the reporting period in the United Kingdom but fell just short of those for Switzerland.

### CO<sub>2</sub> Emissions of the Volkswagen Group's European (EU27+2) New Passenger Car Fleet

*in grams per kilometer (WLTP)*



<sup>1</sup> The European Commission switched its calculation of CO<sub>2</sub> fleet emissions from NEDC to WLTP in 2021.

<sup>2</sup> Subject to confirmation of CO<sub>2</sub> data within the scope of official publication by the European Commission.

### CO<sub>2</sub> Fleet Emissions in the USA

In the United States, the emission pool – comprising the Group brands Volkswagen Passenger Cars, Audi, Lamborghini, Bentley and Porsche – commits to the Greenhouse Gas (GHG) and Corporate Average Fuel Economy (CAFE) regulations. Due to a model year – the accounting period used in the USA – differing in length from the calendar year, internal calculations are used to determine the figures for the current and preceding model year. The average GHG CO<sub>2</sub> value (internal data as of September 2023) for the passenger car and light commercial vehicle fleets in model year 2023 is 133 g CO<sub>2</sub>/km (model year 2022: 142 g CO<sub>2</sub>/km). The statutory target is 122 g CO<sub>2</sub>/km (model year 2022: 136 g CO<sub>2</sub>/km). Compliance with the statutory requirements of the GHG and CAFE regulations together with externally acquired credits enabled the Volkswagen Group to comply with the applicable requirements – subject to recognition by the authorities. The figure given for model year 2023 is also subject to recognition by the Environmental Protection Agency (EPA). We anticipate a CO<sub>2</sub> target of around 110 g CO<sub>2</sub>/km in the USA for 2025 and therefore expect to be able to achieve this target. For 2030, we aim to increase the share of electric vehicles in our new vehicle fleet to significantly more than 50%, which would put us within the target range of the current administration.

### Achieving Decarbonization Targets

We have two levers in particular available to us to impact greenhouse gas emissions across the entire life cycle of Volkswagen products: the Group's electric offensive and the Renewable Energies strategy.

The Group Steering Committee for Fleet Compliance and a specially founded Decarbonization Project Center are responsible for strategy and target development and also for implementation of the program and fleet compliance. The Decarbonization Project Center includes experts from all brands and relevant departments. We use a predefined process overseen by the management of the Decarbonization Project Center and the Group Steering Committee for Fleet Compliance to check measures with which we can achieve the objective of decarbonization. All production locations and the brands and regions have prepared decarbonization roadmaps. The degree of target achievement is measured with a tracking system. If we miss our target, we implement corrective measures. TRATON SE's heavy commercial vehicles have a significant carbon footprint and are therefore part of a separate decarbonization program that is connected with the existing decarbonization program for passenger cars and light commercial vehicles via interfaces. The program and associated measures are intended to facilitate progress with reducing greenhouse gas emissions.

### Volkswagen Group CO<sub>2</sub> Emissions according to the GHG Protocol for Passenger Cars and Light Commercial Vehicles in the USA

*in grams per kilometer by model year*



<sup>1</sup> Subject to submission of the final MY report MY23 and subsequent recognition by EPA and CARB (internal data as of September 2023).

<sup>2</sup> Subject to recognition by EPA and CARB (final MY report MY22 submitted but not yet confirmed).

Decarbonization KPIs	Unit	2023	2022	Notes and comments
<b>Decarbonization index<sup>1</sup>   GRI 305-4</b> WLTP strategic KPI	in metric tons of CO <sub>2</sub> /vehicle	47.3	47.8 (48.0)	The KPI includes passenger-car manufacturing brands and light-commercial-vehicle-producing brands in the Europe (EU27, United Kingdom, Norway and Iceland), China and USA regions. In particular, savings in the use phase (for example, due to the increased share of electric vehicles) have led to a reduction in the DCI by 0.5 metric tons of CO <sub>2</sub> /vehicle. The DCI for 2022 and 2023 is reported without taking offset measures into account. To enable comparability, the DCI reported in 2022 (48.0 metric tons CO <sub>2</sub> /vehicle) was adjusted to new calculation assumptions (rectification of errors in logistics and franchises, inflation adjustment in categories 2, 8 and 13).
<b>Average emissions of the new passenger car fleet</b> (strategic KPI)				
EU	g CO <sub>2</sub> /km	119	119	
USA	g CO <sub>2</sub> /km	133	142	Emission pool: Volkswagen Passenger Cars, Audi, Lamborghini, Bentley and Porsche. Forecast value: The figure given for model year 2023 is also subject to confirmation by the EPA.
<b>Alternative drive technologies in the Group</b>				Volkswagen Group production: Volkswagen Passenger Cars, Audi, Škoda, SEAT, Volkswagen light commercial vehicles
Worldwide				
Gas drives (natural gas and LPG)	number of vehicles produced/percentage change	7,189/ -53.3	15,387/ -56.3	
Hybrid drives	number of vehicles produced/percentage change	253,009/ +10.1	229,882/ -4.2	
All-electric drives	number of vehicles produced/percentage change	769,431/ +32.7	580,023/ +35.5	
<b>Alternative drives (total)</b>	<b>number of vehicles produced/percentage change</b>	<b>1,029,629/ +24.8</b>	<b>825,292/ +17.4</b>	

<sup>1</sup> There was an error in the calculation of the DCI figure for Scope 3 categories 4 and 9 (logistics) in previous years because the Chinese joint ventures' vehicle volume was not correctly taken into account. The error was corrected in the reporting year, and historic figures have been restated accordingly. The calculation of the DCI figure for Scope 3 category 14 (franchises) was standardized in the reporting year so that the process-related emissions recorded in the previous year are now divided by the corresponding vehicle volume of the previous year. The previous year's figure was adjusted accordingly.

Decarbonization KPIs	Unit	2023	2022	Notes and comments
Europe				EU27, United Kingdom, Norway and Iceland
Gas drives (natural gas and LPG)	number of vehicles produced/ percentage change	7,104/ -53.4	15,240/ -56.4	
Hybrid drives	number of vehicles produced/ percentage change	206,322/ +24.0	166,415/ -16.2	
All-electric drives	number of vehicles produced/ percentage change	447,656/ +31.3	340,952/ +17.8	
<b>Alternative drives (total)</b>	<b>number of vehicles produced/ percentage change</b>	<b>661,082/ +26.5</b>	<b>522,607/ 0.0</b>	
Product carbon footprint (DCI)   <i>GRI 305-4</i>	in metric tons of CO <sub>2</sub> /vehicle	47.3	47.8 (48.0)	See also decarbonization index note.
Scope 1 GHG emissions (absolute) <sup>2,3</sup>   <i>GRI 305-1</i>	in million metric tons of CO <sub>2</sub>	4.03	4.48	
of which Volkswagen AG	in million metric tons of CO <sub>2</sub>	1.83	2.04	
Scope 1 GHG emissions (specific) <sup>3</sup>   <i>GRI 305-4</i>	in kg of CO <sub>2</sub> /vehicle	363	418	Passenger cars and light commercial vehicles
in Volkswagen AG	in kg of CO <sub>2</sub> /vehicle	2,243	3,060	
Scope 2 GHG emissions (absolute) <sup>2</sup>   <i>GRI 305-2</i>	in million metric tons of CO <sub>2</sub>	1.96	2.11	
of which Volkswagen AG	in million metric tons of CO <sub>2</sub>	0.12	0.11	
Scope 2 GHG emissions (specific)   <i>GRI 305-4</i>	in kg of CO <sub>2</sub> /vehicle	204	236	Passenger cars and light commercial vehicles
in Volkswagen AG	in kg of CO <sub>2</sub> /vehicle	145	167	
<b>Scope 3 GHG emissions   <i>GRI 305-3</i></b>	<b>in million metric tons of CO<sub>2</sub></b>	<b>413.95</b>	<b>396.39</b>	
Category 1: Purchased Goods and Services	in metric tons of CO <sub>2</sub>	89,572,138/ 21.6	80,786,280/ 20.4	The category 1 CO <sub>2</sub> 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 68 production-volume-weighted life cycle assessments (LCAs). All vehicle LCAs (passenger cars and light commercial vehicles) have been independently certified in accordance with ISO 14040/44. Key drivers of change include an increased average vehicle weight and increased production number.

<sup>2</sup> Scope: The following sites are not included in the Group assessment in the reporting year: the four Scania Service Centers (Johannesburg, Narasapura, Kuala Lumpur, Taoyuan City); one MAN Truck & Bus SE site (Serendah); one site in China (Suzhou) and one site currently still under construction in China (Changchun) with planned production start at the end of 2024. Data for December of the reporting year may be based on estimates. Any estimated figures for the prior year were replaced when the current data was collected.

<sup>3</sup> The KPIs contain incomplete data for the MAN Truck & Bus SE sites.

Decarbonization KPIs	Unit	2023	2022	Notes and comments
Category 2: Capital goods	in metric tons of CO <sub>2</sub> /in %	5,716,214 / 1.4	6,633,357 / 1.7	The emissions associated with capital goods were calculated on the basis of an economic input-output analysis using the investment data in the Volkswagen AG Annual Report. The emission factors used in the calculation will be adjusted for inflation from the 2023 reporting year onward.
Category 3: Fuel- and energy-related emissions (not included in Scope 1 or 2)	in metric tons of CO <sub>2</sub> /in %	983,498 / 0.2	1,034,162 / 0.3	The Group-wide consumption of energy is recorded annually in our internal environmental information system and converted into CO <sub>2</sub> equivalents using emission factors for the various energy sources from a representative generic database.
Category 4: Upstream transportation and distribution	in metric tons of CO <sub>2</sub> /in %	4,153,587 / 1.0	4,124,894 / 1.0	This number is equivalent to the CO <sub>2</sub> emissions from energy-source supply and use, both from inbound and outbound shipments and transportation processes between our sites worldwide (excluding the Chinese joint ventures). Transportation data are manually derived from internal transport IT systems for all modes of transport and manually recorded processes. Figure based on the 2023 CDP report; the figure for the 2023 reporting year will appear in the 2024 CDP report.
Category 5: Waste	in metric tons of CO <sub>2</sub> /in %	1,050,976 / 0.3	909,775 / 0.2	The waste produced across the Group is recorded annually in our internal environmental information system and converted into CO <sub>2</sub> equivalents using emission factors for the various waste streams from a representative generic database.
Category 6: Business travel	in metric tons of CO <sub>2</sub> /in %	248,450 / 0.1	123,816 / 0.0	Since the 2022 reporting year, the emissions have been calculated based on Volkswagen AG's actual air and rail travel and extrapolated for the Group. The increase in emissions is due to the removal of travel restrictions during the reporting year.
Category 7: <sup>4</sup> Employee commuting	in metric tons of CO <sub>2</sub> /in %	1,114,774 / 0.3	1,099,091 / 0.3	The CO <sub>2</sub> emissions are based on activity data that were collected in a specific survey representing commuting to/from our largest site in Wolfsburg. The calculation assumes 220 working days per year and a distribution between modes of transport of 75% by car, 10% by train (long-distance transport), 5% by public transport (land transport) and 10% by public transport (urban). The corresponding emission factors for these four modes of transport were calculated on the basis of external generic data sources. The global Scope 3 emissions caused by commuting were extrapolated from the Wolfsburg results on the basis of headcount.

<sup>4</sup> Due to the low proportion of emissions (< 0.5%), the previous calculation was based on a generic approach. International, generic reference data will be used to further develop the methodology for emissions in the commuting category in the 2024 reporting year.

Decarbonization KPIs	Unit	2023	2022	Notes and comments
Category 8: Upstream leased assets	in metric tons of CO <sub>2</sub> /in %	259,659/ 0.1	413,446/ 0.1	The calculation is based on Group-wide payments for rights to use land, buildings and buildings on third-party land. The emissions for this category were estimated using an economic input-output analysis. The emission factors used in the calculation will be adjusted for inflation from the 2023 reporting year onward.
Category 9: Downstream transportation and distribution				Included in category 4
Category 10: Processing of sold products				Included in Scope 1
Category 11: Use of sold products	in metric tons of CO <sub>2</sub> /in %	299,195,581/ 72.3	288,543,814/ 72.8	The CO <sub>2</sub> emissions comprise the well-to-wheel emissions of all passenger cars and light commercial vehicles sold in 2023 at an assumed lifetime mileage of 200,000 km. The calculation is based on the weighted average fleet emissions [g CO <sub>2</sub> /km] in the main European markets (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. In the previous year's report, the figure wrongly took account of the Bugatti brand's vehicles but not the MAN brand's light commercial vehicles. The previous year's figure has therefore been corrected.
Category 12: End-of-life treatment of sold products	in metric tons of CO <sub>2</sub> /in %	609,577/ 0.1	552,289/ 0.1	The category 12 CO <sub>2</sub> 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 68 production-volume-weighted life cycle assessments (LCAs). All vehicle LCAs (passenger cars and light commercial vehicles) have been independently certified in accordance with ISO 14040/44.
Category 13: Downstream leased assets	in metric tons of CO <sub>2</sub> /in %	8,627,724/ 2.1	9,162,826/ 2.3	The calculation is based on, among other things, payments received by the Group for rights to use land, buildings and buildings on third-party land. The emissions for this category were estimated using an economic input-output analysis. The emission factors used in the calculation will be adjusted for inflation from the 2023 reporting year onward.
Category 14: Franchises	in metric tons of CO <sub>2</sub> /in %	2,415,100/ 0.6	3,009,100/ 0.8	Since the 2022 reporting year, the calculation has been based on an annual evaluation of the CO <sub>2</sub> 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.

# 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<sub>2</sub> 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 Volkswagen Group supports the EU's overarching goal. We are committed to the Paris Climate Agreement and align our own activities with the 1.5 degree goal. We aim to achieve net carbon neutrality by 2050.

## Reporting for Fiscal Year 2023

The Volkswagen Group is required by the EU Taxonomy to report on all of the environmental objectives for the first time in fiscal year 2023. Following climate change mitigation and climate change adaptation, definitions have now been assigned to the four remaining environmental objectives, these being sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems. 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 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 key performance indicators 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 "NEW AUTO – Mobility for generations to come", we are preparing ourselves for the global changes in mobility and thus playing a substantial role in driving Volkswagen's transformation into a provider of sustainable mobility. 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.

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
<b>Environmental objective: climate change mitigation</b>		
<b>3. Manufacturing</b>		
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
<b>9. Professional, scientific and technical activities</b>		
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<sub>2</sub> 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<sub>2</sub> emissions of less than 50 g/km in accordance with the WLTP. This encompasses the majority of our plug-in hybrids. Buses meeting the Euro 6 standard (Stage E) were also included until December 31, 2022.

#### *Economic activity 3.18 Manufacture of automotive and mobility components*

This economic activity was added to the EU Taxonomy in the reporting period to enable those components that play a key role in reducing greenhouse gas emissions also to be taken into account. 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 has been verified for some first projects by an independent third party and will be extended to other applications 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 greenhouse gas emissions substantially in other sectors of the economy are taxonomy-eligible. At Volkswagen, this comprises all new-build activities that enable the use of gas and climate-neutral synthetic fuels (e.g. manufacturing of gas and dual-fuel engines), all industrial solutions for energy storage and sector coupling (e.g. heat pumps) and all 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<sub>2</sub> 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 greenhouse gas emissions. 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, an analysis was performed largely 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, an analysis was performed 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 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, at the sites of the European truck and bus brands, and in the Power Engineering Business Area.

**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<sub>2</sub> 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 measures needed to mitigate the risk were developed.

**Sustainable Use and Protection of Water and Marine Resources**

We evaluated our economic activities with respect to the sustainable use and protection of water and marine resources looking at the three following criteria: preserving water quality, avoiding water stress, and an environmental compatibility assessment (EIA or comparable process). Risks identified in an EIA are examined during the approval process and, if relevant, result in measures and regulatory requirements. We based the analysis primarily on ISO 14001 certificates, information from site approvals and other external data sources related to sites 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 parts 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 measures for the use of recycled materials in new vehicles.

For trucks and buses, a review was 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 among other things by 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 July 2023, the European Commission revised the DNSH criterion of the EU Taxonomy. There is room for interpretation as to the effect that the changed requirements will have on internal processes related to the assessment of substitution options for substances of very high concern (SVHC) in the 2023 reporting year.

In the vehicle-related business, standards and processes stipulating in principle that SVHCs should be avoided and substituted are already in place. On this basis, our analyses look at the substances contained in the process materials used in production and in the vehicle-related components of our all-electric vehicles, and at the suppliers of these materials and components, in order to assess whether the SVHCs can be substituted, taking into account factors such as technical and economic criteria. We use pilot projects to test the processes and documentation for assessing substitution options in accordance with the amended EU Taxonomy requirements. It has not yet been possible to verify whether the sites of the truck and bus brands that operate only outside the European Economic Area comply with the new regulations due to factors such as the inadequate lead time for implementation.

In the Power Engineering Business Area, the corresponding processes include surveys relating to the substitution assessments and guidelines for performing these assessments.

### Protection and Restoration of Biodiversity and Ecosystems

In order to verify adherence to the requirements on biodiversity and ecosystems, the relevant areas were identified. Where biodiversity-sensitive areas are located close to a production site, we checked whether a nature conservation assessment had been performed and whether nature conservation measures had been defined in the environmental approvals and subsequently implemented. We also checked whether changes had occurred 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. In 2022, 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 measures and the provision of a complaints mechanism. The due diligence obligations apply both to the Volkswagen Group's own business area and to the Group's supply chain. In the reporting year, the departments responsible performed a risk analysis using questionnaire-based surveys of the Group companies of the Volkswagen Group's own business area; this included all sites that were also examined under the DNSH criteria. The companies were given risk-specific measures to counteract the risks identified in the analysis, and were required to implement these. For risks that are already known, we have begun to revise and initiate preventive measures and to supplement these with other measures where appropriate. The status of implementation of the respective measures is continuously monitored by the Group. If infringements of the frameworks are identified, remedial measures must be initiated and checked for their effectiveness.

Relationships with our business partners are based on agreements such as the Code of Conduct for Business Partners. We review compliance by the relevant suppliers with the binding requirements defined in the Code using sustainability ratings. We address existing sustainability risks and violations of sustainability principles by systematically defining and allocating packages of measures to correct the violations; we also apply this approach to the upstream supply chain. In addition, we also conducted training for suppliers and on-site audits at suppliers with a high risk exposure in the reporting period. We implemented a Human-Rights-Focus-System in 2022 to comply 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 financial figures relevant for the Volkswagen Group are taken from the IFRS consolidated financial statements for fiscal year 2023. 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 the sales revenue reported in the IFRS consolidated financial statements. This amounted to €322.3 billion in fiscal year 2023 (see also note on "Sales revenue" in the notes to the consolidated financial statements; the prior-year figures were adjusted – see disclosures on IFRS 17).



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Of this total, €294.0 billion, or 91.2% 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 €165 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, €36.6 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 2023, there were 799 thousand such vehicles, around one third more than in the previous year. Their share of the relevant sales volume – excluding the vehicles from the Chinese joint ventures – rose to 12.7 (11.1)%. Passenger cars and light commercial vehicles made up the bulk at 797 thousand vehicles; trucks and buses were down compared with the previous year, when buses that met the requirements of the Euro VI-E standard were still counted. Sales of all-electric vehicles (BEV) increased very sharply

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, €36.5 (26.1) billion of the sales revenue generated from our vehicle-related business, equating to 11.3 (9.4)% of consolidated sales revenue, was taxonomy-aligned. Of this figure, €165 million related to economic activity 3.18 Manufacture of automotive and mobility components, which is being reported for the first time, while €27.8 billion or 8.6% of consolidated sales revenue was attributable to our BEV models.

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 completely taxonomy-aligned sales revenue of €28 million (previous

year: €18 million). The increase in taxonomy-aligned sales revenue is attributable to the expansion of the business. 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 (€3.1 billion), €68 million of which is taxonomy-aligned. In the reporting year, the complex evidential requirements were fulfilled for a portion of the activities for the first time. A further €58 million was contributed to taxonomy-eligible sales revenue by economic activity 9.1 Close to market research, development and innovation.

Of the Volkswagen Group's total sales revenue in fiscal year 2023,

- €297.4 (256.9) billion, or 92.3 (92.0)%, was taxonomy-eligible sales revenue and
- €36.6 (26.1) billion, or 11.4 (9.4)%, was taxonomy-aligned sales revenue.

## Sales Revenue 2023

	Sales Revenue		Substantial Contribution to Climate Change Mitigation		Compliance with DNSH Criteria	Compliance with Minimum Safeguards	Taxonomy-Aligned Sales Revenue	
	€ million	% <sup>1</sup>	€ million	% <sup>1</sup>			€ million	% <sup>1</sup>
Economic activities					Y/N	Y/N		
<b>A. Taxonomy-eligible activities</b>	<b>297,359</b>	<b>92.3</b>	<b>36,847</b>	<b>11.4</b>	<b>Y/N</b>	<b>Y</b>	<b>36,644</b>	<b>11.4</b>
<b>Vehicle-related business</b>								
3.3 Manufacture of low-carbon technologies for transport	294,049	91.2	36,586	11.4	Y/N	Y	36,383	11.3
of which taxonomy-aligned BEVs					Y	Y	27,759	8.6
3.18 Manufacture of automotive and mobility components	165	0.1	165	0.1	Y	Y	165	0.1
<b>Power Engineering</b>								
3.2 Manufacture of equipment for the production and use of hydrogen	28	0.0	28	0.0	Y	Y	28	0.0
3.6 Manufacture of other low-carbon technologies	3,059	0.9	68	0.0	Y	Y	68	0.0
9.1 Close to market research, development and innovation	58	0.0	-	-	-	-	-	-
<b>B. Taxonomy-non-eligible activities</b>	<b>24,925</b>	<b>7.7</b>						
<b>Total (A + B)</b>	<b>322,284</b>							

<sup>1</sup> 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 2023 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 2023, additions in the Volkswagen Group as defined above amounted to

- €12.3 billion from intangible assets,
- €14.8 billion from property, plant and equipment and
- €33.0 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 €1.4 billion in fiscal year 2023. Total capital expenditure to be included in accordance with the EU Taxonomy therefore came to €61.5 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 €61.1 billion, or 99.4% 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 vehicle volumes 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 pro-

duction 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 vehicles meeting the screening criteria for the substantial contribution in the next five years. In contrast, capital expenditure on sites that only produce vehicles not meeting the screening criteria was not counted under the allocation formula. Calculated in this way, capital expenditure relating to vehicles that meet the screening criteria for the substantial contribution amounted to €20.1 billion.

Taking into account the DNSH criteria and minimum safeguards, capital expenditure of €20.0 (16.9) billion was taxonomy-aligned. This represented 32.6 (34.5)% of the Group's total capital expenditure. Of this figure, €5.9 billion was attributable to intangible assets, €6.3 billion to property, plant and equipment and €7.9 billion to lease assets and investment property. The figure includes additions to capitalized development costs of €4.9 billion and additions to property, plant and equipment of €6.1 billion for our all-electric vehicles (BEV). The increase in taxonomy-aligned capital expenditure of €3.1 billion is attributable to the growing number of environmentally sustainable vehicle projects under the EU Taxonomy.

In the reporting period, we refinanced taxonomy-aligned capital expenditure from fiscal years 2021 and 2022 based on the Green Finance Framework updated in October 2022 by issuing green bonds in the amount of €3.5 billion. Only capital expenditure in connection with all-electric vehicles was included here.

In 2022, Scania issued a green bond totaling SEK 3.0 billion to finance research and development activities relating to all-electric vehicles. The remaining €91 million was used in the reporting period; of this amount, €46 million was attributable to taxonomy-aligned capital expenditure. Adjusted for this figure, taxonomy-aligned capital expenditure attributable to the vehicle-related business accounted for 32.5 (34.3)% of total capital expenditure in accordance with the EU Taxonomy.

€37 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 and €85 million is attributable to economic activity 3.6 Manufacture of other low-carbon technologies. For the latter, capital expenditure was broken down based on planned sales revenue.

Taxonomy-aligned capital expenditure for the manufacture of equipment for the production and use of hydrogen was disclosed in the amount of €37 million, half of which was attributable to intangible assets and half to property, plant and equipment. Capital expenditure amounting to €24 million for the manufacture of other low-carbon technologies was disclosed as taxonomy-aligned, more than 90% of this was attributable to property, plant and equipment.

Of the Volkswagen Group's total capital expenditure in fiscal year 2023,

- €61.3 (48.9) billion, or 99.6 (99.6)%, was taxonomy-eligible capital expenditure and
- €20.1 (16.9) billion, or 32.7 (34.5)%, was taxonomy-aligned capital expenditure.

## Capital Expenditure 2023

	Capital Expenditure		Substantial Contribution to Climate Change Mitigation		Compliance with DNSH Criteria	Compliance with Minimum Safeguards	Taxonomy-Aligned Capital Expenditure	
	€ million	% <sup>1</sup>	€ million	% <sup>1</sup>			€ million	% <sup>1</sup>
Economic activities	€ million	% <sup>1</sup>	€ million	% <sup>1</sup>	Y/N	Y/N	€ million	% <sup>1</sup>
<b>A. Taxonomy-eligible activities</b>	<b>61,250</b>	<b>99.6</b>	<b>20,188</b>	<b>32.8</b>	<b>Y/N</b>	<b>Y</b>	<b>20,091</b>	<b>32.7</b>
<b>Vehicle-related business</b>								
3.3 Manufacture of low-carbon technologies for transport	61,129	99.4	20,126	32.7	Y/N	Y	20,029	32.6
of which additions to capitalized development costs for BEVs							4,920	8.0
of which additions to property, plant and equipment for BEVs							6,107	9.9
3.18 Manufacture of automotive and mobility components	-	-	-	-	-	-	-	-
<b>Power Engineering</b>								
3.2 Manufacture of equipment for the production and use of hydrogen	37	0.1	37	0.1	Y	Y	37	0.1
3.6 Manufacture of other low-carbon technologies	85	0.1	24	0.0	Y	Y	24	0.0
9.1 Close to market research, development and innovation	-	-	-	-	-	-	-	-
<b>B. Taxonomy-non-eligible activities</b>	<b>221</b>	<b>0.4</b>						
<b>Total (A + B)</b>	<b>61,472</b>							

<sup>1</sup> 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 both non-capitalized research and development costs, which can be taken from the note on "Intangible assets", and the expenditure for short-term leases recognized in our consolidated financial statements, which

can be found in the note on "IFRS 16 (Leases)", as well as 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. Of the taxonomy-aligned operating expenditure of €5.7 (4.9) billion, around 85% was attributable to non-capitalized research and development costs. The absolute value of the increase in taxonomy-aligned operating expenditure is attributable to the growing number of environmentally sustainable vehicle projects under the EU Taxonomy.

Including the share of the bond issued by Scania attributable to taxonomy-aligned operating expenditure, the share of taxonomy-aligned operating expenditure declined from 43.2 (42.7)% to 42.9 (42.0)% of total operating expenditure in accordance with the EU Taxonomy.

€9 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 and €219 million is attributable to economic activity 3.6 Manufacture of other low-carbon technologies. For the latter, operating expenditure that could not be directly allocated was broken down based on planned sales revenue.

Taxonomy-aligned operating expenditure for the manufacture of equipment for the production and use of hydrogen was disclosed in the amount of €9 (4) million and was attributable to non-capitalized research and development costs. €61 million of the operating expenditure was disclosed for the manufacture of other low-carbon technologies, nearly two-thirds of which was attributable to non-capitalized research and development costs. Operating expenditure that could not be directly allocated was broken down on the basis of the planned taxonomy-aligned sales revenue.

## Operating Expenditure 2023

	Operating Expenditure		Substantial Contribution to Climate Change Mitigation		Compliance with DNSH Criteria	Compliance with Minimum Safeguards	Taxonomy-Aligned Operating Expenditure	
	€ million	% <sup>1</sup>	€ million	% <sup>1</sup>			€ million	% <sup>1</sup>
Economic activities	€ million	% <sup>1</sup>	€ million	% <sup>1</sup>	Y/N	Y/N	€ million	% <sup>1</sup>
<b>A. Taxonomy-eligible activities</b>	<b>13,120</b>	<b>98.9</b>	<b>5,834</b>	<b>44.0</b>	<b>Y/N</b>	<b>Y</b>	<b>5,807</b>	<b>43.8</b>
<b>Vehicle-related business</b>								
3.3 Manufacture of low-carbon technologies for transport	12,893	97.2	5,764	43.5	Y/N	Y	5,737	43.2
3.18 Manufacture of automotive and mobility components	-	-	-	-	-	-	-	-
<b>Power Engineering</b>								
3.2 Manufacture of equipment for the production and use of hydrogen	9	0.1	9	0.1	Y	Y	9	0.1
3.6 Manufacture of other low-carbon technologies	219	1.6	61	0.5	Y	Y	61	0.5
9.1 Close to market research, development and innovation	-	-	-	-	-	-	-	-
<b>B. Taxonomy-non-eligible activities</b>	<b>145</b>	<b>1.1</b>						
<b>Total (A + B)</b>	<b>13,265</b>							

<sup>1</sup> 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 taxonomy-aligned production volume from the medium-term planning with the taxonomy-aligned 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.

As a result, €8 (9) billion of the taxonomy-aligned capital expenditure and €3 (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 €90 (100) billion.

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, we allocated €36 (26) million of the taxonomy-aligned capital expenditure and €8 (4) million of the taxonomy-aligned operating expenditure to the CapEx plan based on the ratio of sales revenue in the reporting period to the average sales revenue envisaged in the medium-term planning. The total capital expense from this 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 €455 (300) million.

In respect of the manufacture of other low-carbon technologies, we allocated €23 million of the taxonomy-aligned capital expenditure and €37 million of the taxonomy-aligned operating expenditure to the CapEx plan based on the ratio of sales revenue in the reporting period to the average sales revenue envisaged in the medium-term planning. The total capital expense from this 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 €380 million.

## Sales Revenue 2023

Code	Sales revenue € (million)	Proportion of sales revenue 2023 % <sup>1</sup>	Criteria for a Significant Contribution						DNSH Criteria (Do No Significant Harm)						Taxonomy-aligned eligible (A.1) or taxonomy- eligible (A.2) % <sup>2</sup>	Enabling activities category E	Transition activities category T	
			Climate change mitigation Y/N; N/EL <sup>2</sup>	Climate change adaptation Y/N; N/EL <sup>2</sup>	Water Y/N; N/EL <sup>2</sup>	Pollution Y/N; N/EL <sup>2</sup>	Circular economy Y/N; N/EL <sup>2</sup>	Biodiversity Y/N; N/EL <sup>2</sup>	Climate change mitigation Y/N	Climate change adaptation Y/N	Water Y/N	Pollution Y/N	Circular economy Y/N	Biodiversity Y/N				Minimum Safeguards Y/N
<b>A. Taxonomy-eligible activities</b>																		
<b>A.1 Environmentally sustainable activities (taxonomy-aligned)</b>																		
Manufacture of low-carbon technologies for transport CCM 3.3	36,383	11.3	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	9.4	E
Manufacture of automotive and mobility components CCM 3.18	165	0.1	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	E
Manufacture of equipment for the production and use of hydrogen CCM 3.2	28	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.0	E
Manufacture of other low-carbon technologies CCM 3.6	68	0.0	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	-	E
<b>Sales revenue from environmentally sustainable activities (taxonomy-aligned) (A.1)</b>	<b>36,644</b>	<b>11.4</b>	<b>11.4</b>	-	-	-	-	-	-	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>9.4</b>	
Of which enabling activities	36,644	11.4	11.4	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	9.4	E
Of which transition activities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned)</b>				EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>	EL; N/EL <sup>3</sup>		
Manufacture of low-carbon technologies for transport CCM 3.3	257,666	80	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	EL	EL	EL	EL	81.8	
Manufacture of other low-carbon technologies CCM 3.6	2,991	0.9	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	EL	EL	EL	EL	0.9	
Close to market research, development and innovation CCM 9.1	58	0.0	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	EL	EL	EL	EL	0.0	
<b>Sales revenue from taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned) (A.2)</b>	<b>260,715</b>	<b>80.9</b>	<b>80.9</b>	-	-	-	-	-	-	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>82.7</b>	
<b>Sales revenue from taxonomy-eligible activities (A.1 + A.2)</b>	<b>297,359</b>	<b>92.3</b>	<b>92.3</b>	-	-	-	-	-	-	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>EL</b>	<b>92.0</b>	
<b>B. Taxonomy-non-eligible activities</b>																		
Sales revenue from activities that are not taxonomy-eligible (B)	24,925	7.7																
<b>Total (A + B)</b>	<b>322,284</b>	<b>100.0</b>																

<sup>1</sup> All percentages relate to the Group's total sales revenue.

<sup>2</sup> 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.

<sup>3</sup> EL: Taxonomy-eligible activity for the relevant objective; N/EL: Activity that is not taxonomy-eligible for the relevant objective.

### Capital Expenditure 2023

Code	CapEx (million) €	Proportion of CapEx 2023 % <sup>1</sup>	Criteria for a Significant Contribution					DNSH Criteria (Do No significant Harm)							Taxonomy-aligned (A.1) or taxonomy-eligible (A.2) % <sup>1</sup>	Enabling activities category	Transition activities category	
			Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity	Climate change mitigation	Climate change adaptation	Water	Pollution	Circular economy	Biodiversity				Minimum Safeguards
<b>A. Taxonomy-eligible activities</b>																		
<b>A.1 Environmentally sustainable activities (taxonomy-aligned)</b>																		
Manufacture of low-carbon technologies for transport	CCM 3.3	20,029	32.6	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	34.5	E
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	37	0.1	Y	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	Y	Y	Y	Y	0.1	E
Manufacture of other low-carbon technologies	CCM 3.6	24	0.0	Y	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	-	E
<b>CapEx from environmentally sustainable activities (taxonomy-aligned) (A.1)</b>		<b>20,091</b>	<b>32.7</b>	-	-	-	-	-	-	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>34.5</b>	
Of which enabling activities		20,091	32.7	-	-	-	-	-	-	Y	Y	Y	Y	Y	Y	Y	34.5	E
Of which transition activities		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned)</b>																		
Manufacture of low-carbon technologies for transport	CCM 3.3	41,099	66.9	EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	EL	EL	EL	EL	64.9	
Manufacture of other low-carbon technologies	CCM 3.6	60	0.1	EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	EL	EL	EL	EL	0.1	
<b>CapEx from taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned) (A.2)</b>		<b>41,160</b>	<b>67.0</b>	-	-	-	-	-	-	<b>67.0</b>	-	-	-	-	-	-	<b>65.1</b>	
<b>CapEx from taxonomy-eligible activities (A.1 + A.2)</b>		<b>61,250</b>	<b>99.6</b>	-	-	-	-	-	-	<b>99.6</b>	-	-	-	-	-	-	<b>99.6</b>	
<b>B. Taxonomy-non-eligible activities</b>																		
CapEx from activities that are not taxonomy-eligible (B)		221	0.4															
<b>Total (A + B)</b>		<b>61,472</b>	<b>100.0</b>															

<sup>1</sup> All percentages relate to the Group's total capital expenditure.

<sup>2</sup> 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.

<sup>3</sup> EL: Taxonomy-eligible activity for the relevant objective; N/EL: Activity that is not taxonomy-eligible for the relevant objective.

## Operating Expenditure 2023

Economic activities	Criteria for a Significant Contribution				DNSH Criteria (Do No significant Harm)								Enabling activities category	Transition activities category				
	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 2022		
Code	OpEx (million) €	Proportion of OpEx 2023 % <sup>1</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	Y; N; N/EL <sup>2</sup>	% <sup>1</sup>	E	T		
<b>A. Taxonomy-eligible activities</b>																		
<b>A.1 Environmentally sustainable activities (taxonomy-aligned)</b>																		
Manufacture of low-carbon technologies for transport	CCM 3.3	5,737	43.2	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	42.7	E
Manufacture of equipment for the production and use of hydrogen	CCM 3.2	9	0.1	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	0.0	E
Manufacture of other low-carbon technologies	CCM 3.6	61	0.5	Y	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	Y	Y	Y	-	E
<b>OpEx from environmentally sustainable activities (taxonomy-aligned) (A.1)</b>		<b>5,807</b>	<b>43.8</b>	-	-	-	-	-	-	-	-	-	-	<b>Y</b>	<b>Y</b>	<b>Y</b>	<b>42.7</b>	
Of which enabling activities		5,807	43.8	43.8	-	-	-	-	-	-	-	-	-	Y	Y	Y	42.7	E
Of which transition activities		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned)</b>																		
Manufacture of low-carbon technologies for transport	CCM 3.3	7,156	53.9	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	54.4	
Manufacture of other low-carbon technologies	CCM 3.6	158	1.2	EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	N/EL	EL	EL	EL	1.7	
<b>OpEx from taxonomy-eligible but not environmentally sustainable activities (activities that are not taxonomy-aligned) (A.2)</b>		<b>7,314</b>	<b>55.1</b>	<b>55.1</b>	-	-	-	-	-	-	-	-	-	<b>56.1</b>				
<b>OpEx from taxonomy-eligible activities (A.1 + A.2)</b>		<b>13,120</b>	<b>98.9</b>	<b>98.9</b>	-	-	-	-	-	-	-	-	-	<b>98.9</b>				
<b>B. Taxonomy-non-eligible activities</b>																		
OpEx from activities that are not taxonomy-eligible (B)		145	1.1															
<b>Total (A + B)</b>		<b>13,265</b>	<b>100.0</b>															

<sup>1</sup> All percentages relate to the Group's total operating expenditure.

<sup>2</sup> 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.

<sup>3</sup> EL: Taxonomy-eligible activity for the relevant objective; N/EL: Activity that is not taxonomy-eligible for the relevant objective.

# Circular Economy

## Strengthening the Circular Economy

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 it a key sustainability topic for the Volkswagen Group. At the same time, this development offers us many opportunities: It necessitates innovation in the areas of material design, recycling technologies and business models – thus promoting the emergence of new ideas and technologies. The shift toward a circular economy comes with new legal requirements. The requirements relevant to the automotive industry include, for example, the new EU Batteries Regulation, which entered into force in 2023 and sets clear requirements for the circular economy. Additional requirements will be created by the new end-of-life vehicle legislation, a first draft of which was published by the European Commission in the reporting year. Another important driver of the circular economy is the ongoing decarbonization of the Volkswagen Group: The growing use of secondary materials and the establishment of closed loops of materials can help to significantly reduce our CO<sub>2</sub> emissions.

### Group-Wide Working Structures and Steering Committees

Recognizing the importance of this topic, Volkswagen has anchored circular economy as a focus topic in Group initiative 6 of the NEW AUTO Group Strategy. 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 such as the Group Steering Committee for the Environment and Energy, the Group Steering Committee for Product Recycling and the Group Working Committee for Environment Product.

We want to intensify our efforts for a transition to a loop-oriented and resource-conserving way of doing business even further in the future. To achieve this, we rely on alliances and the implementation of joint projects with various partners, such as suppliers, plant manufacturers, the recycling sector and universities.

## Our Contribution to a Circular Economy

As part of Group initiative 6, we pursue several lines of action in the area of circular economy. These include, for example, increased use of circular materials, secondary materials and renewable raw materials in our vehicles. In addition, we are working intensively on business models that simplify the recovery of raw materials from our products. For example, we are testing the dismantling of scrap vehicles, which returns valuable materials to circulation, or recycling precious metals from used catalytic converters and diesel particulate filters. Another approach is to preserve recyclable materials through reuse and repurposing – for example, in the recycling of high-voltage vehicle batteries in the pilot facility in Salzgitter.

The topic of circular economy is also a core element of the goTOzero Group environmental mission statement, on which we orient the strategic design of this action area. This mission statement sets the Volkswagen Group targets including, for example, further improving its resource efficiency and promoting reuse and recycling approaches in the areas of materials, energy and water. Other topics that contribute to a circular economy are embedded in the Zero Impact Factory program. It is guided by the vision of creating a factory that has no adverse environmental impact. The Volkswagen Group's environmental standards and policies specify the requirements for the development of our vehicles and their components. One specific example is the vehicle environmental standards, which now also includes guidelines on the topic of "recycling-friendly product development for plastic components."

 → Environmental Compliance Management

With a circular way of doing business in mind, we aim to minimize our consumption of resources, to live up to extended producer responsibility and to reduce energy consumption. The 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. For the first steps regarding circular economy, we have concentrated on the aspects of

batteries, steel, aluminum and plastics. The results obtained from this are used to further develop the overall circular economy strategy and for devising new business models. In geopolitically difficult times, the topic of circular economy is also about strengthening the Group's resilience and minimizing dependencies. We will achieve this in particular by closing our own material loops.

Our approach to waste disposal in production aims to reduce the quantity of waste we produce and to reuse unavoidable waste to create high-quality materials – i.e., to close loops. The focus is on:

- Avoiding waste creation by optimizing production and auxiliary processes and increasing material utilization levels (material efficiency)
- Prioritizing the reuse of waste and reducing the quantity of waste that needs to be disposed of

In order to optimize our management of waste, we are increasingly using digital waste management systems. They make it easier to control waste management processes and facilitate state control of the disposal of hazardous waste.

In order to monitor waste management and recycling processes, regular cross-site, cross-brand and cross-company waste disposal audits take place in Germany and the rest of Europe. In this way, we determine whether waste disposal service providers are disposing of the waste in accordance with their contractual and legal obligations. In addition, there are regular discussions between the auditors. The aim is to ensure that they have a common understanding of the quality requirements associated with waste disposal services, to carry out audits of consistently high quality and to allow other original equipment manufacturers and suppliers to take advantage of the findings.

In addition to waste, another focus is on the resource of water. You can find further information in the Environmental Compliance Management chapter.

 → Environmental Compliance Management

## Measures along the Entire Life Cycle

The most important measures that we want to take to implement the circular-economy strategy include further clarifying targets and indicators and also realizing circular business models. This applies to the most important components and materials, such as batteries, steel, aluminum or plastics. In addition to the existing KPIs (DCI, reduction of the environmental impact of production), the Board of Management adopted a KPI set for the topic of circular economy in the reporting year. It includes a description of the use of circular materials at vehicle level and a breakdown by different vehicle projects. The KPI set will also be used in battery production and show the progress in this area. The KPIs will be reported in the future.

To make our contribution to a circular way of doing business, we are stepping up efforts to use material loops in our production processes. When selecting raw materials, we opt for recycled ones obtained from production waste (pre-consumer recycled materials) or end-of-life products (post-consumer recycled materials). In addition, when developing new vehicles, we pay attention to the recyclability of the required materials and avoiding pollutants. 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 our vehicles registered in Europe comply with these standards.

Our Procurement Division has established a Group-wide system for recovering waste materials that can generate income – for example, paper, plastics, wood, electronic components or metal. Under the umbrella of the Zero Impact Factory initiative, we are intensifying our efforts to avoid plastic waste with the Zero Plastic Waste project. This includes the project for recycling plastic waste in diesel tank production, which is described below.

### Vehicle Development Measures

As also set out in the Group standard on the topic of recycling, we include the circularity of our vehicles in our thinking as early as the development stage. For example, all fluids can later be removed from the end-of-life vehicle and parts to be removed are disassembled. Other measures include:

- The use of recycled materials is prioritized for many components if they meet the same quality standards as the primary materials and are available in sufficient quantity over the service life.

- All components made of plastic are labeled in accordance with international ISO standards so as to be able to later identify them and separate them by type.
- The vehicle environmental standard includes design recommendations that enable materials to be better separated from each other after the end of the vehicle's life.

**Use of Renewable Raw Materials**

To reduce our resource consumption, we rely on raw materials from renewable sources when manufacturing our vehicles. Wherever possible, our Group brands use, 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. In addition, our sustainability standards apply to our suppliers. More information can be found in the Supply Chain and Human Rights chapter and in the Responsible Raw Materials Report.

 → Supply Chain and Human Rights

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Responsible Raw Materials Report

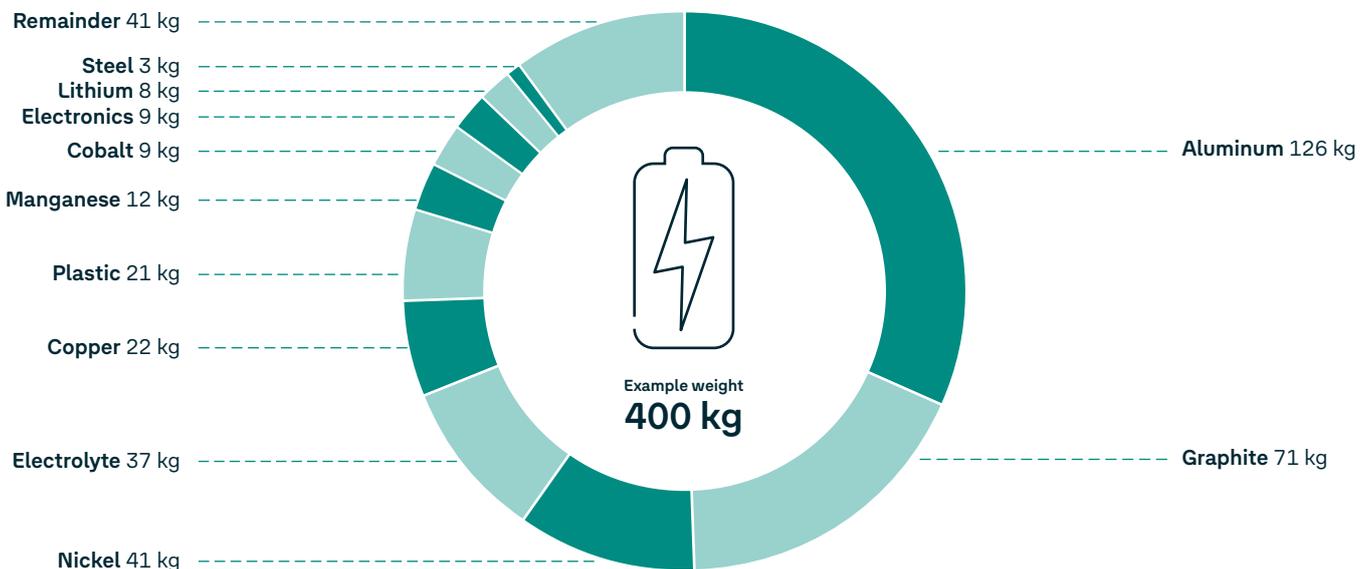
**Use of Recycled Materials in Vehicles**

Using the highest possible proportion of recycled materials is very important for us. The Volkswagen Group's environmental standards also state that recycled materials or materials with a recycled content should be used preferentially in place of other materials where technically possible. In the ID. family, headliners, fabrics, carpets, seats, door trim panels and decorative inlays, for example, are made from recycled materials. Some of the seat textiles for all lines are made of up to 100% recycled PET – which was frequently previously PET bottles. In the Golf 8, 28% of the textiles and 6% of the thermoplastics are made from recycled materials.

**In-House Expertise in Battery Recycling**

Electric drives are an important step toward low-emission mobility and thus help to protect the climate. At the same time, their production results in different components entering circulation than in 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. For example, the mining and use of these raw materials is associated with emissions and other adverse environmental impacts. If we use battery raw materials multiple times instead, this significantly reduces these impacts and helps us to reduce our carbon footprint. Moreover, making use of materials multiple times also helps to save costs. Volkswagen AG is already working on a recycling concept for batteries. In addition, Volkswagen AG is exploring strategic partnerships with numerous players in the battery value chain to comprehensively close the loop for the Group.

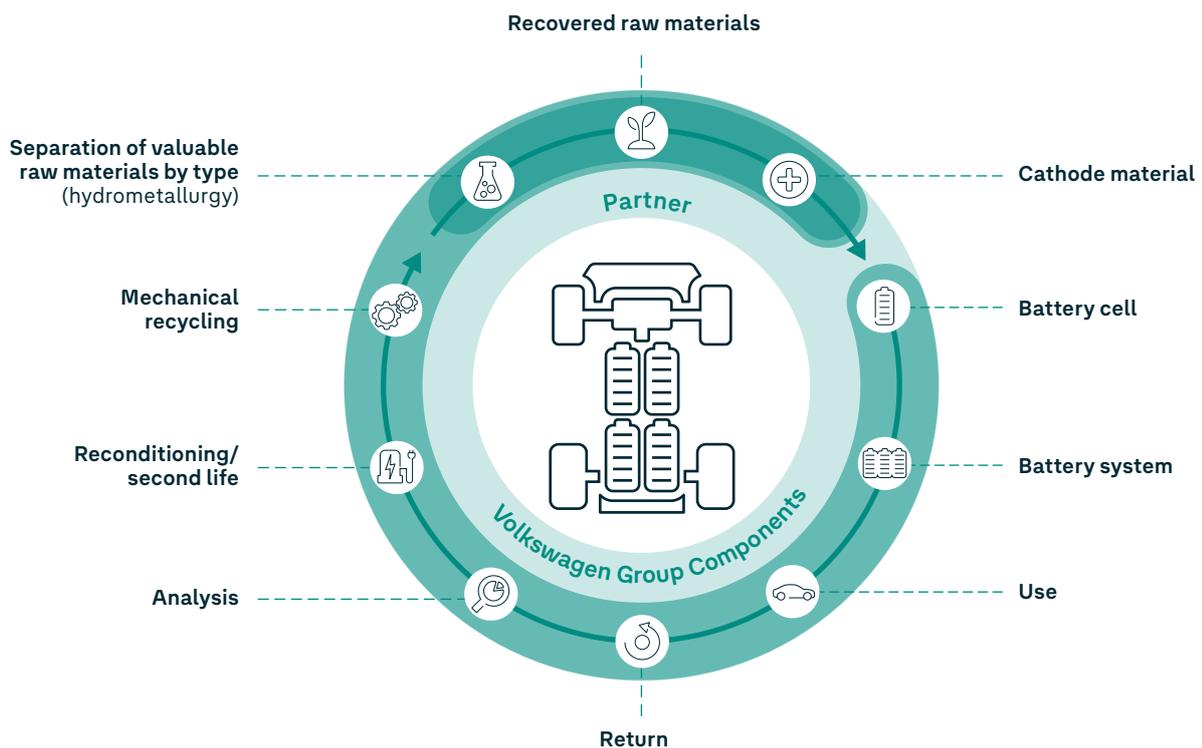
**Making New from Old – This Is How Many Valuable Materials a High-Voltage Battery Contains**



Volkswagen AG opened the Group's first pilot facility for recycling high-voltage vehicle batteries at the Salzgitter site at the start of 2021. The objective is industrialized recovery of valuable raw materials such as lithium, nickel, manganese and cobalt in a closed loop and also of aluminum, copper and plastic. Moreover, in connection with this we develop various concepts for discharging and dismantling batteries and carry out investigations into the further recyclability of battery materials. Batteries are only recycled in the pilot facility if they can no longer be used in other ways – for example, in reconditioned form in mobile energy storage systems such as flexible fast-charging stations or charging robots. The facility has been initially designed to recycle up to 3,600 battery systems per year in pilot operation.

The innovative and CO<sub>2</sub>-saving recycling process does not require energy-intensive melting in a blast furnace. The used battery systems are delivered, deep discharged, and dismantled. The individual parts are ground into granules in the shredder and then dried. In addition to aluminum, copper and plastics, the process mainly yields valuable "black powder" containing lithium, nickel, manganese, cobalt and graphite, which are important raw materials for batteries. The separation and processing of the individual substances by hydrometallurgical processes – using water and chemical agents – is subsequently carried out by specialized partners. As a consequence, essential components of old battery cells can be used to produce new cathode material. The material recovered can be used to support battery cell production at Volkswagen in the future.

### After Use Is before Use – The Loop for Battery Raw Materials



**Remanufacturing of Tools**

In 2023, 77,090 tools were processed at the center of excellence for tools at the Salzgitter site to make them suitable to return to use. This means that the production tools at Volkswagen are reconditioned.

**Remanufacturing of Vehicle Parts**

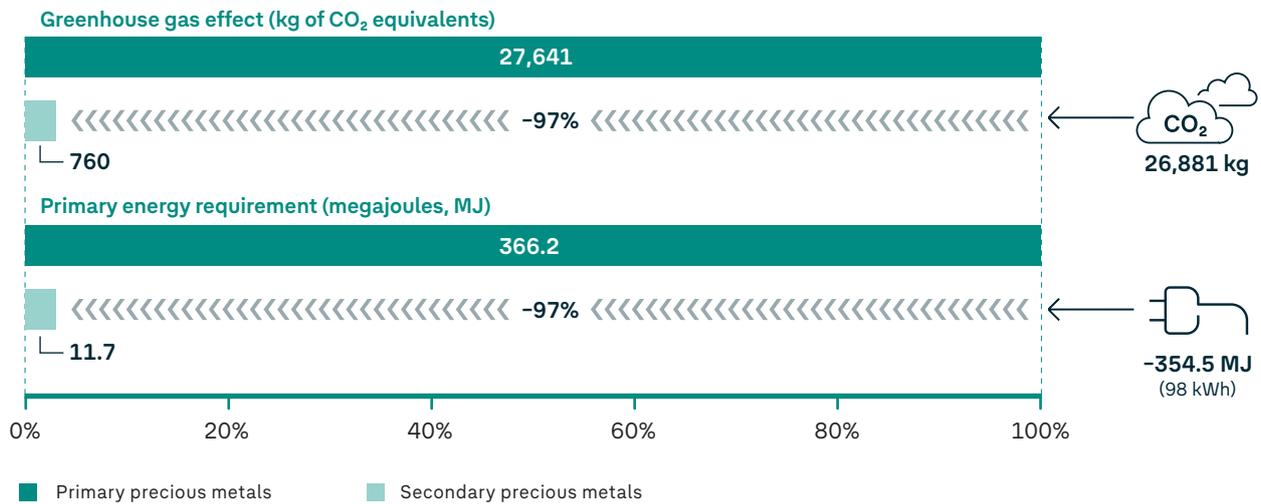
Our focus on high quality with a low need for repair is aimed at ensuring a long service life for our vehicles during the use phase and is therefore an important contribution to resource efficiency. Should a part fail, Group After Sales and its brands offer the opportunity to participate in the Exchange Parts program for selected products. A central component of the exchange program is the return of so-called used parts from participating importers and national companies with the aim of industrial remanufacturing and possible reuse in other Group vehicles. Used parts that cannot be remanufactured immediately are replaced with a brand-new part.

**Recycling of Precious Metals from Used Catalytic Converters and Particulate Filters**

As part of the Exchange Parts program, used catalytic converters and particulate filters are taken back in order to recover the precious metals platinum, palladium and rhodium they contain through defined processes. In addition, catalytic converters from engine test benches and production batches flow into the recycling process and are then available to the company as secondary material, thus closing material cycles and reducing the environmental impact compared to primary material.

The environmental impact of secondary precious metals was evaluated in a life cycle assessment carried out by the Fraunhofer Institute IST on a pilot plant. As a result, a reduction in primary energy requirements and a reduction in greenhouse gas emissions of around 97% compared to primary raw materials can be achieved through recovery. This could result in a reduction in greenhouse gas emissions (electrical energy based on Sphera database electricity mix 2021) of almost 27 tons per kilogram of secondary precious metal compared to primary precious metals. The life cycle assessment was externally audited by TÜV Nord in accordance with ISO 14040.

**Environmental Impact of Recycling Precious Metals**



**Sustainable Parts at Audi: Sustainable Alternatives to the Genuine Part**

Audi aims to position itself as a sustainable premium brand. To this end, the Group has also repositioned itself in after sales in order to be able to offer its customers sustainable solutions when a repair is needed. Thus, in addition to the spare parts and parts repair, which customers are already aware of, in the future used parts will also be available to customers. Used vehicles are dismantled in Ingolstadt for this purpose. The high-quality used replacement parts represent a low-CO<sub>2</sub> and inexpensive alternative to new parts and are used in vehicles aged five years or more. The replacement part portfolio includes body and paintwork repair parts such as lights, fenders and doors but also complete engines and transmissions – always with a two-year guarantee. Audi original used parts ("sustainable parts") will gradually be available in EU markets from 2024.

**Aluminum Closed Loop**

A closed loop for aluminum was achieved for the first time beyond Company boundaries in the Audi Neckarsulm plant in 2017 with the Aluminum Closed Loop Project. The waste from aluminum sheet-metal parts from the press shop is delivered directly back to the suppliers, who can recycle the scrap and use it to produce new material that Audi then uses again in the press shop. Compared with using primary aluminum, recycling aluminum waste can save up to 95% of the energy used in manufacturing. In this way, Audi avoids CO<sub>2</sub> emissions and reduces the quantity of primary raw materials needed. In addition to the plant in Neckarsulm, the Audi plants in Ingolstadt and Győr and the multi-brand plant in Bratislava have now also joined the Aluminum Closed Loop process. The process itself and the resultant net CO<sub>2</sub> savings of more than 850,000 metric tons of CO<sub>2</sub> since 2017 have been verified by independent third parties.

→ More than

**850,000 metric tons of CO<sub>2</sub>**

have been saved in net terms since 2017 through the Aluminum Closed Loop

**Recycling Production Waste**

Waste with recyclable content generated in production is also being increasingly systematically included in our closed-loop processes. For example, in the Volkswagen Group Components foundry, all aluminum chips generated at the Kassel site are returned to the casting process. Around 20 metric tons of aluminum chips are produced here each day and melted down in the plant. According to forecasts, this alternative to regular aluminum production reduces the energy requirements by around 3,250 MWh per year and reduces CO<sub>2</sub> emissions by more than 1,400 metric tons per year. Once the technical preparations for retrofitting have been completed, the foundry wants to melt down a further 40 metric tons of material from other European Volkswagen plants per day. In the long term, the quantity is set to rise to up to 80 metric tons of chips per day. It is currently around 200 metric tons per month. Copper from the site operated by Volkswagen Group Components in Salzgitter was also melted down in the foundry in September 2023.

At the Volkswagen plant in Wolfsburg, plastic waste produced in the process of manufacturing gasoline tanks (co-extrusion) is prepared and used again for the production of diesel tanks (mono-extrusion). As a result, around 1,600 metric tons of material that would otherwise be disposed of can be used in plastic tanks in this way each year. This can save the plant 2,500 metric tons of CO<sub>2</sub> and €2 million in costs of materials each year.

**Research and Development**

The Volkswagen Group is actively involved in publicly funded research projects on recycling technologies to optimize the recycling processes even further. These research projects are carried out in collaboration with partners, 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 research team 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 in this way, thus contributing to more sustainability and greater security of supply. In addition to Volkswagen, the consortium comprises TANIÖBIS GmbH, J. Schmalz GmbH, Viscom AG and researchers from RWTH Aachen University, TU Braunschweig and the Fraunhofer Institute for Surface Engineering and Thin Films.

**Open Hybrid LabFactory**

The Open Hybrid LabFactory (OHLF) has also dedicated itself to the research of 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. Experience shows that collaboration between industry and science – including from the areas of design, production technology, materials science and sustainability – provides ideal conditions for developing circular economy solutions.

Circular Economy KPI	Unit	2023	2022	Notes and comments
CO <sub>2</sub> avoided since 2017 through the Aluminum Closed Loop Project	in metric tons of CO <sub>2</sub>	854,005	633,881	

# People in the Transformation

GRI 2-23, 402-1

## Social Responsibility for a New Era of Sustainable Mobility

The automotive industry is in the middle of a far-reaching technological transformation in order to live up to rising societal expectations, international treaties and political regulations which require targeted decarbonization of products and business processes. Shifting from the internal combustion engine to the electric drive, digitally connecting the car with its environment or autonomous driving do not just lead to corresponding increases in revenues and higher value-added shares in software and electric mobility; digitalization and electrification as drivers of future technological development also increase knowledge intensity in the sector, with a focus on coding, programming and engineering activities. This transition will be completed within a decade. This means the whole automotive world is currently in a transformation corridor, at the end of which the role of automotive manufacturers and their suppliers as employers and the qualifications needed in the industry will be radically different from at the start of this process. With our Group People Strategy, we are setting a course to make this change employee-friendly and socially acceptable.

## Human Resources Management

The Board Member for Human Resources has overarching responsibility for all social issues. Within Volkswagen AG, they have a direct right to issue instructions in connection with this. Internationally, the members of the brands' and regions' boards of management responsible for HR issues have responsibility for human resources issues and report to the Board Member for Human Resources. The significant management tools in this context include charters that cover employee issues, Group and brand policies, and business regulations at company level. As part of implementing the NEW AUTO Group strategy, targets are defined and worked on at various levels of the Group in the Group People Strategy. A KPI set was established as a tool to measure strategic implementation (see "Managing the Transformation and Making It Measurable" section, p. 98).

Firmly established committee structures facilitate the regular flow of information and decision-making.

## Sustainability Principles as the Foundation of HR Work

Volkswagen is a socially responsible employer, which, as a member of the UN Global Compact, follows international sustainability frameworks and standards in its HR activities, such as the UN Sustainable Development Goals (SDGs) or the Global Reporting Initiative (GRI). How we conduct our working relationships is also managed through a number of other charters and declarations that we have agreed with the Group European Works Council and Global Group Works Council. These give our employees security with regard to their collective rights at the workplace and set out the principles of the Volkswagen Group's labor policy. Together with the codetermination committees or the employee representatives, we implement these agreements at the respective sites.

The relevant HR frameworks include:

- The Declaration by the Volkswagen Group on Social Rights, Industrial Relations and Business and Human Rights (Declaration on Social Rights). Here, we commit to paying all employees the legally required national minimum wage that is to be guaranteed, to protecting the rights to privacy, personal safety and freedom of opinion, to the rights of indigenous peoples and to preventing cruel, inhuman or degrading treatment. The Declaration on Social Rights is geared to the conventions of the International Labour Organization (ILO). The scope of the charter extends to Volkswagen AG and the Volkswagen Group's controlled companies. The principles of the Declaration on Social Rights were also integrated as a component of the sustainability requirements in the supply chain and in the Volkswagen Code of Conduct for Business Partners.

 → [www.volkswagen-group.com > Declaration on Social Rights](https://www.volkswagen-group.com > Declaration on Social Rights)

- The Charter on Labour Relations, which sets out additional information, consultation and codetermination rights for employee representatives of the brands, companies and locations represented by the Group European Works Council and the Global Group Works Council.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > [Charter on Labour Relations](#)

- The Charter on Temporary Work, in which Group management as well as the Group European Works Council and the Global Group Works Council have agreed on principles relating to temporary work.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > [Charter on Temporary Work](#)

- The Charter on Vocational Training, in which professional training is anchored as a central part of Charter on Labour Relations.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > [Charter on Vocational Training](#)

→ The **Declaration on Social Rights** provides a binding basis for the Volkswagen Group's social and industrial relations. It is geared to the conventions of the ILO and applies to Volkswagen AG and the Volkswagen Group's controlled companies.

In addition, there are a number of locally applicable agreements with the relevant responsible trade unions that stipulate, for example, standards for further training or for preventive healthcare measures. These fundamental standards and agreements form the basis at Group level for the rights of employees and their elected representatives who are represented in the Group European Works Council and the Global Group Works Council. Executive managers and employee representatives meet regularly to consult on relevant issues. All members of the Group European Works Council and the Global Group Works Council attend at least one joint session of the two works councils every year.

### Employee Rights to Participation

We want to enable the most comprehensive representation of employee interests possible in our Group. When establishing cooperative labor relations marked by social harmony, we are guided by universally valid human rights and the standards of the ILO. Volkswagen is committed to global compliance with freedom of association and recognizes the basic right of all employees to form trade unions and workers' representations. Employees' right to negative freedom of association is also respected. The recognition of the right of all employees to form trade unions and workers' representations also includes the value chain and represents a key component of the Declaration on Social Rights. Due to different political and legal conditions, it is not possible to implement the OECD (Organisation for Economic Co-operation and Development) and ILO standards at all 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. A particular challenge therefore arises in states that have not signed the ILO Convention on Freedom of Association and Protection of the Right to Organise.

Our aim is to bridge the tension between the different national conditions and the interest in the greatest possible achievement of the right to organize. The Volkswagen Group relies here on a long tradition of also organizing company labor relations in countries in which the ILO Convention on Freedom of Association and Protection of the Right to Organise has not been recognized. Concrete examples include Volkswagen do Brasil Indústria de Veículos Automotores Ltda., ŠKODA AUTO Volkswagen India Private Limited and Ducati Motor (Thailand) Co., Ltd., where we pursue a participation approach that goes well beyond the legal framework.

Cases of discrimination due to membership of a trade union can be reported in the Volkswagen Group's whistleblower system. These cases have, to date, not been recorded as separate statistics as the recording of discrimination incidents does not differentiate between the causes of the discrimination. More information on the whistleblower system can be found in the Integrity and Compliance chapter.

 → Integrity and Compliance

### Cooperative Organization of Labor Relations at Brands and Companies

We cooperate with the relevant trade unions all over the world. Many companies in the Group also have a supervisory board on which the workforce is represented. In this way, Volkswagen's Commercial Vehicle division, with the holding company TRATON SE and its subsidiaries MAN, Scania, Navistar and Volkswagen Truck & Bus, enables far-reaching participation of employee representatives. The TRATON SE Works Council can, for example, exercise extensive rights of information and consultation within the framework of a participation agreement between the board of management and employee representatives. The agreement also regulates the equal representation of employee representatives in the highest body of TRATON SE – the supervisory board. Scania also has a European works council with participation rights, the SEC (Scania European Committee). In addition, Scania has introduced a global corporate policy that regulates minimum standards such as working hours, weekly rest periods, vacation time and sick leave for its employees. Moreover, the Swedish truck brand is an active partner of the Global Deal platform, a multi-stakeholder initiative for social dialog and partnership between governments, companies, employers' associations and trade unions.

The Volkswagen Group is aware that ESG-related controversies – including with regard to the protection of employee rights – are becoming increasingly important in investors' decisions. To make how we deal with current and ongoing controversies transparent, the Group has provided its own information online.

 → [www.volkswagen-group.com > ESG Controversies](http://www.volkswagen-group.com > ESG Controversies)

### Socially Responsible Transformation

Our aim at Volkswagen is a successful and socially responsible transformation of the workforce into the new era of sustainable mobility. We want to continue to employ the most highly qualified employees possible in attractive, promising professional fields, to pay them competitive salaries, and to provide secure jobs.

The transformation of the automotive industry, which is driven by digitalization and electrification, has a significant impact on our production strategy – and thus on the qualifications needed and the composition of the workforce. Since 2020, we

have been converting more and more vehicle and component plants: from the production of vehicles with combustion engines to the production of e-vehicles. Examples of this include the ongoing processes of retooling the plants in Emden, Salzgitter and Hanover and in Chattanooga, USA. Electric cars are now being built at 18 Volkswagen Group sites. Although their production is less complex compared with cars with internal combustion engines, new fields of employment for highly qualified workers are emerging as a result of new digital functionalities in the vehicle. Overall, the current structure of Volkswagen's workforce does not yet reflect the expected changes; for example, around half of employees continue to work in manual jobs in production. One core endeavor of our HR strategy is therefore to train employees from traditional areas of production in the areas of work required along our NEW AUTO Group strategy. It is also to be expected that the further implementation of the NEW AUTO Group Strategy and the transformation into a software-oriented business could lead to asynchrony in human capital development, for which it is vital to prepare. For example, a surplus of staff may arise in traditional areas, while a shortage is probable on talent markets for tech professions, where businesses such as Volkswagen will have to compete with IT businesses.

As a result, the Volkswagen Group workforce is undergoing a process of simultaneous recruitment, job cuts and restructuring. This transformation will only be successful if we involve our employees, train them, prepare them for the forthcoming changes as well as possible, give them a clear perspective and allow them to participate. We also need to preserve our employees' performance and motivation in this modernization process as well as seek to efficiently manage labor costs in order to stay competitive.

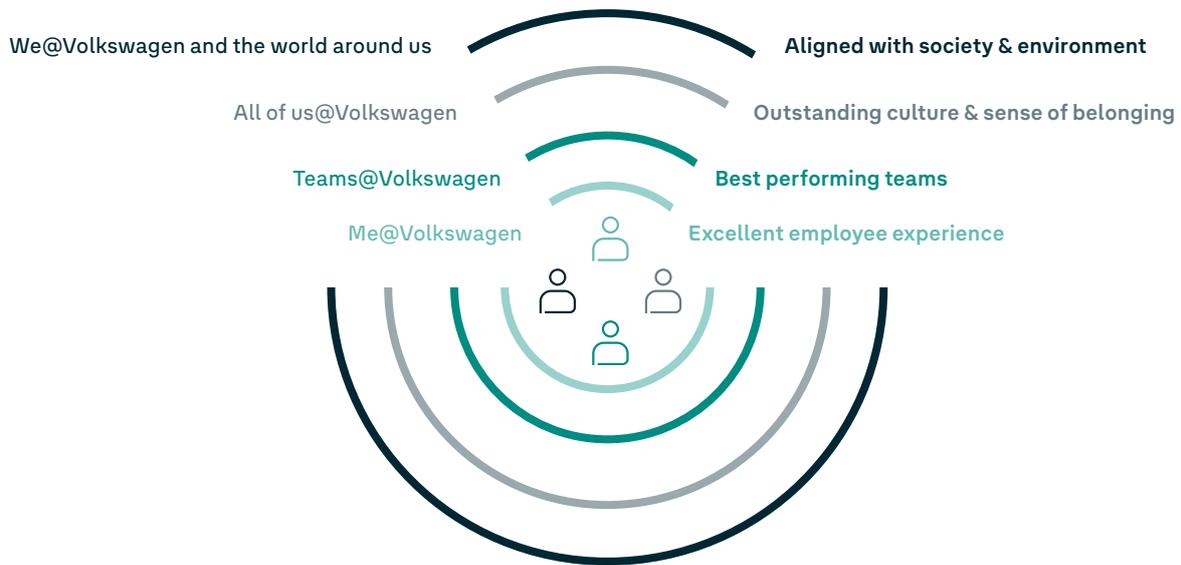
### Transformation in Human Resources as a Focus Topic of the Group Strategy

The responsibility for "people in the transformation" is at the core of our current and future activities in human resources. However, this responsibility extends beyond this: For the Volkswagen Group the transformation of the workforce is defined as a focus topic in the Group's NEW AUTO strategy. We have also embedded the topic in our Group-wide People & Transformation initiative. The Group People Strategy, which was adopted by the Group Board of Management in 2021 and is entitled "Transform to Tech," plays a key role for our three brand groups. The Volkswagen Group also continued

with key, successful approaches in its Human Resources policy in the reporting year. These include the pronounced stakeholder focus in corporate governance, comprehensive participation rights for employees, forward-looking training opportunities and the principle of long-term service through systematic employee retention and remuneration that is fair and transparent.

At the same time, the Group People Strategy is setting innovative trends: The employee experience is being systematically improved; teams, as the most important units in the company's organization, are being strengthened; and modern forms of working such as agile working are set to be expanded. In this way, we want to increase our employer attractiveness and raise our organization's performance.

## Our Approach: Four Dimensions of the Group People Strategy



In our Group People Strategy we have identified different dimensions with the aim of addressing employees' needs and expectations in a holistic manner. Together, these four dimensions make up the work experience, job satisfaction and, ultimately, the success of the work and the Group's integration into society:

- Me@Volkswagen
- Teams@Volkswagen
- All of us@Volkswagen
- We@Volkswagen and the world around us

Through our initiatives and programs in these four dimensions, we are targeting an improvement in the individual and group-related work situations and also taking the Volkswagen Group's cultural cohesion and social legitimacy into consideration.

### Initiatives in the Me@Volkswagen Dimension

We want to systematically improve the employee experience and are striving to ensure that all employees have the best possible conditions in which to do their job. That starts with excellent equipment and tools, continues via the avoidance of red tape and overly complex process steps through state-of-the-art workspaces, 360-degree feedback opportunities, individual health coaching and personally tailored advanced training opportunities.

### Transformation-Oriented Human Capital Development

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

and adjustment to new work and career profiles is a key action area in the workforce transformation. The electrification of the vehicle fleet, the transition towards connected, autonomous driving and the digital transformation of our Group mean that employees currently need very different qualifications. We handle these changes through our comprehensive vocational and advanced training system with individual training measures.

In the current upheaval of the automotive industry, the Volkswagen Group's particular training focus is on training employees on important future technologies and closely supporting them in the transformation process. For example, Volkswagen specifically added courses on the topic of e-mobility to its professional training program at the site in Wolfsburg, with the aid of the Volkswagen Group Academy. The eMotionRoom was opened at the Wolfsburg plant for this purpose. In the reporting year, 2,519 production employees (11.5%) enjoyed an entertaining experience of the transformation process from internal combustion engines to electric vehicles in this training space. The eMotionRoom is part of a one-day training program (eMotionDay), which all production employees in Wolfsburg will participate in by 2025.

Dual vocational training at the Volkswagen Group supports the workforce transformation. With its flexible combination of practical activities and theoretical knowledge, vocational training prepares our young professionals for the forthcoming challenges. On an international level, we are guided by the high German training standards. In 2023, the Volkswagen Group trained 17,081 people. We also support the career development of new entrants once they have completed their apprenticeship. For example, especially talented young specialists are nurtured in talent groups.

In particular, we are broadening the knowledge base for the digital transformation in the Group with the Faculty 73 program. We train software developers here for our own needs. The two-year training program is designed for employees and external applicants with an affinity for IT. The future experts acquire all the necessary skills for a successful career as a software developer in the automotive industry within the training. Since Faculty 73 was introduced (in 2019), 278 junior

software developers have already successfully completed this training program. The people who have completed the program are primarily employed in the Group and brand IT departments and the Technical Development and CARIAD departments. In November 2023, a fifth year of trainees began this innovative transformation program.

Volkswagen AG, CARIAD and Škoda Auto a.s. have been supporting the innovative programming schools in Wolfsburg, Berlin and Prague in cooperation with the non-profit École 42. For example, Volkswagen AG and CARIAD donated €4.5 million for this purpose in the reporting year. In 2023, an average of 882 students learned from and with each other in Berlin, Wolfsburg and Prague in this innovative training concept. Like at École 42 in Paris, the free training is also open to applicants who have not graduated high school or college, irrespective of their age, sex or origin.

At the Volkswagen Group Academy, which is responsible for vocational and advanced training, skilled workers can choose from a broad range of advanced training courses. These range from further training on topics of the future and occupational or cross-disciplinary areas of general interest to specific qualifications in vocational groups and even comprehensive personnel development programs.

Degreed, the innovative learning platform we introduced, opens up a wide range of further training opportunities for our employees. The platform creates a simple, individual learning experience and will be progressively rolled out in the Group. Degreed is aimed at supporting the results of strategic HR planning with appropriate training programs. Another focus is developing important skills – for example, in areas such as data analytics, software development, leadership, machine learning and artificial intelligence. The "Individual career orientation" (ICO) module offers all Volkswagen AG employees the opportunity to reflect on career goals, interests and personal skills and compare these with the development opportunities in the Group. Various methods of self-reflection or assessment by others, practical exercises, literature recommendations and podcasts are also offered in a toolkit.

In our extensive training measures, we set store by an overarching system and uniform standards. This also applies to

the leadership and management programs we currently use, which are summarized in the following overview.

Program	Participating brands and companies <sup>1</sup>	Target audience
<p><b>Foreman leadership development program (foreman LDP, previously foreman base training)</b></p> <p>The foreman LDP teaches the basic skills necessary for performing the work of a foreman. The participants optimize the management of their own foremanship, are strengthened in their foreman role and expand their leadership skills. They experience their own behavior in real management situations and learn to reflect on themselves even better.</p>	Volkswagen Passenger Cars, Volkswagen Commercial Vehicles	Foremen
<p><b>Manager leadership development program (manager LDP, previously manager base training)</b></p> <p>In the manager LDP, participants get to know the relevant management tools and successfully use them situationally within Volkswagen AG's value system. The manager LDP also includes content on reflection on your own management style.</p>	Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, CARIAD, Volkswagen Financial Services AG	Subsection managers
<p><b>Management development program</b></p> <p>The management development program for prospective managers focuses on diversity, business management, personal responsibility and an agile mindset.</p>	Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, CARIAD, Volkswagen Financial Services AG	Management candidates
<p><b>Senior management program</b></p> <p>The Group-wide senior management program provides experienced managers with knowledge from research and practice with focuses on customer centricity, innovation and leadership, supplemented by learning content including design thinking methods, tools such as Triple Impact and Lean Canvas, and decision biases.</p>	Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Škoda Auto a.s., AUDI AG	Newly appointed members of senior management
<p><b>Group training catalog</b></p> <p>A decentralized catalog of training and qualifications that have been conceptually designed by the individual brands and can be used by other brands. For example, the Group Leadership Academy provides seminars that support and inspire management in the transformation of the Group with the Group Training Catalog for Leadership and Transformation. For example, the "Building a sustainable organization. Together." training teaches how sustainability can be factored into operational management decisions.</p>	Volkswagen Passenger Cars, AUDI AG, CARIAD, TRATON SE	Management, senior management, top management

<sup>1</sup> To improve readability, an illustrative selection has been made and subsidiaries and microenterprises have not been mentioned.

### Opinion Survey Measures Employee Satisfaction

We attach great importance to actively involving our employees in processes and to ensuring that their opinions, assessments and criticism are heard. That is why we conduct the Opinion Survey each year. In this employee survey, in which 129 companies of the Group took part in 2023, we measure the status of our internal employer attractiveness with a targeted question. In addition, we are also interested in our employees' views on the questions of where the Group stands on the topic of integrity and how they assess working relationships in the Group. The results of the Opinion Survey help us to identify possible improvements and inform managers

of where action needs to be taken in their organizational units. In defined follow-up processes, managers take suitable measures in dialog with their employees. The Opinion Survey's Group team supports them in this with various tools – such as a method toolbox. The regular communication with managers on the measures derived and their implementation status takes place using a top-down approach, beginning with the respective division manager/Board member and proceeding to the lowest management level. The aim is to ensure the implementation of the measures derived from the organizational units in a lasting manner.

In 2023, the survey covered 129 companies in 48 countries. 464,749 of the 588,072 employees in the companies surveyed responded. This is equivalent to a response rate of 79%. The employee satisfaction index, which is calculated from 22 questions, is the principal indicator of the Opinion Survey. It is calculated from the total of all the responses to the survey in this regard and, in 2023, stood at 82.5 out of a possible total of 100 index points in the Volkswagen Group (2022: 82.4 index points) and at 75.8 index points in Volkswagen AG (2022: 76.2 index points). 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.

→ In 2023, the score on the employee satisfaction index in the Volkswagen Group was

**82.5 out of 100**  
possible index points and thus slightly above the score in the previous year.

### Successfully Contributing Their Own Ideas

Through their creativity, knowledge and initiative, employees take on responsibility for improving processes and products and ultimately help us to achieve our sustainability goals. In 2023, 15,363 ideas were submitted as part of idea management, and savings of around €43 million were achieved at Volkswagen AG's sites.

In addition, Volkswagen AG supports the development of business ideas fit for the future with its own separate innovation fund. The associated "intrapreneurship" program offers employees the opportunity to implement their own business ideas at Volkswagen and expand the existing portfolio of services and products. It consists of an incubator phase for developing a business plan and an accelerator phase for constructing prototypes and customer tests. Under an agreement between IG Metall and Volkswagen AG, the Group makes €20 million available to the fund each year for projects in new areas of business.

### Initiatives in the Teams@Volkswagen Dimension

As our transformation and the accompanying cultural changes take shape, the way in which teams in the Volkswagen Group collaborate is fundamentally changing. Hybrid, digital and agile forms of collaboration are becoming more important.

They require changes in office environments and working methods that are intended to simplify collaborative, flexible work. The same applies to opportunities to collaborate digitally. These new approaches to work organization supplement existing tools, such as flexible working time models. At Volkswagen AG, these include various part-time models, mobile working, trust-based working time, flexitime, the use of working time accounts, Time Asset credits and other tools.

### Hybrid Working at Volkswagen

Hybrid working – a combination of remote working and working at the office – has become the "new normal" for many employees. It can give employees greater flexibility in terms of when and where they work. To strengthen collaboration between teams in this changed environment, we offer accompanying knowledge transfer and training formats on the topic of virtual and hybrid collaboration.

Hybrid collaboration also poses new requirements for the design of office spaces. Against this backdrop, we are currently testing desk-sharing models in various office environments (e.g., at Volkswagen AG, Audi and Porsche) with the aim of designing more modern workplaces at Volkswagen. And we are also investing in contemporary working environments in production. For example, we are gradually renovating several hundred social spaces at the Wolfsburg site. Money for this is partly provided by the modernization fund, which distributes an average of €25 million a year on request by the plants and departments. The fund has a total volume of €125 million, spread over five years.

### Promoting Agility and Cultural Change

The Volkswagen Group attaches particular importance to its employees being able to act with agility and entrepreneurial drive. Together with 30 publicly traded large companies from Germany, Austria and Switzerland, we developed a skills matrix for training and professional development in the area of agile business processes under the umbrella of the DACH30 initiative. As part of these endeavors, the Volkswagen Group Academy set up an agility training portfolio.

In order to actively support divisions, departments and project teams with implementing strategic realignments, Volkswagen has a Culture & Change Factory. With around 40 experts, this area, which is under the umbrella of the Group Academy, supports and steers various transformation projects and is intended to help to build up expertise in new working methods. The team's portfolio includes change management, formats for collaboration culture, agile training, team coaching, process design and continuing training.

## Initiatives in the All of Us@Volkswagen Dimension

The Volkswagen Group Essentials define the shared underlying values across all of the Group's brands and companies. Seven simple statements describe what the Group stands for: "We take on responsibility for the environment and society," "We are honest and speak up when something is wrong," "We break new ground," "We live diversity," "We are proud of the work we do," "We not me," "We keep our word."

We want our corporate culture to create a feeling of belonging for our workforce – a feeling that increases in importance in particular in times of change and in an environment that is becoming increasingly heterogeneous. We see fair remuneration as an important part of our self-image. It is intended to motivate and express our appreciation for the performance of each individual. And last but not least, we need to empower our leaders to contribute to a successful transformation and act as role models.

### Leading by Example as a Manager

Role models motivate, give people courage for change and create trust. These are key factors for successfully working together. The role model program supports managers in strengthening these factors. Concise catalogs give managers suggestions and instructions for different activities that can be implemented easily and without any additional budget. The binding framework with minimum requirements for managers supports implementation of this program to improve the corporate culture.

### Social Compatibility of the Transformation in Focus

Collective job security agreements play an important role in the transformation. In Volkswagen AG in Germany, the job security applies until 2029 as a result of the Digital Transformation Roadmap, which underlines our appreciation for industrial work.

We also strive to act in a socially responsible way anywhere we have to cut jobs for economic reasons. For example, as it did many other companies, the coronavirus pandemic also challenged Volkswagen do Brasil to reduce fixed costs. Volkswagen do Brasil, metalworker trade unions and employee representatives of all four plants came together to negotiate a restructuring agreement. In addition to cost-cutting, it was also a matter of applying flexibility measures and adjusting the headcount through a program of voluntary resignations.

At MAN Truck & Bus SE, partial retirement contracts, termination agreements, a change of Group and the establishment of a transfer company were used as tools for the socially responsible headcount reduction that was also necessary there. The basis for this was the negotiation of a joint key issues paper between the company's management and the employee representatives. The corresponding rules and programs that were implemented in 2021 were valid until the end of the reporting period.

We provide the HR answers to various challenges at a national or international level with future-proofing programs that we have concluded as part of codetermination. For example, Germany and other parts of Western Europe face not only risks resulting from demographic changes but continue to face shortages of skilled workers who we will need for cutting-edge areas of work.

### Fair and Transparent Pay

A fair and transparent pay system and payment of fair remuneration make a significant contribution to employees' job satisfaction. In accordance with our Declaration on Social Rights, the remuneration and fringe benefits for our employees correspond at least to the legally required minimum level which is to be guaranteed in the particular country. As they are collectively agreed with trade unions, our rates of pay are usually higher than the prevailing minimum levels. Our employees are generally selected, hired and promoted on the basis of their qualifications, experience and abilities. Individual pay is generally based on the job performed.

Employees of Group companies enjoy further Company benefits. Depending on location, these may include subsidized transport and meals, employee terms at cooperation partners and discounts on certain leisure activities. Additional health-care or supplementary pension benefits may round off the range of company benefits at specific sites. By offering occupational pension schemes, Volkswagen AG and many of its brands and subsidiaries make an important contribution towards securing their employees' income in old age. Employee participation in the Company's success in the form of an employee share program – such as a stock option plan – is not currently offered.

## Initiatives in the We@Volkswagen and the World Around Us Dimension

The Volkswagen Group employs more than 684,025 people, of which 116,063 at Volkswagen AG. We work in 35 countries in Europe and 37 countries in North and South America, Asia, Australia and Africa and operate 115 production sites around the world. In all these places, we assume responsibility for the employees and their families, but also for social and economic development around our sites.

We are aware that without long-term social legitimacy at our locations and in our markets, we will not be able to continue our business model in times of accelerated changes in values – this applies from an economic, environmental and social perspective. We see our employees as representatives of the Volkswagen Group who communicate our values to society. Together with them, we also assume responsibility above and beyond our core business – such as through foundation work and corporate volunteering (employee engagement). The topics of our social engagement activities range from education, diversity, a culture of remembrance, culture, climate and environmental protection through various site commitments. More information on this is available in the Corporate Citizenship chapter.

 → Corporate Citizenship

## Managing the Transformation and Making It Measurable

The transformation means that we are on a long-term path of change and renewal. It is important to us to keep checking whether we are keeping to the course we have set out on and are achieving our goals. The Group People Strategy's strategic KPIs help us to measure our progress and take counter-measures where necessary:

- Internal employer attractiveness:** The indicator is determined by asking respondents as part of the Opinion Survey, which is conducted for the majority of our Group workforce, whether they perceive their company as an attractive employer. The Volkswagen Group's target for 2025 is 89.1 out of a possible total of 100 index points. 86.0 index points were achieved in the reporting year, i.e., the intermediate target for 2023 of 88.8 index points was missed. 86.6 points were achieved in the previous year. For Volkswagen AG, the score for 2023 was 84.7 index points (2022: 87.1 points).

- Diversity index:** As part of our Group-wide diversity management, in this strategic indicator we report on the trends in the proportion of women in management and the internationalization of top management, in each case as a percentage of the active workforce<sup>1</sup> globally. In particular, this indicator underpins the objective of the Group People Strategy, which is aimed at contributing to an exemplary leadership and corporate culture.

 → Diversity

- Strategic HR planning implementation status:** Strategic HR planning supplements operational HR planning by adding a qualitative, long-term and strategic planning perspective. It allows business units to identify qualitative and quantitative surpluses and shortfalls at an early stage and derives necessary qualification, 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<sup>1</sup> considered in the strategic HR planning from 2023. The data showed a coverage of 34.3%, which is slightly below the target of 35%.
- Number of training hours per employee:** Due to the transformation in the automotive industry, we are facing the biggest process of change in expertise and cultural change in the history of the Group. As a result, individual opportunities for change for employees are becoming an increasingly important success factor. Volkswagen is expanding access to training by leveraging economies of scale in connection with digitalization and through the use of the Degreed platform. The goal is to increase the average number of training hours per employee in the Volkswagen Group – based on the active workforce<sup>1</sup> – by 35% to 30.0 hours per year by 2030. The baseline value is 22.3 hours and represents the average for the years 2015 to 2019. The years 2015–2019 were chosen as the baseline due to the outbreak of the Covid-19 pandemic, which temporarily curtailed training activities in 2020 and 2021. The target for the reporting year was 24.0 hours. An average of 22.1 hours per employee meant it was not achieved.

<sup>1</sup> Definition of active workforce: total workforce not including trainees or employees in the passive phase of semi-retirement. In addition, when compiling the data for the diversity index and within the framework of the German Act on the Equal Participation of Women and Men in Leadership Positions (*Gesetz zur gleichberechtigten Teilhabe von Frauen und Männern an Führungspositionen*) and the training KPIs, an adjustment is made for employees in the withdrawal phase of the Time Asset scheme (Time Asset scheme: time credits from deferred compensation).

## Preventive Health and Occupational Safety

Particularly in the transformation, ensuring a safe and healthy working environment is a significant component of sustainable corporate governance and an important building block of employer attractiveness. Sustainability in the context of occupational health and safety for us means developing and implementing long-term strategies and measures that aim to ensure the health and safety of employees and, at the same time, take account of environmental and social aspects. This long-term approach also helps the Volkswagen Group to cope with demographic change, which is now typical of many industrial countries. Open communication in which employees can express concerns and suggestions for improving health and safety at work is also important to us.

### Management at Group Level

Healthcare is managed at Group level by the Head of Group Occupational Health and Safety, who is also Volkswagen AG's senior physician. They report directly to the Chief Human Resources Officer, reporting to the latter on the topics of health and occupational safety. The Group Steering Committee for Health and the Group Steering Committee for Occupational Safety make decisions on strategic direction and coordinate topics of fundamental importance across brands. In addition, the steering committees initiate projects, ensure that expert knowledge is made transparent, and leverage synergies in healthcare and occupational safety. Compliance with legal requirements, the identification, assessment and reduction of work-related risks, the derivation of measures and checking effectiveness form the basis for successful occupational health and safety and thus make a positive contribution to keeping employees healthy as part of society.

Specifically, occupational healthcare in the Volkswagen Group provides employees with advisory and preventive services relating to healthy and safe working – for example, in the form of checkups. The services help to maintain and improve employees' health. They take account of both the physical and mental health of employees and provide them with information on health-related topics as part of various initiatives.

## Strategic Direction

Occupational health and safety are not isolated topics for us but inseparable elements of the Group-wide sustainability strategy. It recognizes the close connection between the well-being of our employees, operating efficiency and our long-term success. The aim is to strengthen this connection and continuously improve working conditions with innovative approaches and cooperative measures. With this in mind, we want to ensure a healthy and safe working environment that protects our employees and contributes to a productive and positive corporate culture.

### Guidelines and Policies Regulate Occupational Health and Safety

A Group policy regulates the responsibility for occupational health and safety uniformly for all the Group's brands and companies. This policy was revised in 2023 to set binding health and safety requirements for all the Group's companies. By aiming for the highest standards in health and safety, we not only help to protect our employees but also contribute to our Group's sustainable development.

Our aim here is to ensure the protection and promotion of physical and mental health, taking into account psychosocial risks and their effects. At Volkswagen AG, the maintenance, promotion and restoration of our employees' mental health are defined premises of our strategic focus and are anchored not only in the internal "Health 2025+" agenda of the Volkswagen Health department but also in the "Mental Health" position paper and in the Volkswagen Group's Occupational Health and Safety Policy.

### Safety First Strategy

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

GRI 403-1, 403-2, 403-4, 403-6, 403-8, 403-9

The Safety First strategy requires all Volkswagen Group production sites to comply with the standards of ISO 45001 occupational health and safety management systems. All production sites with more than 1,000 of their own employees are to be certified in accordance with ISO 45001 by 2026. The implementation of the strategy is supported by brands and companies reporting and sharing information on their progress and measures. In 2023, we also established a networking meeting at which contacts from various brands share information on health and safety topics. In addition, various health and safety committees in which both company and employee representatives are involved have been established at Volkswagen AG.

### Preventive Measures and Initiatives

In the area of health, in addition to meeting statutory requirements, the Volkswagen Group focuses to a large extent on preventive approaches. For example, employees are offered regular checkups. To further increase our employees' health and thus also their ability to work, in the reporting year a project team modernized and digitalized this checkup and linked it with specific follow-up interventions. The focus included creating an end-to-end, digital process chain, ensuring the earliest possible start of treatment for employees with health problems and increasing employees' health literacy.

#### Running for a Good Cause

Volkswagen organized its first International Health.Care.Run., a brand-wide charity run, in 2023. Thousands of employees took to the starting line at a total of 21 sites in 11 countries to raise money for a good cause. The money went toward the "a chance to play" project, which helps disadvantaged children and young people close to the Volkswagen sites.

### Measuring Effectiveness

To evaluate the Group companies' current performance in occupational health and safety, in the reporting year the Volkswagen Group conducted a risk analysis based on self-assessment questionnaires at the level of the companies. For example, we were able to identify improvement potential and introduce measures to reduce sustainability-related risks. The content of the risk analysis focused on the topics

of external certification, organization, safety standards for workplaces, work equipment, workstations and protective measures, training and instruction, and emergency planning. The implementation of requirements and compliance with standards is audited in a risk-based Group audit program on occupational health and safety. Three Group audits were conducted in the 2023 reporting year.

→ At the end of 2023, a total of

**72**

**Volkswagen Group production sites were certified in accordance with ISO 45001.**

Collecting key figures is a core element for assessing the effectiveness of our measures. At the end of 2023, a total of 72 (2022: 61) Group production sites were certified in accordance with ISO 45001. This corresponds to coverage of 51% of employees at Volkswagen Group production sites. In addition to the number of ISO 45001 certificates and their level of coverage, the Volkswagen Group uses the accident frequency for employees, excluding temporary agency workers, as a key performance indicator for reporting. The accident frequency index provides information on the number of accidents at work as a proportion of the total of all hours worked. It is calculated as the number of accidents at work reported multiplied by 1 million divided by total number of hours worked. In 2023, the accident frequency was 3.6 (2022: 3.7) in the Volkswagen Group and 7.0 (2022: 6.3) in Volkswagen AG. The Group uses Group regulations to provide cross-brand information in the event of serious or fatal accidents involving our own employees or workers from external firms. On this basis, measures can be taken to prevent similar accidents across all our sites in the future. The Volkswagen Group recorded no fatal work-related accidents involving our own employees in the reporting year.

In fiscal year 2023, the Health Department carried out 1,741 initial and 5,380 subsequent checkups in Volkswagen AG. Since the introduction of the service in 2010, a total of 88,643 Volkswagen checkups have been completed (active workforce<sup>1</sup>).

People in the Transformation KPIs <sup>1</sup>	Unit	2023	2022	Notes and comments
<b>Number of countries in which the Volkswagen Group is active by continent</b>				
Europe	number	35	35	
North and South America, Africa, Asia, Australia	number	37	37	
<b>Production facilities worldwide</b>	<b>number</b>	<b>115</b>	<b>119</b>	
of which Volkswagen AG production facilities	number	6	6	
<b>Number of employees in the Volkswagen Group by continent   GRI 2-7</b>				
Europe	number	493,629	490,777	
America	number	77,430	73,236	
Africa	number	5,717	5,702	
Asia	number	105,644	104,574	
Australia	number	1,605	1,516	
<b>Total workforce (of which Volkswagen AG)   GRI 2-7</b>	<b>number</b>	<b>684,025 (116,063)</b>	<b>675,805 (116,677)</b>	
<b>Number of employees in the Volkswagen Group by type of work   GRI 2-7, 2-8</b>				
Fixed-term employees	number	27,640	25,536	
Permanent employees	number	656,385	650,269	
Temporary agency workers	number	27,974	26,171	
Apprentices	number	17,081	16,590	
in Volkswagen AG	number	4,374	4,452	
<b>Employee age structure in the Volkswagen Group   GRI 405-1</b>				
		<b>Women/ men</b>	<b>Women/ men</b>	
< 20 years old	in %	0.3/1.2	0.3/1.2	
20–29 years old	in %	3.5/11.6	3.4/12.2	
30–39 years old	in %	5.8/24.8	5.6/25.0	
40–49 years old	in %	4.9/21.1	4.7/21.1	
50–59 years old	in %	3.5/17.9	3.4/17.8	
> 60 years old	in %	0.7/4.8	0.7/4.6	
<b>Proportion of women in the Volkswagen Group   GRI 405-1</b>				
Total management	in %	18.7	16.8	
Total apprentices	in %	20.6	20.3	Excluding Scania and Navistar
Volkswagen Group, total	in %	18.7	18.1	
<b>Proportion of women in Volkswagen AG   GRI 405-1</b>				
Total management	in %	17.3	15.9	
Total apprentices	in %	25.1	25.0	
Volkswagen AG, total	in %	18.6	18.3	

<sup>1</sup> The "diverse" category is not included in the KPIs because the total number is too low to be visible in the percentage breakdowns.

People in the Transformation KPIs <sup>1</sup>	Unit	2023	2022	Notes and comments
<b>Staff turnover at Volkswagen AG   GRI 401-1</b>				
Women	in %	0.6	0.5	
Men	in %	0.7	0.6	
<b>Opinion Survey</b>				
Participating companies	number	129	159	
Participating countries	number	48	49	
Eligible employees	number	588,072	614,142	
Participating employees	number	464,749	475,778	
Percentage of participating employees	in %	79	77	
Internal employer attractiveness	index score	86.0	86.6	
Internal employer attractiveness in Volkswagen AG	index score	84.7	87.1	
Employee satisfaction index	index score	82.5	82.4	
Employee satisfaction index in Volkswagen AG	index score	75.8	76.2	
<b>Idea management at Volkswagen AG</b>				
Ideas submitted	number	15,363	13,953	
Savings	in € million	42.56	38.0	
<b>Training<sup>2</sup>   GRI 404-1</b>				
<b>in the Volkswagen Group</b>				
Training hours per employee	average number of hours	22.1	20.1	
Time	million hours	14.3	12.9	
Training costs	in € million	487.7	399.3	Excluding vocational training costs
Training costs per employee	average cost in €	753.9	623.4	Excluding vocational training costs
<b>in Volkswagen AG</b>				
Training hours per employee	average number of hours	11.9	10.9	
Time	million hours	1.2	1.1	
Training costs	in € million	103.4	91.1	Excluding vocational training costs
Training costs per employee	average cost in €	1,015.8	887.0	Excluding vocational training costs

<sup>2</sup> Change in methodology: 2023 figures adjusted for employees in the withdrawal phase of the Time Asset scheme (time credits from deferred compensation). Previous year's figures adjusted.

People in the Transformation KPIs <sup>1</sup>	Unit	2023	2022	Notes and comments
<b>Preventive health and occupational safety<sup>3</sup>   GRI 403-8</b>				
Initial checkups by the Health department	number	1,741	548	
Subsequent checkups by the Health department	number	5,380	2,398	
Total Volkswagen AG checkups since 2010	number	88,643	84,799	
Group sites certified in accordance with ISO 45001	number	72	61	
Proportion of these in terms of number of employees <sup>4</sup>	in %	51	27	
Volkswagen AG sites certified in accordance with ISO 45001	number	3	2	Certification for the six Volkswagen AG sites is scheduled to be achieved by 2024.
Proportion of these in terms of number of employees	in %	34	19.8	
<b>Accidents reported<sup>3</sup>   GRI 403-9</b>				
				Temporary agency workers and internal commuting accidents not included in the KPI. Absence days are included through December 31 of the respective fiscal year.
Index of accident frequency in the Volkswagen Group	value	3.6	3.7	Value per 1 million hours worked
Index of accident frequency in Volkswagen AG	value	7	6.3	Value per 1 million hours worked
<b>Deaths due to work-related injuries   GRI 403-9</b>				
Volkswagen Group deaths	number	0	1	
Volkswagen AG deaths	number	0	0	

<sup>3</sup> Scope: The following sites are not included in the Group assessment in the reporting year: Volkswagen Transmission (Shanghai) Co., Ltd. and Innovative Charging Solutions (Suzhou) New Energy Technology Co., Ltd. Data for MAN Truck & Bus SE (Serendah) are based on estimates.

<sup>4</sup> Change in methodology: scope adjustment in 2023 - relates to the number of employees at production sites worldwide. Previous year's figure not adjusted.

# Diversity

## Commitment to Diversity, Equal Opportunities and Inclusion

Whether age, gender, origin or sexual orientation, diversity has many dimensions. At Volkswagen, we make room for this diversity and see our employees' differences as an asset. The basis for this can be open, respectful communication, inspiring leadership and a work culture based on equal opportunities and partnership. In this way, we want to ensure that all employees feel seen for their individuality and can realize their full potential. We are convinced that diversity is a source of new value creation and competitiveness and a decisive factor for the Group's success – particularly in times of skills shortages.

## Diversity Management Established across the Group

Group diversity management is directly assigned to the member of the Volkswagen Group Board of Management with responsibility for Human Resources and reports to this individual. Diversity managers are working on the topic in the Volkswagen Group across all divisions and locations. They meet regularly to promote the sharing of best practices and to discuss the implementation of programs and action.

## An Integral Part of Group Strategy

Diversity was defined as a focus topic for sustainability as part of the NEW AUTO Group strategy and Group initiative 6, which was derived from it. We have enshrined the topic of diversity and equal opportunities in the HR Compliance Group policy. The particular importance of this action area is also underpinned in the Volkswagen Group by the fact that the diversity index as a strategic KPI has acquired direct remuneration

relevance at Group Board of Management level. In addition, from 2023 the achievement of the target for the proportion of women in management – which is relevant to the index – has been anchored in management remuneration by introducing an ESG factor in the annual bonus.

We have also set out the aim of diverse workforces in key documents. The declaration "We live diversity" as one of the seven Group Essentials is thus a firm part of the Volkswagen Group's cultural DNA. Our understanding of diversity extends beyond gender equality, sexual orientation and internationality. For example, we also focus on the inclusion and integration of employees with disabilities.

## Stakeholder Engagement

Volkswagen uses various formats to discuss diversity issues with internal and external stakeholders. One example of this is the diversity panel, which was created in 2021. In the reporting year, the panel held a final meeting and issued concrete recommendations for action regarding organization, processes and activities in the Group, such as online training, internal information campaigns and discrimination surveys. The panel included experts from civil society, business and academia but also high-ranking managers from various areas of the Group. Its aim was to enhance in-house skills, to systematically counteract everyday discrimination and racism and to raise awareness of discriminatory content and conduct.

The Volkswagen Group has also underscored its commitment to diversity in Germany by its signature of and financial support for the Diversity Charter initiative and through the Chef:innensache initiative – a network of managers from business, academia, the public sector and the media for promoting equal opportunities for women and men.

## Antidiscrimination

We at Volkswagen strongly reject discrimination. This is because we stand for respect, for equal opportunities, for working together and for equal treatment of all people, irrespective of their ethnicity, race, gender, disability, ideology, religion, nationality, sexual orientation, social background or political beliefs, provided the latter are based on democratic principles and tolerance towards those who hold different views.

The Volkswagen Group Code of Conduct provides guidance throughout the Group and we sanction any breaches of the rules set out in it. Under the Code, every employee and manager is responsible for ensuring that colleagues work together in partnership and for taking action if rules are breached. We also keep central statistics on this: In 2023, 32 Volkswagen Group employees were dismissed due to breaches in the area of discrimination, harassment or stalking.<sup>1</sup>

## Targets for More Diversity

### More Diversity in the Volkswagen Group's Management

At all levels of management, we aim to set targets for measures and programs and further promote diversity in the Group. For example, our diversity approach includes quotas for women in managerial positions and targets for the internationality of our top management. These two figures are combined in our diversity index, which has been in force since January 1, 2017. The diversity index forms part of our NEW AUTO Group strategy and the Group People Strategy. Data for the index are collected for the whole Volkswagen Group with its active workforce.<sup>2</sup> With this index, we manage measures and assess the extent to which they have been implemented.

→ The **diversity index** tracks the changes in the proportion of women in management and the internationalization of top management, in each case as a percentage of the active workforce<sup>2</sup> globally.

The proportion of women in management positions – comprising line management, senior management and top management (including members of the Group Board of Management) – was 19.2% in 2023, which is significantly above the previous year's level (2022: 17.2%). We aim to raise this figure to 20.2% by 2025.

We aim to increase the level of internationalization in top management, the uppermost of our three management tiers, to 25.0% by 2025. At 25.6%, the target was already exceeded in the past fiscal year.

The figures for the proportion of women and internationalization are each included with equal weighting in an index that was set to 100 in each case for 2016. Both indices were included in equal proportions when setting targets and in the compilation of the overall index (proportion of women figure and top management internationalization figure). An increase in this index to 142 was planned for 2023. This target was beaten with a figure of 154. The targets are decided by the Group Board of Management.

### Goals for Increasing the Proportion of Women at Volkswagen AG

We have also formulated goals as regards the proportion of women in management for Volkswagen AG in accordance with section 76 (4) of the German Stock Corporation Act (*Aktien-gesetz – AktG*). In line with the German Act on the Equal Participation of Women and Men in Leadership Positions (*Gesetz zur gleichberechtigten Teilhabe von Frauen und Männern an Führungspositionen*) and section 76 (4) of the German Stock Corporation Act (*Aktiengesetz – AktG*), Volkswagen AG set targets for the period until the end of 2025 of 16.5% for the proportion of women in the active workforce<sup>2</sup> at the first level of management (senior management, top management and brand board of management) and 23.4% for the second level (line management). As of December 31, 2023, the proportion of women in the active workforce<sup>2</sup> at the first level of management was 15.3%, and at the second level of management it was 21.5%. The Group's Board of Management and Supervisory Board are regularly updated on the progress we are making toward these targets.

## Programs and Options

By offering various programs, we are aiming at increasing the proportion of women at management levels within the Group and at ensuring greater equality of opportunity and equal rights in career development. The Volkswagen AG-wide Kompass-2.0 program provides female talent with guidance and a decision aid for starting a management or leadership career and is also aimed at female production workers. The program centers around a nine-month period of mentoring accompanied by networking days, dialog events, seminars and feedback meetings. A total of 248 employees started the program in 2023.

<sup>1</sup> Subject to approval by the Group Board of Management. Basis: 378 companies, each with more than 5 employees.

<sup>2</sup> Definition of active workforce: total workforce not including trainees or employees in the passive phase of semi-retirement. In addition, when compiling the data for the diversity index and within the framework of the German Act on the Equal Participation of Women and Men in Leadership Positions (*Gesetz zur gleichberechtigten Teilhabe von Frauen und Männern an Führungspositionen*), an adjustment is made for employees in the withdrawal phase of the Time Asset scheme (Time Asset scheme: time credits from deferred compensation).

In order to achieve a sustainable increase in the proportion of women in management, we continuously work on the further integration of diversity and gender equality into HR processes. Volkswagen AG also offers managers various models of shared leadership – for example, the option of job sharing. In addition, there is an impat program aimed at top talent of non-German origin and any gender. This ensures greater visibility of international managers, leverages their expertise and promotes Group-wide networking.

The Volkswagen Group participates in the Target Gender Equality program, which was set up by the UN Global Compact and targets increased gender equality. The program is based on the UN Women's Empowerment Principles. These provide companies with guidance on how they can promote the empowerment of women and gender equality in the workplace, in business and in society.

**Diversity Wins @ Volkswagen completed**

Expanding approaches to promoting diversity and inclusion was the aim of the Diversity Wins @ Volkswagen program, which ended in 2023.

→ **94%**

**of our managers have taken part in the Diversity Wins @ Volkswagen program.<sup>3</sup>**

The program included mandatory training for managers, from foremen to top managers. The training participants developed an understanding of why diversity and inclusion are important for the Group, what design approaches and activities can be developed and what responsibility as a manager means in concrete terms. 94% of managers from companies with more than 1,000 employees had been trained across the Group and around the world by December 31, 2023. The Diversity Wins @ Volkswagen training content has been integrated into other manager training, including the management development program and the leadership development program. More information can be found in the People in the Transformation chapter.

 → People in the Transformation

**Encouragement of Networks**

The Volkswagen Group supports the formation of employee networks to promote personal initiative and the willingness to take on responsibility. This includes, for example, the LGBTQIA\*-&-friendsnetwork "We Drive Proud." The network not only represents the interests of lesbian, gay, bisexual, trans\*, queer, inter\* and asexual people but first and foremost helps to shape cultural change in the Group. "We Drive Proud" sees itself as an open, Group-wide initiative that maintains dialog with existing networks, e.g., those at AUDI AG, Dr. Ing. h.c. F. Porsche AG and SEAT S.A. The cross-divisional Women Career Network advocates for equal development opportunities for women and more diversity in leadership positions in the Volkswagen Group. There are now also fathers' networks in existence at AUDI AG (dads@audi) and in Volkswagen AG (Intersectionality).

**Creating a Better Work/Life Balance**

Volkswagen has recognized its employees' need to be able to respond at short notice and flexibly to changed life circumstances. We are therefore constantly working on improving our employees' work/life balance through flexible working time models. For example, we want not only to take into account the specific needs of parents, single parents or carers for relatives but to facilitate more flexibility for all employees. The rules and programs here vary from country to country and are determined by the legal framework, cultural circumstances and the results of collective negotiations.

Starting with Volkswagen AG, 18 Group companies have already established the "Meine AusZeit" instrument since 2021. This means employees can take a career break at short notice and flexibly without saving time credits beforehand. In the leave of three to six months, they continue to receive their pay, financed by advance payment by the employer. This is repaid in the subsequent period of work immediately after the leave.

In addition, we are working on meeting the need many employees have for more flexibility regarding their working hours and mobile working. Volkswagen AG, AUDI AG, Dr. Ing. h.c. F. Porsche AG, SEAT S.A. and Volkswagen Financial Services AG, among others, have therefore concluded company agreements regarding working outside company premises (mobile working). Our guarantee of reemployment also offers a high level of flexibility. For the past 20 years or so, Volkswagen AG employees have been able to take up

<sup>3</sup> Proportion of managers from companies with more than 1,000 employees who had participated in the program across the Group and around the world by December 31, 2023.

to eight years' leave of absence without having to give a reason. Regardless of whether this leave is for career development purposes or for family reasons, employees have a guaranteed right to reemployment on comparable terms subject to the economic situation.

Employees of various companies, including Volkswagen AG, Dr. Ing. h.c. F. Porsche AG, MAN Truck & Bus SE and AUDI AG, have an annual option: A conversion to paid leave may be made in place of payment of additional remuneration in accordance with the collective agreement. In Germany, the large number of people who take advantage of their statutory parental leave entitlement proves how many employees wish for reconcilability of work and family life. We grant parents additional benefits that go beyond statutory entitlements. Thus, Volkswagen AG employees that are entitled to company cars may continue using their vehicles privately for a limited period during parental leave. Volkswagen AG and subsidiaries with corresponding rules grant their employees a benefit provision in the employer-financed occupational pension plan (basic plan) during parental leave.

We also consider childcare during working hours highly important. The Volkswagen Group therefore endeavors to offer childcare geared to specific groups of people. Additionally, we provide daycare centers near a number of our sites.

### **Inclusion in the Workplace**

We assume social responsibility by supporting workshops for people with disabilities. To this end, we awarded contracts worth around €11.97 million in various Group companies during 2023. But we also champion inclusion internally. In 2023, the proportion of employees with disabilities at Volkswagen AG was 8.7%.

Our responsibility for keeping employees in valuable activities for their entire career if possible also extends to the needs of employees with a restricted working capacity. After all, individual forms of work organization can result in significantly higher performance and job satisfaction levels for precisely these groups of employees. The Work2Work program provides a good example. Since 2001, Volkswagen AG has opened up new career opportunities within the business for employees with differing abilities. In Wolfsburg, 575 employees are currently employed in Work2Work jobs in more than 50 different areas.

Diversity KPIs	Unit	2023	2022	Notes and comments
<b>Diversity index</b>				Active workforce <sup>1</sup>
<b>Proportion of women in management   GRI 405-1</b>				
Target for proportion of women in management	in %	17.9	17.0	
Actual proportion of women in management	in %	19.2	17.2	
Actual level of proportion of women sub-index   weighting 0.50		158	142	
<b>Internationalization in top management   GRI 405-1</b>				
Target figure for internationalization in top management	in %	23.2	22.3	
Actual level of internationalization in top management	in %	25.6	23.4	
Actual level of internationalization in top management sub-index   weighting 0.50		150	138	
<b>Cumulative diversity index figure</b>				
Target cumulative diversity index figure	value	142	136	
Actual cumulative diversity index figure	value	154	140	
<b>Proportion of women (as per legal situation in Germany: Executive Positions Act)   GRI 405-1</b>				
Actual figure for women at first management level <sup>2</sup>	in %	15.3	14.2	Volkswagen AG, active workforce <sup>1</sup>
Actual figure for women at second management level <sup>3</sup>	in %	21.5	19.7	Volkswagen AG, active workforce <sup>1</sup>
<b>Discrimination</b>				
Dismissals due to breaches in the area of discrimination	number	32	14	Basis: 378 companies, each with more than 5 employees (previous year: 110 companies, each with more than 500 employees)

<sup>1</sup> Definition of active workforce: total workforce not including trainees or employees in the passive phase of semi-retirement. In addition, when compiling the data for the diversity index and within the framework of the German Act on the Equal Participation of Women and Men in Leadership Positions (*Gesetz zur gleichberechtigten Teilhabe von Frauen und Männern an Führungspositionen*), an adjustment is made for employees in the withdrawal phase of the Time Asset scheme (Time Asset scheme: time credits from deferred compensation).

<sup>2</sup> Definition of first level of management: senior management, top management and brand board of management.

<sup>3</sup> Definition of second level of management: line managers.

# Integrity and Compliance

GRI 2-23, 2-24, 205-1

## Integrity and Compliance: Foundation of Business Success

Integrity and compliance (I&C) have a high priority in the Volkswagen Group. They create the basis for correct and values-based conduct. We gear our rules, processes and corporate culture to enabling all employees to act with integrity and in compliance with the rules at all times. This includes doing the right thing on the basis of your own convictions – regardless of economic, time or social pressures.

We believe that sustainable economic success requires each individual to comply with laws, regulations and voluntary commitments. This behavior must be a matter of course for all Group employees. This is why we have made I&C a key element of our NEW AUTO Group strategy and defined it as one of six focus topics of our sustainability program. As metrics and action areas, I&C should permanently have the same strategic and operational priority in our Group as sales revenue, profit, product quality or employer attractiveness.

We want to lead the way as a role model for I&C and take responsibility – as a company and as part of society. We have set out the basis of our actions in our Code of Conduct (CoC) and in the Group Essentials.

 → [volkswagen-group.com](https://www.volkswagen-group.com) > Code of Conduct

 → [volkswagen-group.com](https://www.volkswagen-group.com) > Group Essentials

We are aware that violations of laws, rules and regulations would not only damage the trust our shareholders, customers, partners and employees place in us, we would also have to expect legal consequences and face the threat of fines. From an I&C perspective, our business activities entail risks in the areas of corruption, money laundering, human rights and

the environment. As part of our e-mobility strategy and the corresponding ramp-up of our battery business, we need to purchase significantly more raw materials whose mining must be strictly monitored for human rights compliance. There is generally a high risk of corruption in the countries concerned. Breaches of environmental protection requirements may also harm the natural environment and lead to reputational damage and financial losses.

We use our responsible supply chain system to proactively avoid or minimize social and environmental risks and corruption along the supply chain. The structure builds on a systematic risk analysis. More information can be found in the Supply Chain and Human Rights chapter. Details on the organization of our general risk management system and internal control processes can be found in the Risk Management chapter.

 → Supply Chain and Human Rights

 → Risk Management

## Anchoring in the Group

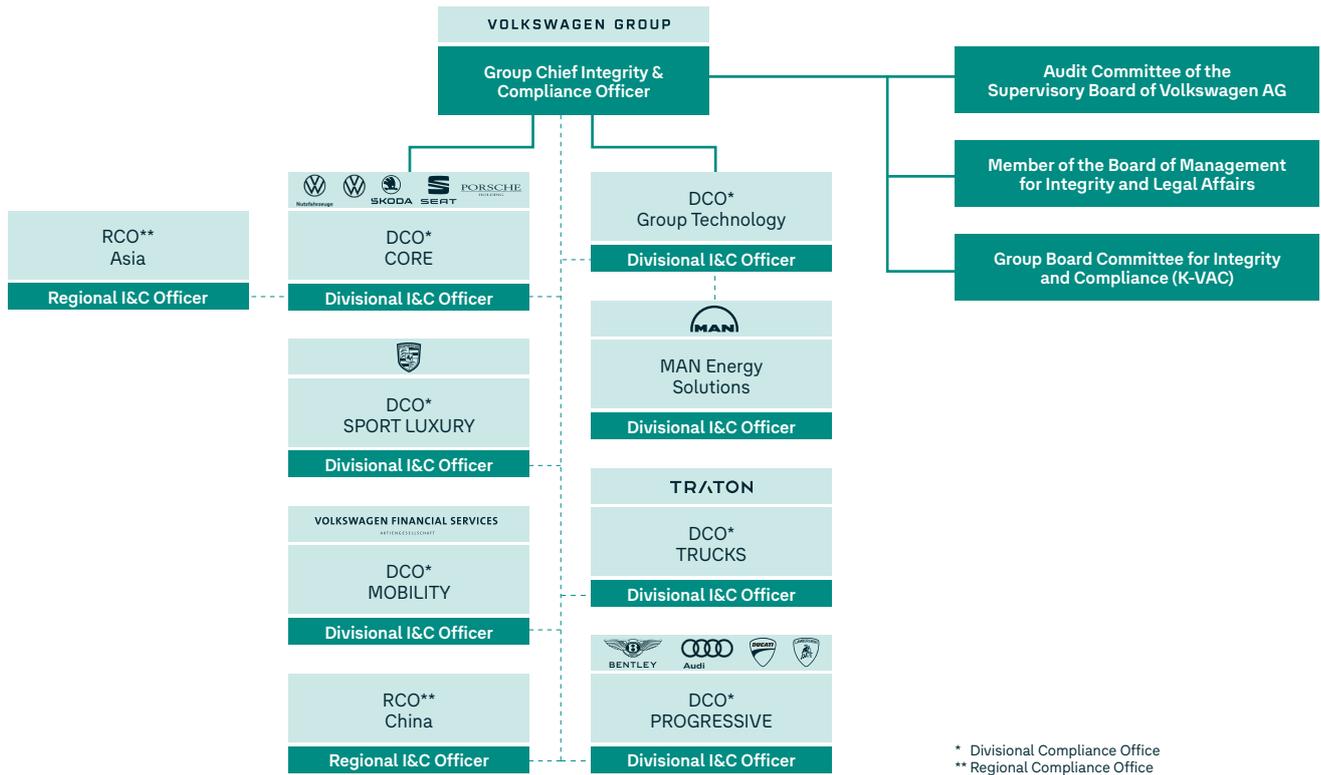
Group Integrity & Compliance supports the Group and brand companies in carrying out their business activities in compliance with the rules and complying with the relevant laws and internal regulations.

The Group Chief Integrity & Compliance Officer heads the global integrity & compliance organization. They report directly to the member of the Board of Management for Integrity and Legal Affairs and to the Audit Committee of the Supervisory Board of Volkswagen AG. The integrity & compliance organization is structured by division, which is intended to strengthen communication and enable harmonized processes across all relevant Group companies.

The divisional integrity & compliance officers are generally responsible for several brands and implement compliance measures in their area of responsibility. Dr. Ing. h.c. F. Porsche AG and TRATON SE are exceptions from this. They have their own, independent compliance structures.

One regional integrity & compliance officer is responsible for the activities of the Volkswagen-controlled entities in China. A regional integrity & compliance officer for the Asia region oversees the controlled companies in Australia, Korea, Japan, Malaysia and Taiwan.

## Group Integrity & Compliance DCO and RCO Structure



As the highest Group body, the Integrity and Compliance Group Board of Management Committee (K-VAC) deals with our integrity and compliance management system. It is overseen by the Group Board of Management Integrity and Legal Affairs function. K-VAC analyzes the respective compliance management systems for each risk area, harmonizes the intermediate processes and reviews I&C reports from the brands and regions. As well as the members of the Group Board of Management responsible for human resources and finance, the committee also includes other members of the boards of management and top management of the brands.

### Together4Integrity Successfully Concluded

With the Together4Integrity (T4I) program, we have built a holistic integrity and compliance management system (ICMS) which brings together virtually all the Company's integrity and compliance activities under one roof. This system was set up in line with the five internationally recognized ECI (Ethics and Compliance Initiative) principles: strategy, risk management,

a culture of integrity, a speak-up environment and resolute accountability. The aim of T4I is not only to strengthen uniform corporate governance throughout the Group in relation to integrity and compliance, but also to advance the culture of integrity. This includes steadfastness in adhering to principles of integrity regardless of economic or social pressures. T4I and the integrity and compliance management system therefore contribute significantly to increasing sustainability in the Volkswagen Group. The original plan was for it to be implemented by 2025. However, given that the roll-out had already made more progress than expected at the beginning of the reporting period and that the consistently high approval scores for the question on integrity in the annual Opinion Survey pointed to the program's success, we decided in the reporting period to bring the centralized program management and control to an early end during 2023. Responsibility for continuing to implement the measures and embedding them in a lasting way now lies with the Group brands and companies and with the responsible Group departments.

## Integrity and Compliance in Practice

As part of the operational implementation of I&C, we continuously identify possible risks and define the corresponding work focuses. There are also awareness and training measures for Group employees and suppliers. By these means, we want to ensure that everyone acts with integrity as a matter of course in day-to-day business.

### Work Focuses and Risk Assessment

The focuses of the Group Integrity & Compliance Organization's work include anti-corruption and preventing embezzlement, fraud and money laundering. In addition, the Compliance department is involved in mergers and acquisitions (M&A).

The starting point is the internal compliance risk assessment (ICRA). It determines the compliance risks in the Group. Every controlled company must implement appropriate measures based on its risk profile. The Group Chief Integrity & Compliance Officer reports on the implementation status to K-VAC on an ad hoc basis, but at least annually. The ICRA also defines standards for the Code of Conduct, the whistleblower system, compliance training and communication.

Internal and external auditors regularly scrutinize the compliance management system (CMS). Particularly in the context of the monitoring and improvement process, auditors regularly audit how effective compliance measures are. In addition, we are continuously further developing the CMS.

Group-wide hot-topic reporting plays an important role for our compliance work. It helps to pass on information on compliance-relevant, systemic incidents and to escalate the information in the whole organization.

### M&A and NCS Compliance

In the case of planned mergers and acquisitions requiring the involvement of Group Integrity & Compliance, the companies and transactions are audited for human rights risks and for integrity and reputation risks, including corruption, money laundering and fraud. This also applies to joint ventures, industrialization projects (e.g., new foreign production sites with external partners) and strategic collaborations with third parties. The business divisions responsible for the transaction are then given recommendations for risk-reducing measures.

The integrity & compliance organization also provides advice on the basis of sharing best practice for compliance management in non-controlled shareholdings (NCS), i.e., companies that are not controlled by a Volkswagen Group company as the majority shareholder. In the case of non-

controlled companies (this also includes the Chinese joint ventures), a case-by-case assessment is made with regard to the compliance management system in cooperation with our respective companies via our internal contacts. We rely on the cooperation of these companies here.

### Anti-Corruption

The Volkswagen Group has a zero-tolerance policy toward active or passive corruption. This is anchored in both the Code of Conduct for Employees and the Code of Conduct for Business Partners.

 → [volkswagen-group.com](https://volkswagen-group.com) > [Code of Conduct for Business Partners](#)

Further Group policies set out how to deal with conflicts of interest, donations and sponsorship or benefits in the form of gifts or invitations. In addition, there are operating guidelines addressing approval procedures and record-keeping. Investigating reported breaches of principles is the responsibility of managers and HR, and in serious cases also our investigation offices. If we find personal misconduct, the HR department in question takes the appropriate disciplinary action.

### Business Partner Due Diligence Process

Group Integrity & Compliance supports the entities with operational responsibility – e.g., Procurement or Sales – in conducting the business partner due diligence (BPDD) process. It includes regular screenings, risk assessments, sanction list checks and the identification of warning signs regarding business partners (suppliers and sales partners). We also check whether business partners have a CMS or have implemented any compliance measures.

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 measures to minimize risk and implement these with business partners. In individual cases, we contact selected business partners directly to resolve potential violations. If this is not possible, we do not commence the business relationship or we terminate it insofar as legally possible. The business partner in question may be blacklisted from doing business with the Volkswagen Group, its brands and its companies.

→ In 2023, more than

**4,100**

**BPDD reviews were conducted.**

As of December 31, 2023, we had identified around 400 cases that led to not commencing or terminating business relationships.

### Raising Awareness and Communication

The CoC lays the foundations for integrity and compliance in the Volkswagen Group. It serves as the main tool for reinforcing awareness of responsible conduct and decision-making and can be used as an aid and as a way of finding the right contact persons. As of the start of 2024, a new version of the CoC entered into force. Additional content and an overarching, Group-wide narrative also convey a clear, values-oriented attitude and ensure ease of integration of future developments. The CoC is binding for all the Group's employees. Its content is also part of employee appraisals as a measurement criterion for "setting an example of integrity and compliance."

 → [volkswagen-group.com > Code of Conduct](https://volkswagen-group.com > Code of Conduct)

Events in the departments supplement the services offered by Group Integrity & Compliance. The communication team regularly addresses tasks and case studies from compliance practice. Information and communication activities such as awareness campaigns, film and dialog formats, newsletters and interactive games are used to raise awareness on compliance topics. One separate external format is Compliance-XChange, in which experts share information with other DAX companies on various focal points, such as whistleblower systems or the prevention of money laundering.

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 topics of anti-corruption and the Code of Conduct, and is in close communication with other advisory bodies in the Group.

In the reporting year, the information point handled 1,551 inquiries. Around 28% relate to the acceptance or giving of gifts and invitations.

### Training and Standards

Group I&C sets Group-wide uniform standards for compliance training with the CMS. The department puts together implementation packages for the rollout of mandatory training. These contain information on the content and schedule of the training. The packages are intended to enable brands and companies to train employees to an equal level of quality in a risk-based, target-group-specific manner with predefined core content.

In addition to general training, Volkswagen AG's compliance departments additionally offer target-group-specific training formats and communication formats, including management discussions and training courses for disseminators of information.

The training's two focal topics are the Code of Conduct and anti-corruption.

### Code of Conduct

All employees in the Group are required to complete CoC training and a final test every two years. The training is web-based training (WBT), and passing is documented in the employee's training history. We update the content – including environmental compliance, product conformity, product safety, and the prohibition of corruption – every two years. The last update was in the reporting year. Production employees receive mandatory CoC training every four years. Volkswagen AG systematically records the number of permanent staff subject to mandatory qualification who have a valid CoC qualification (full-time and part-time employees and management). Interns, student workers and doctoral candidates are excluded for technical and process reasons.

In Volkswagen AG, 49,987 employees in the relevant target group had a valid qualification as of the end of December 2023. This is equivalent to 98.9% of the active workforce who must be trained.<sup>1</sup>

Members of senior management and above are certified on the CoC each year. They confirm that they comply with the requirements of knowing their own role of setting an example of compliance, raising the awareness of employees in their area of responsibility accordingly and telling them where they can find certain information in the CoC. Part of the certification is also that participants are aware of the reporting obligation in the event of serious compliance breaches and disclose any conflicts of interest.

We also give business partners from sales and procurement training based on risk. The basis for this is the CoC for Business Partners. This has been a component of agreements with suppliers and service providers since 2020.

### Anti-Corruption

Employees in areas or companies with high exposure to risk must complete mandatory anti-corruption training. It involves an in-depth module on dealing with officeholders and mandate holders. We also raise the awareness of managers from senior management upwards regarding the principles of conduct, which include the prohibition of corruption, as part of the annual CoC certification.

<sup>1</sup> Definition of active workforce: total workforce not including trainees or employees in the passive phase of semi-retirement. In addition, when compiling the data for the diversity index and within the framework of the German Act on the Equal Participation of Women and Men in Leadership Positions (*Gesetz zur gleichberechtigten Teilhabe von Frauen und Männern an Führungspositionen*), an adjustment is made for employees in the withdrawal phase of the Time Asset scheme (Time Asset scheme: time credits from deferred compensation).

Volkswagen AG systematically records the number of permanent staff subject to mandatory qualification who have a valid anti-corruption qualification (full-time and part-time employees and management).

In Volkswagen AG, 49,823 employees in the relevant target group had a valid qualification as of the end of December 2023. This is equivalent to 98.6% of the active workforce<sup>1</sup> who must be trained. Employees can also access the "anti-corruption" guideline at any time.

 → [volkswagen-group.com](https://volkswagen-group.com) > [Anti-Corruption Guideline](#)

### Antitrust Law

Depending on their exposure to risk, it may be mandatory for employees to complete antitrust web-based training. The Group Board of Management is also trained on this content. Employees who are employed in key positions with high risk exposure also receive additional compliance training. This concerns, for example, managing directors or financial officers. The training is held across the Group by the respective companies' compliance and personnel managers. Group Legal also continuously provides antitrust training on a risk-oriented basis and conducts assessments on antitrust and anti-competitive risks.

### HR Compliance

I&C is integrated into standard HR processes such as recruitment, training, promotion and remuneration. It is a compulsory topic in annual employee appraisals and is part of employee training. Volkswagen AG and other defined companies keep anonymized statistics on misconduct and the resulting sanctions. These are regularly communicated to employees. Compliance content is a component of all career development paths, from the trainee induction program through programs for leadership and management development to the senior management program. More details can be found in the People in the Transformation chapter.

 → [People in the Transformation](#)

### Product Compliance

The product compliance management system (PCMS) supports our products in meeting the statutory and regulatory requirements of the exporting and importing countries, internal and external standards, contractually agreed customer requirements and externally communicated commitments over their entire service life. The PCMS defines roles and responsibilities for design, implementation and monitoring. We train employees and managers on product compliance and create points of contact to whom our employees can address their questions.

### Environmental Compliance

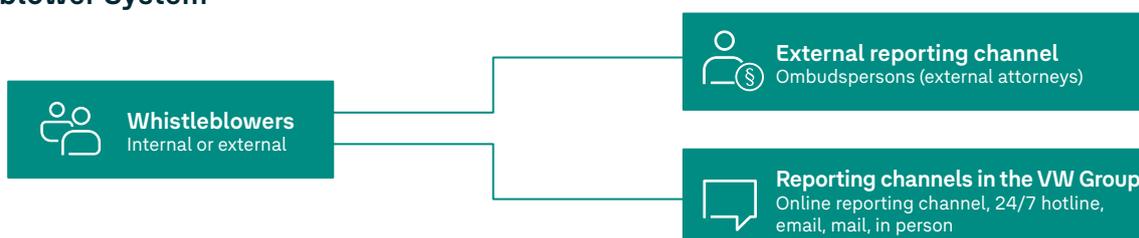
The environmental compliance management system stipulates that environmentally relevant aspects must be taken into account in all strategy, planning and decision-making processes of the brands and Group companies. This includes a KPI system that measures progress on environmental targets. You can find further details in the Environmental Compliance Management chapter.

 → [Environmental Compliance Management](#)

### Protection and Prevention: The Whistleblower System

The whistleblower system is intended to avert damage to the Group, the workforce and other stakeholders with binding principles and regulated procedures. Employees, business partners and their employees, customers and other third parties can report information on potential breaches of the rules – including serious risks and human-rights and environmental violations – at any time. They may do this anonymously if they so choose. The whistleblower system offers six different reporting channels for this. These include an online channel, which accepts reports in many languages; an international 24-hour telephone hotline; and external attorneys, who act as ombudspersons. The processing of the reports and any follow-up questions can also be confidential and anonymous, if this is requested. Special IT infrastructure prevents the source of the information from being identified.

## Whistleblower System



Strict confidentiality and secrecy apply throughout the investigation process. An investigation is only initiated after a thorough review and in the event of concrete indications of rule-breaking. There is a presumption of innocence. Those involved are heard as soon as possible, and their names are cleared if they have been wrongly accused.

HR sanctions proven misconduct. This can mean a warning, a reprimand or termination. Following serious breaches of rules, structured root cause analyses are conducted in order to prevent similar incidents in the future.

### The Investigation Offices' Work

The Central Investigation Office in Wolfsburg coordinates the Group-wide whistleblower system. The employees there process whistleblower information concerning Volkswagen AG and those of its subsidiaries that do not have their own investigation office and also process reports with relevance for the Volkswagen Group.

Group Internal Audit, Group Security and Group Legal assist with operational case investigation. In individual cases, the 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 cases are exceptionally complex – particularly with imminent legal consequences for Volkswagen AG (e.g., in the event of particularly serious corruption or possible breaches of antitrust and competition law).

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 Chinese subsidiaries. Cooperation between the investigation offices and uniform processing of whistleblower information are centrally monitored and coordinated in Wolfsburg.

### Information and Communication

An IT system, internal controls and multiple-party verification support employees with the processing of suspicious activity reports. Figures on the whistleblower system are reported to the Board of Management and the Supervisory Board at regular intervals. The workforce is also regularly informed about the whistleblower system. In addition, numerous compliance training courses address the task of the whistleblower system and how it works. 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 fields of audit, security, human resources, legal or compliance.

### Protection from Discrimination

The Volkswagen Group assures all whistleblowers of protection from any reprisals they could experience due to their reports and the efforts to investigate breaches. This also applies to people who support the whistleblowers or the investigations. This principle is anchored in Group policy 3, which applies worldwide and is described in the Code of Conduct. Breaches of the ban on discrimination are treated as serious breaches of the rules.

Volkswagen Group complies with international laws on whistleblower protection – for example, the EU directive on whistleblower protection, its implementation acts and the German Supply Chain Due Diligence Act (LkSG) – through the provisions contained in the Group policy.

### Suspected Cases and Compliance Breaches in the Reporting Year

In 2023, 4,120 pieces of whistleblower information were received. Around 20% of these were anonymous but with the option to contact the whistleblower, and around 11% were anonymous without the option to make contact. In 777 cases, the investigation offices accepted an initial suspicion of breaches of the Code of Conduct, in several cases also of laws and/or specific internal regulations at the same time, with the result that an internal investigation was initiated. Of these, 171 cases involved potentially serious breaches of rules.

In the reporting year, the investigation offices examined individual cases of suspected serious infringements of rules to prevent corruption. In nine cases this resulted in significant sanctions such as warnings or dismissals. In five cases this was due to conflicts of interests and in four cases to violations of the policy on benefits. Two investigations into suspicions of serious infringements of antitrust or competition law were closed. In none of these cases was a serious violation of antitrust or competition law established.

An independent external auditor has audited the effectiveness and functionality of the whistleblower system. The Audit Committee of the Supervisory Board, the Group Board of Management and the boards of management of companies concerned were informed of the result and possible suggestions for improvement. The past audit showed that the Group whistleblower system's processes are suitable for efficiently and effectively processing whistleblower information. The investigation offices of AUDI AG, TRATON SE, Volkswagen AG and China were audited in the reporting year.

## Data Protection – Handling Personal Data Responsibly

The Volkswagen Group wants to become a software-oriented mobility provider. This makes compliance with global data protection requirements, especially the General Data Protection Regulation and the German Federal Data Protection Act (*Bundesdatenschutzgesetz*), particularly important.

We base our actions on the following principles: We want to protect the personal data of current and former employees and of customers, suppliers, contractual partners and other data subjects. We collect, record, process, use and store personal data in accordance with legal requirements. We design all components of information processing in such a way that the confidentiality, integrity, availability, verifiability and resilience of the sensitive information and personal data is maintained, and unauthorized internal or external use is prevented.

Volkswagen AG's Group policy is intended to ensure that the controlled Group companies comply with the relevant legal, regulatory and company data protection regulations. It is binding for all Group companies of Volkswagen AG worldwide. The companies implement the requirements autonomously and are thus responsible for compliance with the applicable data protection requirements. This Group policy applies to the collection, processing or other use of the personal data of natural persons, particularly of employees, customers, suppliers, contractual partners and other third parties. The data subjects can assert their rights via a range of channels at any time.

Since 2021, we have offered mandatory web-based data protection training for all managers and all members of the Group Board of Management and brand boards of management of Volkswagen AG. The managers are required to raise their employees' awareness of topics relevant to data pro-

tection every two years. The Group also provides target-group-specific training and events, including training sessions for apprentices and trainees and joint events with IT Security and other departments. For example, we want to increase awareness of the handling of personal data. Information and communication activities such as awareness campaigns, newsletters or podcasts additionally help with the implementation of and compliance with legal and company data protection requirements.

Volkswagen AG has also created a data protection management system (DPMS) and a data protection management organization. These form the basis for implementation of and compliance with the EU General Data Protection Regulation (GDPR). As a compliance management system for data protection, the DPMS also serves to regularly analyze and further develop the data protection processes.

The process for reporting data protection breaches is a core element of Volkswagen AG's data protection management (Articles 33 and 34 GDPR). It serves to identify potential data protection breaches at an early stage and allows them to be processed efficiently. If needed, necessary and damage-limiting countermeasures are initiated, the competent supervisory authority is notified and data subjects are informed. Potential data protection breaches should be reported using the data breach hotline, which can be contacted 24/7. However, it is also possible to make contact through other channels – for example, by email to [data-breach@volkswagen.de](mailto:data-breach@volkswagen.de) or by phone via the local help desk. Anonymous reports of potential data protection breaches can be submitted through Volkswagen AG's central whistleblower system.

In fiscal year 2023, there were no reportable data protection breaches pursuant to Art. 33 EU GDPR in the processing of personal customer data. Reportable data protection breaches outside of the processing of personal customer data were reported to the competent supervisory authority in due time.

Integrity and Compliance KPIs	Unit	2023	2022	Notes and comments
Business partner due diligence reviews	number	> 4,100	> 4,300	Business partners in sales and procurement (suppliers)
<b>Information point</b>				
Inquiries to the compliance information point processed	number	1,551	1,517	Volkswagen AG
Change in inquiries to the compliance information point processed	in %	2	14	
<b>Code of Conduct</b>				
Employees of Volkswagen AG who have a valid qualification on the Code of Conduct	number	49,987	48,311	Web-based training; scope definition, see p. 112
Proportion of the workforce of Volkswagen AG to be qualified	in %	98.9	98.4	Web-based training; scope definition, see p. 112
<b>Anti-corruption   GRI 205-2</b>				
Employees of Volkswagen AG who have a valid qualification on the topic of anti-corruption	number	49,823	45,808	Web-based training; scope definition, see p. 112
Proportion of the workforce of Volkswagen AG to be qualified on the topic of anti-corruption	in %	98.6	93.0	Web-based training; scope definition, see p. 112
<b>Pieces of whistleblower information</b>				
Pieces of whistleblower information	number	4,120	3,073	In all investigation offices
of which anonymous and without any possibility of contact	in %	11	9	

# Supply Chain and Human Rights

## Protecting Human Rights Effectively

The Volkswagen Group pursues the vision of enabling sustainable mobility for generations to come. This includes living up to our legal, social and environmental responsibility not just in our own Group but also in our supply chains. In 2023, the Volkswagen Group once again defined the focus topic of "Supply chains and human rights" as a key topic.

## Responsibility in Our Group

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.

Volkswagen AG created the independent function of a Human Rights Officer (HRO) in August 2022. This position serves as the first point of contact for all human rights-related issues from authorities, NGOs and the public.

We confirm our commitment to major international agreements and declarations, which determine important cornerstones for our actions. These include in particular:

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

The above international frameworks are a focus for Volkswagen. The salient business and human rights issues refer to:

### Labor rights

- Freedom of association and the right to collective bargaining
- No forced labor
- No child labor
- Good working conditions

### Safety

- No involvement in any unlawful activities
- Guarantee of people's safety

### Tolerance

- Tolerance towards different ideological and religious opinions and respectful expression of them
- No discrimination
- Diversity and protection of disadvantaged, especially indigenous groups

Expectations of employees and the Group-wide understanding of the observance of universal human rights are set out in our Code of Conduct: We respect, protect and promote the regulations on protecting human rights worldwide as fundamental and universally valid requirements. We reject all use of child, forced or compulsory labor and any form of modern slavery or human trafficking.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Code of Conduct

Group management and the Group European Works Council and Global Group Works Council have also signed the Volkswagen Group's joint declaration on social rights, industrial relations and business and human rights – known as the Declaration on Social Rights.

 → People in the Transformation

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > Declaration on Social Rights

In our view, continuous dialog between those involved about principles and implementation issues is needed in differentiating between the state's duty to protect human rights and corporate human rights responsibility. For businesses, it is often challenging to obtain concrete and objective information enabling a comprehensive assessment of human rights situations. In order to achieve further progress, we also seek cooperation with international organizations. For example, we are in written and personal dialog with our stakeholders here.

 → Stakeholder Management

Institutional investors and investment banks also seek dialog with us on the topic of the supply chain and human rights. One of the places we publish our standpoint, including on controversial aspects, is the Volkswagen Group's investor relations website.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > ESG Controversies

The Volkswagen Group stands firmly against forced and child labor in connection with its business activities. The company takes its responsibility for human rights very seriously in all regions of the world, adhering closely to the UN Guiding Principles on Business and Human Rights. These principles form part of the company's Code of Conduct. We maintain these values throughout our supply chain and have zero tolerance for any exceptions to this policy.

## The Protection of Human Rights at Volkswagen

As a global business, we are aware of our responsibility to respect human rights and comply with our due diligence obligations as regards to human rights and the environment. This is the benchmark for our corporate conduct in our controlled companies and production sites and along our supply chain and value chain.

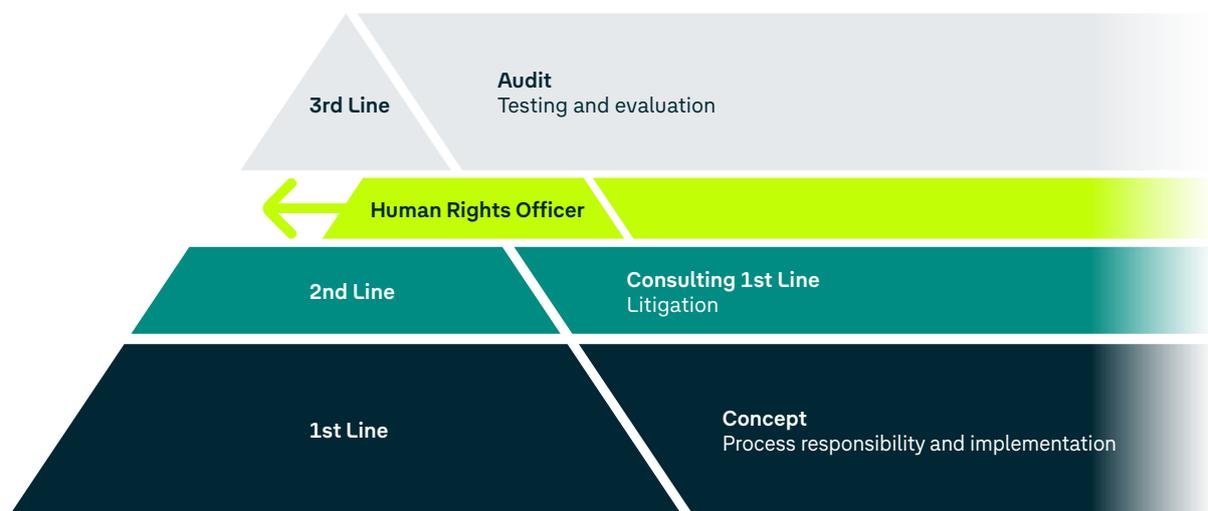
For the first year in which the German Supply Chain Due Diligence Act (*Lieferkettensorgfaltspflichtengesetz - LkSG*) becomes valid, the Volkswagen Group's strategic objective concerning human rights is to ensure the obligations imposed by the act are met completely and in the best possible manner. For the 2023 financial year, it is first of all our ambition to implement the legal requirements in a timely and complete manner. This will be challenging given the global operational expansion of our business activities and the high complexity of our supply chain and value chains.

In the coming years, we will continuously review and improve our initial risk management system in terms of defending protected legal positions under human rights and environmental laws, and to broaden it to include further strategic goals and objects of legal protection, including beyond the scope of the LkSG.

### Anchoring in the Group

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 the risk to protected legal positions under the LkSG.

## Three Line Model for a Holistic Governance, Risk and Compliance Management System



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 under the LkSG, which they detect at an early stage, analyze and actively manage by means of suitable preventive measures. Relevant divisions for ensuring the fulfilment of human rights and environmental due diligence obligations as defined in the LkSG 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; with regard to objects of legal protection under the LkSG 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 all-encompassing, independent auditing body.

In the three line of defense model, the independent and exclusive function of the Human Rights Officer at Volkswagen is positioned between the second and third lines of defense as a continuously accompanying controlling, monitoring and consulting function. It therefore completes the holistic system for managing corporate risks as defined in the LkSG.

The HRO's business area is represented by an organizational structure, who have regionally focused and strategic cross-functional roles. The HRO's area focuses on monitoring, auditing and consulting in accordance with section 4 (3) of the LkSG on behalf of the Group Board of Management. In addition, the Group Board of Management has delegated to the HRO various responsibilities which includes internal and external communication, the reporting in connection with the LkSG, as well as coordinating the fulfilment of obligations for reporting and preparing a policy statement across the Group (sections 10 and 6 of the LkSG).

The HRO reports directly to the member of the Group Board of Management for Finance/COO at Volkswagen AG, whose area of responsibility does not include the first and second lines of defense – to be monitored by the HRO.

The HRO was appointed by resolution of the Group Board of Management on 24 June 2022 as Human Rights Officer as defined in section 4 (3) of the LkSG for the whole of Volkswagen AG's own business area as described in section 2 (6) LkSG, including the currently 13 other Group companies at that are subject to mandatory reporting alongside Volkswagen AG. In the same resolution, it was decided that the companies of the Volkswagen Group that are subject to mandatory reporting shall be at liberty to appoint their own human rights officers as defined in section 4 (3) of the LkSG, in addition to the HRO. The decision was then embedded in a Group Policy governing the division of responsibilities.

In 2022 and 2023, the companies AUDI AG and Volkswagen Financial Services AG, which are both subject to mandatory reporting, each appointed to the role of human rights officer one person in addition to the HRO, in accordance with section 4 (3) of the LkSG. In 2023, the companies Dr. Ing. h.c. F. Porsche AG and TRATON SE, which are both subject to mandatory reporting, each set up committees to perform monitoring, auditing and consulting tasks on behalf of the two companies and their subsidiaries in addition to the HRO, in accordance with section 4 (3) of the LkSG. Irrespective of this, the HRO also monitors the aforementioned companies and performs the remit assigned by the Group Board of Management in coordination with the functionaries of AUDI AG, Volkswagen Financial Services AG, Dr. Ing. h.c. F. Porsche AG and TRATON SE within the framework of a cooperation model.

### **Risk Analysis Procedure in Volkswagen AG's Own Business Area and at Suppliers**

In order to avoid both human rights and environmental risks, the LkSG specifies several obligations concerning due diligence that companies must adhere to. These obligations include, among others, the implementation of risk analyses, the establishment of preventive measures, the adoption of remedial actions once legal violations have been identified as well as the establishment of a whistleblower system. The effectiveness of measures needs to be checked and documented continuously.

These due diligence duties apply both to the Volkswagen Group's own business area and to its supply chain. The content and activities regarding the supply chain are explained in detail in the next but one section (see the "Transparency and Responsibility in the Supply Chain" section, p. 121).

In the 2023 reporting year, the departments responsible for the core tasks of the German Supply Chain Due Diligence Act conducted a risk analysis on the basis of questionnaire-based surveys in the Group companies of the Group's own business area. The risk analyses comprised abstract and concrete risk analyses. In addition, further risk analyses were carried out on an ad hoc basis, for example as part of mergers and acquisitions transactions.

**Abstract Risk Analyses**

The Group companies relevant for the German Supply Chain Due Diligence Act in the Volkswagen Group's own business area were assessed using defined criteria regarding possible abstract human rights or environmental risks.

The results of the abstract risk analyses were used for the Group-wide management and prioritization of further, more detailed steps in concrete risk analyses.

**Concrete Risk Analyses**

*Human Resources and Occupational Health and Safety*

Risks to be prioritized include unequal treatment in the employment relationship and disregard of the occupational health and safety obligations applicable to the place of employment. Due to the fact that Volkswagen AG also operates in regions and markets where there is no legal right to freedom of association or the right is restricted, this risk too has been weighted as a priority. We monitor these regions and markets.

Group Occupational Health and Safety has expanded the rules and regulations on occupational health and safety that apply throughout the Group to include requirements and measures intended to counteract, in particular, the risks pursuant to section 2 (2) (5) of the German Supply Chain Due Diligence Act.

HR Compliance has revised the Group policy on HR compliance, introduced basic measures to prevent human rights violations against employees and expanded measures that have already been introduced to include a focus on protecting human rights. This is currently being implemented in the Group.

*Group Security*

Group Security's risk analysis is conducted through an annual self-assessment in the compliance reporting tool (CoRT).

Group Security has expanded Group policy 13 Security to include rules that counteract, in particular, the risks pursuant to section 2 (2) (11) of the German Supply Chain Due Diligence Act. This integrates previously missing requirements into the contracts with security service providers or in the future award of contracts for security services.

*Environment*

In 2023, Group Environment expanded the Environment Compliance Management System (ECMS) to include the risks relevant for the German Supply Chain Due Diligence Act and further advanced the implementation of the ECMS across the Group.

As part of the ECMS, annual risk analyses relating to the German Supply Chain Due Diligence Act are conducted and suitable prevention and remedial measures are defined and implemented. The companies continuously review the effectiveness of these measures. The findings obtained are used to further develop the ECMS's ongoing improvement programs.

 → Environmental Compliance Management

**The Grievance Mechanism**

Potential violations of human rights as well as environmental risks in own business as well as by direct and indirect suppliers and other business partners can be reported to the Investigation Office at all times. This is also relevant for any other hints that may require immediate action. The Investigation Office will inform the responsible departments who will process the issue accordingly. This includes in particular taking the necessary measures to minimize or end violations and/or risks in case of confirmed initial suspicions.

 → Integrity and Compliance

## Transparency and Responsibility in the Supply Chain

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 63,000 supplier sites in more than 96 countries around the world. Our activities may have negative effects on our environment and on people in our supply chain. At the same time, our size and position in the market also mean there are opportunities to achieve environmental and social improvements in our suppliers' countries and sites.

Our aim is to design supply chains responsibly and to reduce risks as far as possible. The Group Procurement Sustainability department is responsible for the operational management of sustainability topics in our supply chains. Dialog between our brands and regions through the Sustainability Procurement Network, in which more than 110 experts from five continents continuously work together, plays an important role here. The network's activities mean we can better identify current developments and long-term challenges in the individual countries and develop solutions together.

### Sustainability as Part of the Procurement Strategy

In the area of procurement, we launched a comprehensive strategy program in 2022 whose aims include 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. In the "fairness and equality" topic, we address, among other things, human rights due diligence, responsible procurement of raw materials, and diversity and inclusion in our supply chains.

In addition, our activities are anchored as a focus topic for sustainability in the NEW AUTO Group strategy and Group initiative 6, which was derived from it. In the reporting year, a significant focus of the work was integrating the requirements of the German Supply Chain Due Diligence Act (LkSG) and other legal requirements into our global procurement processes. Additional work focuses included implementing projects and partnerships in the area of the circular economy and reducing CO<sub>2</sub> emissions in the supply chain.

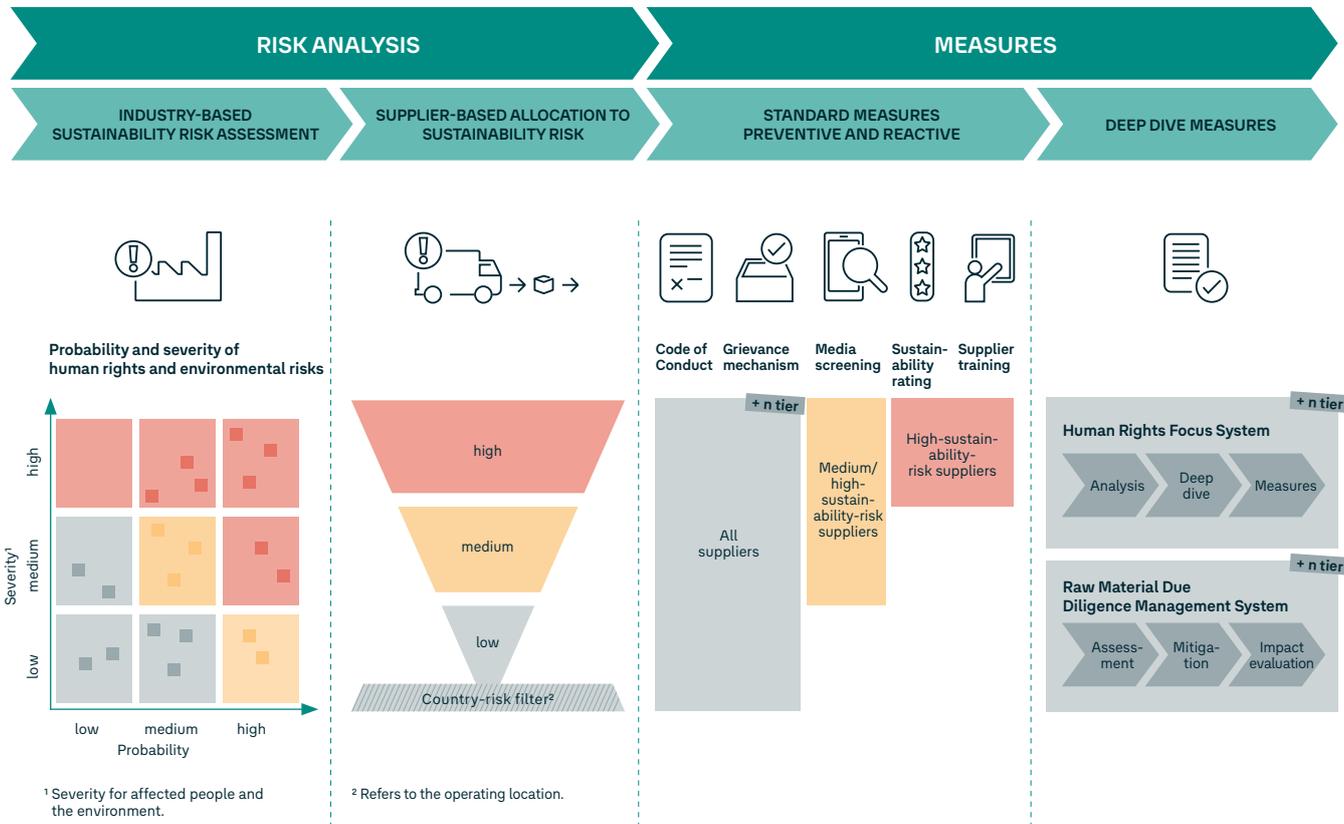
### Our Management Approach: Responsible Supply Chain System (ReSC System)

On January 1, 2023, the German Supply Chain Due Diligence Act entered into force. In preparation for this, we had already adapted our management approach in procurement and introduced extensive measures in 2022. The aim of the new approach is to avoid and minimize human-rights, social or environmental risks along the Volkswagen Group's supply chain based on a systematic risk analysis. It should also help to end breaches and continuously improve suppliers' sustainability performance. The ReSC system includes the following elements, which build on each other:

- Risk analysis:** A regular risk analysis serves to identify risks in the Volkswagen Group's supply chain in advance. 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 the risks, each supplier is allocated a low, medium or high sustainability risk. For suppliers with a low sustainability risk, a country risk score is additionally applied. If the supplier has an increased country risk, it is upgraded to the medium risk category. The risk analysis is updated once a year and/or on an ad hoc basis by Group Procurement Sustainability in consultation with relevant parent companies of the Volkswagen Group.
- Standard measures:** These proactive and reactive measures include the Code of Conduct for Business Partners, the supply chain grievance mechanism, media screening, the sustainability rating and training suppliers and employees.
- Deep dive measures:** These encompass the human rights focus system in the supply chain, the raw materials due diligence management system and collaboration with external partners to develop the concept of sustainability in the supply chain.

Implementation of the management approach is mandatory and is enshrined in corresponding policies for the Group's brands and controlled companies. The Volkswagen Group identifies the sustainability risks that may arise as a result of its business relationships. The processes for analyzing risk represent the first step of our ReSC system. Based on the risks identified, a package of measures for preventing and mitigating risks is assigned to the suppliers in the respective business models and countries.

## Responsible Supply Chain System (ReSC system)



## Standard Measures: Foundation of Our ReSC System

### Code of Conduct for Business Partners

We have set out our expectations for the conduct of business partners with respect to key human-rights, environmental, social and compliance standards in the “Volkswagen requirements for sustainability in relations with business partners” – the Code of Conduct for Business Partners. It is a core element of our supplier management. The requirements are based, among other things, on the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights and the relevant International Labour Organization (ILO) conventions. The Code of Conduct is, however, not just based on international standards, but also objectives, rules and policies of the Volkswagen Group.

Before submitting a quote, our suppliers must confirm that they accept our sustainability requirements in the Code of Conduct for Business Partners. They must consent to this

again after 12 months if they wish to submit new quotes. We also call on our tier 1 suppliers to pass our requirements set out in the Code of Conduct for Business Partners down along the supply chain. The revised Code of Conduct for Business Partners was published in 2023.

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 include, for example, achieving the fullest possible disclosure of the cobalt, nickel, lithium and natural graphite supply chains for battery cells. For new vehicle projects, the Volkswagen Group intends to make CO<sub>2</sub> emissions a technical feature for relevant components in the future. This means that suppliers are given binding CO<sub>2</sub> targets, compliance with which must be proved on request. More information can be found in the Decarbonization chapter.

 → Decarbonization

### Supply Chain Grievance Mechanism

The supply chain grievance mechanism is used to process information on breaches of the Code of Conduct for Business Partners by the Volkswagen Group's direct or indirect suppliers. The mechanism is accessible via the channels of the Volkswagen Group's whistleblower system and is open to all potentially affected stakeholders – e.g., employees of suppliers, civil society players or representatives of communities in the immediate vicinity of our production locations. The processing of cases is uniformly described in a binding manual and is managed by the Group. Cases are processed together with the brands and regions of the Volkswagen Group. Breaches identified are categorized by their severity in accordance with the process. Depending on the categorization of the breach, appropriate measures are then introduced. If risks or breaches are identified at indirect suppliers, measures are also introduced, for instance, an audit. This requires the assistance of the direct supplier with whom a contractual relationship exists. If there are serious breaches, it is possible to temporarily block suppliers from eligibility for the award of new contracts or to terminate the business relationship with them. In the reporting period, 219 reports of breaches were dealt with. In total, three suppliers were blocked from eligibility for the award of new contracts due to serious breaches.

### Media Screening

Group Procurement Sustainability carries out continuous and risk-based media screening of relevant suppliers<sup>1</sup> using an IT tool. If the tool identifies indications of possible breaches of our Code of Conduct for Business Partners, these are reviewed and, if necessary, processed in the supply chain grievance mechanism. In 2023, more than 33,000 suppliers were part of the continuous media screenings. Their share of the total procurement volume in the reporting year was 89%.

### Sustainability Rating

We introduced a sustainability rating (S rating) for all relevant companies and suppliers with a high sustainability risk in 2019. We use it to audit the sustainability performance of relevant suppliers<sup>2</sup> and reveal opportunities for continuous improvement. The S rating assesses the environmental performance of suppliers and their social sustainability and integrity. It is directly relevant to awarding contracts. The result of the S rating is divided into three rating categories: Suppliers with an A or B rating meet our requirements to a sufficient degree and are thus eligible for the award of contracts. If a supplier does not meet our requirements for compliance with sustainability standards (C rating), it is fundamentally not eligible for the

award of contracts. There is thus a direct incentive for suppliers to improve their sustainability performance.

→ The **S rating** is a Group-wide tool used to assess the sustainability performance of relevant suppliers<sup>2</sup> in the fields of the environment, social aspects and integrity and to mitigate risks. It is directly relevant to awarding contracts.

The check for the S rating takes place via a multistage process. In an initial step, the risk exposure is identified from a combination of country risk and the supplier's corporate processes and policies. In addition, the companies' sustainability performance is checked in risk-based audits.

We use data from a specialist service provider for the identification of the country risk. We check whether suppliers' corporate processes and guidelines meet our requirements by means of a standardized self-assessment questionnaire. We developed the self-assessment questionnaire (SAQ) in a joint project with other automotive corporations involved in the DRIVE Sustainability Working Group organized by CSR Europe. In the reporting period, all suppliers subject to the S rating were required to switch to the 2022 extended SAQ. The new SAQ version (5.0) thus provides the new basis for the S rating assessment. SAQs based on the previous set of questions (4.0) are no longer accepted. The information and documents in the SAQ are checked and validated by a service provider via a central platform. If a supplier states that it has appropriate processes and policies, it must prove this with documents. This allows transparency to be created about the supplier's processes, management systems and policies – for example, on the topic of occupational safety. Every supplier that the S rating applies to must meet the requirements enshrined in the questionnaire in the areas of corporate governance, the environment, occupational safety, social issues, human rights, compliance and supplier management. Since 2022, selected questions in the SAQ have been considered mandatory as minimum requirements for all supplier sites with ten or more employees. A supplier is not eligible for the award of contracts unless it meets the minimum requirements. In the reporting period, we extended these minimum requirements to include, for example, the topic of disruption and asset management. By the end of the reporting period, a total of more than 14,953 direct suppliers had

<sup>1</sup> 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.

<sup>2</sup> The relevance of a supplier for the S rating results from factors including the size of the company or the risk exposure derived from the type of product or service.

completed an SAQ in connection with the S rating. In the reporting period, 9,357 suppliers improved their sustainability performance through taking appropriate steps. In accordance with the Code of Conduct for Business Partners, a certified and/or validated environmental management system is mandatory for all suppliers with a production site and a site size of 100 employees or more. Since 2022, proof of this has been required for the S rating. Based on sales revenues, more than 80% of our suppliers in the scope have met this requirement.

In addition, the 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 measures 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 connection with the S rating in 2023. On average, seven breaches of our sustainability requirements were identified per audit.<sup>3</sup> More than two-thirds of all breaches were identified in the categories of "working hours and overtime," "fire safety and emergency evacuation" and "occupational health and safety."

There are differences by region: In the Asia-Pacific region, most breaches are seen in the "working hours and overtime" category. In Africa and Europe, the "fire safety and emergency evacuation" category is the most frequently affected. In North America, the field of "occupational health and safety" has the most breaches. No audits were conducted in South America in the reporting year, so no breaches were identified.

We are also continuously working together with other companies on standardizing the tools we use – for example, the audits of supplier sites. To this end, four major Volkswagen Group companies founded the Responsible Supply Chain Initiative e.V. (RSCI) together with 11 additional partners in 2021. A consistent approach and the initiative-wide recognition of the audit findings should enable broader coverage of the supply chain and also keep the operating expense for suppliers low.

 → [Responsible Supply Chain Initiative e.V. \(RSCI\)](#)

By the end of the reporting year, we had 10,912 S ratings for suppliers. Of these suppliers, 4,639 have an A rating. 38 suppliers were rated C and are thus not currently eligible for the award of contracts. Suppliers who do not meet our requirements for compliance with our sustainability standards are also not eligible for the award of contracts. Direct suppliers with a positive S rating (A or B rating) represent 79% of the total procurement volume.

→ **4,639**  
suppliers have an A rating.

In addition, suppliers who we have identified as having an increased corruption risk due to their business and region are also subjected to a more in-depth corruption risk audit. This process is called the business partner due diligence (BPDD) process and is carried out before any decision to award a contract. In addition, all relevant business partners will then also be continuously checked for any change in general conditions through risk and news screening. 316 BPDD reviews were carried out in the reporting year.

**Sustainability Training for Employees and Suppliers**

Systematic training of our employees and suppliers is a central component of our strategy and essential for the improvement of sustainability in the supply chain. For all Procurement employees, the topic of sustainability is an established part of the skills profile. The training course on sustainability for procurement was taken more than 3,700 times in total worldwide in 2023.

→ In 2023  
**7,791**  
suppliers were trained on sustainability globally.

In order to facilitate continuous supplier development, we usually conduct issue-specific sustainability training courses and workshops with our suppliers at selected locations or online and offer web-based training. 7,791 suppliers received such training in the reporting period.<sup>4</sup> This includes 87 suppliers who used the DRIVE Sustainability initiative's online training and e-learning options. Voluntary, in-depth human

<sup>3</sup> MAN Energy Solutions SE has conducted its own risk analysis of suppliers using its own methodology.

<sup>4</sup> Change in methodology: reduction of the scope – all suppliers that were present for at least 51% of the training time are counted.

rights training for suppliers has been available since 2020. The training includes the legally required aspects, such as training on child labor, forced labor or discrimination. In the reporting year, we began systematically rolling out the training to suppliers with a high sustainability risk.

In addition to the trainings, we make an e-learning module on sustainability available to current suppliers in eight languages.

## Deep Dive Measures: Further Elements of Our ReSC System

### Human Rights Focus System

In our sustainable supplier management, we are also involved in protecting groups of people who may be subject to a high risk of potential human rights violations at any point in our supply chain. In order to achieve more impact here, we introduced the human rights focus system (HRFS) in 2022. We want to use it to identify and address issues associated with human rights and environmental risks that require a more in-depth analysis. An in-depth social standard audit has been developed in collaboration with a service provider. The results of the audit are used in the analysis. The aim is to implement suitable prevention and remedial measures that take account of the diverse and often structural causes of human rights violations.

To identify the relevant issues, we assess aggregate internal data from the supply chain grievance mechanism and the audits together with external data from studies and NGOs in an annual analysis. In the reporting period, we identified three focus topics in this way: forced labor, living wages and supplier management. The topics are addressed in collaboration with the Audi, MAN, Porsche and Scania brands.

In the next step, the root causes of the respective issues are investigated in a structured way in order to develop and implement suitable measures. A toolbox of measures for systematically addressing the focus topics has been defined. A human rights risk can have diverse causes. The toolbox can be used to identify generically suitable measures for specific causes. These can then be worked out on a case-by-case basis when dealing with the focus topic in question. 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:** In this area, after a general cause-and-effect analysis, a topic-specific analysis was carried out to identify the greatest risks of forced labor for our supply chains. This made it possible to identify countries, industries and topic-specific focuses – for example, through analyzing reports or discussions with experts. These are to be addressed in more detail in the future. Targeted measures need to be derived according to the cause of the risk. One measure that has already been initiated is communication through multi-stakeholder initiatives. In addition, internal and external indications of possible risks are continuously monitored.
- **Living wage:** In the focus topic, the working group analyzes the topic of wages in the supply chain using studies, reports, interviews and internal and external data. The Code of Conduct for Business Partners requires suppliers to pay their employees an appropriate wage. This should be a living wage. The working group for the focus topic is currently developing a method for calculating living wages. Which causes specific to the sector or the award of contracts stand in the way of a living wage will also be analyzed. The findings from the analysis will be used to derive suitable measures.
- **Supplier management:** Dealing with the topic of supplier management includes ensuring that our direct suppliers pass on our extensive sustainability requirements to the upstream supply chain. The working group analyzes which supplier groups in particular should be supported by measures and which challenges our suppliers face when passing on our sustainability requirements. For the purposes of this analysis, we selected suppliers who are supported by the DRIVE Sustainability initiative's supply chain sustainability e-learning options. The aim is for all our suppliers to be empowered to bring our sustainability requirements to the deeper supply chain more effectively and comprehensively.

### 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. In 2020, we implemented an OECD-oriented raw materials due diligence management system. It serves to identify, assess and avoid actual and potential human rights risks in our upstream raw material supply chains. In the reporting period, a new audit and assessment was conducted of the 16 raw materials 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 and rare earths.<sup>5</sup> Wool and magnesium have newly been added.

With this risk-based approach, we prioritize our activities on the basis of the severity and probability of breaches of the law and on the basis of the Group's influence. We also systematically use our Group structure for developing and implementing specific prevention and mitigation measures, whose effectiveness we audit. New report structures and toolkits have been developed, and existing tools, such as the supply chain grievance mechanism, 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.

Since 2021, the Volkswagen Group has also reported on the observation of its human rights due diligence obligations in the raw material supply chain – including reporting on the status, progress and goals of the raw materials due diligence management system – in an annual Responsible Raw Materials Report. The Group's specific activities and measures regarding the 18 particularly risky raw materials are also set out there.

 → [www.volkswagen-group.com](http://www.volkswagen-group.com) > [Responsible Raw Materials Report](#)

Increasing supply chain transparency is an important prerequisite for identifying, avoiding and mitigating human rights risks in the upstream supply chain. To this end, the Volkswagen Group works closely with its direct suppliers and business partners in the context of the raw materials due diligence management system.

We cooperate with, among others, service providers who, for example, enable suppliers to be comprehensively audited using artificial intelligence and media screenings. Here, permanent monitoring of freely available internet sources, including social media, provides us with indications of possible breaches by suppliers.

Because the human-rights-related risks are often highest at the start of the supply chain and these can be countered most effectively here, direct collaboration with mine operators on the certification of mines is an additional part of our strategy. In this way, we intend to audit, assess and improve the sustainability performance of the mines in our supply chain in the medium term.

### Collaboration with External Partners and Involvement in International Initiatives

We want to address human rights risks in the upstream supply chain and beyond our contractual relationships. To this end, we get involved in various initiatives and local projects – both on a cross-industry and a raw-material-specific basis. We present details on this in our Responsible Raw Materials Report. Together with our partners in the automotive industry and along the value chain, we pursue the following objectives: knowledge transfer, the development of standardized tools for risk assessment and the introduction of standards for responsible raw material supply chains with respect to human rights, the environment and compliance.

<sup>5</sup> The risk scope of the management system goes beyond Annex 2 of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

For the battery raw materials cobalt, lithium, nickel and natural graphite, our aim is supply chain transparency from mining the raw materials to manufacturing the finished product. We have been passing the requirement for full transparency on to our direct battery suppliers in our contracts since 2020. Volkswagen has the data received audited and verified, including via partner companies through second-party supply chain mapping audits.

In the Cobalt for Development project in the Democratic Republic of the Congo, we work together with project partners for improved working and living conditions for small-scale cobalt miners and their communities. The pilot project aims to strengthen compliance with laws and improve health and safety conditions and social well-being for people locally. Additional information is available on the project website.

 → [Cobalt for Development \(C4D\)](#)

In the case of the battery raw material lithium, the Volkswagen Group, together with other partners, has created the Responsible Lithium Partnership initiative, which works towards responsible use of resources and sustainable lithium production in Salar de Atacama in Chile. This is to be achieved through a multi-stakeholder platform comprising all the relevant players in the Salar watershed – from civil society groups, including indigenous communities, through government institutions to local mining companies.

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

 → [DRIVE Sustainability](#)

Supply Chain and Human Rights KPIs	Unit	2023	2022	Notes and comments
Direct suppliers	number	> 63,000	> 59,000	
Countries in which Volkswagen has direct suppliers	number	> 95	> 90	
Experts in the Sustainability Procurement Network globally	number	>110	> 70	
<b>Supply chain grievance mechanism</b>				
Reports from supply chain grievance mechanism	number	219	145	
Temporary blocking of suppliers	number	3	4	
<b>Reports from supply chain grievance mechanism: number by region</b>				Because a report may include several suppliers, the sum of this KPI may be higher than the number of reports.
Europe	number	135	100	
Asia <sup>1</sup> -Pacific	number	38	28	
Africa	number	1	5	
North America	number	53	18	
South America	number	15	4	
No classification possible	number	27	11	
<b>Reports from supply chain grievance mechanism: number by context</b>				
Social	number	95	36	
Compliance	number	52	34	
Environment	number	10	10	
Cross-topic	number	30	14	
Other	number	32	51	Plausibility of reports not yet checked
<b>Reports from supply chain grievance mechanism: direct supplier</b>				
Yes	number	151	98	
No	number	11	47	
<b>Media screening</b>				
Direct suppliers in the media screening <sup>2</sup>	number	> 33,000		- Recorded in the Sustainability Report for the first time in the 2023 reporting year
Revenue percentage of direct suppliers in the media screening in total procurement volume	in %	89		- Recorded in the Sustainability Report for the first time in the 2023 reporting year

<sup>1</sup> Scope: In terms of geographical distribution, Russia and Türkiye are allocated to Asia.

<sup>2</sup> According to ReSC system.

Supply Chain and Human Rights KPIs	Unit	2023	2022	Notes and comments
<b>S rating   GRI 308-2, 414-2</b>				
Existing direct supplier S ratings	number	10,912	12,660 <sup>3</sup>	
of which direct suppliers with an A rating	number	4,639	6,618 <sup>3</sup>	
of which direct suppliers with a C rating	number	38	65	
Revenue percentage of direct suppliers with a positive S rating (A or B rating) in total procurement volume	in %	79	75	
Business partner due diligence reviews	number	316	487	Of suppliers
<b>Audits (on site)</b>				
Number of on-site audits carried out in connection with the S Rating	number	89	252	
Number of on-site audits carried out in connection with the S rating and average number of breaches per audit broken down by region				Audits for the S rating – most relevant breaches of our sustainability requirements
Africa	number/average number of breaches	3/5	-/4	
Asia <sup>1</sup> -Pacific	number/average number of breaches	54/8	-/10	
Europe	number/average number of breaches	25/3	-/4	
North America	number/average number of breaches	7/9	-/6	
South America	number/average number of breaches	0/0	-/9	
Number of audits carried out in connection with the human rights focus system	number	17	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
Number of audits carried out in connection with the supply chain grievance mechanism	number	6	-	Recorded in the Sustainability Report for the first time in the 2023 reporting year
Total number of all audits carried out	number	112	-	Comprises audits in connection with the S rating, the human rights focus system and the supply chain grievance mechanism. Recorded in the Sustainability Report for the first time in the 2023 reporting year.
of which audits where substantial negative environmental and/or social impact was identified	number	64	-	Findings that are systemic in nature according to the assessment logic are considered substantial. Recorded in the Sustainability Report for the first time in the 2023 reporting year.

<sup>3</sup> Change in methodology: reduction of the scope. Previous year's figure not adjusted.

Supply Chain and Human Rights KPIs	Unit	2023	2022	Notes and comments
<b>Training and certification</b>				
Revenue-based direct suppliers in scope with certified environmental management system pursuant to ISO 14001 or EMAS validation	in %	80	85	
Procurement staff participation in training on the topic of sustainability	number	> 3,700	> 2,000	
Direct suppliers who have received training on the topic of sustainability <sup>4</sup>	number	7,791	> 2,900	
<b>Self-assessment questionnaire (SAQ)   GRI 308-1, 308-2, 414-1, 414-2</b>				
Direct suppliers with completed SAQ	number	14,953	16,029	
Proportion of new suppliers who have been assessed using social and environmental criteria	in %	26	12	Direct suppliers who were assessed for the first time in the reporting year
Improvements in direct suppliers, based on the SAQ	number	9,357	6,748	

<sup>4</sup> Change in methodology: reduction of the scope - all suppliers that were present for at least 51% of the training time are counted.

# Appendix

**132** Independent Auditor's Limited Assurance Report

**135** Contact Information

The assurance engagement performed by EY relates exclusively to the German version of the combined non-financial report 2023 of Volkswagen Aktiengesellschaft. The following text is a translation of the original German independent assurance report.

# Independent Auditor's Report on a Limited Assurance Engagement

GRI 2-5

## To Volkswagen Aktiengesellschaft, Wolfsburg

We have performed a limited assurance engagement on the separate non-financial report of Volkswagen Aktiengesellschaft, Wolfsburg (hereinafter the "Company"), which is combined with the non-financial report of the Group for the period from 1 January to 31 December 2023 (hereinafter the "non-financial reporting"). The combined non-financial report is included in the Sustainability Report 2023.

Not included in the combined non-financial report are the paragraphs listed in chapter "About This Report" in section "Report Structure" of the Sustainability Report (Volkswagen Group Sustainability Communication, Foreword, The German Corporate Governance Code – A Blueprint for Successful Corporate Governance, Further Information, The Volkswagen Value Chain, Making the Social and Environmental Impact of Our Actions Measurable), references to disclosures made outside the combined non-financial report (e.g., references to disclosures in the Annual Report or to additional sustainability disclosures of the company in the internet), disclosures below the page headers that reference the Standards of the Global Reporting Initiative (GRI) as well as the company's disclosure that the Sustainability Report systematically uses the GRI Standards (with reference to) as the underlying structure for reporting on management approaches and the specific standard disclosures. The aforementioned disclosures were therefore not subject to our assurance engagement.

## Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the non-financial reporting in accordance with Sec. 315c in conjunction with Secs. 289c to 289e HGB ("*Handelsgesetzbuch*": German Commercial Code) and Art. 8 of Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment and

amending Regulation (EU) 2019/2088 (hereinafter the "EU Taxonomy Regulation") and the Delegated Acts adopted thereunder as well as in accordance with their own interpretation of the wording and terms contained in the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as set out in section "EU Taxonomy" of the non-financial reporting.

These responsibilities of the Company's executive directors include the selection and application of appropriate methods for the preparation of the non-financial reporting and making assumptions and estimates about individual non-financial disclosures that are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as the executive directors consider necessary to enable the preparation of non-financial reporting that is free from material misstatement, whether due to fraud (manipulation of the non-financial reporting) or error.

The EU Taxonomy Regulation and the Delegated Acts adopted thereunder contain wording and terms that are still subject to considerable interpretation uncertainties and for which clarifications have not yet been published in every case. Therefore, the executive directors have disclosed their interpretation of the EU Taxonomy Regulation and the Delegated Acts adopted thereunder in section "EU Taxonomy" of the non-financial reporting. They are responsible for the defensibility of this interpretation. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of the interpretation is subject to uncertainties.

## Independence and Quality Assurance of the Auditor's Firm

We have complied with the German professional requirements on independence as well as other professional conduct requirements.

Our audit firm applies the national legal requirements and professional pronouncements - in particular the BS WP/vBP (*"Berufssatzung für Wirtschaftsprüfer/vereidigte Buchprüfer"*: Professional Charter for German Public Accountants/German Sworn Auditors) in the exercise of their Profession and the IDW Standard on Quality Management issued by the Institute of Public Auditors in Germany (IDW): Requirements for Quality Management in the Audit Firm (IDW QS 1) and accordingly maintains a comprehensive quality management system that includes documented policies and procedures with regard to compliance with professional ethical requirements, professional standards as well as relevant statutory and other legal requirements.

### Responsibilities of the Auditor

Our responsibility is to express - a conclusion with limited assurance on the non-financial reporting based on our assurance engagement.

We conducted our assurance engagement in accordance with International Standard on Assurance Engagements (ISAE) 3000 (Revised): "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" issued by the IAASB. This standard requires that we plan and perform the assurance engagement to obtain limited assurance about whether any matters have come to our attention that cause us to believe that the Company's non-financial reporting is not prepared, in all material respects, in accordance with Sec. 315c in conjunction with Secs. 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as well as the interpretation by the executive directors disclosed in section "EU Taxonomy" of the non-financial reporting.

Not included in the combined non-financial report are the paragraphs listed in chapter "About This Report" in section "Basis for Report" of the Sustainability Report (Volkswagen Group Sustainability Communication, Foreword, The German Corporate Governance Code - A Blueprint for Successful Corporate Governance, Further Information, The Volkswagen Value Chain, Making the Social and Environmental Impact of Our Actions Measurable), references to disclosures made outside the combined non-financial report (e.g., references to disclosures in the Annual Report or to additional sustainability disclosures of the company in the internet), disclosures below the page headers that reference the Standards of the Global Reporting Initiative (GRI) as well as the company's disclosure that the Sustainability Report systematically uses the GRI Standards (with reference to) as the underlying structure for reporting on management approaches and the specific standard disclosures. The aforementioned disclosures were therefore not subject to our assurance engagement.

In a limited assurance engagement, the procedures performed are less extensive than in a reasonable assurance engagement, and accordingly, a substantially lower level of assurance is obtained. The selection of the assurance procedures is subject to the professional judgment of the auditor.

In the course of our assurance engagement we have, among other things, performed the following assurance procedures and other activities:

- Gain an understanding of the structure of the sustainability organization and stakeholder engagement,
- Inquiries of relevant employees regarding the selection of topics for the non-financial reporting, the impact and risk assessment and the policies of the Group for the topics identified as material,
- Inquiries of relevant employees involved in the preparation of the non-financial reporting about the preparation process, about the internal controls related to this process as well as disclosures in the non-financial reporting,
- Inquiries of employees of the Company and the Group responsible for data capture and consolidation, about the data capture and compilation methods as well as internal controls to the extent relevant for the assurance of the disclosures in the combined non-financial report,
- Identification and assessment of risks of material misstatement in the non-financial reporting,
- Analytical procedures on selected disclosures in the non-financial reporting,
- Inquiries, inspection of sample documents and obtaining evidence relating to the collection and reporting of selected disclosures in the non-financial reporting,
- Reconciliation of selected disclosures with the corresponding data in the annual financial statements and management report,
- Evaluation of the process to identify the economic activities taxonomy-eligible and taxonomy-aligned as well as the corresponding disclosures in the non-financial reporting,
- Evaluation of the implementation of Group management requirements, processes, and specifications regarding data capture through onsite visits at selected sites of the Volkswagen Group
  - Volkswagen Aktiengesellschaft (Wolfsburg, Germany)
  - Volkswagen Sachsen GmbH (Zwickau, Germany)
  - SEAT, S.A. (Martorell, Spain)
  - Audi Brussels S.A./N.V (Brussels, Belgium)
  - Automobili Lamborghini S.p.A. (Sant'Agata Bolognese, Italy)
  - FAW-Volkswagen Automotive Company (Changchun, China)
  - SAIC Volkswagen Automotive Company Ltd. Shanghai (Changsha, China)

- ŠKODA AUTO Volkswagen India Pvt. Ltd. (Aurangabad, India)
- Navistar Inc. (Springfield, United States of America)
- Scania Latin America Ltda. (São Paulo, Brazil),

- Evaluation of the presentation of disclosures in the non-financial reporting.

In determining the disclosures in accordance with Art. 8 of the EU Taxonomy Regulation, the executive directors are required to interpret undefined legal terms. Due to the immanent risk that undefined legal terms may be interpreted differently, the legal conformity of their interpretation and, accordingly, our assurance engagement thereon are subject to uncertainties.

### Assurance Conclusion

Based on the assurance procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the non-financial reporting of the Company for the period from 1 January to 31 December 2023 is not prepared, in all material respects, in accordance with Sec. 315c in conjunction with Secs. 289c to 289e HGB and the EU Taxonomy Regulation and the Delegated Acts adopted thereunder as well as the interpretation by the executive directors as disclosed in section "EU Taxonomy" of the non-financial reporting.

We do not express an assurance conclusion on the disclosures that are not part of the combined non-financial report and that were therefore not subject to our assurance engagement. These are the paragraphs listed in chapter "About This Report" in section "Report Structure" of the Sustainability Report (Volkswagen Group Sustainability Communication, Foreword, The German Corporate Governance Code – A Blueprint for Successful Corporate Governance, Further Information, The Volkswagen Value Chain, Making the Social and Environmental Impact of Our Actions Measurable), references to disclosures made outside the combined non-financial report (e.g., references to disclosures in the Annual Report or to additional sustainability disclosures of the company in the internet), disclosures below the page headers that reference the Standards of the Global Reporting Initiative (GRI) as well as the company's disclosure that the Sustainability Report systematically uses the GRI Standards (with reference to) as the underlying structure for reporting on management approaches and the specific standard disclosures.

### Restriction of Use

We draw attention to the fact that the assurance engagement was conducted for the Company's purposes and that the report is intended solely to inform the Company about the result of the assurance engagement. As a result, it may not be suitable for another purpose than the aforementioned. Accordingly, the report is not intended to be used by third parties for making (financial) decisions based on it. Our responsibility is to the Company alone. We do not accept any responsibility to third parties. Our assurance conclusion is not modified in this respect.

### General Engagement Terms and Liability

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

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

Stuttgart, 1 March 2024  
 EY GmbH & Co. KG  
 Wirtschaftsprüfungsgesellschaft

Hinderer  
 Wirtschaftsprüfer  
 [German Public Auditor]

Welz  
 Wirtschaftsprüfer  
 [German Public Auditor]

# Contact Information

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## Disclaimer

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

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

## Your Feedback

In the interests of improving and advancing our commitment to sustainability, we would be delighted to receive your feedback on our sustainability report. You can send us your views directly online using the email address at left.

