

VOLKSWAGEN

AKTIENGESELLSCHAFT



# Empowering Transformation

Sustainability Report 2017



# About This Report

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## REPORT STRUCTURE

The Volkswagen Group is committed to providing transparency to all its stakeholder groups. For the first time, this Group Sustainability Report 2017 includes a combined separate nonfinancial report that complies with sections 289b para. 3 and 315b para. 3 of the Handelsgesetzbuch (HGB – German Commercial Code), hereinafter referred to as the “nonfinancial report”. The nonfinancial report serves to meet the disclosure requirements of the CSR-Richtlinie-Umsetzungsgesetz (CSR-RUG – German CSR Directive Implementation Act).

In the Group Sustainability Report, all text passages, tables and graphics that form part of the nonfinancial report are indicated by a

gray background. The Group Sustainability Report 2017 is supplemented by a detailed description of the sustainability activities of our brands and regions and of the Volkswagen Group's CSR projects. This additional information, which does not form part of the nonfinancial report, can be found on the Volkswagen Group's corporate website at: [www.volkswagenag.com > Sustainability > Reporting](http://www.volkswagenag.com > Sustainability > Reporting)

Information on conflicting sustainability objectives and the “diesel issue” may be found in our separate sustainability magazine, Shift 2017. The publication is available here: [www.volkswagenag.com > Sustainability > Shift](http://www.volkswagenag.com > Sustainability > Shift).

### REPORTING (INCL. NONFINANCIAL REPORT)

- Strategy and Management
- Products and Production
- People and Responsibility
- Appendix

### OTHER SUSTAINABILITY ACTIVITIES

- Brands and Regions
- CSR-Projects worldwide

### MAGAZINE

- Sustainability magazine
- Shift 2017



## REPORTING PRINCIPLES

For the first time, Volkswagen AG will issue a nonfinancial statement at company level for reporting year 2017 and a nonfinancial Group statement for reporting year 2017, which will be published together as a combined separate nonfinancial report in the sense of HGB sections 289b para. 3 and 315b para. 3 as part of the Group Sustainability Report 2017. The nonfinancial report is drawn up in accordance with HGB sections 315b and 315c, in conjunction with sections 289c through 289e. Furthermore, the GRI Standards of the Global Reporting Initiative (GRI) were used as the framework for drawing up the non-financial report. In this nonfinancial report, Volkswagen has systematically used the GRI Standards of the Global Reporting Initiative (GRI) as the underlying structure for the materiality analysis and reports on management approaches, as well as the specific standard disclosures also included in the GRI Content Index. As required by CSR-RUG, this nonfinancial report concentrates on those action areas that are necessary for an understanding of the Volkswagen Group's business development, performance and position, as well as the Volkswagen Group's influence on nonfinancial aspects.

In terms of content, the Group Sustainability Report was prepared in compliance with the GRI Standards of the Global Reporting Initiative (GRI), applying the "Comprehensive" option. At the same time, the GRI Content Index shows how we are implementing the requirements of the United Nations Global Compact (UN GC) and have committed ourselves to the United Nations Sustainable Development Goals (SDGs), as well as the criteria of the German Sustainability Code (DNK).

Important ideas for the report's content were provided by the questionnaires and appraisals of sustainability-oriented rating agencies. We also took our lead from Stakeholder Engagement Standard AA1000.

To validate issues of material significance for the Volkswagen Group resulting from various global challenges, we drew upon the findings of the Volkswagen Group's Stakeholder Panel, which has been in place for many years now, as well as the results of the latest comprehensive stakeholder surveys conducted by Group companies Audi, MAN, Porsche and Volkswagen Financial Services.

This sustainability report also takes account of the recommendations made by the previous Stakeholder Panel following the latter's evaluation of the Group Sustainability Report.

To manage its sustainability performance, the Volkswagen Group records strategic key performance indicators (KPIs) in accordance with the requirements of the Global Reporting Initiative (GRI) and the framework for ESG (environment, social and governance) indicators

defined by the European Federation of Financial Analysts' Societies (EFFAS). Increasingly, shareholders and investors are calling for transparency, making them an important target group for our sustainability reporting.

The KPIs presented in this report build on the indicators presented in previous years. We have made no changes in the methods used to collect and measure the data on our sustainability performance. The Volkswagen Group's global production network comprised 120 production sites at the end of the reporting year. This is now the sixth time we have reported our emissions in line with Scope 3 of the WBCSD/WRI Greenhouse Gas Protocol (GHG).

In general, the KPIs relate to the entire Group. 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 environmentally relevant data.

 GRI 102-45, 102-48, 102-49

## REPORTING PRACTICES

The nonfinancial report and Group Sustainability Report are published annually. In addition to information about the Group's sustainability activities in the 2017 fiscal year (1 January to 31 December 2017), the sustainability report also contains selected information from the 2018 fiscal year. The editorial deadline was 6 February 2018, and both reports appear in German and English. The next nonfinancial report will be published in the second quarter (Q2) of 2019, and we anticipate that the next Group Sustainability Report will also appear in Q2 2019.

## REPORT AUDIT

The combined separate nonfinancial report prepared in accordance with HGB sections 289b para. 3 and 315b para. 3 was subjected to a voluntary, limited assurance audit by PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC) in accordance with ISAE 3000 (Revised), to verify that its disclosures comply with the principles of the Sustainability Reporting Standards of the Global Reporting Initiative and the relevant statutory requirements.

Further information on the audit can be found in the independent auditor's remarks on nonfinancial reporting in the Independent Assurance Report.

## ADDITIONAL REPORTING WITHIN THE GROUP

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

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

## ADDITIONAL INFORMATION

A list of links is provided under "Supplementary Information", so that readers can rapidly access documents covering the selected content in more detail. This list can be found online at: [www.volkswagenag.com/en/sustainability/policy.html](http://www.volkswagenag.com/en/sustainability/policy.html). The latest, continuously updated news on sustainability in the Volkswagen Group can be found on the Group portal at: [www.volkswagenag.com/sustainability](http://www.volkswagenag.com/sustainability).

## FRAME OF REFERENCE

The information in this report relates to the Volkswagen Group as a whole. Where information relates to individual Group brands only, this is clearly indicated in the text.

## FORWARD-LOOKING STATEMENTS

This sustainability report contains statements relating to the future business development of the Volkswagen Group. These statements are based on assumptions regarding the development of the economic and legal conditions in individual countries and economic regions, in particular as they relate to the automotive industry, which we have made on the basis of the information available to us and which we consider to be realistic at the time of publication. The resulting estimates entail a degree of risk, and actual developments may differ from those predicted. Any changes in significant parameters relating to our key sales markets, or any significant

shifts in exchange rates of relevance 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 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 emerge that affect the development of our business.

## CALCULATION OF FLEET EMISSIONS IN EUROPE

The figure for Group fleet CO<sub>2</sub> emissions is the figure annually recorded in the course of official monitoring pursuant to "Regulation (EC) 443/2009 of the European Parliament and of the Council of 23 April 2009 setting emission performance standards for new passenger cars as part of the Community's integrated approach to reduce CO<sub>2</sub> emissions from light-duty vehicles" by the European Environment Agency (EEA) on behalf of the European Commission for the brands belonging to the group of connected manufacturers "VW Group PC". This figure is the volume-weighted average of all specific CO<sub>2</sub> emissions from new passenger cars registered for the first time in the respective calendar year, based on the calculation logic defined in EU Regulation 443/2009. Provided that the figure for fleet CO<sub>2</sub> emissions is set down in a Commission Implementing Decision to confirm or amend the average specific CO<sub>2</sub> emissions and specific emissions targets for manufacturers of passenger cars for the respective calendar year in accordance with Regulation (EC) 443/2009 of the European Parliament and of the Council, this figure is published; otherwise, provisional CO<sub>2</sub> emission figures are published, which are evaluated on the basis of internal systems using the same logic.

## NOTICE PURSUANT TO EU DIRECTIVE 1999/94 EC

Further information on the official fuel consumption and official specific CO<sub>2</sub> emissions of new passenger cars can be found in the "Guide on the Fuel Economy, CO<sub>2</sub> Emissions and Power Consumption of All New Passenger Car Models Offered for Sale on the German Market", which can be obtained free of charge from all sales outlets of and directly from DAT Deutsche Automobil Treuhand GmbH, Hellmuth-Hirth-Strasse 1, 73760 Ostfildern, Germany, or downloaded from: [www.dat.de](http://www.dat.de)

# Nonfinancial Report (NFR)

## INDEX FOR THE NONFINANCIAL REPORT

The following index provides an overview of the disclosures required for the nonfinancial report in accordance with HGB section 315c in conjunction with sections 289c through 289e, together with appropriate references to the sections of this Group Sustainability Report in which these disclosures may be found.

PwC has subjected the elements of the Group Sustainability Report that make up the nonfinancial report to a voluntary limited assurance audit in accordance with ISAE 3000 (Revised).

All text passages, tables and graphics in the Group Sustainability Report that form part of the nonfinancial report are indicated by a gray background.

References to disclosures outside the summarized management report are supplementary information and do not form part of the nonfinancial report.

Based on various global challenges, the Volkswagen Group has drawn up a list of 18 key action areas. This analysis was based on external studies, industry analyses and stakeholder surveys, as well as internal policies and guidelines from our different divisions. These action areas were largely defined on the basis of the findings of expert workshops held in the past that addressed topics relating to the economy, the environment and civil society.

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

The Volkswagen Group's action areas were evaluated in terms of their strategic importance for TOGETHER – Strategy 2025 and their stakeholder relevance. In addition, the implications of CSR-RUG for the disclosure of nonfinancial information were discussed with representatives of the brands and corporate functions in four workshops. Furthermore, the significance of what is known as the "impact outlook" for the evaluation of action areas for the Volkswagen Group was discussed in the Group CSR Meeting (GCM).

In the course of this process, Volkswagen identified a total of 11 material aspects as defined in CSR-RUG. A detailed description of this materiality process can be found in the section on Strategy and Management on page 28.

**INDEX – NONFINANCIAL REPORT**

		<b>Relevant content in Sustainability Report 2017</b>	<b>Page(s)</b>
Description of the business model		The Volkswagen Group; TOGETHER – Strategy 2025	16, 18; 20–22
Material Risks		Risk Management	46–47
<hr/>			
<b>Nonfinancial aspect</b>	<b>Action area</b>	<b>Section of Sustainability Report 2017</b>	<b>Page(s)</b>
Broad thematic issues affecting all nonfinancial aspects	Compliance, risk management, governance	The Volkswagen Group; TOGETHER – Strategy 2025; Sustainable Management; Action Plan – Strategy and Management; Compliance; Risk Management	16–18; 20–22; 27; 35; 44–45; 46–47
	Supplier management	Action Plan – Strategy and Management; Supplier Management	36; 37–39
Customer matters	Customer satisfaction	Customer Satisfaction and Customer Loyalty	23
Environmental matters	Resource conservation throughout life cycle	TOGETHER – Strategy 2025; Management Approach – Products and Production; Action Plan – Products and Production; Energy, CO <sub>2</sub> and Climate Change; Production and Logistics	22; 50; 54; 59–62; 65–67
	Climate protection and decarbonization	Management Approach – Products and Production; Energy, CO <sub>2</sub> and Climate Change	50; 59–62
Employee matters	Employer attractiveness	Management Approach; The 9 Strategic Initiatives of “Empower to Transform”; Strategic Objective: Excellent Employer Strategic Objective: Skilled and Committed Employees	72–73; 74; 75 78
	Diversity and equal opportunities	Management Approach; The 9 Strategic Initiatives of “Empower to Transform”; Strategic Objective: Exemplary Leadership and Corporate Culture	72–73; 74; 85–86
	Occupational health and safety	Management Approach; The 9 Strategic Initiatives of “Empower to Transform”; Strategic Objective: Skilled and Committed Employees	72–73; 74; 81
Social matters	Social responsibility*	Management Approach; The 9 Strategic Initiatives of “Empower to Transform”; Corporate Citizenship	72–73; 74; 91–93
Respect for human rights	Human rights	The 9 Strategic Initiatives of “Empower to Transform”; Human Rights	74; 89–90
Combating corruption and bribery	Compliance, risk management, governance	Sustainable Management; Action Plan – Strategy and Management; Compliance	27; 35; 44–45

No reportable correlations with amounts reported in the annual financial statements or consolidated financial statements were identified.

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

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# Strategy and Management

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As one of the world's largest industrial corporations, our Group bears a special social responsibility. We wish to put our creative powers to good use for the benefit of people and the environment. Every year we produce more than 10 million vehicles. This gives rise to positive effects – such as new jobs, regional prosperity and individual opportunities for participation – but also to negative impacts, due above all to emissions and resource consumption. And in view of the growing trend toward digitalization, we will be obliged to confront new issues in the future – what we do with our customers' data, for example, how we ensure this data is secure and protected at all times, and what legal and ethical quandaries are raised by automated driving.

# Letter to Our Stakeholders

## DEAR READERS,

In real terms, what will mobility look like the day after tomorrow? How important will the car be as a means of transport? When will artificial intelligence finally replace the driver? None of these questions can be answered with absolute certainty today. Only one thing is certain. The scope of the change facing the Volkswagen Group, and indeed the entire automotive industry, is more wide-reaching than anything our industry has experienced in its 130-year history.

In truth, our Company faces a dual challenge. We have not yet surmounted the diesel crisis for which we ourselves are responsible; its consequences will continue to weigh on us for the foreseeable future. We have taken significant steps to strengthen our internal processes and control mechanisms, and to refocus on compliance and integrity – by revising our Code of Conduct, for example, and extending our whistleblower system. We continue to work on the renewal of our corporate culture, by flattening our hierarchies, giving our employees more personal responsibility and decentralizing our management, and by drawing up our Code of Cooperation as a platform for open collaboration in and between our Group companies.

But all these initiatives, as well as the impressive commitment of our workforce to this process of change, must take a back seat when news of the misconduct and poor judgments that unfortunately took place within our Company once again becomes public. And it shows that both as a Company and as an industry, we must deal much more seriously and sensitively with ethical issues, and act even more decisively on sustainability issues.

In our program for the future, TOGETHER – Strategy 2025, we clearly describe our way forward into a new world of mobility. Our plans build on Volkswagen's qualities: our innovative strength, our technical expertise, the enormous commitment of our employees around the world. But we also set ourselves new priorities. For example, Roadmap E, published in September 2017, put flesh on the bones of our electrification strategy. By 2025, our Group companies will make more than 80 new electric models available to our customers. By 2030, we will electrify our entire model portfolio. By doing so, we are convinced that the Volkswagen Group can make a significant contribution to boosting the e-mobility breakthrough.

Living up to this self-imposed commitment will not only require a great deal of effort, but also a great deal of money. Over the next few years, we will be investing more than €34 billion in e-mobility, autonomous driving, digitalization and new mobility services. The lion's share will be spent on electrification. This is how we will turn Volkswagen into a pioneer of zero-emission mobility. As far as our Group is concerned, the transport revolution and the energy revolution are inseparably intertwined.

E-mobility is still in its infancy. And there are still many unresolved questions regarding the e-mobility value chain and product life cycle – from raw materials and energy production through to infrastructure and recycling. As the Volkswagen Group, we are helping to answer these questions, both by contributing our expertise and by assuming responsibility.

**“Low-emission drive technologies; smart mobility services; innovative, safe solutions for autonomous driving – these are among the ambitious plans we are working on right now as we look ahead to the future.”**

Volkswagen will play a courageous, consistent and responsible role in the systemic shift to new drive technologies. And we will do so without neglecting current technologies and vehicle projects. This is how we will earn money today so we can invest it in tomorrow.

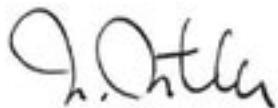
The recommendations of the Group Sustainability Council we appointed in 2016 should help to restore the trust and confidence of our employees, our customers and the general public. By working together, we aim to prepare our Group for the future, molding Volkswagen into the perfect model of a corporation that operates sustainably, with integrity – and is at the same time commercially successful.

For a long time, Volkswagen could be found at the top of the most prestigious sustainability indices – and we aim to reclaim that position. As a Group, our intrinsic mission is to make a key contribution to solving critical problems. We want to work with others to mitigate climate change and improve urban air quality. This is why we are setting ourselves new, ambitious production targets. By 2025, we intend to reduce negative environmental impacts in our production plants by a further 20%. This means 45% less energy, CO<sub>2</sub>, water, solvents and waste per vehicle compared with our 2010 baseline.

Traditionally, the social aspects of sustainability are very important to us at Volkswagen. Consequently, even at a time when the automotive industry is undergoing a fundamental transformation, we continue to regard economic success and job security as equal priorities. We want to help shape the future of work in an increasingly digitalized world. We are committed to equal opportunities, education, stronger social values and support for disadvantaged people in all walks of life. Many thousands of our employees around the world are also working as volunteers in social and environmental projects. By doing so, they are making an important contribution to social cohesion – even outside the factory gates.

The Sustainability Report for 2017 before you will give you an insight into our efforts. To make the disclosures, figures and data in this report transparent, understandable and easy to compare, we have followed the guidelines of the Global Reporting Initiative (GRI), with reference to the Sustainable Development Goals (SDGs) of the United Nations. This report also represents our Communication on Progress under the United Nations Global Compact (UNG) and serves as our Nonfinancial Declaration under the CSR-Richtlinie-Umsetzungsgesetz (CSR-RUG – German CSR Directive Implementation Act).

We look forward to receiving your suggestions and feedback.



M. Müller



# Diesel Crisis. A Status Report

The diesel crisis was made public on September 18, 2015 – a date etched in the Group's collective memory. Key events are shown in the timeline below.

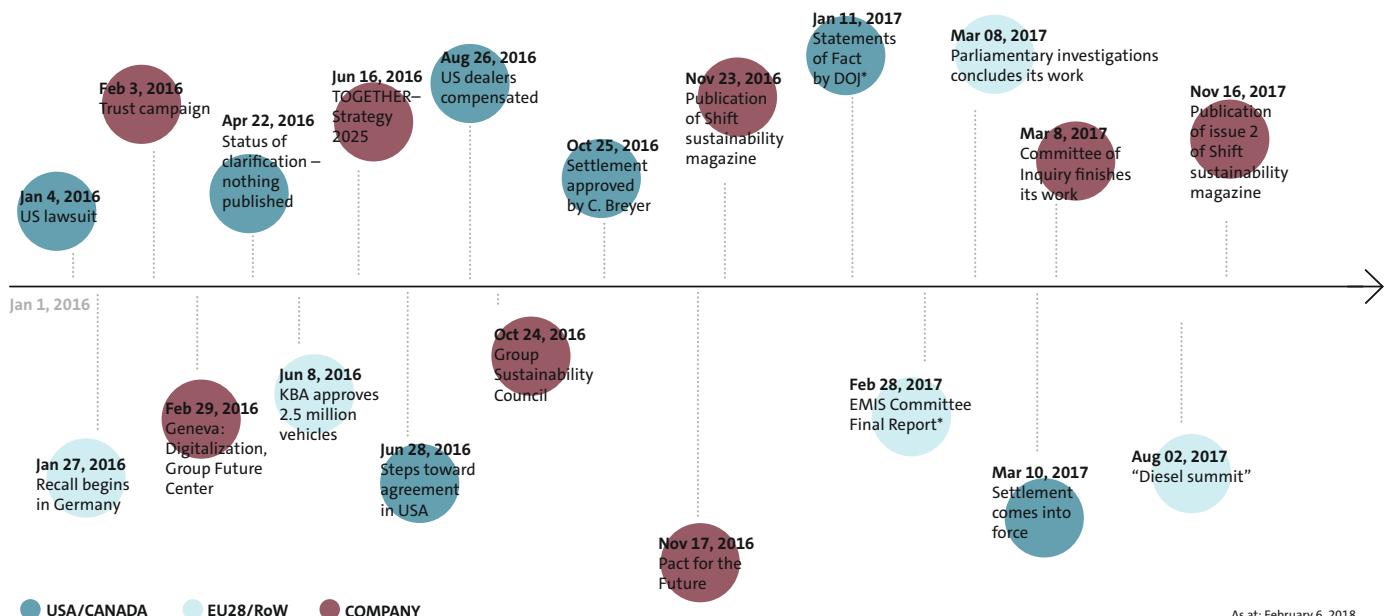
The diesel issue prompted a process by which we strengthened our corporate culture, particularly in the areas of compliance and internal control mechanisms. This development led to the initiation of programs and projects designed to intensify Volkswagen's collective awareness of integrity.

We honed our internal control systems for the product development process and vehicle testing, overhauled our Code of Conduct and the whistleblower system, and increased the frequency of the training courses provided to staff on these topics.

The combination of integrity, compliance and culture is an important and indispensable part of the transformation process we are undergoing. We are renewing ourselves from the inside out and are evolving on a daily basis to merit our most important asset – the trust of our customers and shareholders.

Our exhaustive investigation continues; it also touches on a wide range of legal issues. Further information on this complex subject area can be found in the Management Report in our Annual Report 2017. A critical analysis also appears in our sustainability magazine, Shift 2017.

## TIMELINE



\*Department of Justice (DOJ); Emission Measurements in the Automotive Sector (EMIS).

> More information can be found in our sustainability magazine, Shift 2017.

> More information can be found in our Annual Report 2017.

# The Volkswagen Group

With 12 brands, the Volkswagen Group – based in Wolfsburg, Germany – is one of the world's leading automobile manufacturers and the largest in Europe. In 2017, the Group – including Chinese joint ventures – delivered a total of 10,741,455 cars and commercial vehicles to customers. The Group has a 12.1% share of the global passenger car market, and reported after-tax earnings of €11,638 million on sales revenue of €230,682 million in 2017. More than 640,000 employees produce an average of 44,170 vehicles per working day at 120 manufacturing locations on four continents, or are involved in the provision of mobility-related services.

## STRUCTURE

Volkswagen AG is the parent company of the Volkswagen Group. It develops vehicles and components for the Group's brands, but also produces and sells vehicles – in particular passenger cars and light commercial vehicles – under the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands. In its function 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, Scania AB, MAN 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 required by HGB sections 285 and 313, which can be accessed on our website at [www.volkswagen.com/en/ir](http://www.volkswagen.com/en/ir) and forms part of the annual financial statements.

## SHAREHOLDER STRUCTURE

at December 31, 2017 in % of voting capital

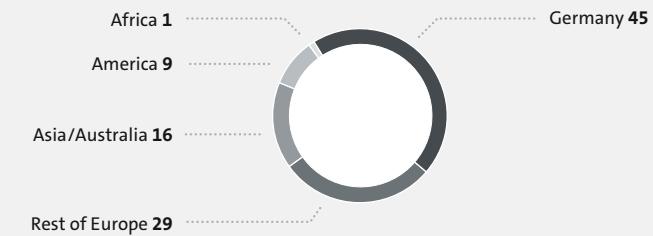


Volkswagen AG is a vertically integrated energy company within the meaning of section 3 para. 38 of the Energiewirtschaftsgesetz (EnWG – German Energy Industry Act) and is consequently subject to the provisions of the EnWG. In the electricity sector, Volkswagen AG is involved in electricity generation, sales and distribution, together with a Group subsidiary.

Volkswagen AG's Board of Management is the body ultimately responsible for managing the Group. The Supervisory Board appoints, monitors and advises the Board of Management, and is directly consulted on decisions of fundamental significance for the Company.

## EMPLOYEES BY CONTINENT

at December 31, 2017 in %



## GROUP KEY FIGURES

Volume data	2017	2016
Vehicle sales (units) in thousand	10,777	10,391
Vehicle production (units) in thousand	10,875	10,405
Research and development costs in €bn	13.1	13.7
Employees at Dec. 31.	642,292	626,715
Proportion of female employees in %	16.3	16.0
Proportion of apprentices in % <sup>1</sup>	4.6	4.6
Average hours of training per employee <sup>3</sup>	22.0	21.5
Average cost of training per employee in € <sup>3</sup>	1,261	1,276
CO <sub>2</sub> emissions European new car fleet in g/km <sup>2</sup>	122	120
CO <sub>2</sub> emissions in kg/veh. <sup>4</sup>	810	883
Energy consumption in kWh/veh. <sup>4</sup>	2,068	2,090
Financial data (IFRS) in € million	2017	2016
Sales revenue	230,682	217,267
Operating result after special items	13,818	7,103
Earnings before tax	13,913	7,292
Earnings after tax	11,638	5,379

<sup>1</sup> At the Group in Germany.

<sup>2</sup> Subject to official publication by the European Commission.

<sup>3</sup> Average for total Group workforce in the reporting period.

<sup>4</sup> Production of cars and light commercial vehicles, prior-year figures adjusted.



## PRODUCTS

The Volkswagen Group is one of the leading multibrand groups in the automotive industry. The Company's business activities comprise the Automotive and Financial Services divisions. All brands in 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 Volkswagen Group's passenger car brands are mostly consolidated in the Passenger Cars Business Area. This Business Area focuses primarily on developing vehicles and engines, producing and selling passenger cars, and dealing in original (genuine Volkswagen) parts. The product portfolio extends from fuel-efficient small cars through to luxury vehicles in the premium segment, and also includes motorcycles, and will successively be supplemented by mobility services.

The Commercial Vehicles Business Area focuses above all on the development, production and sale of light commercial vehicles, trucks and buses under the Volkswagen Commercial Vehicles, Scania and MAN brands, supported by our original parts business and related services. Collaboration between commercial-vehicle brands MAN and Scania is managed and coordinated under the umbrella of Volkswagen Truck & Bus GmbH. The Commercial Vehicles Business Area's portfolio ranges from pickups to heavy trucks and buses.

The Power Engineering Business Area manages business activities involving large-bore diesel engines, turbomachinery, special gear units, propulsion components and testing systems.

The activities of the Financial Services Division comprise dealer and customer financing, vehicle leasing, banking and insurance activities, as well as fleet management and Mobility offerings.

With its brands, the Volkswagen Group has a presence in all relevant markets around the world, with Western Europe, China, the USA, Brazil and Mexico currently representing its key sales markets.

## LOCATIONS AND EMPLOYEES

The Volkswagen Group's production network is comprised of 120 locations in which passenger cars, commercial vehicles and motorcycles, as well as powertrains and components are manufactured.

With 71 locations, Europe remains our most important production region for vehicles and components. There are 28 sites in Germany alone. The Asia-Pacific region has 31 locations. We have five locations in North America and nine in South America. The Group operates four locations in Africa.

## MARKETS

Despite difficult economic conditions, the Group – including our Chinese joint ventures – delivered a total of 10,741,455 cars and commercial vehicles in 2017. The Group was able to maintain its strong competitive position in the reporting period thanks to a wide range of attractive and environmentally friendly vehicles. Worldwide, for the manufacture of its products, the Group purchased goods and services with a total value of €173.6 billion. This includes purchasing figures for our Chinese joint-venture companies.

Further details of the Group's development, holdings and changes affecting production locations or activities can be found in our 2017 Annual Report.

# The Volkswagen Value Chain

## RESEARCH & DEVELOPMENT

Year for year, the Volkswagen Group invests more in research and development than any other automotive company in the world, laying the foundations for new models and innovative concepts with which to master the challenges of the future: digitalization, networking and electric mobility (e-mobility).

**49,316 people**  
are employed by the Volkswagen Group  
in Research & Development



## PROCUREMENT



**173.6 € billion**  
spent on procurement (2017)

Every year, the Volkswagen Group purchases a wide range of raw materials, components and other goods. A sustainable supply chain and environmentally compatible transportation play key roles in our responsible and comprehensive championing of human rights, environmental protection and the battle against corruption.

## PRODUCTION

Every working day, the Volkswagen Group manufactures an average of 43,000 vehicles. Efficient production ranks alongside employee health and safety as one of our core goals. New concepts help prepare employees for the future, covering every step from vocational training onwards.

**120**  
**production sites**  
on four continents (2017)



## MARKETING & SALES



**>10.7 million**  
vehicles delivered worldwide (2017)

The Volkswagen Group markets its vehicles in 153 countries. Around the world, comfort and safety are considered the key customer requirements. We continuously reduce our models' fuel consumption and offer alternative mobility services.

## AFTER-SALES & FINANCIAL SERVICES

Our service provision includes supporting dealerships to ensure they can provide quality advice and maintenance, managing our original parts business, and providing innovative vehicle-related financial services. Driver training courses in fuel-efficient driving play an effective part in cutting fuel consumption and thus CO<sub>2</sub> emissions.

**19,520**  
people attended Driving Experience  
eco-driving courses and test drives (2017)



## RECYCLING



End-of-life vehicles are  
**85% recycled**  
and  
**95% recovered**

Recycling makes a key contribution to reducing our products' impact on the environment and conserving resources. This is not just about recycling vehicles at the end of their useful life; recycling starts at the new-vehicle development stage, during which we pay close attention to the recyclability of the required materials, the use of high-quality recycled materials, and the avoidance of pollutants. At the same time, we factor in aspects of the use phase, for instance the treatment and disposal of service fluids and high-wear components.

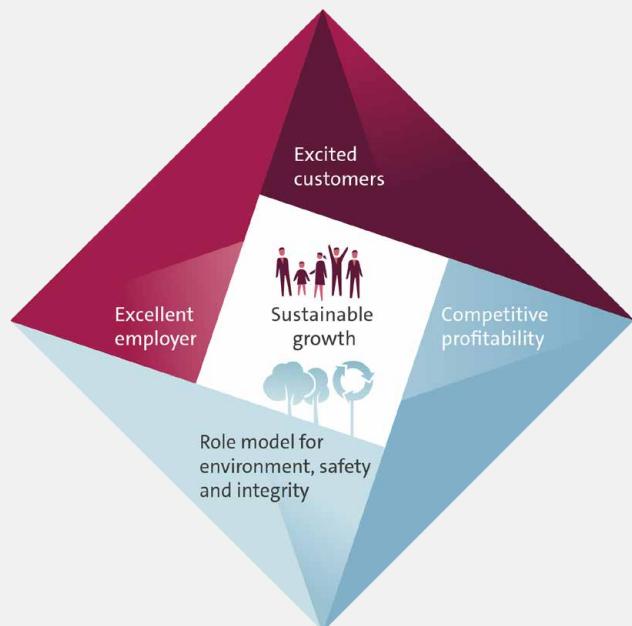
# TOGETHER – Strategy 2025

We aim to achieve lasting success in tomorrow's world of mobility by evolving into a global leader in the provision of sustainable mobility. With this in mind, we have embedded our program for the future, TOGETHER – Strategy 2025, at the heart of our corporate activities.

In 2016, the inception of TOGETHER – Strategy 2025 launched the biggest change process in the history of Volkswagen. Our new program for the future is making the Volkswagen Group more focused, efficient, innovative and sustainable – bringing us closer to our customers and setting us on a steady course of profitable growth. It defines the framework and key building blocks of our vision – to become a world-leading provider of sustainable mobility.

Setting our sights on 2025 shows that we are thinking and acting long-term, looking forward to the future. The term "TOGETHER" describes the collective mindset within the Volkswagen Group, which will be even more important for our sustainable success going forward.

## TOGETHER – STRATEGY 2025



With the help of this Group strategy, we in the Volkswagen Group are working together to thrill our customers with amazing vehicles and advanced, flexible mobility solutions – building a portfolio of strong brands that will meet their many different needs now and in the future.

Every day, we assume and exercise responsibility for the environment, safety and society, as we seek to become a role model in these areas. Integrity, reliability, quality and passion are the cornerstones of our work. By pursuing these goals and principles, we strive for technological leadership in the industry, strengthen our competitive profitability and, at the same time, remain an excellent, safe and dependable employer.

The Code of Collaboration that forms part of our program for the future is the foundation on which our Group strategy rests. It describes how we cooperate within the Group and in our daily interactions, based on such core values as "open and honest", "uncomplicated", "without prejudice", "on an equal footing" and "for one another".

## THE FOUR BUILDING BLOCKS OF OUR PROGRAM FOR THE FUTURE: TOGETHER – STRATEGY 2025

Our Group strategy comprises a raft of far-reaching strategic decisions and practical initiatives, all essentially aiming to safeguard the Group's long-term future and generate profitable growth. It comprises four building blocks, embracing a total of 16 strategic Group initiatives.

The first building block is the transformation of our core automotive business. Developing, building and selling vehicles will remain essential for the Volkswagen Group going forward. However, there will be far-reaching and lasting changes to this business in the future. This is why we are comprehensively restructuring our core business for this new era of mobility.

Establishing a new mobility solutions business is the second building block of our Group strategy. Within this business area, we are developing innovative and efficient mobility services that are also attractive, profitable and tailored to customer requirements – with the aim of being one of the leading provider in this growth market moving forward.

With the third building block, we are boosting the Group's traditional innovative strengths and placing them on an even broader footing. This is necessary not only for the transformation of our core business, but also for building our new mobility services business. To this end, we are pushing ahead with the digital transformation of all parts of the Company.

Becoming one of the world's leading providers of sustainable mobility calls for substantial capital expenditure. This investment is to be funded primarily through efficiency gains along the entire value chain – from product development and sourcing through to production and distribution, as well as in our corporate support functions. We can also generate additional resources for future investments by optimizing our existing portfolio of brands and equity investments. Bringing us to the fourth building block of our Group strategy, which involves securely financing the Volkswagen Group and placing it on a solid footing.

 Further information on Sustainable Mobility in the Volkswagen Group can be found in our Together.net magazine at:  
<http://together.volkswagengroup.com>

## GROUP STRATEGY GOALS AND KEY PERFORMANCE INDICATORS

Our strategic initiatives describe how we intend to achieve our vision of becoming a world-leading provider of sustainable mobility. For this purpose, we have defined four target dimensions – thrilled customers; excellent employer; role model for the environment, safety and integrity; and competitive profitability – which are intended to help us grow sustainably.

These target dimensions apply across the Group. However, the strategic KPIs which we will use to measure our future progress in implementing our Group strategy will differ according to business model. This is

because our car-manufacturing brands have a different business model from our truck and bus brands, which in turn differs from the business models of our Power Engineering and service businesses.

Below we describe the Group strategic goals which have been assigned to each of the target dimensions.

The definitions of the strategic KPIs for the target dimension of competitive profitability have been standardized and established across the Group. In some cases, however, the substance of the strategic KPIs for the other target dimensions is still being defined as we continue to flesh out our Group strategy.

### TARGET DIMENSION: THRILLED CUSTOMERS

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

Our strategic KPIs include the Net Promoter Score, conquest rate and key indicators for loyalty, customer satisfaction and retention.

### 16 GROUP-WIDE INITIATIVES



#### TRANSFORM CORE BUSINESS

- Sharpen positioning of brands
- Develop successful vehicle and drivetrain portfolio
- Partner with regional players to win in economy segment
- Streamline modular architectures
- Implement model line organization
- Realign components business
- Develop battery technology as new core competency
- Develop self-driving system for autonomous vehicles and artificial intelligence
- Develop best-in-class user experience across brands and customer touchpoints



#### BUILD MOBILITY SOLUTIONS BUSINESS

- Establish mobility solutions business
- Develop and expand attractive and profitable smart mobility offering



#### SECURE FUNDING

- Improve operational excellence
- Optimize business portfolio
- Integrate strategy and planning process



#### STRENGTHEN INNOVATION POWER

Drive digital transformation

Create organisation 4.0

## TARGET DIMENSION: EXCELLENT EMPLOYER

Skilled and dedicated employees are one of the keys to sustainable success. We seek to boost our employees' job satisfaction and motivation by offering equal opportunities, a modern and attractive working environment, and a forward-looking work organization. This offering is based on exemplary leadership and corporate culture, enabling us to retain our core workforce and attract new talent.

The strategic KPIs of this target dimension cover internal employer attractiveness determined by means of the opinion survey, external employer attractiveness, an external employer ranking as well as a KPI pertaining to cross-brand exchange and rotation and the diversity index.

## TARGET DIMENSION: ROLE MODEL FOR THE ENVIRONMENT, SAFETY AND INTEGRITY

Every day, we in the Volkswagen Group assume and exercise responsibility for the environment, safety and society. This sense of responsibility informs all our thoughts, actions and all the decisions we make, in equal measure.

We pay particular attention to the resources used and emissions generated by our product portfolio, as well as our locations and plants. Our goal is to continuously reduce our carbon footprint and lower our pollutant emissions. Through our innovations and outstanding quality, we seek to meet the highest standards of product safety.

Our paramount principles include compliance with laws and regulations, the establishment of safe, reliable processes, and open acknowledgment of mistakes so they can be avoided or rectified in the future. In terms of integrity, Volkswagen aims to become the role model for a modern, transparent and successful enterprise.

The strategic KPIs of this target dimension include the decarbonization index, KPIs pertaining to emissions figures, as well as to compliance, process reliability and a culture of dealing openly with mistakes.

## TARGET DIMENSION: COMPETITIVE PROFITABILITY

Investors judge us by whether we are able to meet our obligations with respect to interest payments and debt repayments. As equity holders, they expect suitable dividends and a lasting increase in the value of their shares.

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

To achieve operational excellence in all business processes, and to become an industry benchmark – those are the goals we have set ourselves.

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

### STRATEGIC KPIS: COMPETITIVE PROFITABILITY

	2015	2025
Operating return on sales*	6.0%	7 to 8%
Research and development ratio (R&D ratio) in the Automotive Division	7.4%	~6%
Capex/sales revenue in the Automotive Division	6.9%	~6%
Net cash flow in the Automotive Division	€ 8,887 million	Positive, to allow a distribution ratio of 30%
Net liquidity in the Automotive Division	€ 24,522 million	~10% of consolidated sales revenue
Return on investment (ROI) in the Automotive Division	-0.2%	> 15%

\* 2015 before special items.

# Customer Satisfaction and Customer Loyalty

As part of our future program, we have developed a sales and marketing strategy aimed at inspiring customers on a whole new level under the slogan “customer delight”. We regard ourselves as an innovative and sustainable mobility provider for all commercial and private customers worldwide – with a unique product portfolio encompassing twelve successful brands and innovative financial services.

We will implement the ‘TOGETHER’ sales strategy step by step over the coming years. In the focus area of new sales, for example, we are realizing innovative sales and service strategies together with our sales partners. In the focus area of the customer ecosystem, we are implementing platforms for a seamless digital brand experience at all customer touchpoints – this is enabling us to meet ever-growing customer expectations as well as increased data protection standards. In the focus area of steering, we are optimizing how our brands capitalize profitably on market opportunities.

Optimal coverage of markets, customer segments and customer budgets are at the heart of a strategic Group initiative. To this end, we are establishing automobile-specific customer segmentation to steer the positioning of our brands. At the same time, we are examining global markets for potential revenue sources. In 2017, we rolled out this methodology in Europe and China and agreed on the region-specific, customer-oriented brand territories for product positioning. From 2018, the new methodology will be applied in the Volkswagen Group’s product processes; other brands will also be included.

The Volkswagen Group aims its sales activities at inspiring its customers. This is our top priority, as enthusiastic customers remain loyal to our brands and recommend our products and services to others. In addition to satisfaction with our products and services, we value our customers’ emotional connection to our brands. It is important for us to retain customers and win new ones. To measure our success in this area, we collect data on and analyze three strategic indicators for the major passenger car-producing brands:

- Net promoter score: Proportion of customers who would recommend us to others minus the proportion of customers who would not recommend us. In terms of customers’ willingness to recommend them, Porsche and ŠKODA lead the core European markets when compared to other Group brands and competitors.

- Loyalty rate: Proportion of customers of our car brands who have bought another Group model. The loyalty of Volkswagen Passenger Cars, Audi, Porsche and ŠKODA customers has kept these brands in the upper loyalty rankings in comparison with competitors for a number of years. Compared to other manufacturer groups, the Volkswagen Group therefore holds the top spot, with a considerable margin over the competition.
- Conquest rate: Newly acquired passenger car customers as a proportion of all potential new customers. Here, too, we have a top ranking, primarily thanks to the good scores for the Volkswagen Passenger Cars brand.

The downward trend in brand image and brand trust at the Volkswagen Passenger Cars brand following the diesel issue did not continue in 2017. Instead, the first signs of recovery were evident. Porsche remains in top position in the image ranking.

We also use a strategic indicator to measure the satisfaction of customers with our products and services in the truck and bus business:

- Customer satisfaction: In the markets relevant for the Volkswagen Group, we aim to be one of the industry leaders in terms of the satisfaction rate for our commercial vehicle brands. To evaluate these criteria, we use customer satisfaction studies, which delivered positive satisfaction figures in line with our targets in the reporting period.

In the financial services business, we use two strategic indicators:

- Customer satisfaction: In addition to looking at customer satisfaction with our products, we measure this by examining reviews of our service staff; both aspects are an indicator for our customer and service focus. The results continued their positive trend in 2017. To achieve our goal of very high customer satisfaction throughout the Financial Services Division by 2025, we regularly evaluate what action is needed and how ideas can be shared and implemented across different countries.
- Customer loyalty: Trust in and loyalty to our services rely on customer satisfaction with our product range and service. The loyalty scores that are regularly calculated based on product sales to our customers are impressive proof of customers’ trust in our financial services. Ambitious targets underscore the focus on customers and fulfilling their needs at Volkswagen Financial Services.

## E-MOBILITY AND DIGITALIZATION IN GROUP SALES

By 2025, as part of our Roadmap E, we plan to offer our customers around the world more than 80 new electric models, including some 50 pure battery-driven vehicles and 30 plug-in hybrids. This campaign will be complemented by vehicle-related, customer-focused offers, such as customized charging infrastructure solutions and mobile online services. This is turning the Volkswagen Group from an automotive manufacturer into a mobility service provider, posing completely new sales challenges.

We are making highly targeted use of the opportunities of digitalization in sales. Our actions are guided by a clearly defined strategy that requires extensive cooperation between the brands to achieve the greatest possible synergies. Our aim here is to create a completely new product experience for our customers – one which is impressive with its seamless customer communications, from the initial interest in purchasing a vehicle, to servicing, and ultimately to the sale of the used car. In the process, we are thus opening up new business models and opportunities in every aspect of the connected vehicle – in particular mobility and other services. Vehicles are becoming an integral part of the customer's digital world of experience. We take great care to make all processes transparent so that customers always retain control of their own data.

We also gear our internal processes and structures to the pace of digital innovation. The result is project teams operating across different business areas, new forms of cooperation, a more intensive relationship with the international start-up scene, a consolidation of venture capital expertise – as a form of supporting innovative ideas and business models – as well as new lean systems and cloud-based IT solutions.

## FLEET CUSTOMER BUSINESS

Our business relationships with fleet customers are often long-term partnerships. In a volatile environment, this customer group guarantees more stable vehicle sales than the private customer segment.

The Volkswagen Group has an established base of business fleet customers in Germany and the rest of Europe in particular. Our extensive product range enables us to satisfy their individual mobility needs from a single source.

In fiscal year 2017, the share of fleet customers in total registrations in Germany remained stable at 14.1% (14.1%) amid a 2.7% growth in the market. The Volkswagen Group's share of this customer segment decreased to 44.7% (47.1%). Outside Germany, we recorded growth in the Group's share of registrations by fleet customers in Europe to 25.2% (24.5%). On the whole, the Volkswagen Group's share in Europe remained constant at 28.9% (28.9%). This shows that fleet customers still have considerable confidence in the Group.

## AFTER SALES AND SERVICE

In addition to individual service, the timely provision of genuine parts is essential in ensuring passenger car customer satisfaction in After Sales. The genuine parts supplied by our passenger cars brands and the expertise of the service centers represent the highest level of quality and ensure the safety and value retention of our customers' vehicles. With our global after-sales network including more than 120 of our own warehouses, we ensure that almost all our authorized service facilities around the world can be supplied within 24 hours. We regard ourselves as a complete provider of all products and services relevant to customers in the after-sales business. Together with our partners, we ensure the worldwide mobility of our customers. The partner businesses offer the entire portfolio of services in all vehicle classes. We are continuously expanding our range of tailored services in order to improve convenience for our customers and increase customer satisfaction.

Around the world, our commercial vehicles business also prides itself on products of the highest quality and on strong customer focus. Our range of trucks, buses and engines is complemented by services that guarantee fuel efficiency, reliability and good vehicle availability. The workshop service and service contracts offer customers a high degree of certainty in addition to high quality. We are reducing servicing times and costs with a view to reducing vehicles' total operating costs and helping them retain their value.

In the Power Engineering segment, we help our customers ensure the availability of machinery with MAN PrimeServ. The global network of more than 100 PrimeServ locations guarantees excellent customer focus and offers, among other things, replacement parts of genuine parts quality, qualified technical service and long-term maintenance contracts.

# Sustainable Mobility

It is our task to ensure responsible and efficient production, and to make mobility not only as safe, convenient and environmentally compatible as possible, but also affordable for large numbers of people.

We have firmly established e-mobility as a key action area in our TOGETHER – Strategy 2025 program for the future – while at the same time setting out our goal of becoming one of the world's leading providers of e-mobility by 2025. Coupled with e-mobility and autonomous driving, digitalization will transform our business – with implications of which many people are not yet aware.

As we work to develop pioneering mobility solutions, we do not limit our focus to automotive mobility, but also consider other modes of transportation, as well as issues such as urbanization, urban development, traffic-related services and the quality of transport infrastructure. We also take account of trending demands, such as vehicle-sharing. For these reasons, we have embedded new mobility solutions and digital services as core elements in our TOGETHER – Strategy 2025 program.

By 2025, we intend to generate a proportion of our revenues from mobility solutions. With the Volkswagen Group's new company for mobility services, MOIA, we are laying the foundations of lasting success in tomorrow's world of mobility – across the Group, and across all our brands. MOIA develops and markets its own mobility services, either independently or in partnership with cities and existing transport systems. In parallel with MOIA, the brands continue to move forward with their own specific services.

We are working on other innovative mobility concepts as part of the #WolfsburgDigital initiative. We recently made our on-demand X-Shuttle service available to our employees. Five modified Volkswagen Crafters transport commuters between our Braunschweig and Wolfsburg sites – they even provide a traveling concierge service. Group employees can use a smartphone app to specify their pickup location and destination and book the shuttle digitally. An algorithm combines the commuters' requests, figures out optimal routes, and calculates travel

and arrival times for each passenger. And the X-Shuttle service offers additional benefits – parcel and laundry services, snacks and drinks, free Wi-Fi and smartphone charging ports. X-Shuttle is more than just a ridesharing service; it is a pilot for future concepts in urban mobility and conceivably the future of carpooling.

 > Further information on the X-Shuttle can be found at:  
<https://www.volkswagenag.com/en/news/stories/2017/06/the-car-pool-of-the-future.html>

In the future, autonomous vehicles will enrich many people's mobility experience. A mobility concept based on heavily used autonomous vehicles will take up less space, consume less energy, and be significantly safer and more sustainable. With SEDRIC (for SELF-DRIving Car), not only have we created precisely such an innovative, integrated mobility concept for the urban traffic of the future, we have also developed a totally new kind of concept car. SEDRIC is a cross-brand ideas platform for our Group. It features an intuitive control system that gives an entirely new meaning to the idea of autonomous driving. The touch of a button, a verbal command or a smartphone app is enough to summon the self-driving automobile, which then delivers its passengers conveniently, reliably and safely to their destinations.

## MOIA

Just one year after its inception, MOIA has introduced an integrated ride-pooling concept with a mission: "One Million Cars off the Road". Starting in 2018, the initiative will provide new mobility options aimed at significantly reducing traffic in cities. We will launch this mobility service in 2018, initially in Hamburg.

MOIA has been testing the service in Hanover since October 2017 and is continuously developing the various components based on real-world operation. A fleet of 20 Volkswagen Multivans is currently being used for the tests.

Thanks to the MOIA ridesharing vehicle we introduced in December 2017, we can now cover the entire ride-pooling value chain – or just individual links in the chain, as required.

 > Further information on MOIA can be found at:  
<https://www.moia.io>

Starting in 2018, in a further step along the road to a new world of digitized mobility, we are planning to join forces with Israeli company Mobileye to implement a new navigation standard for automated driving. Future Volkswagen models will use Mobileye's Road Experience Management™ (REM™) camera-based mapping and localization technology.

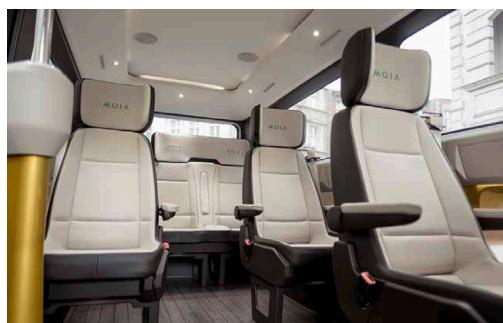
-  Further information on SEDRIC can be found at:  
<http://www.discover-sedric.com/en/>  
Further information on the strategic partnership between Volkswagen and Mobileye can be found at: <https://www.volkswagen-media-services.com/en/>

However, the economic, social and environmental requirements our mobility solutions must satisfy often contain a number of inherently conflicting goals. Whenever we fail to achieve a balance between economic, social and environmental objectives, long-term risks emerge both for our stakeholders and for the financial success of our Group. Some examples of such conflicting goals include:

- Individual mobility solutions facilitate participation in society and individual autonomy. In the future, many people will still want to run their own cars – despite the steadily increasing availability of innovative mobility concepts. This is particularly true of the growing consumer markets in emerging and developing countries, as well as sparsely populated regions. However, the desire for individual mobility also contributes to increased consumption of natural resources and accelerates the process of anthropogenic climate change.



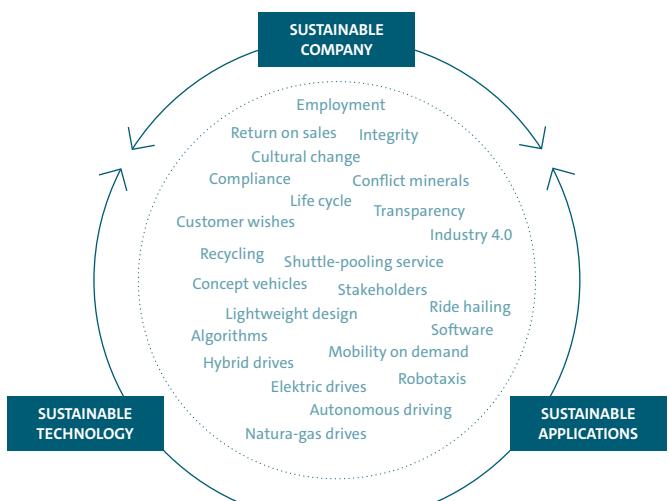
The MOIA vehicle is the world's only electric ride-pooling six-seater. Although nearly ready for production, the concept vehicle is not yet available for sale, so is not subject to EU Directive 1999/94 EC.



Putting a new face on ride-pooling, the MOIA vehicle is all-electric, eco-friendly, and has enough room for six passengers.

- The market success of SUVs underscores the attractiveness of Volkswagen products. Fulfilling these existing customer wishes safeguards the business success of our Group and provides job security for our employees. But the higher fuel consumption of SUVs compared with other vehicle models makes it more difficult for us to meet the climate targets we have set ourselves.
- Government legislation, and especially changes to regulations governing CO<sub>2</sub> emissions, have made ecologically driven structural change inevitable. However, this far-reaching change poses a challenge to existing production methods and workforce qualifications. At the same time, the shift toward e-mobility and the associated investments in production capacity are also generating new employment opportunities.
- Electric mobility also raises new environmental questions, such as how to measure the environmental impact of electric and hybrid vehicles compared with conventional vehicles in terms of the use of mineral resources in production and the recycling of battery cells at the end of the product life cycle.
- Automated vehicles and new mobility services offer more convenience, enhance road safety, and encourage optimization of transport and traffic systems, especially in heavily populated urban areas. The new demand for collective mobility is creating a new competitive environment with brand-new players, to which we must continually adapt.
- Connected driving and digitalization depend on data sharing and big data analysis, but we must also comply with legislation governing personal data protection. Before automated mobility can succeed, we need to clarify a large number of ethical and legal questions.

#### VOLKSWAGEN SUSTAINABILITY CYCLE



# Sustainable Management

Our aim is to operate responsibly along the entire value chain. This means our corporate governance must be sustainable and transparent to its core.

Largely in line with the recommendations of the German Corporate Governance Code, we practice Group-wide sustainability coordination, integrated compliance and risk management, the continued development of a culture of integrity, and responsible supply chain management. The forward-thinking handling of environmental issues, responsibility toward our employees and social engagement by our brands and in the various regions provide the framework for our Group's sustainability approach. The greatest challenge to effective sustainability management is our complexity, with our 12 brands, more than 640,000 employees and 120 production sites.

Voluntary undertakings and principles applied across the Group form the basis and backbone of our sustainability management. These include our Model of Sustainable Development, our stakeholder guidelines and our corporate guidelines.

The Model of Sustainable Development provides a benchmark for sustainable corporate policy with three key elements:

- a lasting balance between economic, environmental and social systems and our efforts to achieve long-term equilibrium between divergent interests,
- responsibility for our own actions at regional, national and global level, with
- transparent communications and fair cooperation.

## COORDINATION OF SUSTAINABILITY

We have created a clear structure for coordinating our sustainability activities that includes internal and external sustainability committees.

Our internal sustainability coordination is based on the tight integration of our corporate and sustainability strategies. In 2017, in its function as our Sustainability Board, the Group Board of Management under the leadership of CEO Matthias Müller regularly worked on the strategic issues surrounding a holistic sustainability management approach.

The Corporate Sustainability Steering Committee regularly updates the Group Board of Management on issues of relevance to sustainability. The steering committee includes top managers from corporate functions, as well as representatives of the Group Works Council and brands. Its tasks include defining strategic sustainability goals and position statements, identifying key action areas and approving the sustainability report. Management indicators are used to monitor the extent to which these sustainability goals are being met. The steering committee meets regularly under the leadership of the external affairs and sustainability function.

In turn, the steering committee is supported by the sustainability office. Its duties include coordinating all sustainability-related activities within the Group and the brands. The office also handles the monitoring and coordination of sustainability ratings. Finally, it is responsible for drawing up the sustainability report and supporting the Sustainability Council and its workshops.

As part of the environmental and socio-political regulatory process, we also maintain an ongoing dialog with policymakers.

At divisional level, the CSR project team ensures that information on current projects is regularly shared between the various sustainability experts within the Group. In addition, other project teams work across business areas on topics such as reporting, stakeholder management and sustainability in supplier relations. These coordination and working structures have also been established across the brands and are subject to ongoing development.

In our efforts to continuously improve our sustainability concept, we have set up two external committees to provide us with independent advice: the Sustainability Council and the Stakeholder Panel.

Appointed in 2016, the international Sustainability Council regularly consults with the Board of Management, senior managers and employee representatives. It is authorized to proactively propose topics and implement projects subject to prior agreement. Its first projects included an investigation of innovation and cultural change related to sustainable mobility, an international initiative related to crisis prevention as a consequence of climate change, and a scientific study on defining the future parameters of transportation and climate policy. More detailed information on the council's members and activities can be found here: [www.volkswagenag.com > Sustainability > Sustainability Council](http://www.volkswagenag.com > Sustainability > Sustainability Council).

In cooperation with experts in the field, we set up a Stakeholder Panel that has kept track of our sustainability reporting in particular over the past 20 years and provided a critical commentary. In 2017, the panel included some 200 national and international stakeholders from government, academia and research, the financial markets and civil society. We regularly conduct interviews and apply the findings in order to refine our understanding of our external stakeholders' expectations.

## MATERIALITY ANALYSIS

GRI 102-43, 102-44, 102-46, 102-49

Our approach to the analysis and identification of significant issues is as follows:

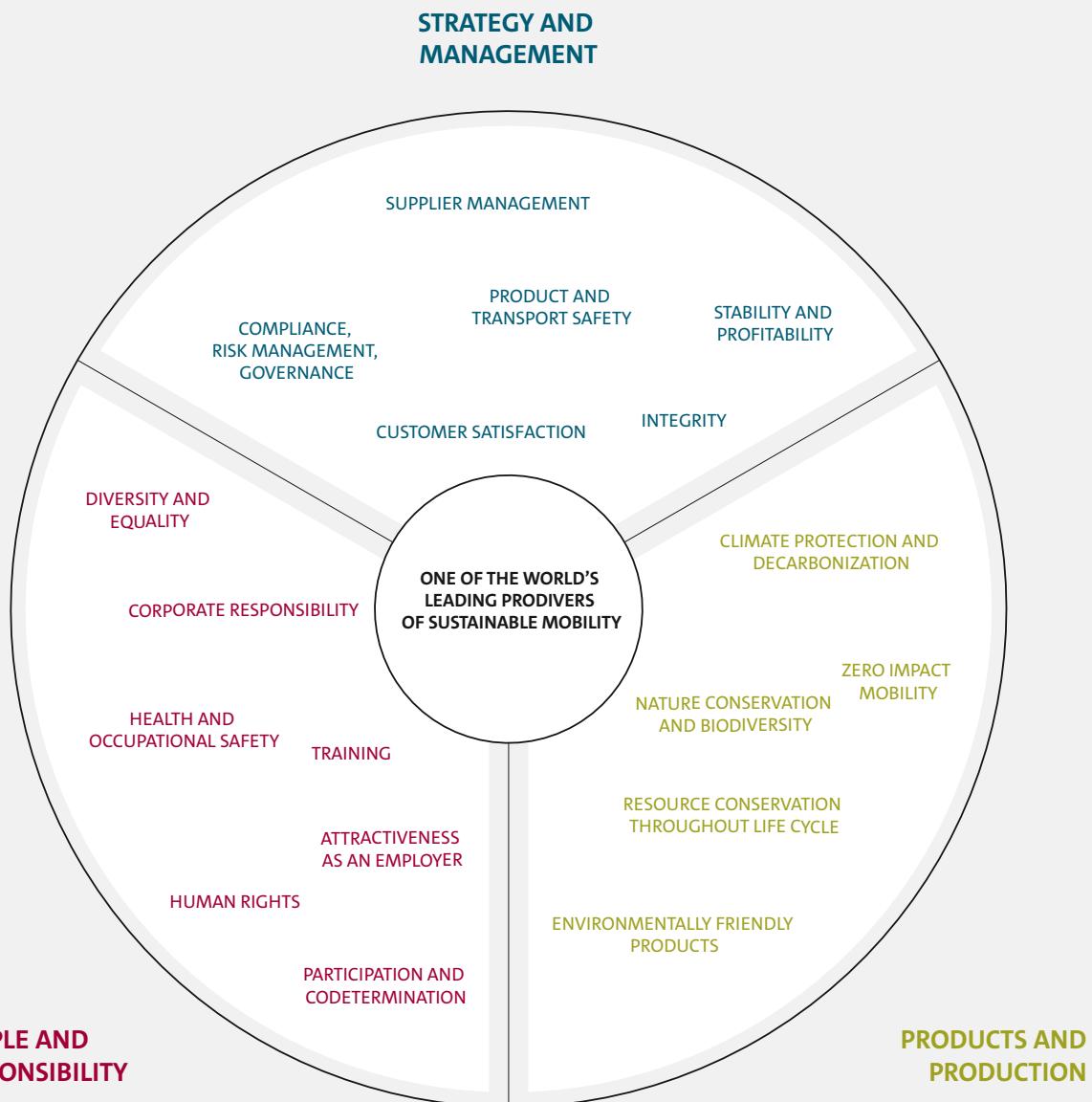
1. Based on various global challenges, we drew up a list of 18 key action areas. We did this on the basis of the following sources: external studies, industry analyses and our brands' stakeholder surveys, as well as internal guidelines such as the Group-wide TOGETHER – Strategy 2025 and the individual strategies of our divisions. These action areas were largely defined on the basis of the findings of expert workshops held in the past addressing topics related to the economy, the environment and civil society.
2. In August, "Group Guideline No. 25: Sustainability Reporting" was approved by the Group Board of Management. This policy regulates organization and responsibilities, and also defines the process for the annual materiality analysis.
3. The changeover to the new sustainability reporting framework of the Global Reporting Initiative – the GRI Standards –, which will become mandatory in July 2018, was carried out in cooperation with external experts.

4. Following our evaluation of the modified reporting requirements and in line with the strategic approach of TOGETHER – Strategy 2025, we have expanded our materiality analysis. Going forward, we will further intensify our focus on a holistic approach to sustainability which takes account of the Group perspective, the perceptions of our stakeholders, and the environmental, economic and social impacts of our business. For this reason, as a first step, we have decided to extend our key action areas to include the issues of integrity and human rights.
5. The 18 action areas identified by the Volkswagen Group were evaluated in terms of their strategic importance for TOGETHER – Strategy 2025 and their stakeholder relevance.
6. In 2017, the implications of CSR-RUG (for the disclosure of nonfinancial information) and of the new GRI standards were discussed with representatives of the brands and corporate functions in four workshops, and subsequently reconciled with our divisional strategies.
7. Furthermore, in the Group CSR Meeting (GCM), we discussed the importance of taking an "impact perspective" when evaluating the action areas for our Group.

The outcome of this systematic materiality process was that, due to our size, our impacts and our resulting responsibilities, all minimum disclosure requirements under CSR-RUG were once again identified as material. This also applies to all topics defined as "material" by the GRI Standards of the Global Reporting Initiative. The graphic below shows our material action areas in line with CSR-RUG and the GRI Standards:

**VOLKSWAGEN GROUP'S KEY ACTION AREAS IN LINE WITH CSR-RUG AND THE GRI STANDARDS**

GRI 102-46, 102-47, 102-49



The specific content of the action areas in terms of objectives, values and indicators is still being fleshed out as part of the implementation of our new Group strategy.

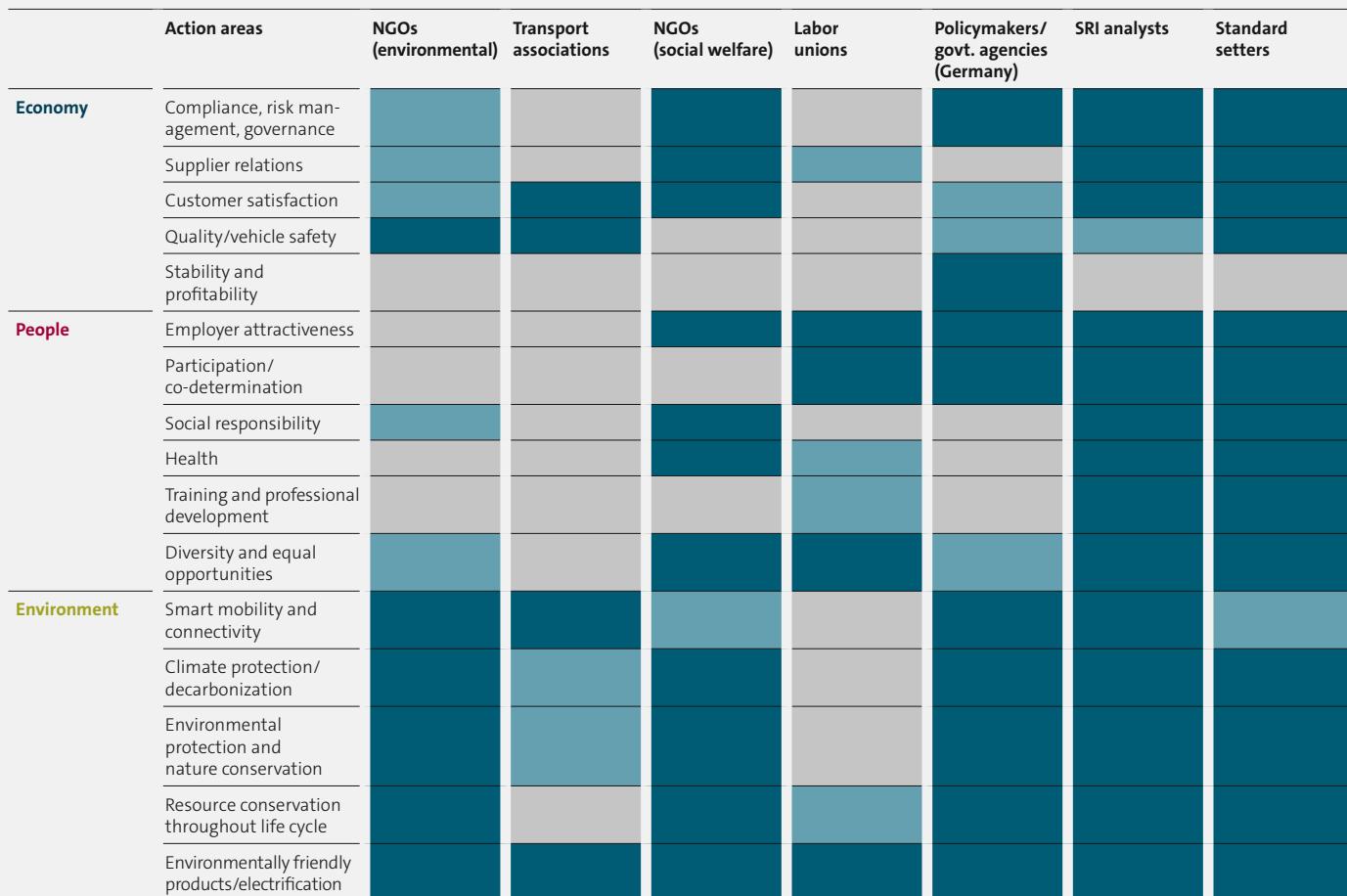
Our relationships with our stakeholders, as well as their requirements, expectations and attitudes, are of fundamental importance in identifying issues of material significance for the Volkswagen Group. For this reason, in addition to our established Stakeholder Panel and the stakeholder surveys carried out by the Group companies, we have worked

with other internal and external representatives to further refine our key action areas.

The graphic below shows the Group's most important action areas in the view of our stakeholders. Our desk research focused on the interests of more than 40 national and international stakeholder groups whose concerns formed part of a multi-stage analysis which informed the identification of our action areas:

#### DESK RESEARCH ON STAKEHOLDER PERSPECTIVES\*

GRI 102-44, 102-46, 102-47, 102-49



- Main topic
- Secondary topic
- Not addressed

\* This analysis is based on the action areas defined in 2015 and stakeholder perspectives at that time.

In view of our broad international standing, we have deliberately avoided any prioritization of these action areas. On the one hand, the relevance of the individual areas may vary by region; on the other hand, we do not wish to judge, for example, whether the health of over 640,000 employees worldwide is more important than, for example, resource conservation throughout the vehicle life cycle – or vice versa. As we understand it, sustainable development means taking equal account of economic, environmental and social interests and maintaining an appropriate balance between them.

## STRATEGIC STAKEHOLDER MANAGEMENT

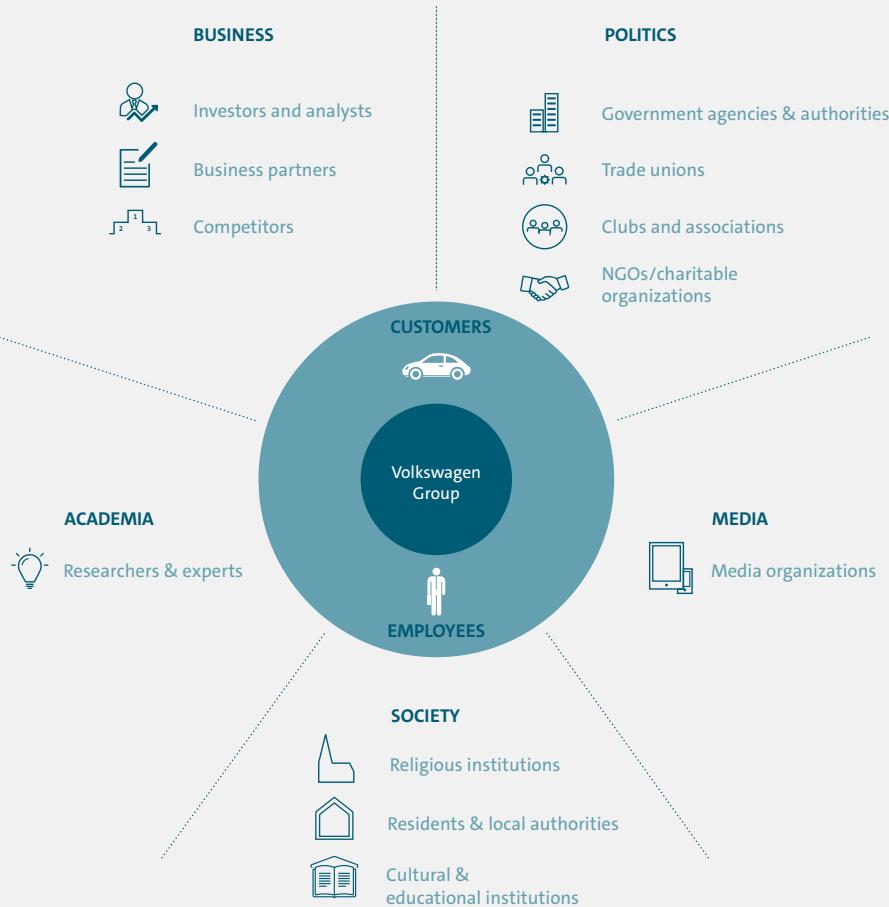
GRI 102-40, 102-42, 102-43, 102-44, 102-46

As an automobile manufacturer with 12 brands and 120 production sites, offering vehicles in 153 countries, we are confronted with a broad spectrum of requirements, expectations and attitudes on a daily basis. In addition to the opportunities presented by our relationships with our stakeholders, this diversity of interests is also a challenge, because it can result in conflicting objectives.

Stakeholders are individuals, groups or organizations who influence or are influenced by our corporate decision-making processes and/or their outcomes. At the center of our stakeholder universe are our customers and employees. Based on those with whom we regularly come into contact, we have identified 12 additional stakeholder groups surrounding this core, all of whom are given equal priority.

## VOLKSWAGEN GROUP STAKEHOLDERS

GRI 102-40



In the 2017 reporting year, our stakeholders took advantage of surveys and dialog events to communicate numerous expectations to the Volkswagen Group:

### STAKEHOLDER SUGGESTIONS AND VOLKSWAGEN AG RESPONSES

 GRI 102-43, 102-44

Topics	Stakeholders	Volkswagen AG
Sustainability management	Incorporate sustainability strategy into corporate strategy	<p>TOGETHER – Strategy 2025</p> <ul style="list-style-type: none"> <li>▪ Vision: Sustainable Mobility</li> <li>▪ Sustainable Growth: We thrill our customers with tailor-made mobility solutions and serve their diverse needs with a portfolio of strong brands. We assume and exercise responsibility for the environment, safety and social issues. We act with integrity and build on reliability, quality and passion as the foundation stones of our work</li> </ul>
Integrity and governance	Place integrity and technological competence on an equal footing	<ul style="list-style-type: none"> <li>▪ Creation of the position of Board Member for Integrity and Legal Affairs</li> <li>▪ TOGETHER – Strategy 2025: Model of Integrity</li> <li>▪ Multilingual integrity program</li> </ul>
Greenhouse-gas and pollutant emissions	Close the gap between emissions in the lab and on the road	<ul style="list-style-type: none"> <li>▪ TOGETHER – Strategy 2025: Carbon footprint KPI</li> <li>▪ Electrification</li> <li>▪ Volkswagen welcomes the introduction of RDE and WLTP, as both testing methods will help close the gap between emissions measured in the lab and under real driving conditions.</li> </ul>
Communicating sustainability	Identify and communicate conflicting objectives	<ul style="list-style-type: none"> <li>▪ Shift sustainability magazine provides critical self-scrutiny and dialog</li> <li>▪ Decision-making processes are informed by regular stakeholder surveys and dialog event</li> </ul>
Corporate strategy	KPIs for transformation into mobility services provider	<ul style="list-style-type: none"> <li>▪ Development of new KPIs as part of TOGETHER – Strategy 2025</li> </ul>

We have a strategic stakeholder management system in place to help us organize our many different stakeholders and their needs, and ensure they are included in our business decisions. To successfully facilitate a dialog of equals, our stakeholder management system must meet the following criteria:

- Systematically recording the expectations placed on Volkswagen
- Productively sharing the knowledge of all parties involved
- Jointly developing solutions to problems
- Making our decision-making processes transparent

Successful stakeholder management requires systematic and strategic planning, implementation and monitoring of our activities. With this in mind, we restructured our stakeholder management system in the 2017 reporting year:

- **Planning and Governance:** Our brands and divisions are responsible for maintaining direct contact with our stakeholder groups. We combine and manage the resulting commitments at Group level (sustainability management).
- **Standardization:** Our stakeholder management is guided by the standards established at many different levels of regulation (policies).

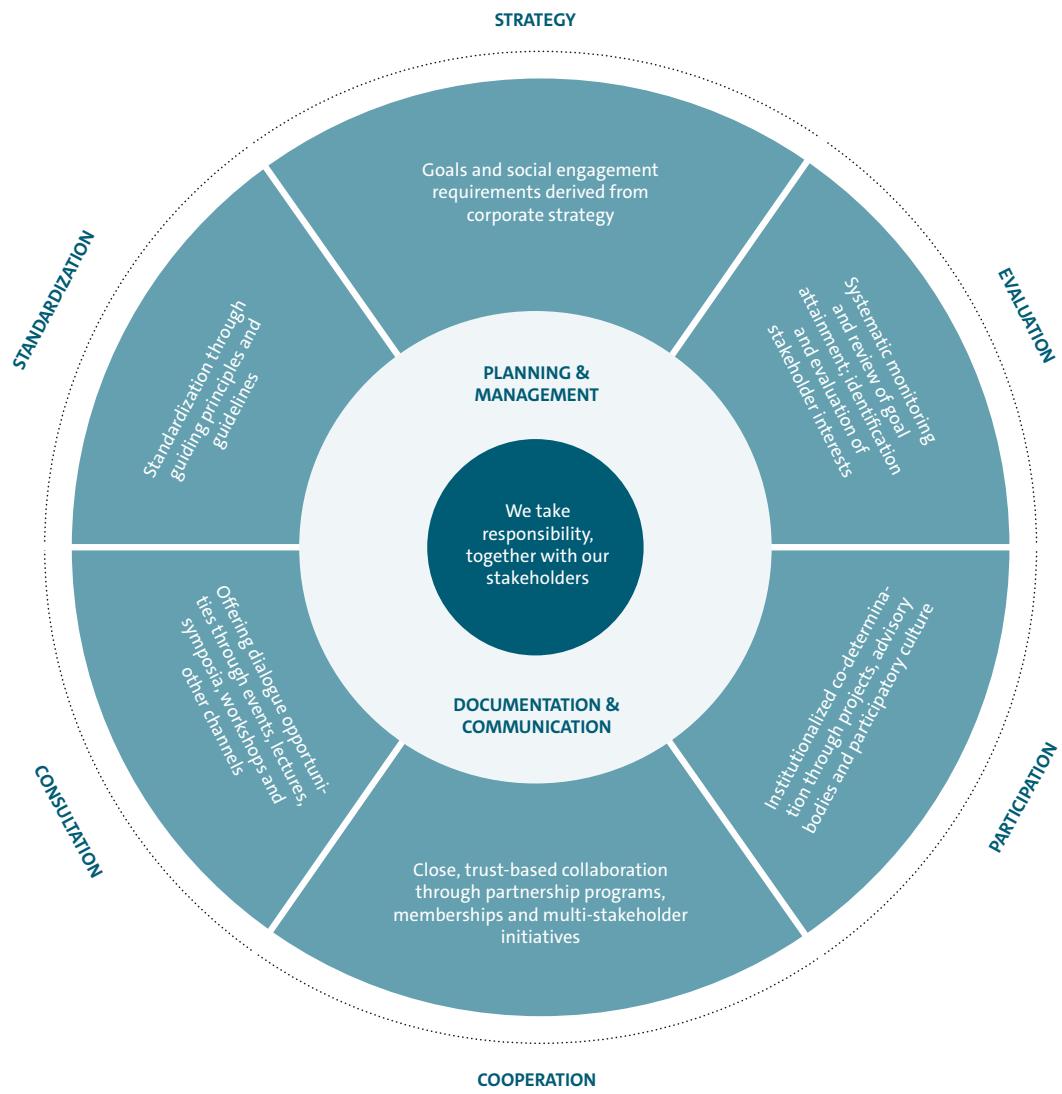
- **Partnerships:** At Group level, our work with selected stakeholders takes the form of strategic partnerships. An overview of our partnerships can be found in the Supplementary Information.
- **Participation:** We see our stakeholders as partners and involve them in our decision-making processes. In addition to the strong culture of co-determination at Volkswagen, the activities of our Group Sustainability Council should also be mentioned here.
- **Consultation:** An overview of our programs and initiatives for dialog and interaction can be found in the Supplementary Information. Information received from NGOs may also prompt us to initiate discussions and examine opportunities for cooperation.
- **Evaluation:** Each year, we collect feedback from our stakeholders through our Stakeholder Panel and our stakeholder surveys. The results of our 2017 reputation study can be found in the Supplementary Information.
- **Documentation and Communication:** Our Sustainability Report is our primary medium for documenting our activities, supplemented by *Shift*, our sustainability magazine. We regularly provide additional information on current projects in press releases and newsletters and on social media.

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## STAKEHOLDER MANAGEMENT AT VOLKSWAGEN – A HOLISTIC APPROACH

GRI 102-42, 102-43, 102-44

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In the 2017 reporting year, two examples of platforms for stakeholder communication were the Stakeholder Panel Dialog and the 2017 Global Stakeholder Reputation Survey.

We invite the members of our Stakeholder Panel to Stakeholder Dialog events at regular intervals. Stakeholder Panel Dialog events provide a format for coming together to openly and critically discuss current Group initiatives. In the 2017 reporting year, two of these events took place in our offices in Hanover (June) and Berlin (December). In each case, we discussed topics such as further steps in the implementation of our corporate strategy TOGETHER – Strategy 2025, the Volkswagen Group's e-mobility initiatives, the ongoing development of our materiality analysis, and the scope and contents of our nonfinancial reporting with between 20 and 30 panel members.

We also conducted our 2017 Global Stakeholder Reputation Survey in the reporting year, in collaboration with an opinion polling service provider. In Germany, the USA and China, a total of 300 opinion leaders representing research and academia, civil society, the media, government and financial markets were surveyed. The survey was designed by reference to our TOGETHER strategy and the Volkswagen Code of Values, as well as an analysis of material issues as required for our sustainability reporting. The results showed that along with product perception, our stakeholders believe that corporate culture, values and integrity, as well as corporate governance, all play an important role in the building of trust. And in their view, this is precisely where further action is needed.

#### OVERVIEW OF THE VOLKSWAGEN GROUP'S STAKEHOLDER DIALOG FORUMS

GRI 102-43, 102-44

Stakeholder round tables	Stakeholder workshops	Stakeholder Panel Dialog events	Stakeholder surveys	Partnerships with universities
Small groups (4–6 stakeholders)	Medium groups (10–15 stakeholders)	Large groups (30 stakeholders)	Large representative samples	Visiting professors and lecturers
Several times per year (e.g. in Berlin)	Internal and external speakers	Twice a year (Hanover and Berlin)	2017 Global Reputation Survey (500 stakeholders)	Several times per year (e.g. in Osnabrück)
Discussions with senior management and Group Sustainability Council	Discussions with senior and middle management	Internal and external speakers	2017 Group Materiality Survey (30 stakeholders)	Sponsorship of events
		Discussions with senior and middle management		

**ACTION PLAN – STRATEGY AND MANAGEMENT**

Action areas	Goals and actions	Deadline	Status
Stability & profitability	Secure funding and strengthen innovation power	2025	New
	Operating return on sales: 7–8%	2025	New
	Return on investment for the Automotive Division: >15%	2025	-0.2% (2015)
	Ratio of capex to sales revenue in the Automotive Division: ~6%	2025	6.9% (2015)
	Research and development (R&D) ratio in the Automotive Division: ~6%	2025	7.4% (2015)
	Net cash flow in the Automotive Division: positive, to allow a target distribution ratio of 30%	2025	€ 8,887 million (2015)
	Net liquidity in the Automotive Division: ~10% of consolidated sales revenue	2025	€ 24,522 million, 11.5% (2015)
Risk management	Operation and further development of risk management and internal control systems (RMS/ICS) in operating business units	Ongoing	Support for operating business units to further develop RMS/ICS (e.g. in Volkswagen brand's development of powertrains; in training courses on defining and documenting internal controls for technical development)
	Standardize and further develop risk management methods and risk management and internal control processes to safeguard the future viability of the Volkswagen Group	Ongoing	Strengthening of quarterly risk reporting process across all Volkswagen AG executive functions by further enhancing relevance of risk management; Further development of GRC IT system to ensure consistent, standardized risk reporting
	Strengthen networking of risk management organization and activities between brands	Ongoing	All Group brands now involved in regular sharing of information on risk management, network meetings; risk management wiki as information and idea sharing platform for GRC organization
Integrity	Integrity program: mandatory participation in web-based training program for all non-managerial employees; additional objectives currently in development	2018	Rollout of tools for integrity program; development of KPIs for regular integrity monitoring
Compliance	Further deepen awareness and culture of compliance	Ongoing	Information supplied to specific target groups via different media across multiple brands and companies
	Continuous optimization of Compliance Management System (CMS)	Ongoing	Further development of CMS taking account of international legislation and internal Group benchmarks
	Continue to develop and conduct Group-wide compliance training courses	Ongoing	Risk-based approach for classroom and online training courses
	Reorganization of Group-wide whistleblower system	Ongoing	Establish Group-wide minimum standards; external internet presence; further rollout across brands and companies

**ACTION PLAN – STRATEGY AND MANAGEMENT**

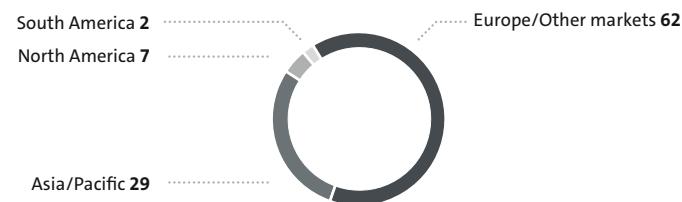
Action areas	Goals and actions	Deadline	Status
Zero-impact mobility	Establish mobility solutions business	2025	New
	Rapidly develop new mobility solutions	2025	Ongoing
	Leading provider of autonomous vehicles – rapid market launches planned	2025	Most recent evolutionary stage of SEDRIC concept presented at IAA in 2017; platform created for highly diverse model family
	Forecast and analyze mobility trends	Ongoing	Presented and discussed in internal Group and brand strategy meetings and at Stakeholder Dialog events (DRIVE Group forum)
Supplier management	Extend e-learning tool and sustainability questionnaire	Ongoing	In terms of procurement spending, 80% coverage for e-learning tool and 89% for sustainability questionnaire; planned increase of coverage to 83% for e-learning tool and 93% for sustainability questionnaire in 2018
	Perform in-depth sustainability audits	Ongoing	49 audits carried out in the reporting period; 45 audits were planned in 2017
	Provide supplier training in sustainability	Ongoing	More than 700 suppliers trained on the subject of sustainability
	Implementation of OECD Due Diligence Guidance	Ongoing	Evaluation of supplier information on conflict minerals
Sustainable management	Ensure similar management of sustainability within the Group and by the brands	2015	Management structure introduced at Volkswagen Commercial Vehicles
	Sharpen positioning of brands	2025	Ongoing
	Establish IT-based sustainability management system at Group, brand and company level	Ongoing	Already in use

# Supplier Management

As a multinational corporation, we also bear a global responsibility. The localization strategies at our production sites are generating ever more globalized and complex supplier structures. We have more than 40,000 tier 1 suppliers worldwide, who employ more than 5 million people. This is why our sustainability efforts do not stop at our factory gates. At 41 locations in 21 countries, our procurement network ensures that our production facilities are supplied with production materials of the requisite quality, in the required quantities, at competitive prices. The goods and services we purchase around the world to manufacture our products are worth a total of €173.6 billion (including our Chinese joint ventures).

## VOLUME OF GROUP PROCUREMENT BY MARKET

in %



## SUSTAINABILITY IN SUPPLIER RELATIONS CONCEPT

REQUIREMENTS	MONITORING	TRAINING AND SKILLS
Contractually binding	Verification of compliance with requirements	Training and raising awareness of buyers and suppliers
<ul style="list-style-type: none"><li>▪ Environmental protection</li><li>▪ Employee rights</li><li>▪ Transparent business relationships</li><li>▪ Fair trading practices</li><li>▪ Duty of care to build responsible supply chains</li></ul>	<ul style="list-style-type: none"><li>▪ Sustainability questionnaire</li><li>▪ App for evaluating suppliers' sustainability</li><li>▪ Supplier audits</li></ul>	<ul style="list-style-type: none"><li>▪ E-learning programs for suppliers and buyers</li><li>▪ Classroom training courses for suppliers and buyers</li></ul>

## FURTHER DEVELOPMENT

- Working and sharing information with the global procurement network
- Involvement in cross-sectoral sustainability initiatives
- Involvement in working groups on sustainability with other automotive manufacturers

## SUSTAINABILITY IN SUPPLIER RELATIONS

Only by cooperating closely with our business partners can we ensure compliance with our sustainability standards. With this in mind, we rolled out our Sustainability in Supplier Relations concept in 2006.

To identify the latest developments and long-term challenges in each country, we rely on the dialog which takes place between our brands and regions through the Sustainability Procurement Network. This network supports the continuous exchange of information between more than 20 experts.

Our Sustainability in Supplier Relations concept is based on three key criteria: requirements, monitoring and development. In this respect, we define what we expect of our suppliers in terms of sustainability, and then turn these expectations into requirements. We use targeted monitoring instruments to ensure compliance, and organize training initiatives to steadily raise suppliers' awareness of sustainability issues.

## SUPPLIER REQUIREMENTS

The Sustainability in Supplier Relations concept is based on the “Volkswagen Group requirements regarding sustainability in its relationships with business partners (Code of Conduct for Business Partners)”. The latter embeds our expectations of our business partners’ conduct with respect to key environmental, social and compliance standards in our contractual agreements. We also call on our tier 1 suppliers to pass these requirements down along the supply chain. Among other things, these requirements are based on the principles of the UN Global Compact, the International Chamber of Commerce’s Business Charter for Sustainable Development, and the relevant conventions of the International Labour Organization.

-  > Full details of Volkswagen Group requirements regarding sustainability in its relationships with business partners can be found at:  
[http://www.vwgroupsupply.com/one-kbp-pub/en/kbp\\_public/information/sustainability\\_1/sustainability.html](http://www.vwgroupsupply.com/one-kbp-pub/en/kbp_public/information/sustainability_1/sustainability.html)

Before we consider working with potential suppliers, we use a country risk analysis and other data to obtain a clearer picture of the social, environmental and human-rights risks in the areas where they operate. This analysis is based on third-party information and the results of in-house analyses. We also subject all potential new business partners and suppliers to an integrity check (Business Partner Check).

During the fiscal year, prior to being awarded contracts, 137 supplier locations were evaluated against sustainability criteria based on self-assessments. 89 of them were subjected to further on-site verification by an external specialist.

Our early-warning systems also screen, for example, press and internet coverage of relevant sustainability issues.

Before submitting a quotation, our suppliers must confirm that they acknowledge our sustainability requirements; this explicit acknowledgement must be repeated after 12 months have elapsed if they wish to submit new quotations. These requirements are an integral part of our contracts with all suppliers to General Procurement and with all suppliers of production materials. They apply to all goods and services purchased worldwide.

## CONFLICT MINERALS AND SUSTAINABLE PROCUREMENT OF RAW MATERIALS

To us, sustainable supplier management means providing special protection to those groups along our supply chain who are potentially at high risk of human rights abuses. In this context, we regard the due diligence requirements for building responsible supply chains of minerals from conflict-affected and high-risk areas as an additional contractual requirement for our suppliers.

In 2017, to comply with our duty of care and build responsible supply chains of minerals from countries affected by conflicts or classified as high-risk, we published – among other things – a guideline on sustainable raw material procurement. It can be found at: [www.volksagenag.com/en/sustainability/policy.html](http://www.volksagenag.com/en/sustainability/policy.html). This step also reflects our commitment to fulfilling the stipulations of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. In this respect, we expect our suppliers to refrain from using any minerals sourced from non-compliant smelters. Minerals are considered conflict minerals if non-governmental armed groups are supported directly or indirectly through their extraction, transportation, trade, handling, processing or export.

Upon request, suppliers and subcontractors must disclose to us the smelters or refineries from which they source the metals tin, tantalum, tungsten and gold. In 2017, suppliers provided us with specific information on their supply chains that enabled us to identify 315 smelters of tin, tantalum, tungsten and gold. In cases of suspected non-compliance, we also expect our suppliers to disclose the sources of materials that may have some connection with human rights violations such as child, forced or compulsory labor, as well as any other forms of modern slavery or human trafficking. This also applies to labor conditions in the extraction of raw materials such as cobalt and mica.

For this purpose, we advise suppliers to use the standardized reporting template available from the Responsible Minerals Initiative (RMI). With the help of data provided by RMI, we inform suppliers in business relationships with non-compliant smelters and/or refiners about alternative options for working with conflict-free smelters and/or refiners.

We call on our suppliers to practice due diligence along the supply chain. This includes implementing measures to ensure that the minerals used by suppliers – in particular tantalum, tin, tungsten, gold and cobalt – do not directly or indirectly promote or support armed conflicts, and are in no way connected to human rights violations.

In 2017, as a member of the DRIVE Sustainability Working Group ([www.drivesustainability.org](http://www.drivesustainability.org)), we partnered with other automotive manufacturers to launch an initiative on raw materials sourcing. This involves systematically identifying sustainability risks in the extraction of raw materials and devising measures to reduce these risks.

## SUPPLIER MONITORING

In the course of the business process, our business partners are required to complete our sustainability questionnaire and to document their activities relating to specified areas of responsibility. The questionnaire covers the areas defined in our sustainability requirements.

We are transferring our sustainability questionnaire over to the self-assessment questionnaire developed for use throughout the industry in a joint project with other automotive corporations involved in the DRIVE Sustainability Working Group organized by CSR Europe.

By the end of the reporting year, over 25,000 of our suppliers had completed a sustainability self-assessment questionnaire and submitted it to us. This covers around 89% of our total procurement volume. We use the responses to these self-assessments to help identify ways to enhance sustainability performance, and then communicate the latter to our suppliers. In the last fiscal year, by taking appropriate measures to enhance suppliers' sustainability performance, we were able to improve the sustainability performance of more than 1,500 suppliers.

### STATUS OF SUSTAINABILITY QUESTIONNAIRE

	Total in 2012–2017 cumulated	Status 2017, based on procurement expenditure	Procurement expenditure-based target for 2017	Procurement expenditure-based target for 2018
Sustainability Questionnaire (self-assessment)	25,046	89%	93%	93%

As one of our environmental requirements, we require our tier 1 suppliers to put in place a certified environmental management system that complies with ISO 14001 and/or EMAS. To date, 88% of our tier 1 suppliers have documented such a system. In accordance with the EMAS and ISO 14001 environmental certification and auditing procedures at our sites, contractors and suppliers who work on site and have an environmental impact are also subject to regular audits. In addition, we encourage our suppliers to put in place a certified occupational health and safety management system that complies with OHSAS 18001, SA8000 and/or AA1000.

Where selected business partners are identified by self-assessments or our internal analysis system as being at increased risk of non-compliance with sustainability requirements, they are – for example – audited by an external specialist on site. These audits cover all our sustainability assessment criteria, as well as interviews with employees of the selected suppliers; 321 suppliers were audited in the current fiscal year.

If there is reason to suspect that tier 1 suppliers or their subcontractors are failing to comply with our sustainability requirements, we ask the party concerned for a written statement using a standardized report (6D Report). Based on the six points we specify in the report, our business partners can describe the situation and any remedial measures. If the answers prove unsatisfactory, we take further steps, such as examining documentation or visiting the supplier's premises.

What we refer to as "ad-hoc cases" represent a significant proportion of our supplier assessment activity. These refer to the sudden discovery of instances where a supplier is suspected of non-compliance with our sustainability requirements. This may happen, for example, during an on-site audit.

Where such an ad-hoc or suspected case of non-compliance occurs, the ad-hoc expert team from the relevant brand or region coordinates the implementation of a series of remedial measures, as appropriate. In such cases, the team receives support from the corporate ad-hoc expert team in Wolfsburg.

In 2017, for example, we worked with selected suppliers to identify challenges involved in complying with sustainability requirements related to their management of subcontractors. Due to the complexity of the supply chains involved, we will continue to work on these issues with our suppliers in 2018.

Apart from sustainability issues, last year, for example, we identified non-conformances in the management of occupational health and safety during a third-party audit. Together with the supplier and the local ad-hoc expert team, we developed a plan of action. As part of implementing the action plan, the supplier's plant was inspected and the supplier was given practical help by the ad-hoc team. All remedial measures were completed by the end of 2017.

**PROCUREMENT VOLUME-BASED PROPORTION OF  
 ENVIRONMENTAL AND SOCIAL CERTIFICATION OF MAIN SUPPLIERS**

	2017	2016	2015	2014	2013
<b>Environmental certification (EMAS, ISO 14001)</b>					
Verified	61%	55%	49%	48%	44%
Self-assessed	27%	32%	35%	39%	40%
<b>Total</b>	<b>88%</b>	<b>87%</b>	<b>84%</b>	<b>87%</b>	<b>84%</b>
<b>Social certification(OHSAS 18001, SA8000, AA1000)</b>					
<b>Verified (Total)</b>	<b>50%</b>	<b>13%</b>	<b>9%</b>	<b>8%</b>	<b>6%</b>

**AD-HOC CASES 2017**

Total Group Procurement

Geographical distribution*	Context	Type of supplier	
Europe	21	Social standards	12
		Environmental protection	59
Asia	7	Subcontractor	3
North America	0	Compliance	35
South America	33	Multiple contexts	10
Africa	1		

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

In addition to 62 ad-hoc cases, our Internal Audit function uncovered an additional 31 cases in the reporting period which resulted in measures being agreed with suppliers. These cases involved supplier conduct that failed to comply with regulatory or contractual requirements, which was either reported by individuals or discovered in the course of regular program audits.

In addition, both employees and third parties can address possible cases of non-compliance via the Volkswagen Group's employee representation bodies or trade union associations, as well as through the Volkswagen Group's ombudsman system.

As a result of these audits and the above-mentioned ad-hoc cases, 16 business relationships were terminated in the reporting period.

## SUPPLIER TRAINING

To anchor the Sustainability in Supplier Relations concept more firmly throughout the Group, we are making employees more aware of sustainability issues along the supply chain and providing them with appropriate training. The concept is an established part of the skills profile for all Procurement employees. In 2017, more than 2,000 procurement staff worldwide were given training in this area. In addition, buyers of components associated with higher sustainability risks were given an intensive training program in a separate format.

To facilitate ongoing supplier development, we make an e-learning module on sustainability available to all suppliers as part of our business relationship, as well as to Volkswagen Group procurement staff, in all languages of the countries which have been defined as compliance risks. By the end of the reporting year, 29,000 suppliers – representing 80% of our procurement volume – had completed the e-learning module.

### STATUS QUO E-LEARNING „SUSTAINABILITY QUESTIONNAIRE“

	Total 2012–2017, cumulated	Status in 2017, based on procurement expenditure	Procurement expenditure-based target for 2016	Procurement expenditure-based target for 2018
E-learning	29,000	80%	83%	83%

Alongside the e-learning format, we also conduct issue-specific sustainability training courses and workshops with our suppliers at selected locations. During the reporting period, training events were held in Turkey, India, Italy, Germany, Argentina and Brazil. In total, around 700 personnel employed by some 360 of our suppliers were given training on sustainability issues at these events.

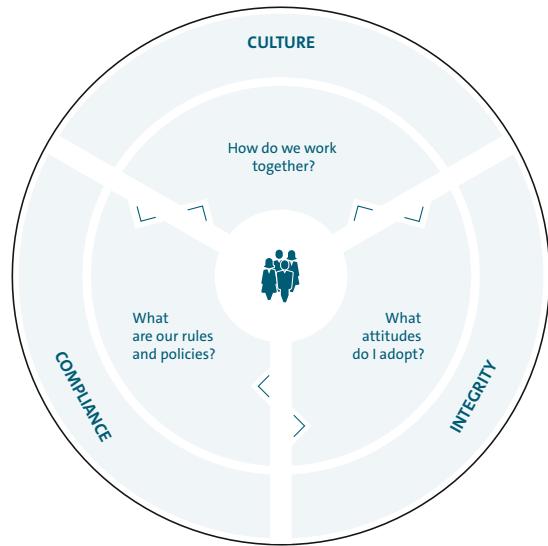
In 2015, as part of our efforts to work with our suppliers to minimize the negative environmental impacts of our vehicles, we also joined the CDP Supply Chain Program, which documents greenhouse gas emissions along the entire value chain.

 > Further information on this topic can be found in the Products and Production section on page 52

# Integrity

The massive loss of trust that followed the diesel issue in particular made it clear that our primary aim must be to become a role model for integrity. This intention represents one of the key objectives of our TOGETHER – Strategy 2025. In our integrity program, we are pursuing a three-dimensional approach that unites the dimensions of corporate culture, integrity and compliance:

## TOGETHER, INTEGRITY, CULTURE AND COMPLIANCE REPRESENT VOLKSWAGEN'S NEW SELF-IMAGE



The integrity management function is responsible for planning, preparing and implementing programs and projects that aim to raise, clarify and intensify our collective awareness of integrity, as well as reinforcing a shared culture of integrity within the Company. On 1 January 2016, we also created the Group Board of Management position for Integrity and Legal Affairs.

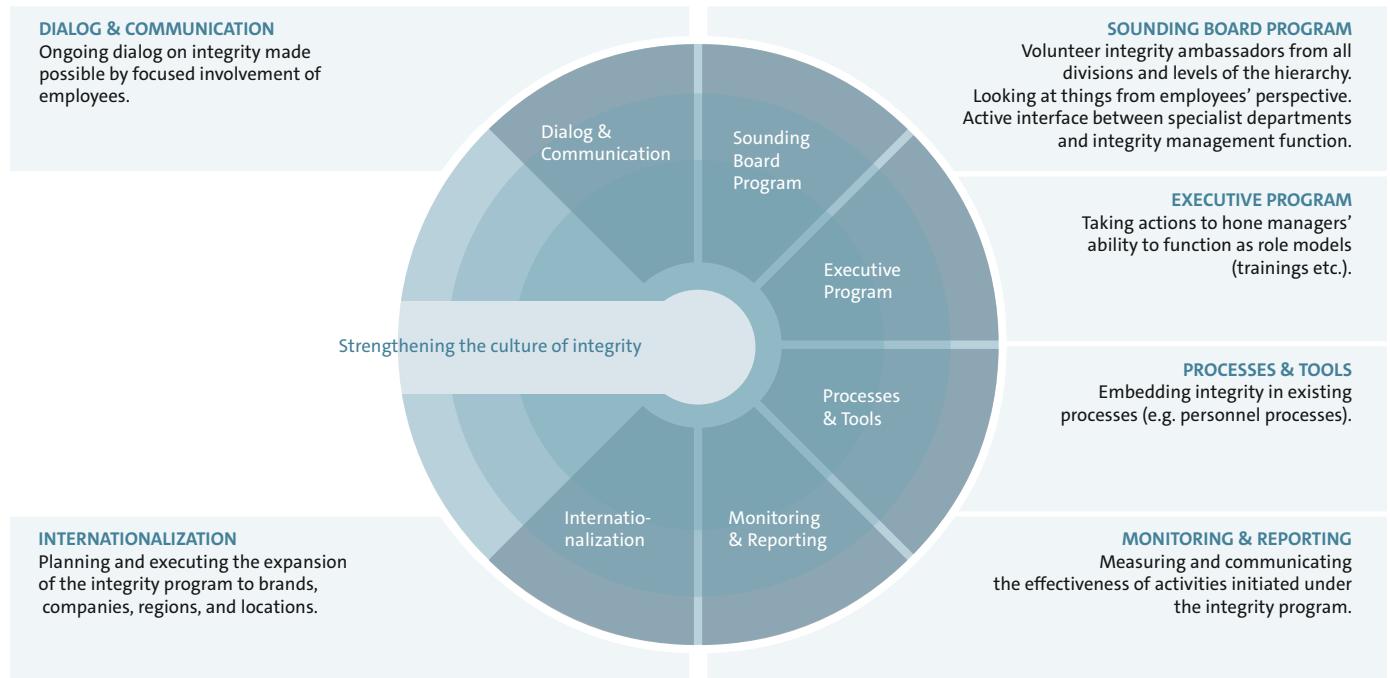
Because we value a neutral outside perspective, in 2016 we also appointed a Sustainability Council of experts in research, academia, science and politics. With their independent expertise and recommendations, they support our efforts to fulfill our social responsibilities, promote integrity, foster our stakeholder dialog, and advance the steady, sustainable development of our Company.

 > Further information on the work of the Sustainability Council can be found in our sustainability magazine Shift 2017 at:  
<https://www.volkswagenag.com/en/sustainability/shift.html>

Furthermore, the remuneration of the Group Board of Management is geared to the Company's long-term results. We have overhauled our remuneration system to balance the interests of our different stakeholder groups, ensuring that it:

- aligns with established market practice and regulatory requirements
- is geared to capital markets and reflects personnel-related transformation objectives
- incorporates the strategic goals of our TOGETHER – Strategy 2025
- sets ambitious goals for sustainable corporate growth
- incorporates an extended long-term perspective
- represents a key element of the Group's strategic realignment
- does not reflect any past events, hence focuses entirely on the future
- is based on a transparent target-compensation approach
- includes a total remuneration cap that is markedly lower than the caps for individual remuneration components
- is based on clear remuneration policy guidelines
- is transparent and easy to understand

## THE SIX ACTION AREAS OF THE INTEGRITY PROGRAM



## INTEGRITY PROGRAM

Our goal is to enhance the culture of integrity in the Group and create a collective awareness of integrity. To this end, in 2016 we launched an integrity program that includes all employees and is based on six action areas:

1. **Dialog & communication:** We regularly distributed information on the concept of integrity and its importance, and on the development of the integrity program. We also set up an integrity mailbox to facilitate direct communication between our employees and the integrity management function. In addition, we held a live chat on our internal social network to encourage discussion.
2. **Sounding Board program:** This program aims to improve dialog between the integrity management function and the workforce. This aim is facilitated by our Integrity Ambassadors – voluntary supporters drawn from our management and staff.
3. **Executive program:** The special responsibility of members of management to serve as role models for integrity was emphasized in a letter signed by the entire Group Board of Management. 7,300 managers, from group leaders to Board-level executives, participated in integrity training in the form of a mandatory web-based training course for all managers, as well as a mandatory four-day conference. We also provided managers with tools for communicating topics such as integrity, culture and compliance to the workforce.
4. **Processes & tools:** We continuously assess ways of integrating our principles of integrity into our key management functions, such as personnel processes. For instance, information on integrity is already a core element of our onboarding package for all newly hired employees, and in 2018, our web-based training course will become mandatory for all non-managerial employees.
5. **Monitoring & reporting:** Regular monitoring helps us to fine-tune and readjust our integrity program and to underscore the relevance of integrity as a topic. This includes the evaluation of feedback received from our Integrity Ambassadors, employees and managers, as well as reports in internal media and external publications. We are currently developing strategic KPIs, in some cases in consultation with external specialists.
6. **Internationalization:** Following the pilot phase at our Wolfsburg site, we are planning to expand the integrity program to include all brands, companies and regions. Employees responsible for governance, risk management and compliance will play an important role in this process.

# Compliance

In the long term, we can only succeed as a Company if we act with integrity, respect statutory provisions worldwide and stand by our voluntary undertakings and ethical principles, even when this is the harder choice. Compliance must be second nature to all employees of our Group.

The principles set down in the Volkswagen Group's Code of Conduct, which were completely reworked in the reporting year, are of essential importance to our employees and have been communicated throughout the Group. The responsibility of each and every employee to comply with rules and regulations is given special emphasis in the new Code of Conduct. We have included real-world examples under each topic and improved the readability of the text with the aim of making it relevant and useful to all employees. The Volkswagen Group Code of Conduct was signed by every member of the Group Board of Management.

 > The Volkswagen Group's complete Code of Conduct can be found at: [https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/Code\\_of\\_Conduct\\_2017\\_VW\\_Group\\_english.pdf](https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/Code_of_Conduct_2017_VW_Group_english.pdf)

Since 2016, the Board of Management's Integrity and Legal Affairs function has been responsible for compliance. A new Group Chief Compliance Officer has been in place since April 1, 2017. In the reporting year, new structures were created within the compliance organization and its staff expanded. In addition to centers of competence at Group level, the structure includes Divisional Compliance Officers and a Regional Compliance Office. The Group Chief Compliance Officer reports directly to the Board Member for Integrity and Legal Affairs.

The compliance organization is closely interconnected by various arrangements, including regular conferences and teleconferences. In addition, we have established the Volkswagen Group Compliance Committee under the direction of the Board Member for Integrity and Legal Affairs. The committee addresses monitoring, as well as the long-term, coordinated and continuing development of responses to fundamental compliance-related issues within the Volkswagen Group. The Group Compliance Committee is charged with the evaluation, implementation, coordination and documentation of any adjustments that may be required to structures and processes across all divisions and Group companies.

The Compliance department has positioned itself to meet future challenges. With the aim of better fulfilling this mission and drawing on lessons learned from past incidents, our whistleblower system, which was put in place in 2006, was improved and partially restructured in 2017; further optimization of the processes was completed on November 1, 2017. Among other initiatives, a central Investigation Office was set up in the Compliance department at the beginning of the year. It is responsible for coordinating the Volkswagen Group's whistleblower system and for processing tip-offs relating to Volkswagen AG or the Group, including all brands and companies.

In addition, AUDI AG, Dr. Ing. h.c. F. Porsche AG and Volkswagen Truck & Bus GmbH are setting up individual brand investigation offices for themselves and their subsidiaries.

Reports of compliance violations can be submitted in all of the Group's main languages and are handled confidentially. The people providing the information need not fear being punished by the Company for doing so. Whistleblowers always decide for themselves whether or not they wish to remain anonymous.

Thus in 2017, an additional, specially protected online reporting channel was set up to allow violations to be reported anonymously to the Investigation Office. As part of the ongoing development of the whistleblower system, employees of Volkswagen AG and other Group companies were made more aware of the system for reporting non-compliances and the system itself was restructured – among other things, to ensure that there was a uniform procedure in place across the Group. In 2017, 1,489 reports were registered across the Group via the whistleblower system, of which 841 were substantiated. In the case of all substantiated reports, investigations were or are being carried out, and any misconduct uncovered was or is being appropriately punished.

The whistleblower system focuses on the disclosure of suspected serious violations as defined in our guideline. We define serious violations as cases that could cause substantial harm to the interests of the Volkswagen Group or one of its Group companies – in particular, financial harm or damage to reputation. This includes, for example, breaches of criminal laws, violations of U.S. environmental regulations, and especially human rights violations. Infringements of our Code of Conduct or other internal regulations may also constitute serious procedural violations as defined in our whistleblower guideline.

Experienced lawyers and defense attorneys work in the whistleblower system. They follow up the tip-offs, taking both incriminating and exonerating factors into account. A full investigation is only launched after very careful examination of each report, and only if there is concrete evidence of a serious breach of the rules. The persons implicated are presumed innocent until proof of misconduct has been established. They are treated fairly, allowed to respond as soon as possible, informed of the outcome of the investigation, and vindicated if they have been wrongly accused. The process provides comprehensive protections both for the whistleblower and for the person accused.

 > Detailed information on the Volkswagen Group's whistleblower system can be found in the Group Management Report in our Annual Report 2017.

## PREVENTION THROUGH INFORMATION

To raise awareness of the importance of compliance, all new employment contracts between Volkswagen AG and management staff on the one hand, and employees covered by collective agreements on the other, include references to the Code of Conduct plus the obligation to comply with it. As part of the hiring process, all new employees receive a copy of the Code of Conduct, and participation in training courses on the Code of Conduct is mandatory for all employees under permanent contract to Volkswagen AG.

We are aware that the risk of individual misconduct can never be completely eliminated. To raise employee awareness of compliance-related issues, we use both traditional communication channels such as employee newsletters, magazines and information stands (at works meetings, for example), and also electronic media such as intranet portals and Group Connect.

In 2017, around 219,549 employees throughout the Group were given various forms of compliance training. Mandatory compliance training courses are held for specific target groups, following a risk-based approach. In addition to traditional lectures and online e-learning programs, case studies, role-play and other interactive formats are also used in employee and management training courses.

Employees are able to obtain advice on compliance issues by writing to dedicated e-mail addresses. Advice provided to employees of the Volkswagen brand focused in particular on the Code of Conduct and corruption prevention. Employees of Volkswagen AG are able to obtain personal advice about compliance issues by contacting the compliance organization via a dedicated e-mail address.

The Volkswagen Integrity, Culture and Compliance Convention also took place in the reporting year. A total of more than 7,300 executives, managers and Works Council members from Volkswagen AG, Volkswagen Sachsen and Volkswagen Osnabrück attended the event.

The aim of the convention was to continue driving forward the change process at Volkswagen. Executives from different levels of the management hierarchy explored topics such as integrity, cultural change and compliance in their everyday work, as well as their responsibility to lead by example. Participants prepared for the event by using an e-learning program to familiarize themselves with the issues.

# Risk Management

Promptly identifying the risks and opportunities associated with our operating activities and taking a forward-thinking approach to managing them is crucial to our Company's long-term success. A foresighted risk management process and effective internal control systems are therefore vitally important to us. Not only do we set high internal standards, we also insist that all our suppliers along our entire value chain comply with these standards.

Our risk management and internal control system (RMS/ICS) defines the primary principles and elements of our Group, forming the basis for the appropriate and effective management and control of material risks. This includes not only risks with impacts limited purely to the Volkswagen Group, but also risks that could have impacts on the environment and society.

## RISK MANAGEMENT AND INTERNAL CONTROL SYSTEM (RMS/ICS)

Our comprehensive RMS/ICS helps us deal with risks in a responsible manner. The organizational design of the Volkswagen Group's RMS/ICS is based on the internationally recognized COSO Enterprise Risk Management framework (COSO: Committee of Sponsoring Organizations of the Treadway Commission). In the reporting year, we continued to pursue a risk management approach that combines aspects of the internal control system with aspects of the compliance management system.

Our organizational guideline on risk management requires all divisions and business units to put a RMS/ICS in place. The exact operational form of the RMS/ICS is up to the risk managers in the individual divisions and business units. The Group Risk Management function supports the divisions by providing necessary training and participating in conceptual development.

The Board of Management receives ad-hoc, quarterly and annual risk reports.

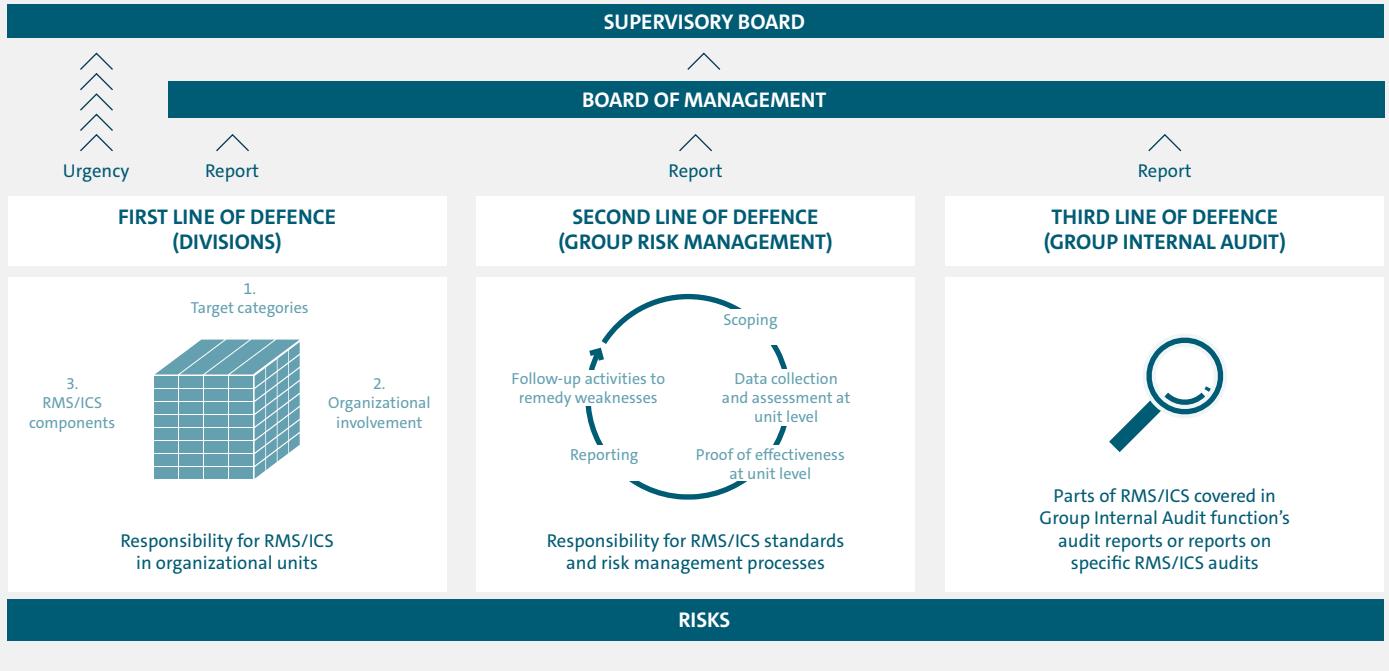
In 2017, we continued to reinforce our internal control system in the area of product compliance. This includes what are known as the Golden Rules.

Any assessment of the probability and scope of future events or developments is, by its nature, subject to uncertainty. We are therefore aware that even the best RMS cannot foresee all potential risks and even the best ICS can never completely prevent irregular or non-compliant actions.

Another key element of our RMS/ICS is the three lines of defense model – a basic element required, among others, by the European Confederation of Institutes of Internal Auditing (ECIIA). In line with this model, our RMS/ICS has three lines of defense that are designed to protect us from the occurrence of material risks.

 > A detailed overview of our risk management and internal control system can be found in the Report on Risks and Opportunities in our Annual Report 2017 on page 165–168.

## "THREE LINES OF DEFENSE" APPROACH



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

A detailed overview of our risk management and internal control system can be found in our 2017 Annual Report, in the Group Management Report's Report on Risks and Opportunities.

The diesel issue both causes intrinsic risks for the Volkswagen Group and has an impact on existing risks.

Risks that could impact on our bottom line also include general environmental risks and climate-change risks.

These include risks that could result from differing CO<sub>2</sub> and emissions regulations. Extreme weather situations, storms or floods can cause failures of information and communication technology, supplier failures resulting in production stoppages, or general production downtime at one or more of our production facilities around the world. Our evaluation of the overall risk situation includes the potential impacts

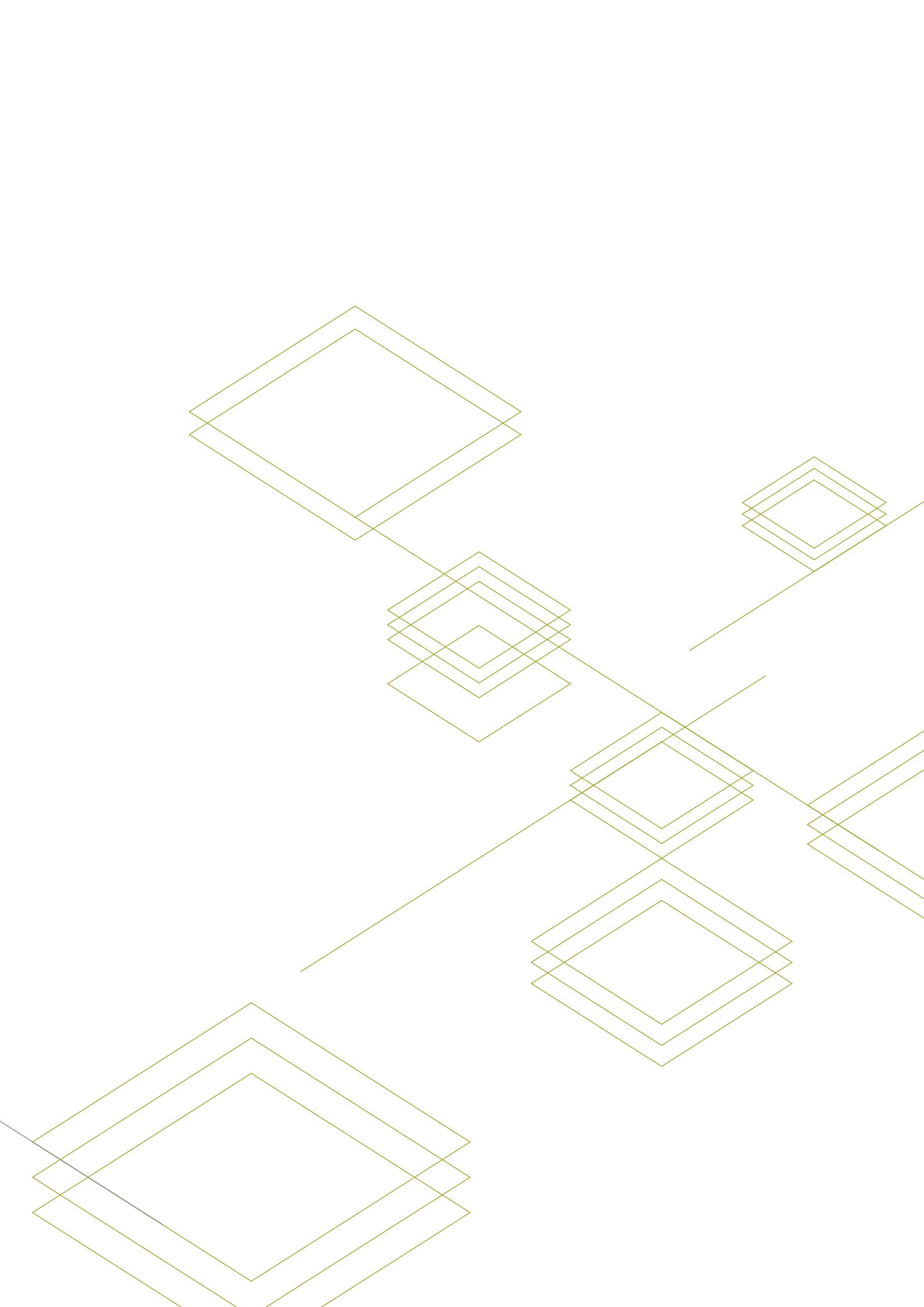
of natural disasters and resource shortages. Our risk assessment takes the form of a net analysis, i.e. taking account of any countermeasures initiated to minimize the risk.

Our Group risk management processes also take account of the risks associated with six nonfinancial aspects:

- Environmental matters
- Labor matters
- Social matters
- Customer matters
- Respect for human rights
- Combating corruption and graft

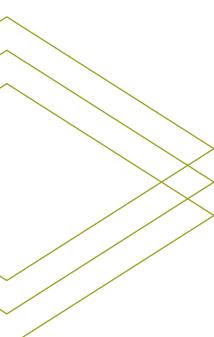
The Report on Risks and Opportunities in the Management Report provides an overview of the risks judged by the Volkswagen Group to be of material significance, including risks related to the six non-financial aspects subject to mandatory reporting. It also includes risks arising from the diesel issue under the nonfinancial aspects of environmental matters (see link below). Otherwise no other high-probability risks with potentially severe negative impacts on nonfinancial aspects were identified in fiscal year 2017.

 > Group Management Report > Report on Risks and Opportunities  
> Risks from the Diesel Issue



# Products and Production

Climate change, resource availability and urbanization are among the major global challenges facing us in the Volkswagen Group. Our TOGETHER – Strategy 2025 aims to make a significant contribution to ensuring that mobility has less impact on the environment. We also want to help attain the United Nations Sustainable Development Goals (SDGs). Our aim is to become a role model for environmental protection. We believe the transformation of our core business is the right way to meet these objectives.



# Management Approach – Products and Production

Our Group has a long tradition of commitment to environmental protection. It is firmly embedded in our TOGETHER – Strategy 2025 as one of our four corporate objectives. As one of the world's leading providers of sustainable mobility, we also want to become an Environmental Role Model. We are working toward this long-term goal by taking responsibility for the environment – day in, day out.

With this in mind, we have defined the following targets:

- To continuously improve our carbon footprint
- To continuously reduce our pollutant emissions
- To continuously reduce our resource consumption

For us, effective environmental protection means complexity and consistency in equal measure. This is why we are focusing on the development of environmentally friendly products by ensuring that our powertrain and fuel strategy is fundamentally sustainable. Roadmap E, which we adopted in 2017 as the centerpiece of our electrification drive, will be supported by innovative solutions for modern combustion engines and alternative drive systems. Research into sustainable mobility solutions and digitized business models is the final element in our strategic realignment.

We look at the entire life cycle from product development through production, from logistics – including the supply chain – through the use phase, right through to recycling (LifeCycle Thinking). At every stage, we take a holistic approach to analyzing environmentally relevant factors such as energy and CO<sub>2</sub> emissions, material management and recycling concepts, water management, recycling solutions, pollutants and nature conservation, in order to meet our ambitious decarbonization, pollutant reduction and resource conservation targets. We ensure that our progress toward meeting these targets is visible by participating in ratings and rankings.

We have set ourselves the goal of becoming one of the world's leading providers of sustainable mobility. Consequently, alongside traditional environmental management, we are making the quality assurance and safety of our products our top priority. This is the only way we can guarantee that our products meet the very highest standards of vehicle and transport safety.

## ORGANIZATIONAL STRUCTURE AND MANAGEMENT SYSTEMS

The Group Board of Management is the highest internal decision-making authority on environmental matters; it also functions as the Group's Sustainability Board. The Group-wide management of environmental protection is the responsibility of the Corporate Environment and Energy Steering Committee, with the support of numerous specialist bodies.

The Corporate Environment and Energy Steering Committee coordinates our brands and companies, and provides regular progress reports to the Board of Management.

All environmental protection activities in our Group are centered on our global principles. We continue to steadily expand and improve on these principles. The following principles are binding for all Group brands:

- Group Environmental Policy
- Group Environmental Principles Locations/Production
- Group Environmental Principles Product
- Mission Statement on Biodiversity

All responsible parties within the Group, working for our brands and at our locations, are required to comply with these environmental principles. The environmental policies and targets of our various brands are also derived from these principles.

Environmental Officers from every part of the Group regularly meet at the Group Environmental Conference (G.E.C.), seeking to optimize our eco-friendly alignment along the entire value chain.

Environmental protection is teamwork. This is why we involve employees across the whole Group in our efforts to jointly achieve the Group's environmental goals. One of the building blocks we use for this purpose is the "Works Agreement on Environmental Protection", which has been in place at Volkswagen AG factories (including the Technical Development department in Wolfsburg) since 1995 and was most recently updated in 2013. In support of the production process, the Volkswagen brand has appointed 318 ambassadors, including 196 Environmental Ambassadors (SfU) and 122 Energy Experts (SfE).

As at the end of 2017, 100 of our 120 production sites, as well as the Volkswagen Passenger Cars brand's Technical Development department, held a valid ISO 14001 or EMAS certificate. This equates to 99% of our workforce.

**SITES WITH ENVIRONMENTAL CERTIFICATION**

previous year in brackets

ISO 14001



100 (95)

ISO 50001



44 (42)

In addition, 44 production sites have had their energy management systems certified under the ISO 50001 standard. Since 2009, the “Integration of Environmental Factors into the Volkswagen Brand’s Product Development” model used in the Volkswagen Passenger Cars brand’s Technical Development department has also been certified to ISO/TR 14062.

In order to devise and implement savings initiatives at Group locations, the Environment Task Force analyzes production processes and workshop infrastructure. This optimization team from Corporate Environmental Research investigates and evaluates resource and energy flows in production, together with the resulting environmental impacts. Based on experience gathered from more than 30 analyses, the team is now able to systematically strengthen and drive forward the sharing of initiatives. With the Environment Task Force’s support, we were able to transfer these initiatives to South America, North America and China. Existing ideas – as well as many newly developed ones – were evaluated in terms of their local and climate-specific impacts and implemented wherever possible.

We use the “Massnahmen@web” IT system to record and catalog environmental measures and make them available for Group-wide sharing of best practices. In the reporting period, some 1,600 implemented initiatives relating to energy and the environment were documented in this system, all serving to improve our passenger car and light commercial vehicle infrastructure and production processes. As well as being worthwhile from an environmental viewpoint, these activities also make financial sense, resulting in annual savings of more than €37 million.



Further information on ISO 50001 certification can be found in the Sustainability sections of our brands:

- Volkswagen
- Audi
- Seat
- ŠKODA
- Bentley
- Lamborghini
- Porsche
- Volkswagen Nutzfahrzeuge
- MAN

**RESOURCE CONSERVATION THROUGHOUT LIFE CYCLE**

Our vision of forward-thinking, environmentally minded mobility spans every stage in the value chain. A comprehensive environmental assessment must consider all the environmental impacts of a vehicle over its full life cycle, from the manufacturing process – including resource extraction, production of materials, supplier processes and our own in-house production at all locations – through the use phase – including driving emissions, fuel preparation and supply – through to the ultimate recycling of the vehicle at the end of its life cycle.

The Group Environmental Conference held in September 2017 positioned “LifeCycle Thinking” as one of the key elements in our future business activities.

Improving each vehicle’s environmental performance over its full life cycle is one of the environmental objectives of the Technical Development function of our Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands. To meet this goal, we prepare detailed life cycle assessments (LCAs) for new vehicles, powertrains, components and materials. One of the outcomes of these activities was the creation of our in-house software package LEAD (Life Cycle Environmental Assessment Database). The system supports the Group-wide sharing of harmonized data that guarantees the use of standardized routines for calculating environmental footprints.



> Further information on sustainability standards as value creators for our brands can be found at:  
– Audi | Aluminium Stewardship Initiative

We lay the foundations for maximizing the fuel economy and resource efficiency of our vehicles during the product development process.

In 2017, we further extended our innovation and technology leadership by investing in new models, eco-friendly drive technologies and enhanced production processes. At the same time, we sought to make our cross-brand innovation management even more efficient, and to improve the interaction between our brands' development processes.

During the 2017 fiscal year, we concentrated our research and development activities across the Group on expanding our product portfolio and improving the functionality, quality, safety and environmental compatibility of our products – while simultaneously reducing the number of platforms we use. Our Group invested €13.1 billion in research and development in 2017. Much of this was spent on efficiency-enhancing technologies.

With respect to resource efficiency, we also evaluate life cycle improvement measures in economic terms. Our Corporate Research unit is currently involved in two long-term research projects, examining what the resource-efficient factory and resource-efficient vehicle of the future will look like. New technologies such as electric and fuel-cell vehicles play a key role here – especially in terms of their resource requirements – as do new closed-loop recycling concepts.

To ensure a holistic approach to optimization, we also involve our suppliers along the entire value chain so that together, we can minimize the environmental impacts of our vehicles. We became active members of the CDP Supply Chain Program (SCP) back in 2015. In 2017, we once again used the SCP to survey more than 100 suppliers who together represent 43% of our production-related procurement spending (excluding services, VW Brazil, Scania and our joint ventures in China). Overall, the response rate in 2017 rose to 84% (2016: 83%). According to our suppliers' self-assessments, they reduced their overall emissions by a total of 16.5 million t of CO<sub>2</sub>-e compared to the previous year (2016: 16 million t of CO<sub>2</sub>-e). In reporting year 2016, the CDP included Science Based Targets (SBT) in the questionnaire for the first time: 25% of the suppliers who responded have already set themselves SBTs or undertaken to do so. These emission reduction developments within our supply chain are contributing to Volkswagen's positive evaluation under the CDP rating's Leadership index.

## ACTION PLAN – PRODUCTS AND PRODUCTION

In our 2025 environmental program, two indicators record the progress we are making toward attaining two strategic objectives:

- In this context, we define the decarbonization index (DCI) as a strategic indicator which we use to measure progress. It measures products' CO<sub>2</sub> emissions along the entire value chain. It is calculated by dividing our CO<sub>2</sub> footprint by the number of vehicles produced. It thus incorporates both direct and indirect CO<sub>2</sub> emissions from the individual production sites (Scope 1 and 2), as well as all other CO<sub>2</sub> emissions occurring throughout the life cycle of the vehicles sold – from the extraction of raw materials through the use phase to the recycling of end-of-life vehicles (Scope 3). The DCI thus makes it possible to pursue milestones in a transparent, holistic way as we make our way toward climate-friendly mobility. We are currently defining DCI target values for 2025, in consultation with the Volkswagen Group brands. The outcome should ensure that our target values contribute to the two-degree target set in the Paris Agreement concluded at the UN Climate Conference in December 2015.
- Environmental impact reduction production per unit (UEP) was defined as part of our environmental production strategy, and target values were specified for the Group and brands. By 2025, we intend to reduce production-related environmental impacts per vehicle by 45% compared with 2010. UEP includes the consumption of energy and water, emissions of CO<sub>2</sub> and VOCs, as well as the volume of waste.

By the end of 2017, we achieved a 30.8% reduction in environmental impacts. The status at the end of 2017 compared with the 2010 baseline breaks down as follows (2016 figures in brackets):

- specific energy consumption: -17.9% (-17.1%)
- specific CO<sub>2</sub> emissions: -26.1% (-19.5%)
- specific VOC emissions: -49.4% (-40.2%)
- specific water consumption: -17.1% (-14.3%)
- specific waste for disposal: -43.3% (-34.7%)

## ACTION PLAN – PRODUCTS AND PRODUCTION

Action areas	Goals and actions	Deadline	Status
Climate protection and decarbonization	Decarbonization index (DCI)  Continuous reduction of our carbon footprint – CDP Report Scope 3 inventory	2018  2025	Currently we are defining DCI target values for 2025 in consultation with the Volkswagen Group brands  CDP Scope 3 inventory overall: increase in total CO <sub>2</sub> emissions per vehicle (Scope 1, 2, 3) from 33.0 t/a in 2016 to 33.3 t/a in 2017; CDP Scope 3 inventory, category 11: Status of CO <sub>2</sub> fleet emissions in 2017: EU: 122.1g CO <sub>2</sub> /km (cars and light commercial vehicles); China: 149.6g CO <sub>2</sub> /km (VWIC+SVW+FAW-VW); Brazil: 129g CO <sub>2</sub> /km; USA: 163.1g CO <sub>2</sub> /km (Audi/VW calendar year; excl. VWoA). CO <sub>2</sub> reduction status in production in 2017: -26.1% (2010 baseline) for passenger cars and light commercial vehicles
	Reduction of European new-car fleet CO <sub>2</sub> emissions to 95g CO <sub>2</sub> /km	2020	EU fleet CO <sub>2</sub> emissions in 2017: 122.1g CO <sub>2</sub> /km (passenger cars and light commercial vehicles)
	Regular external audits of emissions tests by independent experts; introduction of random, realistic testing of on-the-road emission behavior	2025	Launched in 2017
	Fitting particulate filters to TSI and TFSI engines	2017	Step-by-step installation of gasoline particulate filters (GPF) in all the Group fleet's direct-injection TSI and TFSI engines; by 2022, up to 7 million vehicles should be equipped with this technology every year
	Top places in selected product rankings, ratings and awards	2017	Environmental awards in 2017: VCS Auto Environmental Ranking Fleet News Awards WAVE Trophy 2017
Environmentally compatible products	Roadmap E: 80 new electric models, including 50 all-electric e-vehicles and 30 plug-in hybrids	By 2025	Electric vehicles (BEV): ▪ e-Golf ▪ e-up!  Plug-in hybrid vehicles (PHEV): ▪ Golf GTE ▪ Passat GTE ▪ Passat Variant GTE ▪ A3 Sportback e-tron ▪ Q7 e-tron quattro ▪ Panamera 4 E-Hybrid
	Roadmap E: end-to-end electrification of the entire model portfolio (at least one electrically powered version of each of the Group's approx. 300 models); > €20 billion for the industrialization of e-mobility	By 2030	See Roadmap E: status by 2025

### ACTION PLAN – PRODUCTS AND PRODUCTION

Action areas	Goals and actions	Deadline	Status
Resource conservation throughout life cycle	Reduction of greenhouse gas emissions from energy supply to production facilities in Germany by 40% per unit produced by 2020 (compared with 2010 baseline)	2020	Around €26 million invested in renewable energy generated by wind farms and photovoltaic power plants; investment of around €15 million in a cogeneration (CHP) plant; investment of around €65 million in a gas and steam turbine (combined cycle) plant; CO <sub>2</sub> emissions per vehicle from production operations in Germany have already been reduced by around 34% since 2010
	Environmental impact reduction production per unit (UEP): across the Group as a whole, energy and water consumption plus waste and emission levels have been reduced by 45% per unit produced (baseline: 2010)	2025	UEP totaled 30.8% in 2017
Nature conservation and biodiversity	Worldwide commitment to the protection of biodiversity at Group locations; appropriate targets are currently being drawn up	Ongoing	More than 80 nature conservation projects by 8 brands
Product and road safety	Systematic quality assurance along the entire value chain	Ongoing	
	Implementation of Vision Zero: zero fatalities or severe injuries in or due to vehicles manufactured by the Group	Ongoing	

# Powertrain and Fuel Strategy

The automotive industry is about to make the next quantum leap in innovation. We assume that by 2025, about one in every four new vehicles manufactured by the Group – so up to three million units per year, depending on market developments – could run entirely on battery power. Volkswagen's Roadmap E, first presented in public at the Frankfurt Motor Show (IAA 2017), underscores the Volkswagen Group's ambition to massively accelerate the electrification of its entire vehicle portfolio.

The Volkswagen Group's powertrain and fuel strategy paves the way for carbon-neutral, sustainable mobility – entirely in keeping with the United Nations Sustainable Development Goals (SDGs). We aim to boost powertrain and fuel efficiency with each new generation of vehicles – whether they are driven by combustion engines, hybrid drives, plug-in hybrids, all-electric powertrains or, perhaps at some point in the future, fuel-cell systems. All our mobility concepts are tailored to the requirements and customer needs of our respective markets. By taking this approach, we will broaden our portfolio of drive systems such that traditional powertrains will coexist with electric mobility (e-mobility) systems in the future. Our current modular matrix platforms are designed so that different drive systems can be deployed in various combinations and flexibly fitted on production lines in manufacturing facilities around the world. In the future, we will focus on expanding our range of electric powertrains. We will also be adding an electrically powered version of our modular matrix (the Modular Electrification Toolkit or MEB) to form the backbone of upcoming electric vehicles. The MEB offers a number of significant advantages, especially in terms of packaging, meaning the arrangement of powertrain components, auxiliary systems and interior features.

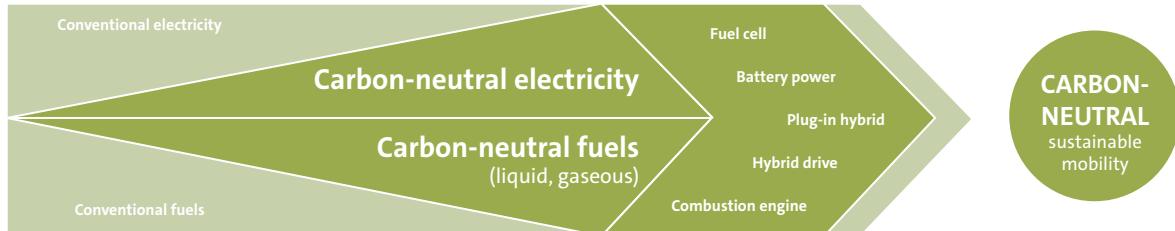


Audi Q7 3.0 TDI e-tron quattro – fuel consumption in l/100 km: 1.9–1.8 (combined); energy consumption in kWh/100 km: 19.0–18.1 (combined); CO<sub>2</sub> emissions in g/km: 50–48 (combined); CO<sub>2</sub> efficiency class: A+.



VW Passat GTE – fuel consumption in l/100 km: 1.7–1.6 (combined); energy consumption in kWh/100 km: 12.8–12.2 (combined); CO<sub>2</sub> emissions in g/km: 39–37 (combined); CO<sub>2</sub> efficiency class: A+.

## POWERTRAIN AND FUEL STRATEGY



## ROADMAP E

With Roadmap E as a core element of our TOGETHER – Strategy 2025, we are launching the largest electrification drive in the automotive industry. By 2025, we want to become a world leader in e-mobility. To do so, we will make more than 80 new, electric models available for purchase to our customers around the world, including some 50 all-electric vehicles and 30 plug-in hybrids. We are assuming that by 2025, one in every four new vehicles manufactured by our Group around the world will run on all-electric powertrains. Depending on how the market develops, this could be as many as 3 million electric vehicles per year. In subsequent years, this figure would then increase in leaps and bounds.

By 2030, we intend to electrify our entire model range. By this deadline at the latest, there will be at least one electrically powered version of each of the 300 or so models manufactured by the Group, across all brands and markets. This makes us the first major mobility company to commit to a specific deadline for the full electrification of its fleet. Roadmap E anticipates that we shall make more than €20 billion available for direct investments in the industrialization of e-mobility by 2030 – including investment in vehicles based on newly developed electric platforms with ranges of up to 600 km (375 miles).

Just to equip our own e-vehicle fleet, we will need a battery capacity in excess of 150 GWh per year by 2025. This corresponds to the annual battery cell manufacturing capacity of at least four “Gigafactories”. To make this possible, we have put one of the largest procurement volumes in the history of the industry out to tender: more than €50 billion.

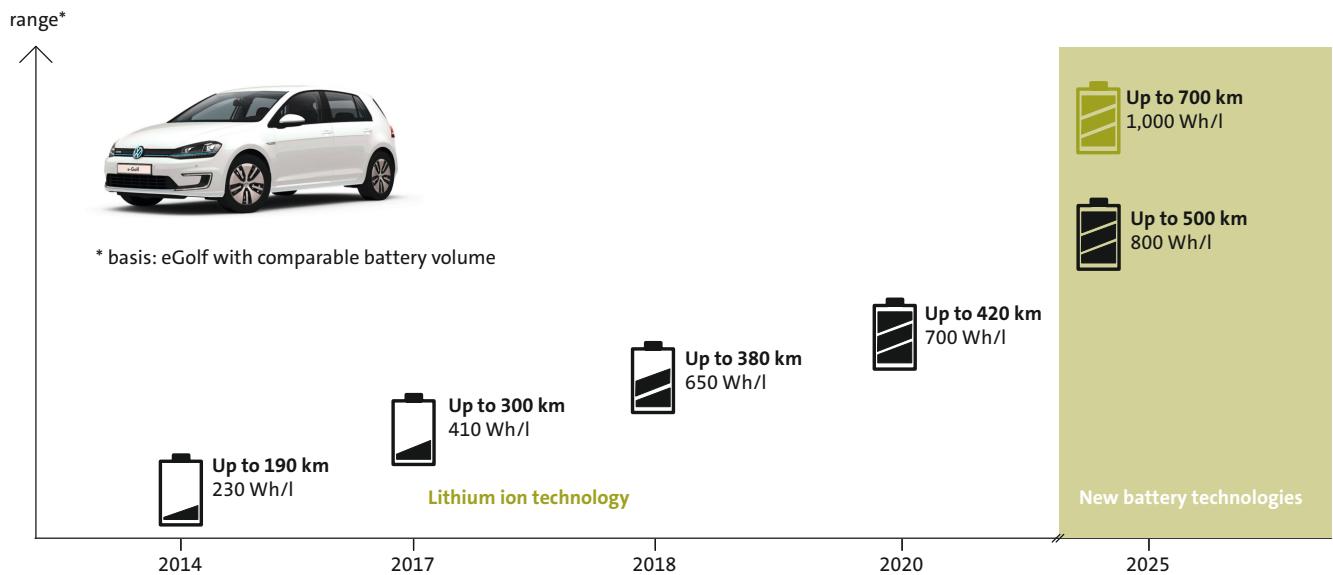


- Further information on e-mobility can be found in the Sustainability sections of our brands:  
– Audi | e-tron  
– Porsche | IONITY  
– Volkswagen | I.D. Family  
– Volkswagen Commercial Vehicles | e-Crafter  
– MAN | eTrucks

At the moment, we are using lithium-ion cells for our all-electric and plug-in hybrid vehicles; we assemble these cells into battery systems. We are currently researching various types of batteries based on solid electrolytes, which have a higher energy density and also meet stricter safety standards. We are investigating ways of industrializing these technologies.

With the announcement of our accelerated electrification drive, we are simultaneously advocating an orderly systemic transition, with the modern combustion engine acting as an indispensable bridge to an emission-free future.

## ROADMAP BATTERY CELL CHEMISTRY AND ENERGY DENSITY



We want to make sustainable, affordable mobility possible for the majority. To do so, we will continue to offer and improve our entire range of powertrains – from conventional to 100% electric. Even as we prepare for carbon-neutral, sustainable mobility, we will still need the combustion engine. Selected models like the Volkswagen up! with gasoline particulate filters already meet the stringent Euro 6 AG exhaust emissions standard, which will not become binding for all newly registered vehicles until September 2018. This year, we have already started the series production of an exceptionally fuel-efficient powertrain for our latest BlueMotion models, in the form of the 96 kW 1.5 TSI evo. Thanks to our new “sailing” mode – whereby the engine is switched off while the vehicle is coasting – and other technical innovations, the 1.5 TSI evo can achieve outstanding fuel efficiency of as little as 1.0 l/100 km in real-world conditions, depending on the customer’s driving style.

Today, every new diesel built by our Group is fitted with an SCR catalytic converter as standard, and we equip new gasoline engines with soot particulate filters across the board.

We feel it is more important than ever for us to rigorously pursue our modular approach. So that we can offer a broad product portfolio as economically as possible, we are reducing the variety of individual modules. In the case of our conventional combustion engines, for example, we will cut the number of variants within the Group by more than one third over the long term.

As vehicles become increasingly electrified, CO<sub>2</sub> emissions in the product life cycle are steadily shifting back toward the production phase; that is to say, the production of electric vehicles results in significantly higher CO<sub>2</sub> emissions than does the production of conventional vehicles, due in particular to battery production.

During the use phase, however, the tables are turned in favor of electric vehicles. If we consider both the CO<sub>2</sub> emissions resulting from the production of fuel or generation of electricity during a vehicle’s service life (approx. 200,000 km or 125,000 miles), as well as the CO<sub>2</sub> emissions produced by the actual combustion of fuel (in conventional vehicles), electric vehicles show a decided advantage. This advantage is so great that despite higher CO<sub>2</sub> emissions during the production phase, electric vehicles have a better carbon footprint over their entire life cycle than conventionally powered vehicles. This applies almost regardless of the electricity mix used by the electric vehicles (with the exception of heavily coal-dependent electricity mixes as found in e.g. China or Poland).

## ALTERNATIVE FUELS

Decarbonization begins with the type of fuel used. We are already in a position to use so-called “reduced-carbon” fuels across all our brands. The practical suitability of these fuels for use in combustion engines has already been comprehensively demonstrated, and in certain fields their use is already regarded as state of the art. They make it possible to achieve almost carbon-neutral long-distance mobility while simultaneously reducing other exhaust emissions (such as NO<sub>x</sub> and particulate emissions). Reduced-carbon fuels include biofuels (specifically, second-generation biofuels) and synthetic fuels (sometimes known as e-fuels) manufactured using hydrogen electrolysis powered by electricity from renewable sources.

By using compressed natural gas (CNG) for transportation purposes, that is, using methane as a fuel, we offer our customers an immediately available and affordable drive technology that supports sustainable mobility based on the combustion engine. With a broad pallet of CNG-powered models in the passenger car and commercial vehicle sectors, we are a market-influencing technology leader in this field. Just by using the fossil natural gas (methane) already available in the global gas network, we could cut CO<sub>2</sub> emissions by up to 25% compared with today's gasoline engines – while at the same time significantly reducing exhaust-gas emissions. And over the next few years, the use of biogas or e-gas (synthetic gas produced using electricity from renewable sources) could make CNG mobility almost entirely carbon-neutral.

A number of projects within the Volkswagen Group and among our brands, such as the Audi “Power-to-Gas” project (a power-to-gas plant in Werlte) and the SEAT “SMART Green Gas” (waste-to-gas) project are producing reduced-carbon fuels (biofuels, e-fuels) and renewable gas (biogas, e-gas).

Our Group is also exploring significant synergies with e-mobility through “sector coupling”, meaning the joint use of energy sources in the power generation, heat and mobility sectors.

-  > Further information on our brands' reduced-carbon fuels can be found at:
- Audi | e-fuels Strategy
  - SEAT | Smart Green Gas
  - Scania | Hybrid technology

For heavy commercial vehicles like trucks and buses in particular, liquefied natural gas (LNG) is an economical and clean alternative, because its high energy density is ideal for long-distance applications.

However, in order for natural gas to become a widely usable energy source, better infrastructural conditions are needed. For example, natural-gas filling station networks are only sufficiently developed in a few countries.

-  > Further information on our brands' alternative powertrain concepts can be found at:
- Audi | e-gas system offer
  - Scania | Alternative fuels
  - MAN | Innovative transport and energy solutions
  - Volkswagen Commercial Vehicles | CNG powertrain

Under Audi's leadership, we are also investigating hydrogen (H<sub>2</sub>) as an energy source. We have been working on fuel-cell technology – used to transform H<sub>2</sub> into electrical energy in the vehicle – for more than 15 years. While operating our test fleets, we have gathered extensive practical experience of suitable powertrains. One of the key factors required for H<sub>2</sub> to succeed is a suitable refueling infrastructure. Based on what we know at present, H<sub>2</sub> will not be widely available as a fuel in the medium term. For this to be possible, hydrogen filling stations and plants for producing hydrogen as a renewable energy source must first be developed. For this reason, we are actively involved in the H<sub>2</sub> Mobility project, the aim of which is the systematic development of an H<sub>2</sub> infrastructure in Germany. We will make the decision on whether to use H<sub>2</sub> in production vehicles on the basis of market demand and infrastructure.

## ECO-FRIENDLY POWERTRAIN TECHNOLOGIES IN THE GROUP<sup>1</sup>

Vehicles produced

		2017	2016	Change (2016 to 2017)
Globally	Gas drives (natural gas and LPG)	84,938 (0.82%)	72,955 (0.73%)	↗ +14%
	Hybrid drives	39,525 (0.38%)	39,037 (0.39%)	↗ +1%
	All-electric drives	20,913 (0.20%)	15,729 (0.16%)	↗ +25%
	<b>Eco-friendly drives (total)</b>	<b>145,376 (1.40%)</b>	<b>127,721 (1.27%)</b>	↗ +12%

		2017	2016	Change (2016 to 2017)
Western Europe <sup>2</sup>	Gas drives (natural gas and LPG)	34,537 (1.01%)	30,807 (0.90%)	↗ +11%
	Hybrid drives	34,939 (1.02%)	33,222 (0.97%)	↗ +5%
	All-electric drives	16,305 (0.47%)	9,480 (0.28%)	↗ +42%
	<b>Eco-friendly drives (total)</b>	<b>85,781 (2.50%)</b>	<b>73,509 (2.16%)</b>	↗ +14%

<sup>1</sup> Volkswagen Group production: VW PC, Audi, ŠKODA, SEAT, VW light commercial vehicles, Audi light commercial vehicles excl. luxury brands.

<sup>2</sup> Western Europe: BEL, DNK, DEU, FIN, FRA, GRC, GBR, IRL, ISL, ITA, LUX, NLD, NOR, AUT, PRT, SWE, CHE, ESP, rest of W. Europe.

# Energy, CO<sub>2</sub> and Climate Change

We welcome the ratification of the Paris Agreement on climate change, which aims to limit global warming to less than 2°C above pre-industrial levels. Referring to international climate agreements, our CEO Matthias Müller is calling upon the automotive industry to ensure that all fleet CO<sub>2</sub> emissions "are steadily reduced to zero by 2050."

## ENERGY CONSUMPTION AND CO<sub>2</sub> EMISSIONS

To reduce energy consumption and CO<sub>2</sub> emissions across the Group, we are relying on a combination of measures, including improved energy efficiency, the use of gas instead of coal for power generation, and the procurement of electricity from renewable sources. We now meet around 37% of our global electricity requirements from renewables.

Our most effective lever for reducing our global carbon footprint is to optimize CO<sub>2</sub> emissions from our vehicle fleet. After all, according to the Scope 3 GHG Inventory, 74% of all CO<sub>2</sub> emissions are produced during the use phase.

And this does not take into account direct CO<sub>2</sub> emissions from our company cars. We are currently working on standardizing the methods used to record emissions from our company-car fleet worldwide.

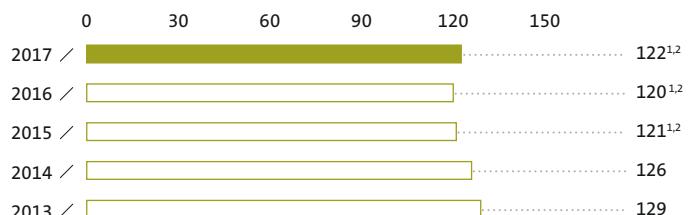
The Volkswagen Group's new passenger car fleet in the EU (excluding Lamborghini and Bentley) emitted an average of 122 g CO<sub>2</sub>/km\* over the reporting period – well below the European limit of 130 g CO<sub>2</sub>/km applied in 2017. The slight increase compared with the previous year is mainly due to the new measurement procedures that must be used, and the decline in the proportion of diesel-vehicle deliveries. As small-volume manufacturers, the Lamborghini and Bentley brands each have an independent fleet for the purposes of the European CO<sub>2</sub> legislation; Bentley complied with its individual target, Lamborghini was slightly above its target.

CO<sub>2</sub> emissions from the Volkswagen Group's new passenger car fleet outside the EU break down as follows:

In the USA, the fleet emissions figure is 163.1 g CO<sub>2</sub>/km (Audi/VW calendar year; not including Volkswagen of America (VWoA)), in China 149.6 g CO<sub>2</sub>/km (Volkswagen Group (Import) Co. Ltd. (VGIC) + Shanghai Volkswagen (SVW) + First Automotive Works (FAW-VW)), and in Brazil 129 g CO<sub>2</sub>/km.

### CO<sub>2</sub> EMISSIONS<sup>1,2</sup>

of the Volkswagen Group's European (EU28) new Passenger Car Fleet



<sup>1</sup>This figure is the volume-weighted average of all specific CO<sub>2</sub> emissions from new passenger cars registered for the first time in the respective calendar year, based on the calculation logic defined in EU Regulation 443/2009 ("NEDC test cycle").

<sup>2</sup>Subject to official publication by the European Commission.

As a result of a continuous rise in production volumes, our overall energy consumption has increased since 2010. At the same time, we have been able to reduce our energy consumption per vehicle by -17.9% since 2010, from 2,519 kWh to 2,069 kWh. Over the past year, we have reduced energy consumption per vehicle by -1.0% compared with the previous year.

Our overall consumption of electrical energy has risen in comparison with 2010, even though we have taken various efficiency-enhancing measures to successfully reduce our electricity consumption per vehicle since 2010.

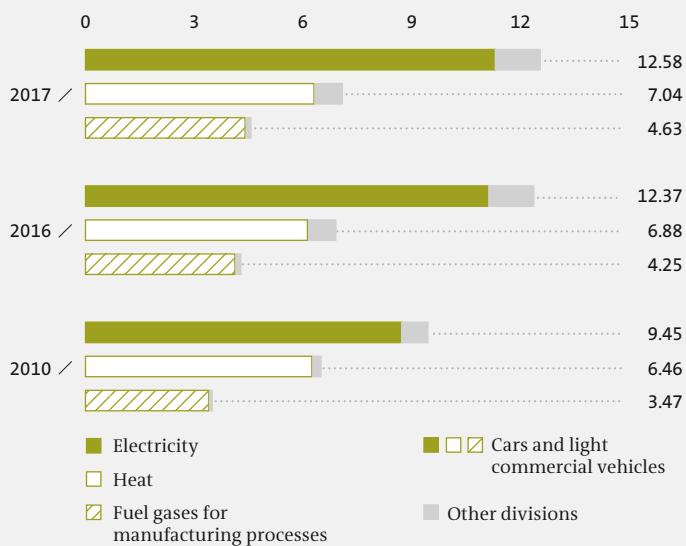
Heat consumption is subdivided into space heating demand for production and non-production areas in manufacturing facilities, and heating demand for technical processes. Since space heating accounts for the greater proportion of the total heating demand, weather conditions have a major impact on trends in overall heating demand. Our absolute heat consumption has risen slightly since 2010.

\* Subject to official publication by the EU Commission in the annual CO<sub>2</sub> fleet monitoring statistics.

Increased production volumes and downstream procedures for the thermal afterburning of VOC emissions from paint shops resulted in higher consumption of gases used to fuel manufacturing processes. This went hand in hand with a slight deterioration in the specific value per vehicle.

#### ENERGY CONSUMPTION\*

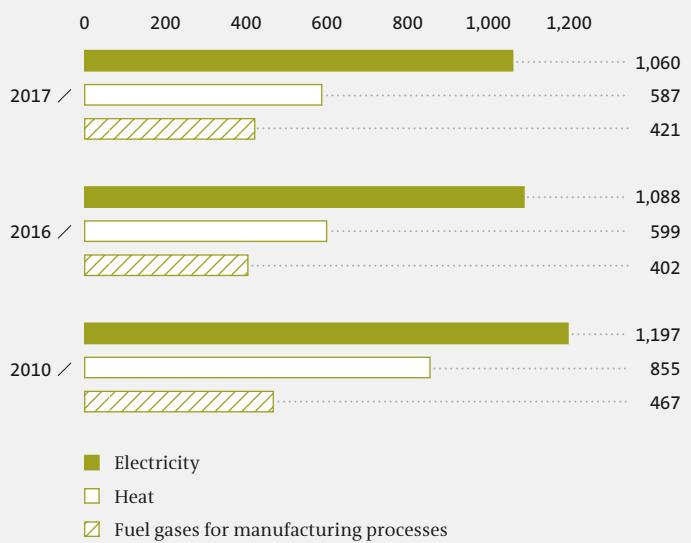
in million MWh/year



\* Cars and light commercial vehicles and other divisions.

#### ENERGY CONSUMPTION\*

in kWh/vehicle



\* Cars and light commercial vehicles.

> Further information on sustainable electricity generation and procurement can be found at:  
 – Lamborghini | trigeneration system (CCHP) and biogas  
 – Ducati | trigeneration plant  
 – MAN | CHP Munich



Volkswagen AG supported the INEES research project by providing 20 VW e-up! cars. VW e-up! energy consumption in kWh/100 km: 11.7 (combined); CO<sub>2</sub> emissions in g/km: 0 (combined); CO<sub>2</sub> efficiency class: A+.

Since 2011, VW Kraftwerk GmbH has been investing in the ongoing development of renewables and the construction of highly efficient combined heat and power (CHP) plants driven by natural gas. Thus in the period to 2016, the company invested around €26 million in renewables such as wind farms and photovoltaic power plants. As part of our fuel conversion strategy, VW Kraftwerk GmbH also invested some €15 million in a CHP plant in Braunschweig and some €65 million in a gas and steam turbine (combined-cycle) plant in Kassel. Furthermore, in addition to the company's own electricity generation activities, we are already implementing an increasingly widespread energy program for the Volkswagen Group's production sites in Germany using carbon-neutral Volkswagen Naturstrom®. The electricity is generated from 100 % renewable energy sources. It is backed up by certificates of origin, validated for each user by the German Federal Environment Agency (UBA). Contractual agreements have already been signed for supplying Volkswagen Naturstrom® to other sites. Over the next few years, VW Kraftwerk GmbH will also be looking to invest in new combined-cycle power plants in Wolfsburg, and in the further development of renewables.

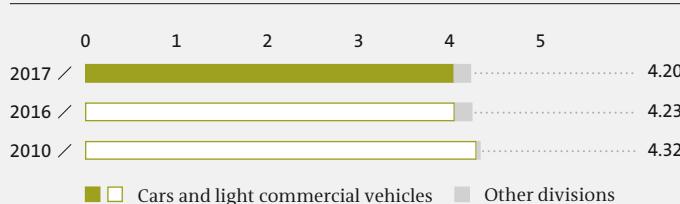
As an example of such development, once we have received approval for the construction and operation of certified wind power plants with a total capacity of 12.8 MW at our MAN Salzgitter site, we are planning to take part in the Renewable Energy Act (EEG) tendering process in 2018. Once our bid has been accepted under the EEG tendering process, we can start to build the wind farm.

Despite the inclusion of new production sites (along with the associated increase in energy consumption), direct CO<sub>2</sub> emissions in the cars and light commercial vehicles category, and indeed across the Group as a whole, have been falling since 2010.

Direct CO<sub>2</sub> emissions are associated with the combustion of fossil fuels, the use of which we have successfully reduced. This reduction in the absolute volume of emissions goes hand in hand with the decline in direct CO<sub>2</sub> emissions per vehicle since 2010.

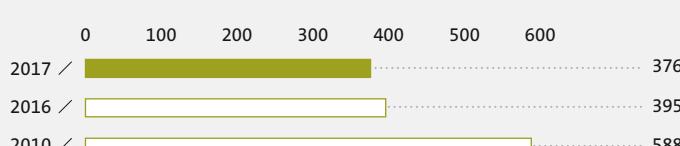
#### DIRECT CO<sub>2</sub> EMISSIONS SCOPE 1\*

in million tonnes/year



#### DIRECT CO<sub>2</sub> EMISSIONS SCOPE 1\*

in kg/vehicle



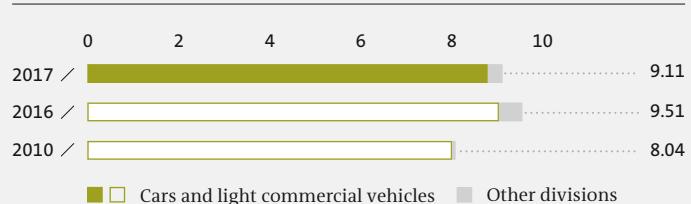
\* Cars and light commercial vehicles.

CO<sub>2</sub> emissions (Scope 1 and 2) have fallen since 2010, thanks to improved energy efficiency and a reduced-carbon energy supply. As a result, we have been able to reduce CO<sub>2</sub> emissions per vehicle by -26.1% since 2010, from 1,096 kg to 810 kg of CO<sub>2</sub>. Last year alone, we were able to reduce CO<sub>2</sub> emissions per vehicle by -8.3% compared with the previous year.

Volkswagen AG operates power stations and boiler plants, which generate heat and electricity for production facilities owned by Volkswagen AG and third parties. CO<sub>2</sub> emissions from these power stations and boiler plants are included in the total CO<sub>2</sub> emissions figure for our Group by assessing the heat and energy consumption of our production facilities using suitable CO<sub>2</sub> emission factors.

#### CO<sub>2</sub> EMISSIONS SCOPE 1 AND 2\*

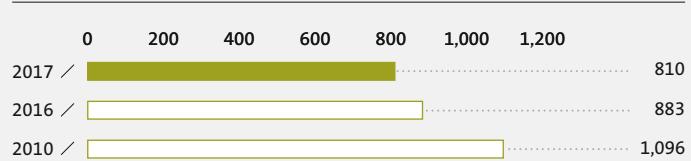
in million tonnes/year



\* Cars and light commercial vehicles and other divisions.

#### CO<sub>2</sub> EMISSIONS SCOPE 1 AND 2\*

in kg/vehicle



\* Cars and light commercial vehicles.

We have not taken direct CO<sub>2</sub> emissions from company cars and official works vehicles into account. We are currently working on standardized methods for recording emissions from our company-car fleet around the world. Preliminary calculations for Volkswagen Deutschland and Audi indicate a 2.6% increase in total CO<sub>2</sub> emissions in the footprint under investigation.

Not shown here are Group carbon offset projects equating to 6,577 t of CO<sub>2</sub> reductions.

On the other hand, the stated CO<sub>2</sub> emissions do not include emissions produced by Volkswagen AG power plants in the course of supplying district heating or power to third parties. In 2016, these emissions amounted to 379,516 t of CO<sub>2</sub>.

### GHG EMISSIONS SCOPE 3

in the Volkswagen Group (cars and light commercial vehicles)

No.	Category	2017 <sup>1</sup>		2016 <sup>1</sup>	
		tonnes CO <sub>2</sub>	%	tonnes CO <sub>2</sub>	%
<b>1</b>	Purchased goods and services	64,139,109	18.9	59,415,034	18.2
<b>2</b>	Capital goods	13,846,493	4.1	13,767,328	4.2
<b>3</b>	Fuel/energy	1,399,741	0.4	1,363,103	0.4
<b>4</b>	Upstream transportation and distribution <sup>2,3</sup>	3,795,390	1.1	3,795,390	1.2
<b>5</b>	Waste generated in operations	2,259,423	0.7	2,137,095	0.7
<b>6</b>	Business travel	685,148	0.2	668,894	0.2
<b>7</b>	Employee commuting	976,650	0.3	953,480	0.3
<b>8</b>	Upstream leased assets <sup>3</sup>	Not reported	—	Not reported	—
<b>9</b>	Downstream transportation and distribution <sup>4</sup>	Not reported	—	Not reported	—
<b>10</b>	Processing of sold products	13,000	0.004	13,000	0.004
<b>11</b>	Use phase (150,000 km) <sup>5</sup>	249,466,650	73.3	241,679,689	73.6
<b>12</b>	End-of-life treatment <sup>2</sup>	1,114,154	0.3	1,606,582	0.5
<b>13</b>	Downstream leased assets <sup>4</sup>	942,053	0.3	1,033,703	0.3
<b>14</b>	Franchises	1,550,000	0.5	1,550,000	0.5
<b>15</b>	Investments	Not reported	—	Not reported	—
<b>Total of reported Scope 3 emissions</b>		<b>340,187,811</b>	<b>100</b>	<b>328,408,918</b>	<b>100</b>

<sup>1</sup> Individual figures are rounded. This may lead to minor discrepancies in the sum total.

<sup>2</sup> Figure based on the 2017 CDP report – the figure for 2017 will appear in the 2018 CDP report.

<sup>3</sup> Upstream.

<sup>4</sup> Downstream.

<sup>5</sup> Well-to-Wheel.

In line with the Scope 3 standards published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), we report CO<sub>2</sub> emissions for 12 out of a total of 15 Scope 3 categories. Our calculations have revealed that the “Purchased goods and services” and “Use phase” emission categories account for around 92% of all Scope 3 emissions. CO<sub>2</sub> emissions in the use phase are calculated on the basis of a Group fleet value representing the global vehicle population in the four major regions (EU28, USA, Brazil and China). In order to provide as complete a picture 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).

In our quest to improve our environmental performance, we do not limit our efforts to the interiors of our production facilities, we also look at our Group real estate as a whole. In 2017, Volkswagen Immobilien GmbH formulated a holistic sustainability model. Not only does the model focus on the entire life cycle of each property, including construction, operation and maintenance; it also examines how each asset is funded. By taking this holistic approach, we aim to make a significant contribution to the Group’s strategy. We would also like to take a leading role in the residential real-estate sector as a sustainable investor in the region. In 2017, we completed a number of construction projects that complied with our own “Blue Building” sustainability standard and subsequently leased them in full.

 > Further information on our BLUE BUILDING concept and other

sustainable building approaches can be found at:

<https://www.vwimmobilien.de/wohnen/neubauprojekte/blue-building.html>

– Porsche | Sustainable Building

– Lamborghini | LEED office building

## EMISSIONS TRADING

32 of our Group locations take part in European emissions trading. For 2017, a total of 1,116,441 emissions certificates were allocated to the Volkswagen Group free of charge (69,977 fewer than in the previous year).

The European Commission is planning further modifications in emissions trading when the fourth trading period begins (from 2021) that may lead to reinforcement of the system and thus to price increases in the certificates. In addition to the EU member states, other countries in which the Volkswagen Group has production sites are also considering introducing an emissions trading system. Seven corresponding pilot projects are running in China, for example, although they have not so far affected the Volkswagen Group. The Chinese government officially implemented a national emissions trading system at the end of 2017. Initially, the impact will only be on the energy generation sector; a gradual expansion is being planned.

## NEW TEST PROCEDURES FOR MEASURING EXHAUST EMISSIONS AND FUEL CONSUMPTION

Since 1 September 2017, new procedures have been in place for measuring exhaust-gas emissions (such as particulates and nitrogen oxides) and consumption (CO<sub>2</sub>) by new vehicle models in the EU. On test benches, the new WLTP standard is replacing the old NEDC test cycle. The new procedure is more dynamic and should better reflect on-the-road driving conditions in the laboratory. A significant innovation in the measurement of fuel consumption: in the future, every vehicle will also be assigned an individual CO<sub>2</sub> value. Under the NEDC standard, CO<sub>2</sub> values were arranged in families.

The abbreviation WLTP stands for "Worldwide Harmonized Light Duty Vehicles Test Procedure". The new test cycle was introduced in order to establish internationally standardized CO<sub>2</sub> emission measurements for passenger cars and light commercial vehicles, and to provide a more realistic picture of levels of CO<sub>2</sub> emissions and fuel consumption for end-customers.

The second stage of the WLTP cycle's introductory phase is due to start on 1 September 2018, at which point all new vehicles will have to be tested using the WLTP's fuel consumption and exhaust-gas emission testing methods.

In addition, under what is known as Real Driving Emissions (RDE) legislation, on-the-road threshold values for particulates (PN) and nitrogen oxides will also come into force for the first time. This means that for the first time, exhaust-gas emission limits will not only apply on the test bench, but also on the road.



e-Golf (100 kW/136 PS) – energy consumption in kWh/100 km: 12.7 (combined); CO<sub>2</sub> emissions in g/km: 0 (combined); CO<sub>2</sub> efficiency class: A+.



up! TSI BMT – fuel consumption in l/100 km: urban 5.5 / extra-urban 3.8 / combined 4.4; CO<sub>2</sub> emissions in g/km: 101 (combined); CO<sub>2</sub> efficiency class: B.

# Production and Logistics

The “Ecologically Exemplary Production” initiative is firmly anchored in our production strategy, which is derived from our Group strategy. As part of this initiative, we will be working to achieve four key objectives by 2025:

- Setting and achieving ambitious environmental targets for production
- Developing a long-term vision for environmental targets in production and rolling it out across the Group
- Improving employees' environmental awareness and incorporating relevant environmental aspects into Group processes
- Achieving top positions in prestigious environmental rankings

With this in mind, we have set ourselves the ambitious goal of reducing levels of the five key environmental indicators per vehicle manufactured – energy and water consumption, waste for disposal, CO<sub>2</sub> and VOC emissions – by 45% by 2025 (compared with the 2010 baseline). This target applies to all the Group's production sites and builds on the eco-friendly production process requirements defined in our Group Environmental Principles.

In addition to continuously reducing these five environmental indicators, we are also actively pursuing other initiatives which aim to improve our material processing efficiency, recycling levels, environmental protection in logistics, and nature conservation.

-  > Further information on our brands' “Ecologically Exemplary Production” initiative can be found at:  
– Volkswagen | Think Blue. Factory  
– ŠKODA | GreenFuture  
– Indien | Think Blue. Factory  
– China | CHP of SAIC VOLKSWAGEN

## MATERIAL INPUT AND RECYCLING

In our efforts to achieve sustainable production, the use of low-impact raw materials plays an important role in reducing our consumption of natural resources.

To manufacture our vehicles, we need production materials comprised of renewable and non-renewable resources. Our efforts to conserve resources over the entire life cycle of our vehicles start at the earliest development stage. By taking this approach, we can continuously reduce the environmental impacts of the materials we use by prioritizing renewable and secondary raw materials.

This is why we focus on using renewable raw materials in vehicle production: wherever possible, our Group brands use natural-fiber-based raw materials such as flax, cotton, wood, cellulose and hemp in floor insulation, trunk linings, door and side-panel trims, and hood insulation. But even when using these renewable materials, we adhere to

strict sustainability standards: in certain instances, negative environmental impacts based on water, fertilizer, energy or land requirements, not to mention social factors such as competition with food crops, may militate against the use of renewable raw materials.

Lightweight body-shell production is a strategic development priority. In terms of functionality, quality, safety and environmental compatibility, we are either improving our existing products or designing brand-new ones. We use hot-formed, high-strength steels in production models. While a lot of energy is required to manufacture these products, the lighter vehicle bodies make it possible to reduce CO<sub>2</sub> emissions and hence improve our products' environmental impact. We are also pursuing a composite materials approach for certain vehicles and platforms, using a range of different materials in one body shell. When developing new platforms, we also use lightweight materials such as aluminium.

-  > Further information on our brands' lightweight body shell construction can be found at:  
– Scania | Light truck

Another element in our sustainable use of materials is the introduction of closed-loop material cycles in our production processes.

Instead of primary raw materials, we increasingly rely on recycled materials. These are obtained from production residues or end-of-life materials – but must meet exactly the same quality standards as primary raw materials.

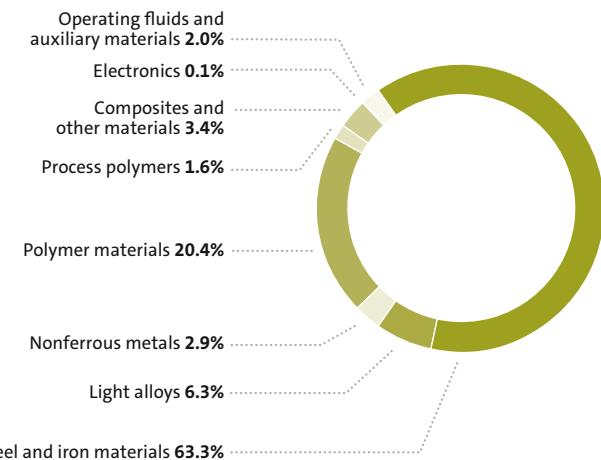
Recycling enables us to further reduce our products' environmental impact, while at the same time conserving resources. For example, even at the development stage of new vehicles, we pay attention to the recyclability of the required materials, the use of high-quality recycled materials and the avoidance of pollutants. This means that end-of-life vehicles can be 85% recycled and 95% recovered.

Other measures that are steadily improving our vehicles' environmental performance focus on, for example, extending the battery life of lithium-ion batteries and introducing closed-loop recycling of their materials.

The implementation of the Aluminium Closed Loop Project in 2017 was the first time we had organized a closed loop for aluminium with non-Group suppliers. The project returned sheet aluminium scrap from our press shops directly to suppliers for subsequent reuse in vehicles.

To calculate the proportion of recycled materials in an entire vehicle, we identify the materials in all of the vehicle's components, together with their recycled material content, and add them up. In order to do this, we depend on reliable information obtained directly from our suppliers, as well as data from industry-specific associations.

## INPUT MATERIALS AND PRIMARY PRODUCTS AS ILLUSTRATED BY THE EXAMPLE OF THE VW POLO (2017)



## WATER

Conserving our planet's freshwater reserves is one of the pivotal requirements for preserving the basic necessities of life. Water resources are already scarce in many parts of the world, and access to clean drinking water is an increasingly pressing problem for large sections of the global population. During our products' use phase, water consumption only plays a minor role. The supply chain is a significant consumer of water, however, especially during the extraction or creation of raw materials. We have no direct influence over this upstream phase. Consequently, to reduce our water consumption, we are focusing on areas which we can influence directly: our production plants. Our latest review indicates that 55% (around 22 million m<sup>3</sup>) of our entire freshwater consumption is attributable to sites located in regions where groundwater resources are at risk.

The water management strategy adopted by the Corporate Environment & Energy Steering Committee defines four areas of activity:

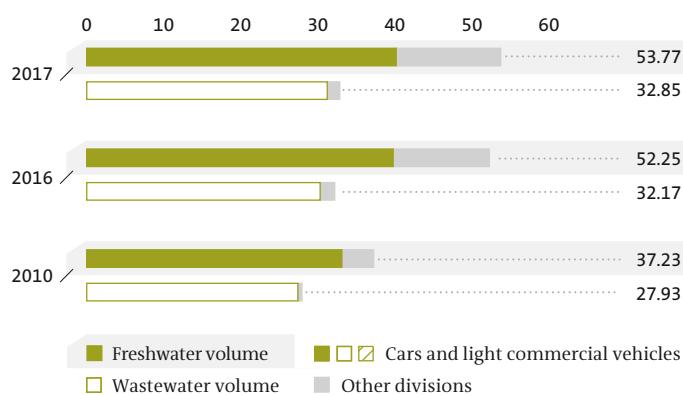
- ensuring safe, reliable water supply and disposal by protecting groundwater resources from pollutants,
- using water efficiently throughout the product life cycle by implementing closed loops,
- engaging in social and environmental projects to protect water resources and promote public environmental awareness,
- enhancing transparency by supporting the CEO Water Mandate and the CDP Water Disclosure Project. In 2017, we were included on the CDP Water A-List. The list includes those companies which were identified over the last CDP reporting year as global leaders in sustainable water management.

Our in-house White Paper defines key requirements for the various processes in our production sequence. These requirements are helping us implement sustainable, water-efficient processes across the entire Group.

The absolute demand for freshwater in our Group has risen over the last few years. This is due not only to the inclusion of new locations in our reporting system, but also to the growing numbers of passenger cars and light commercial vehicles we are manufacturing. On the other hand, freshwater consumption per vehicle has steadily declined since 2010, thanks to a raft of recycling initiatives and the introduction of manufacturing techniques that use minimal water. In 2017, we were able to reduce water consumption per vehicle to 3.76 m<sup>3</sup> from 3.89 m<sup>3</sup> in 2016.

## FRESHWATER AND WASTEWATER\*

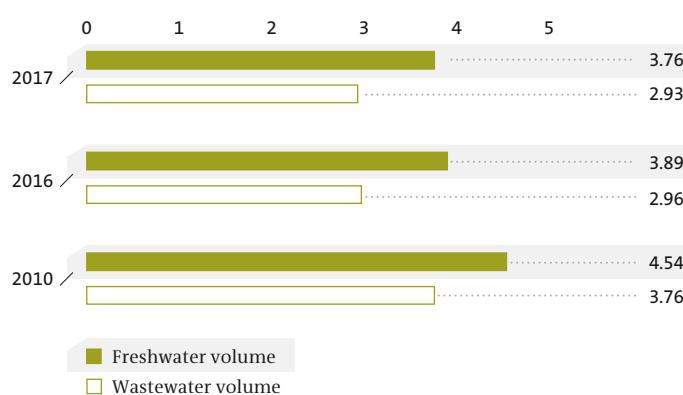
in million m<sup>3</sup>/year



\* Cars and light commercial vehicles and other divisions.

## FRESHWATER AND WASTEWATER\*

in m<sup>3</sup>/vehicle



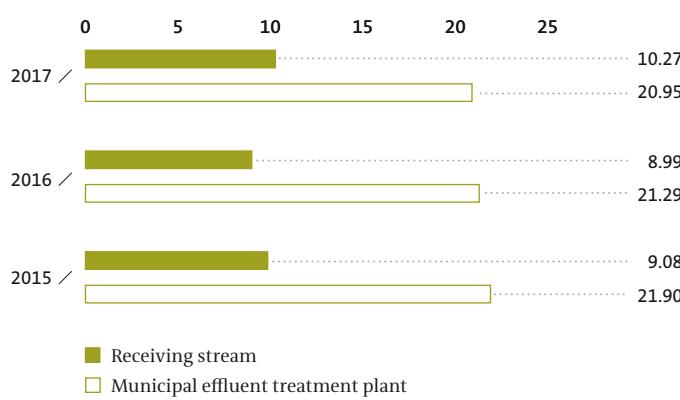
\* Cars and light commercial vehicles.

Depending on where wastewater is purified, we make a distinction between locations that act as so-called "indirect dischargers" by discharging wastewater into municipal sewers for further purification, and those that act as so-called "direct dischargers" by treating their own wastewater in-house and then discharging the purified wastewater directly into a body of water.

Wastewater volumes show a similar trend to the volume of freshwater consumption. Differences in freshwater and wastewater volumes are caused by evaporation losses from cooling towers and in the manufacturing process. We have been able to reduce the volume of wastewater per car and light commercial vehicle produced by 22% since 2010, from 3.76 m<sup>3</sup> to 2.92 m<sup>3</sup> in 2017.

#### WASTEWATER DISCHARGES<sup>1,2</sup>

in million m<sup>3</sup>/year

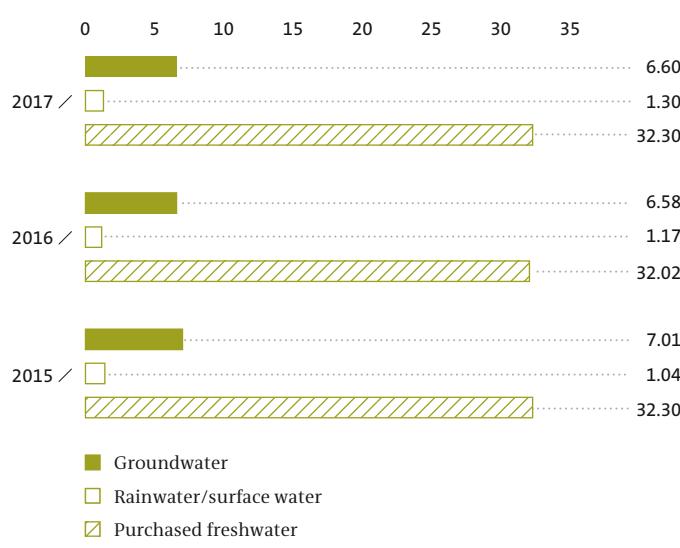


<sup>1</sup> Cars and light commercial vehicles.

<sup>2</sup> Before 2013, differentiated figures for the Group as a whole were not yet available.

#### WATER WITHDRAWAL BY SOURCE<sup>1,2</sup>

in million m<sup>3</sup>/year



<sup>1</sup> Cars and light commercial vehicles.

<sup>2</sup> Before 2013, differentiated figures for the Group as a whole were not yet available.

## WASTE

Making steadily more efficient use of resources means concentrating on avoidance, recovery and recycling – for example by introducing intelligent concepts for a closed-loop economy.

As part of our waste strategy, we aim to use materials and products more and more efficiently, thereby reducing the volume of waste per unit manufactured and recycling any unavoidable waste to high standards. Specifically, this entails:

- Avoiding waste generation by optimizing production and ancillary processes and/or increasing material utilization levels (material efficiency),
- Reducing waste volumes by localizing waste treatment at our sites,
- Prioritizing waste recycling and reducing the amount of waste for disposal.

To optimize our waste management, we are making great efforts to use digital waste management systems across all our divisions. Such systems are already used to control waste management processes in all German factories and some of the other European factories operated by the Volkswagen, Volkswagen Commercial Vehicles, Porsche, Audi, MAN and Scania brands, and to facilitate the state-monitored disposal of hazardous waste in particular (Electronic Government). We are planning to roll out these systems in the rest of Europe and subsequently across regions around the world.

In 2015, we introduced waste disposal audits at many of our sites, in order to review our waste management and recycling processes. For these audits, we jointly developed a standardized procedure in collaboration with other vehicle manufacturers (original equipment manufacturers or OEMs) and major suppliers. Since then, we have been carrying out regular audits of locations and OEMs in Germany and the rest of Europe. In the regions, we have also started monitoring waste disposal services by introducing audits. We trained potential auditors at our sites in eastern Europe, Spain and Portugal with the aim of setting a common benchmark for the quality standards expected of waste disposal services, carrying out quality-assured audits, and ensuring that the results can also be used by other OEMs and suppliers.

Waste from production, logistics and workshops, as well as the Technical Development department, is recycled to high standards. For the recycling of potentially lucrative waste such as paper, plastics, wood or metals (described internally as recyclable waste materials), our Procurement function has rolled out a Group-wide system that improves safety throughout the entire process.



> Further information on our brands' Closed loop economy concepts can be found at:  
– Audi | Aluminium Closed Loop

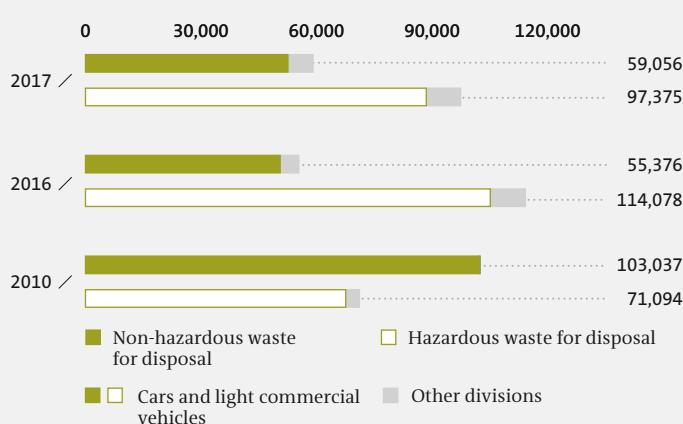
In the passenger cars and light commercial vehicles category, rising production volumes since 2010 have resulted in an increase in the total volume of hazardous waste, while the total volume of non-hazardous waste has declined. Similarly, we were able to reduce the volume of waste for disposal per vehicle from 15.2 kg in 2016 to 13.2 kg in 2017. This represents a 43.3% reduction compared with the 2010 baseline.

Consequently, the proportion of waste for recycling – excluding metallic waste – rose from around 66% in 2010 to around 81% in 2017. This increase in the proportion of recycled waste is also the result of the waste management strategy adopted within our Group, which aims to improve waste recycling rates.

The absolute quantity of metallic “recyclable waste materials” has also risen due to increased production volumes across the Group since the start of the reporting period in 2010. However, in 2017 we were able to reduce the volume per vehicle by 4% compared to 2010. Power stations operated by Volkswagen Kraftwerk GmbH inevitably produce power plant residues. In the last reporting year, we were able to recycle around 130,000 t of these residues.

#### WASTE FOR DISPOSAL<sup>1,2</sup>

in tonnes/year



<sup>1</sup> The bars for “Non-hazardous waste for disposal” and “Hazardous waste for disposal” indicate the share attributable to other Group divisions. This is not depicted for the other fractions, however, due to their minimal share in these amounts.

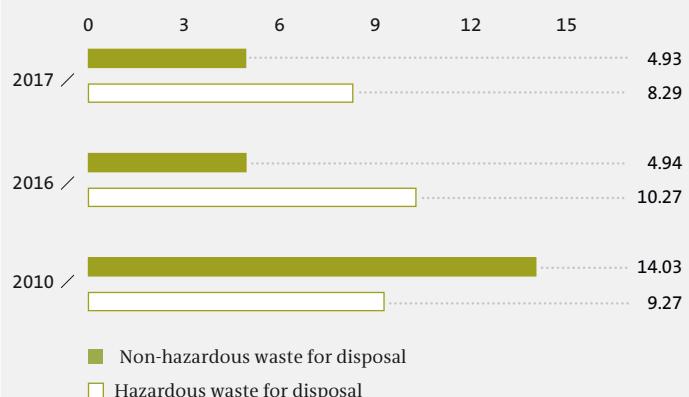
<sup>2</sup> Cars and light commercial vehicles and other divisions.



Information on “waste for recycling” as well as other key figures from the product and production chapter can be found in the appendix from p. 96.

#### WASTE FOR DISPOSAL\*

in kg/vehicle



\* Cars and light commercial vehicles.

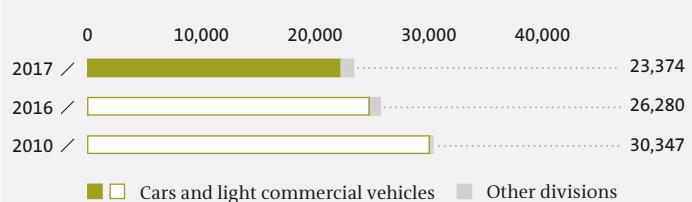
#### VOLATILE ORGANIC COMPOUNDS

Coating processes are the main producers of VOC emissions. Modern paintshops use coating and process materials containing fewer solvents. During coating processes, we also take steps to collect and/or eliminate any solvents emitted. To do this, we usually use a procedure involving thermal afterburning of the exhaust air downstream of the actual coating process.

Despite the increase in vehicle production since 2010 and the associated increase in the number of coating operations, we were able to reduce absolute VOC emissions by 26.0%. We have also significantly reduced emissions per vehicle since 2010, by 49.4%.

#### VOC EMISSIONS\*

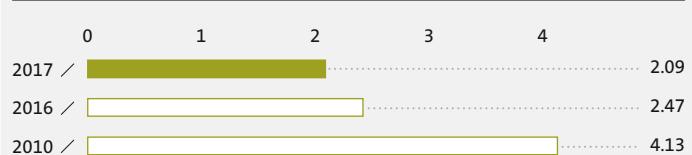
in tonnes/year



\* Cars and light commercial vehicles and other divisions.

#### VOC EMISSIONS\*

in kg/vehicle



\* Cars and light commercial vehicles.

## GREEN LOGISTICS

Logistics contributes to our Group's eco-friendly orientation by analyzing the entire transport chain in terms of emissions.

Our Green Logistics initiative took an approach based on what is known as the A-S-I-F model, originally developed by GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH). The aim is to promote alternative modes of transportation, as well as sustainable, energy-efficient transport systems, in order to reduce greenhouse gas emissions.

In brief, this provides Logistics with the following guidelines for implementing specific measures:

- A – Avoid: avoid transportation wherever possible
- S – Shift: move over to a more environmentally compatible mode of transport
- I – Improve: use better or more modern technology
- F – Fuels: use alternative drive systems

This model was used to define universally valid internal environmental principles, from which we then developed strategic policies and guidelines. These are intended to ensure that our environmental requirements are implemented in our logistical processes worldwide.

An important starting point for reducing CO<sub>2</sub> emissions is the selection of the mode of transport. One of the most efficient options in terms of transport capacity is maritime transport. To further improve the environmental sustainability of ship transport, Volkswagen Konzernlogistik will put two charter ships powered by liquefied natural gas (LNG) into service from 2019.

Starting in 2019, two eco-friendly vehicle transporters, powered by an engine developed by MAN Diesel & Turbo, will travel between Emden in Germany and North America.

In September 2017, we held an LNG Truck Day to dispel doubts and reservations regarding the new technology and actively support the expansion of the LNG fuel station network in Germany. Among others, regional freight forwarders, gas providers and representatives from the German Federal Ministry of Transport and Digital Infrastructure and the Federal Ministry for Economic Affairs and Energy took part.

Furthermore, since 2014, we have gradually been adopting the Euro 5 exhaust emissions standard as the minimum standard for all new contracts in Volkswagen AG's European freight forwarding business. All in all the aforementioned measures show a selection of the various Green Logistics activities within the company and let the Volkswagen Group come closer to its ambitious goals for the future.

 > Further information on our brands' "Ecologically Exemplary Production" initiative can be found at:  
– Audi | DBeco plus

## NATURE CONSERVATION

Inevitably, industrial growth has an impact on natural resources. This is why we do not simply treat measures to preserve biodiversity in our Group as a temporary project; they have been an integral part of our environmental management strategy for years.

Biodiversity signifies the variety of life on our planet, encapsulating the multiplicity of species, genetic differences within species, and the diversity of ecosystems. We rely on it as the basis for our continued existence: healthy food, clean water, fertile soils and a balanced climate. Because of the worldwide decline of biodiversity, the United Nations declared the current decade to be the "UN Decade on Biodiversity".

Since 2007, we have been committed to the protection of biodiversity at Group locations around the world. The objectives of more than 80 projects across eight brands range from protecting water resources and various species through to reforestation and environmental education. Representatives of and institutes in the respective regions are frequently involved, as are NGOs and scientific advisers.

Volkswagen has been committed to protecting biodiversity since 2007 and is a founder member of the Biodiversity in Good Company e.V. initiative. In our mission statement, we have pledged to support the protection of species across all our locations. To do so, we work closely together with our local suppliers. Our membership of the Biodiversity in Good Company e.V. initiative is temporarily on hold as a result of the diesel issue.

The protection of biodiversity is an integral part of our environmental management strategy. By reducing greenhouse gas emissions and using resources as efficiently as possible, we are helping to achieve the objectives set down in the UN Convention on Biological Diversity (CBD). To raise public awareness of the importance of protecting species, and to increase general knowledge on the subject, Volkswagen is making efforts to network with major players in business, politics, civil society and academia.

To consolidate our commitment to biodiversity across the Group, we have, among other things, appointed a biodiversity officer and commissioned external assessments of the risks to water, the soil and biodiversity across our brands. Based on this work, we are currently formulating targets and methods for making our active nature conservation work more transparent and accountable in the future, and for better assessing the effectiveness of our many projects.

 > Further information can be found in the annex:  
Plants in the vicinity of nature conservation areas p. 99.

Volkswagen FS AG is currently engaged in several projects with Naturschutzbund Deutschland e.V. (NABU) including, for example, a peatland conservation project. In addition to supporting the German Peatland Conservation Fund (13 national project areas to date), we also sponsor the European Union's LIFE Peat Restore Project, organized jointly by NABU with partners in Poland, Lithuania, Latvia and Estonia.

 > Further information about nature conservation projects can be found on our CSR world map as well as under:  
– Lamborghini | Lamborghini for biodiversity  
– Ducati | Bee monitoring  
– Volkswagen Financial Services | Volkswagen and German Nature and Biodiversity Conservation Union (NABU)

# Product and Road Safety

We want to keep our customers as safe as possible on the road by offering them a comprehensive range of efficient, affordable and practical powertrain technologies combined with smart mobility concepts. These embrace passive and active vehicle safety systems, as well as climate and environmental protection.

## QUALITY ASSURANCE AND PRODUCT SAFETY

Our customers attach the utmost importance to product safety. So we take a meticulous approach to quality assurance along the entire value chain, from procurement right through to sales.

Right at the start, when a vehicle is first being developed, we use standardized processes to exclude potential use risks. At the next stage, production, our product safety officers rely on lessons-learned processes to ensure that our products stay safe. Because the approach followed by our product safety officers has proved its worth, we are now gradually implementing it among our suppliers, hence along our entire supply chain.

We have established quality specifications for the materials and operating fluids we use that focus not only on their functional properties but also on their longevity. These specifications provide the framework within which Volkswagen's materials specialists, for example, define and verify components' resistance to aggressive media.

Odors and emissions from plastic components inside the vehicle can impair passengers' wellbeing. To avoid these issues, we check the properties of the materials and components we use with great care. Our internal Group standard VW 50180 sets down our requirements for material characteristics. And suppliers must demonstrate that they are complying with these requirements by the sample prototype inspection stage at the very latest. Suppliers' compliance data for selected components used in Group vehicles is further verified in our laboratories. In addition to checking materials and components, we also evaluate odors and emissions in the passenger compartment when we start production of new concept vehicles and production vehicles.

More and more of us live in cities. Traffic noise impairs our quality of life. We want to reduce emissions not only inside our vehicles, but also wherever the use of vehicles is increasing. For this reason, we are working to produce reliable forecasts of the potential impacts of future solutions on urban air quality, noise pollution and traffic flow (impact assessments). This is where models and simulations make an important contribution by helping us to develop the right solutions for the future – solutions that are more precisely tailored and optimized for their intended purposes.

But we are also going one step further. We are using a specially developed tool to calculate noise pollution levels in cities and further develop our understanding of the role of the automobile, assess interactions between

different noise sources, and evaluate various measures for reducing noise. Our aim is to improve the noise situation for urban residents in general by entering into dialog with cities and fellow noise emitters.

Volkswagen Group companies are obliged by law to provide users of their products with appropriate information about the risks that may arise from their foreseeable misuse, and even from their intended use. Our Group companies fulfill this obligation by providing instruction manuals and, in specific instances, placing warning stickers inside the vehicle. Furthermore, since 1 December 2011, all passenger vehicles manufactured in Germany must carry a weight-based efficiency label similar to the energy consumption labels used for household appliances. Efficiency ratings range from A+ (highly efficient) to G (inefficient). The label also informs users of fuel consumption, annual fuel costs, CO<sub>2</sub> emissions and annual tax charges under Germany's CO<sub>2</sub>-based vehicle tax. In the case of electric vehicles, the label provides information on energy consumption. All of our brands publish the details of their models' fuel consumption and CO<sub>2</sub> emissions on their websites.

## SAFE VEHICLES AND ROAD SAFETY

The ultimate aim of our Vision Zero is: zero fatalities or severe injuries in or due to vehicles manufactured by the Volkswagen Group. To progress towards this vision, we have set ourselves the following goals:

- avoidable accidents should not happen,
- unavoidable accidents will be positively mitigated,
- the severity of accidents will be minimized.

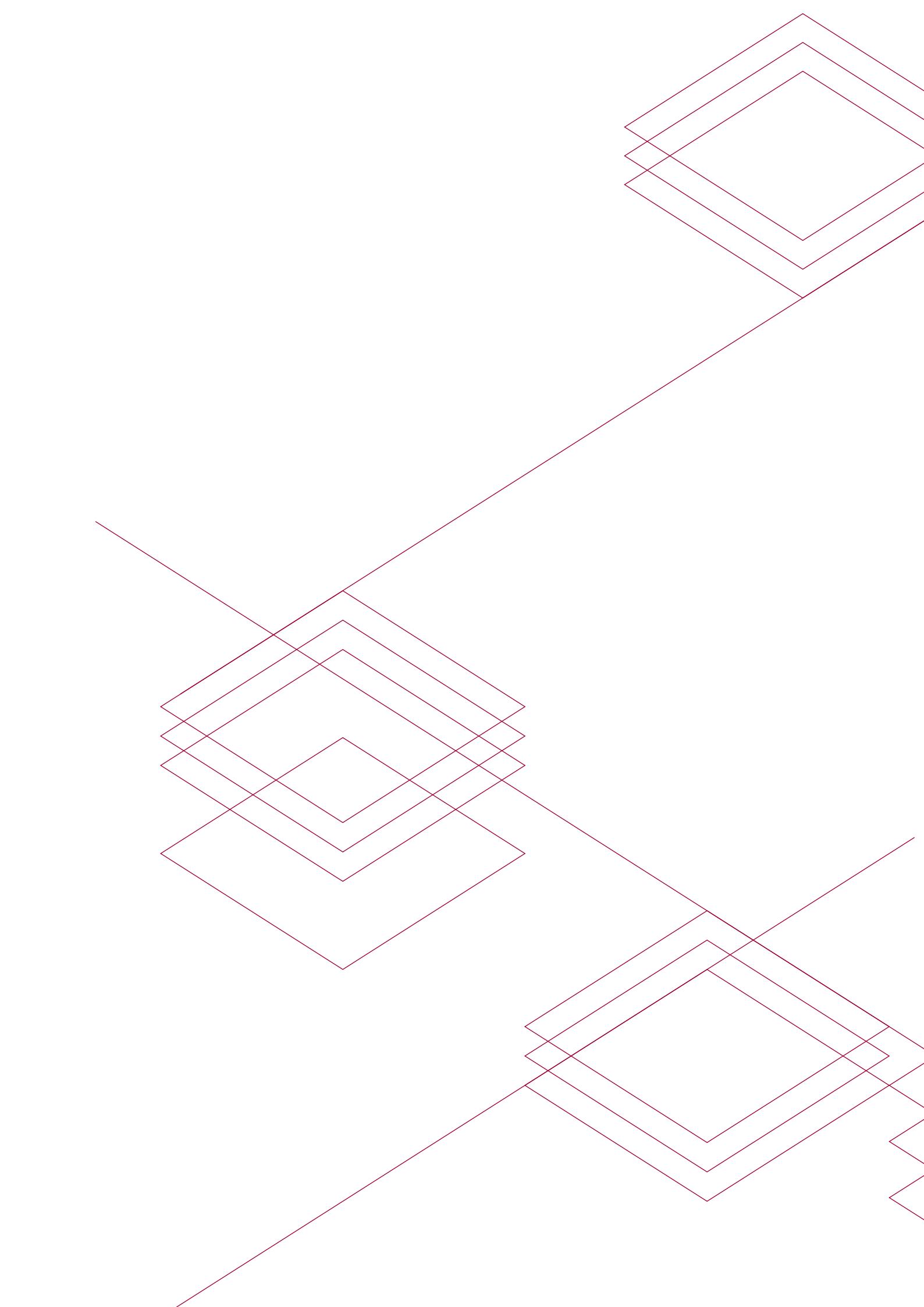
To achieve these goals, the Group's accident researchers collect data from real-world traffic accidents. Their investigations include:

- technical analyses of the vehicles involved to establish the technical severity of the accident,
- medical analyses of injuries suffered by people involved in the accident,
- psychological analyses of the circumstances surrounding the accident.

We use the findings of these analyses to develop measures to protect people inside and outside the vehicle. These include the development of bodywork concepts and occupant retention systems, as well as new driver assistance systems capable of avoiding accidents or mitigating their consequences.

In best-case scenarios, the resulting active systems help to avoid accidents completely. Especially noteworthy are emergency braking systems (such as Front Assist) and lane-keeping systems (such as Lane Assist). Where the collision turns out to be unavoidable, a raft of passive systems ensures that the consequences of the accident for vehicle occupants are either obviated or mitigated. In particular, the coordinated interaction of the vehicle structure with the occupant retention system plays a central role in our thinking.

In our efforts to make mobility safer, we contribute our expertise and experience to the German Road Safety Council (DVR) – of which we are an active member – and to major conferences on vehicle safety held around the world.

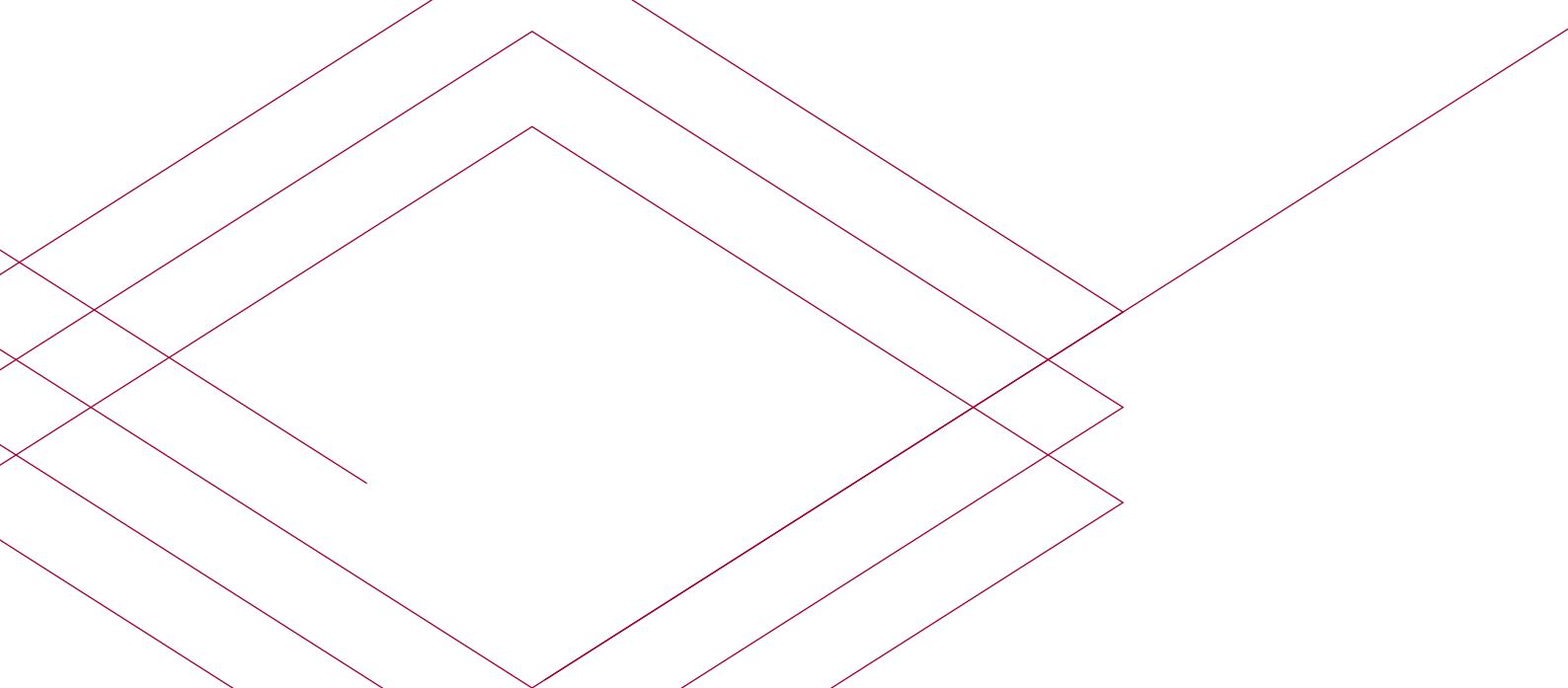




# People and Responsibility

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The Volkswagen Group can look back on a long tradition of cultivating responsible relationships with our employees and our neighbors, as well as responding to the concerns of society as voiced by people outside the company. Through initiatives such as the 4-day week in the 1990s, which effectively rescued 30,000 jobs, or the creation of 4,200 new jobs for the unemployed in 2002 as part of our Auto5000 program, we have repeatedly demonstrated our commitment to and equal prioritization of commercial competitiveness, job security and corporate social responsibility.



# Management Approach

Volkswagen seeks to be a responsible employer and a good corporate citizen. Reliability, trustworthiness and fairness are our watchwords – no matter whether we are talking to individual employees, negotiating with collective representative bodies, collaborating with regional partners in local infrastructure development projects, or cooperating with civil society initiatives and associations. Through these endeavors to foster sustainability and cultivate mutual understanding, as a socially responsible company, Volkswagen is seeking to contribute to the realization of the United Nations Sustainable Development Goals.

Our new “Empower to transform” human resources strategy, which the Group’s Board of Management approved in October 2016, continues this long tradition. The strategy is intended to ensure that the Group, our brands and our workforce are well placed to adapt to the ever more rapidly evolving challenges we are facing. In this era of digital transformation and connected mobility, the paramount goal of our human resources strategy is to be seen as one of the most attractive employers in the world. In this way, we aim to help the Volkswagen Group become a global leader in sustainable mobility on an enduringly profitable basis.

We are well aware that it takes more than just good pay, a secure job and appealing work to make an employer attractive. This is one of the reasons we are constantly expanding our social engagement activities – as a good “corporate citizen”, we see ourselves as a local driver of growth, contributing to structural development, education and equal opportunities wherever we operate. Accordingly, support for social, cultural and community projects is a core element of our strategy at all 120 of the Group’s production sites.

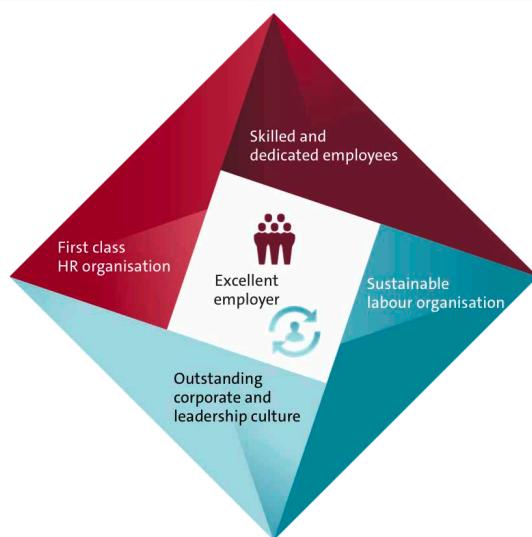
## HUMAN RESOURCES STRATEGY – “EMPOWER TO TRANSFORM”

At the time of launching the Group’s TOGETHER – Strategy 2025 program in 2016, we also introduced our new “We empower to perform” human resources strategy. Following a review of our strategic successes, this was then rebranded “Empower to transform” in November 2017.

This strategy sets out five overarching objectives for personnel management in the Group:

- The Volkswagen Group aims to be an excellent employer across all our brands and companies worldwide.
- Highly skilled and committed employees strive for excellence in innovation, value creation and customer focus.
- Sustainable work practices ensure optimal working conditions in factories and offices.
- An exemplary corporate culture creates a working atmosphere characterized by openness, mutual trust and cooperation.
- While striving for operational excellence and adding strategic value, personnel management within the Group is strongly focused on employees.

In implementing this new strategy, the Volkswagen Group is continuing to pursue the successful key tenets of our human resources policy. As well as seeking to appropriately balance performance and remuneration, these include a strong stakeholder focus, comprehensive employee participation rights, excellent training opportunities and the fostering of long-term service through systematic retention programs. Our new human resources strategy is also setting innovative new trends. For instance, we are developing pioneering forms of work organization in our factories and offices, as well as new working time models to meet employees’ wishes for greater flexibility.



The five action areas of our “Empower to transform” strategy.

At the same time as planning the socially responsible, systematic transformation of our human resources function, we are investing heavily in training and upskilling programs to carry our workforce forward into the digital future. We are continually expanding our preventive healthcare offerings.

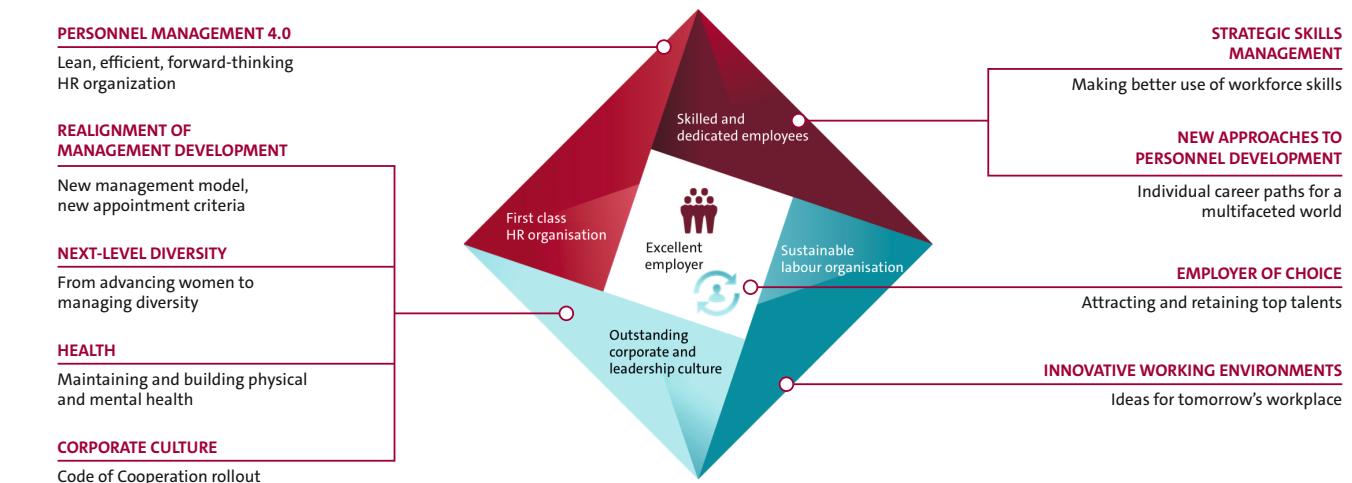
Volkswagen is also set to roll out a diversity management system across the entire Group by 2020. Different cultural circumstances in global markets and increasingly dynamic economic conditions mean that we need an ever-broader range of experiences, world views, problem-solving approaches and ideas for products. The growing diversity of our workforce offers potential for innovation which could be leveraged even more effectively in future.

Our human resources strategy also addresses the causes and consequences of the diesel emissions issue. Various initiatives for transforming our corporate culture are already in progress, aiming to establish flatter hierarchies, a more open form of collaboration and a more broadly entrepreneurial perspective across the Group's divisions.

Volkswagen's personnel development system underwent a thorough review in 2017; it now provides more transparent routes into management with a greater emphasis on individual responsibility. At the same time, our management principles were revised and new criteria for appointments to management positions were defined.

In the course of 2017 we also revised our Group-wide Code of Conduct, further expanded the compliance system and continued the rollout of the Code of Cooperation as key pillars of Group-wide cooperation.

#### ALIGNMENT OF 9 STRATEGIC "EMPOWER TO TRANSFORM" INITIATIVES WITH STRATEGIC OBJECTIVES

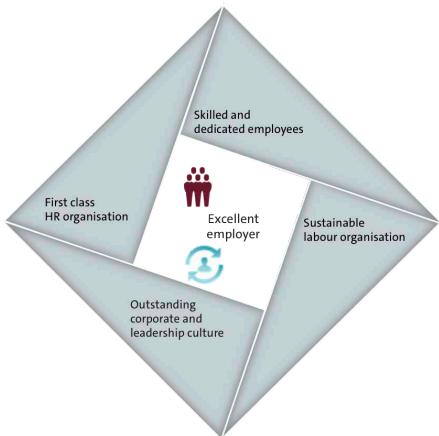


We are implementing our strategy in nine Group-wide strategic initiatives which form the key operationalization tools for our human resources program. These initiatives are systematically aligned with our five principal strategic action areas.

### THE 9 STRATEGIC “EMPOWER TO TRANSFORM” INITIATIVES

<b>Strategic initiative</b>	<b>Action areas</b>	<b>Goals and actions</b>	<b>Deadline and status</b>
Innovative working environments	Occupational health & safety; training and skills; employer attractiveness; participation and co-determination	Innovative working practices in factories and offices; strengthen participation and individual responsibility; design technology around the workforce; create modern working environments	Ongoing / Dec. 31, 2018
Corporate culture	Diversity and equal opportunities; social responsibility; employer attractiveness; participation and co-determination	Create an open corporate culture based on flat hierarchies; foster transparency and participation	Culture cascades to all levels of the Group in 2017; continuing in 2018
New approaches to personnel development	Training and skills; employer attractiveness; participation and co-determination	More transparent routes into management with greater emphasis on individual responsibility	System devised in 2017; rollout in 2018
Realignment of management development	Diversity and equal opportunities; training and skills	New management model and new appointment criteria; transparency about management vacancies	Group-wide rollout during 2018
Next-level diversity	Diversity and equal opportunities; social responsibility; training and skills	Development of diversity and internationality	International diversity targets came into force on Jan. 1, 2018; targets to be adjusted during 2018; ongoing systematic development of management approach
Employer of choice	Diversity and equal opportunities; employer attractiveness	Improve external employer attractiveness and focus on new target groups in the context of digital transformation	Ongoing / Dec. 31, 2018
Personnel management 4.0	Diversity and equal opportunities; employer attractiveness; participation and co-determination	Digitalization of HR tools; improve data transparency for employees; create self-administration options for employees	Concept created in 2017; rollout in 2018
Health	Employer attractiveness; human rights	Development of preventive measures and healthcare	Ongoing / Dec. 31, 2018
Strategic skills management	Employer attractiveness; participation and co-determination	Systematic management of HR transformation; better, skills-appropriate deployment of employees; access to additional upskilling opportunities	System devised in 2017; rollout in 2018

# Strategic Objective: Excellent Employer



Seeking to be an attractive employer is not an end in itself. We will only be able to sustain the enduring commitment and motivation of our employees if we keep the promises we have made about the working conditions in our company. And only if we can make these promises visible to the outside world will we be perceived as attractive in an increasingly competitive talent market, and consequently be able to attract and retain the best people.

## EMPLOYEE TURNOVER\*

at Volkswagen AG (in %)

	2017	2016	2015	2014	2013
Women	0.4	0.3	0.4	0.3	0.3
Men	0.5	0.5	0.4	0.4	0.4
<b>Total</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>0.4</b>

\* Not incl. age-related turnover.

By any comparative measure, the employee turnover rate at Volkswagen is very low, indicating that the strategic focus of our HR policies has successfully positioned us as an attractive employer.

Our “Empower to transform” strategy fuses the external and internal aspects of employer attractiveness by seamlessly reconciling the consistency of our employer’s promise with the real-world employee experience, that is, how our quality as an employer is actually perceived by individuals on a day-to-day basis.

Participation, individual responsibility and opportunities for personal growth are a very important part of our promise as an employer: inspired by visions of the “democratic enterprise”, we wish to see our employees become empowered, competent and confident “company citizens” who actively contribute to shaping the company and participate in decision-making processes.

Such a corporate culture is underpinned by binding standards that protect employees from arbitrary decisions in the workplace and safeguard their opportunities for participation.

## EMPLOYMENT RIGHTS IN THE VOLKSWAGEN GROUP

GRI 102-41

The cornerstones of collaborative and harmonious labor relations at Volkswagen are universal human rights and the conventions of the International Labour Organization. Based on these, we have agreed various charters and declarations with our Group European Works Council (GEWC) and Global Group Works Council (GGWC) that safeguard the collective rights of our employees in the workplace and the organization of their work. They include:

- **The Declaration on Social Rights and Industrial Relations at Volkswagen (the Volkswagen Social Charter).** We set out the fundamental social rights of employees in this declaration in 2002. These are based on the relevant conventions of the International Labour Organization. A revised version of the Social Charter was signed in 2012.
- **The Charter on Labor Relations.** This charter came into force in autumn 2009 and combines greater consultative rights for representative bodies with shared responsibilities. It defines the rights to information, consultation and co-determination enjoyed by employee representatives of brands, companies and sites represented on the GEWC and GGWC.

- The **Charter on Temporary Work**. In November 2012, Volkswagen's executive management, the GEWC and GGWC signed this charter setting out the principles governing temporary work. These include, for example, a guide ratio of temporary employees to core workforce, stipulations on equal pay, equal treatment and training programs, plus a time limit of 36 months before the offer of a permanent position must be considered.
- The **Charter on Vocational Education and Training**. As well as a high standard of education, the Group seeks to offer attractive development opportunities at its various locations. Approved in 2015, this charter recognizes vocational training as a core aspect of labor relations. To implement the charter, the social partners define certain aspects such as the trainee selection process, the duration and quality of vocational training, plus the conditions for subsequently hiring trainees following an apprenticeship.
- In addition, there are a number of country and/or site-specific agreements that stipulate, for example, standards for training or preventive healthcare measures for individual Group companies.

These policy foundations underpin the rights of employees and their elected representatives at Group level in the European and Global Works Councils. They provide a binding framework for the responsible development of existing local labor relations using cooperative conflict resolution approaches.



## EMPLOYEE PARTICIPATION THROUGH ELECTED REPRESENTATIVES AND COLLECTIVE BARGAINING

■ GRI 102-41

Volkswagen has an internationally recognized culture of co-determination. At many sites, employees are represented in two ways: firstly, by a trade union, and secondly, by representatives elected to a works council. Many companies in the Group also have a supervisory board on which the workforce is represented. The International Charter on Labor Relations allows employee representatives around the world to conclude agreements with local management on specific rights to information, consultation and co-determination.

This widespread form of participation has proved highly successful over many decades. When major changes are expected, as in the case of the pact regarding the future of the Volkswagen brand that was negotiated in 2016 and to be implemented by 2020 for example, employee representatives are involved in the planning process from an early stage. This ensures that such processes of change are addressed jointly and have the support of all employees. We attach great importance to informing the workforce of changes as early as possible. Where bodies are composed equally of employee and employer representatives, both sides always receive all relevant information at the same time.

These co-determination structures are by no means static, however. Our international employee representative bodies are constantly evolving in line with the ongoing development of the Group. Executive managers and employee representatives meet regularly to consult on relevant issues. For instance, all members of the GEWC and GGWC attend a joint session every year. As well as discussing the current situation at the various sites, the respective HR managers and Group executive management also share information about future product and workforce plans and consult on social welfare and personnel standards.

## REMUNERATION, REWARDING PERFORMANCE, PROFIT-SHARING AND RETIREMENT PROVISION

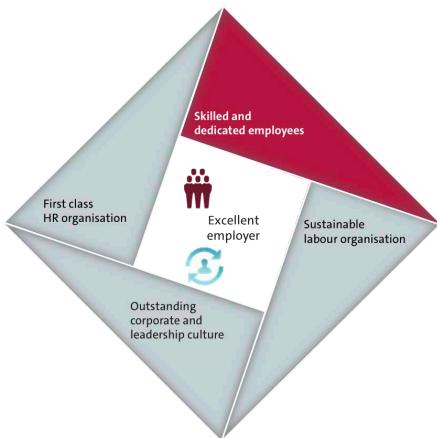
A reasonable income is the most important prerequisite for living an independent life. As stated in our worldwide Social Charter, all remuneration and benefits paid to our employees correspond at the very least to the statutory minimums in each country concerned. Furthermore, this not only applies to our own workforce, but to all our suppliers' employees as well. As they are collectively agreed with trade unions, our rates of pay are usually considerably higher than the prevailing minimum levels. When setting pay, we make no gender distinctions: people are recruited, hired and promoted solely on the basis of their qualifications and skills. Remuneration is based strictly on the job performed and individual performance. This is usually calculated according to a three-tier remuneration system comprising basic pay plus a performance-related component that additionally rewards each individual's performance. The third component is an entitlement to a share in the profits as laid down in the collective agreement. This three-tier pay structure has proved to be a convenient way of enabling employees to share in the company's success.

Employees of Group companies also enjoy further benefits. Depending on location, these may include subsidized transport and meals, low-cost accommodation, monthly childcare allowances and discounts on certain leisure activities. Additional healthcare or supplementary pension benefits round off the range of company benefits offered.

Along with an attractive remuneration package for our active employees, we are also concerned to make provision for those embarking on the next stage of their life. By offering occupational pension schemes, Volkswagen AG, its brands and subsidiaries make an important contribution to ensuring that retirees still have an income in later life. In addition to employer contributions, employees can convert part of their pre-tax salary into pension contributions.

The extensive social rights enjoyed by employees, strong workforce representation, participation in decision-making processes, performance-related remuneration and good retirement provision form the building blocks of our attractiveness as an employer and together constitute the bedrock of our human resources policy. These aspects are further augmented by numerous initiatives, agreements and programs which aim to develop our workforce and create versatile, highly qualified teams.

# Strategic Objective: Skilled and Committed Employees



The second goal of our human resources strategy is to cultivate skilled and committed employees. For us, commitment means first and foremost actively helping to create value, but also taking change in one's stride and personally initiating process improvements. It also means seeing the bigger picture and taking an interest in the environment and developments in society at large. We practice such corporate citizenship in numerous initiatives – for example in our support for volunteering activities, in the aid the Group provides to refugees, in the now traditional campaign where employees donate the odd cents on their monthly pay slips to “One Hour for the Future”, or the work of the Volkswagen Employees’ Foundation. Added to this are the donations – €28.2 million in 2017 – which the Group makes directly to charitable causes.

## ON-THE-JOB COMMITMENT

We like to see our employees tackling their work enthusiastically, showing commitment and team spirit while contributing their expertise. In return, we invest in our workforce, foster a good working atmosphere and offer attractive opportunities for career development. As well as listening to their opinions and constructive criticism, this includes actively involving our workforce in improving processes and assuring quality.

One tool used for this purpose throughout the Group is our Employee Opinion Survey. We use this standardized Group-wide survey to obtain regular feedback on employee satisfaction, and by extension on the extent to which we have fulfilled our goal of being an attractive employer. The survey also helps to systematically identify scope

for improvement and pinpoint the areas where managers need to take action within their organizational units. In 2016, we revised the Employee Opinion Survey to include additional questions and new tools to help line managers discuss the results with employees. The 2017 survey was conducted at 156 sites and companies in 48 countries. Approximately 453,000 of over 570,000 employees in the participating Group companies responded; this is equivalent to a response rate of 79%. In 2017, the score on the employee satisfaction index – a key indicator generated by the opinion survey – was 78.3 out of 100 possible index points, and thus on a par with the previous year.

Our ideas management program is another important tool for encouraging employee engagement. This program enables employees to bring their creativity, knowledge and initiative to bear and take responsibility for improving both processes and products. By 2017, over 54,000 ideas had been submitted, saving the company approximately €124 million at German sites operated by Volkswagen AG, Volkswagen Sachsen GmbH and Volkswagen Osnabrück GmbH. Ideas management is an important leadership and motivational tool for plant supervisors and managers. It also contributes to improving health and safety in the Volkswagen workplace and helps us reach our targets for reducing energy and water consumption, waste, solvents and CO<sub>2</sub> emissions.

### IDEAS MANAGEMENT IN THE VOLKSWAGEN AG\*

	2017	2016
Ideas suggested	54,899	60,793
Implemented ideas for improvement	59,872	65,146
Awarded ideas for improvement	24,267	25,440
Savings (€million)	124	142,8
Bonuses (€million)	22	23,8

\* incl. Volkswagen Sachsen GmbH and Volkswagen Osnabrück GmbH.

### SYSTEMATIC SKILLS DEVELOPMENT

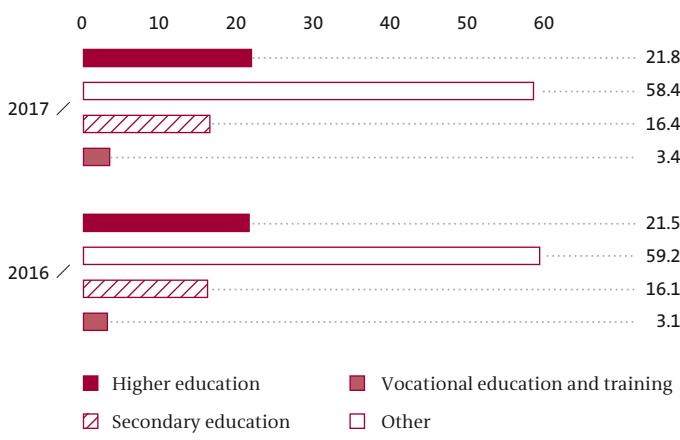
As well as commitment, we place an equally strong emphasis on developing employees' skills. Our education and training system is highly sophisticated, and we maintain close ties with public educational establishments such as vocational schools and universities all over the world.

Well educated employees who regularly update their skills are vital to our company. We therefore regularly review the level of our employees' skills and qualifications in order to identify any further education and training options that might be suitable for them.

 > Further information on the Volkswagen Group's awards can be found in the Ratings and Indices section

### LEVEL OF QUALIFICATION

in the Volkswagen Group (in %)



Our initiatives for enabling employees to acquire further qualifications are organized around occupational "families" (Berufsfamilien). Employees who require similar skills to perform their jobs and who possess the associated competencies are said to belong to an occupational family. The general and technical competencies required for each specific activity are defined in skills profiles. Employees are offered a wide range of opportunities to gain further qualifications,

allowing them to continually update their skills and deepen their knowledge throughout their working lives. In the process, they also learn from more experienced colleagues who act as experts and pass on their know-how in our occupational family academies.

### DUAL MODEL OF VOCATIONAL EDUCATION AND TRAINING

The dual model of vocational education and training, in which theory and practice are closely intertwined, builds the foundations for the advanced skills and excellent performance the Volkswagen Group demands. Occupations in Germany are always certified by the relevant Chamber of Commerce and Industry and follow generally applicable standards, as prescribed by the German Federal Institute for Vocational Training, for instance. Outside Germany, we also apply these high German standards, but the content of training courses is then also aligned with the national standards and requirements in the country concerned. Here, too, the content of the training is very much geared to the skills required in the various occupational families. Volkswagen has rolled out this dual model at many of its locations outside Germany as well, and continues to promote the model as the core framework for acquiring skilled worker qualifications. When planning new plants, we factor in dual vocational training as standard from the outset. Accordingly, more than three-quarters of all trainees in the Group are now learning their trades through the dual system.

As at the end of 2017, the Volkswagen Group had trained 19,207 young people in some 50 recognized occupations. We also support the career development of new entrants once they have completed their apprenticeship. Particularly talented young skilled workers are supported through "talent groups". These two-year training and development programs recruit the best 10% of apprentices from each year's intake at Volkswagen AG and Volkswagen Sachsen GmbH in Zwickau. 105 skilled workers joined the programs during the year under review, taking the total to 956 young men and women since talent groups were first launched in 2008.

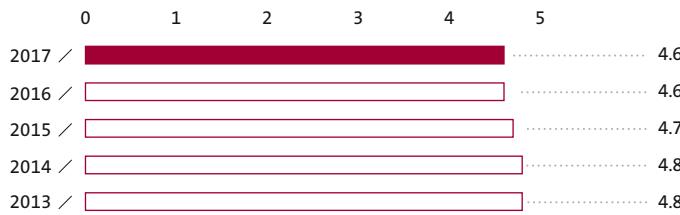
On completion of an apprenticeship, the "Wanderjahre" (year abroad) program offers young people the opportunity to spend twelve months working for a Group company abroad. During the reporting year, 31 Volkswagen Group sites in 17 countries took part in this development program. For the first time, a group of 12 such trainees were sent to Volkswagen (China) Investment Co. Ltd. in Beijing. In 2017, 67 participants from Germany plus 16 from seven other countries began their year abroad within the Volkswagen Group in Germany.

 > Further information on our brands' training and apprenticeship programs can be found at:  

- Lamborghini and Ducati | Dual Education System Italy (DES)
- Porsche | Education enables opportunities
- Scania | Transport Academy in Ghana
- Brazil | Volkswagen SENAI (region)
- India | education as mechatronics (region)

## APPRENTICES

in the Volkswagen Group in Germany (in %)



The percentage of trainees in the Group's total workforce in Germany has remained at around 5% for many years. Collective bargaining agreements ensure that the number of trainees remains fairly constant, even during economically challenging times.

## EXTENSIVE TRAINING OPPORTUNITIES AT ALL LEVELS

At the Volkswagen Group Academy, skilled workers can choose from a broad range of advanced training courses – from further training in occupational or cross-disciplinary areas of general interest to the company, to specific qualifications in occupational families, through to comprehensive personal development programs. In this way, all our employees are able to pursue lifelong learning. This further training is also largely based on the dual-study model, which combines theory with practical experience. Overall, around 93,000 qualification activities totaling 13.9 million hours of training were completed across the Group in 2017. Over 435 courses and programs were newly developed for the Volkswagen brand alone.

We have standardized many of the development programs and selection procedures for executives, managers and group leaders across the Group. During the reporting year, the Volkswagen Group Academy ran some 524 training programs and assessment centers for executives, managers and group leaders in 12 countries.

## ACADEMIC SKILLS DEVELOPMENT

As part of the Volkswagen Group Academy, AutoUni employs top in-house experts and collaborates with higher-education institutions to equip the company with leading-edge knowledge for the future. Its programs and collaborative study modules use a blended-learning format which combines face-to-face classroom teaching with online content, supplemented by lectures and conferences. In 2017, around 9,450 people took part in over 170 AutoUni events all over the world; a growing number were transmitted to the Group's various locations via Skype.

AutoUni cooperates with internationally renowned universities, institutes and research centers on numerous research projects, dissertations and theses, and offers PhD students in the Group a platform for exchanging ideas and gaining interdisciplinary qualifications.

As at the end of 2017, around 360 PhD students were engaged in researching topics of future interest to Volkswagen's various Group companies in Germany.

In addition, AutoUni facilitates networking between the Group's in-house contacts for higher-education institutions and keeps track of collaborative links with universities around the globe: during the year under review, over 1,700 national and international cooperation agreements were in place with universities, research institutes and universities of applied sciences.

All these measures are aimed at maintaining and enhancing the high standard of skills and the outstanding expertise of Volkswagen employees at Group locations all over the world. Above all, we are committed to delivering teaching and learning in our occupational families by following the dual vocational training model, which integrates theory and practice in a mutually reinforcing continuum. Systematic knowledge transfer by in-house experts at all levels and across all brands and specialist fields is another key factor underpinning our success.

-  > Further information on our brands' partnerships with institutions of higher education can be found at:
- Bentley | Crewe Engineering & Design University Technical College (UTC)
  - Lamborghini und Ducati | Motorvehicle University of Emilia-Romagna (MUNER)
  - Argentina | Ferdinand Porsche Institut (region)
  - Brazil | Paraná (region)

## OCCUPATIONAL HEALTH AND HEALTHCARE

Our efforts to ensure that our employees have well-developed skills and a high level of commitment address the first two facets of our strategic objective to cultivate "skilled and committed employees". However, alongside a willingness to perform (through participation) and empowerment to perform (through having the right qualifications), there is a third facet, namely capability. This requires our workforce to be physically and mentally capable of coping with the stresses and strains of work.

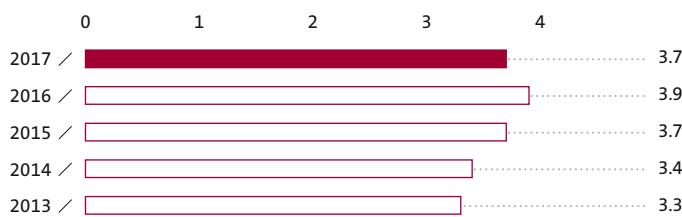
Consequently, we do not simply regard the protection and promotion of our employees' health as a self-evident societal obligation and reflection of our corporate culture, but also as an integral part of our human resources strategy. Volkswagen's holistic approach to health management goes well beyond statutory preventive healthcare and occupational safety; it also includes aspects such as work organization, ergonomics, prevention, integration and rehabilitation, along with leadership culture.

As well as complying with Group guidelines on protecting and promoting health, the medical and healthcare services we provide for our employees are in line with the relevant statutory requirements and internal regulations at each site. Among other things, we maintain a register of jobs that may pose particular problems (list of occupational diseases) and offer employees in these jobs special prevention programs plus increased opportunities for workplace job rotation. All sites have at least emergency health provision, while most also offer medical services under the oversight of a physician.

In the context of health, sustainability means ensuring that, ideally, every employee is still healthy when they retire. Protecting and promoting employees' health is a priority for the company, shared by both management and employee representatives. As part of our strategy process, we have launched our own Group health initiative. During its very first year, the initiative had developed and implemented some basic concepts relating to prevention, workplace health management and ergonomics throughout the Group. The aims of the health initiative are clearly defined: to improve employees' quality of life, reduce stress, avoid chronic illnesses and consequently also boost employees' performance and reduce absenteeism.

#### ABSENTEEISM\*

Cumulative values (in %)



\* Production locations with over 1,000 employees, excluding Scania, MAN, Ducati, Shanghai Volkswagen Powertrain and Volkswagen Automatic Transmission. From 2014: including Porsche. From 2015: including MAN Germany.

For manufacturing companies in particular, sickness-related absences from the workplace are not only a significant cost factor, they also present major logistical challenges when planning, for example, shift rotas. Increased availability of diagnostic and screening measures can help reduce absenteeism. The working time lost to the company is calculated using the following formula: days of absence  $\times$  100/payment-relevant days i.e. days when employees are expected to be at work.

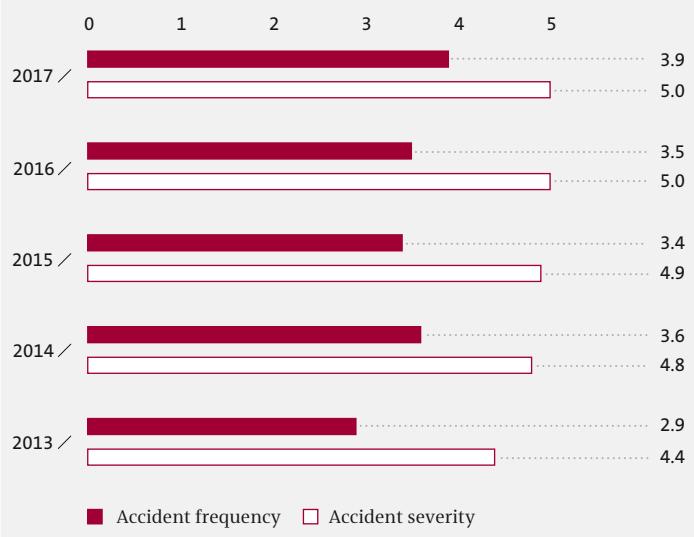
#### IMPROVING OCCUPATIONAL SAFETY

Like preventive healthcare and emergency health provision, the continuous improvement of occupational safety is vitally important to us. As long ago as 2004, the Volkswagen Group drew up an occupational safety policy which is binding on all Group companies around the globe. The same high standards of work organization and occupational safety apply worldwide. For this purpose, in 2010 the Group launched its own occupational safety management system (KAMS). This system is used to analyze the organizational structures and processes for occupational safety at all participating Group companies. The findings are held in a central database with Group-wide access.

To improve information sharing, in recent years the exchange of reports on serious and fatal accidents within the Group has been introduced. This enables us to take specific action to prevent similar accidents across all our sites in the future. Since 2012, Volkswagen in Germany has also been running mandatory occupational safety training modules for all prospective managers. The group leader qualification modules have likewise been standardized so that occupational safety forms a mandatory part of basic group leader training. As a result, we have successfully managed to keep the accident frequency in our companies at a consistently low level.

#### ACCIDENT INDEXES

in the Volkswagen Group

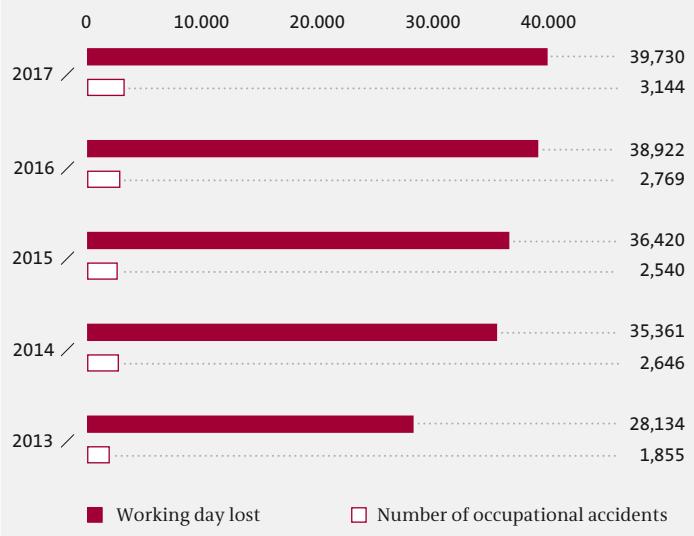


The accident frequency index is a measure of the frequency with which accidents at work occurred in relation to the total number of hours worked. The formula for calculating the index is: number of occupational accidents, multiplied by 1 million, divided by the number of hours worked.

The accident severity index indicates how serious the accidents were by calculating the ratio of the total number of lost working days to the number of hours worked. The formula for calculating the index is: number of working days lost, multiplied by 1 million, divided by the number of hours worked.

#### ACCIDENT SEVERITY

in the Volkswagen Group



## PREVENTIVE HEALTHCARE AND REHABILITATION

Preventing accidents and avoiding risks in the workplace is one side of the occupational health equation; individual preventive measures are the other. The Volkswagen Checkup – a free, comprehensive health screening program for all employees – is now established at all Volkswagen AG German sites and helps employees stay fit and healthy and maintain their performance. Employees appreciate the high-quality diagnostics and follow-up preventive healthcare and exercise programs. 13,237 checkups were carried out at Volkswagen AG sites in 2017, slightly below the level of the previous year, in which 14,323 checkups were performed.

This checkup has now been successfully rolled out to almost all international sites. Other preventive healthcare programs have been brought into line with Group-wide standards. In many cases, country-specific supplementary examinations, such as HIV and tuberculosis tests, have been added.

 > Further information on our brands' programs for healthcare in the workplace can be found at:  
– ŠKODA | Prevention in focus

At many sites, we offer a tailored rehabilitation program to reintegrate employees following serious or prolonged illness, providing specific job-related support at an early stage. The aim is to restore an employee's ability to work within three to six months at most.

At Volkswagen AG, a rehabilitation program may also include specially tailored services, depending on a person's individual needs in each case. Examples are "JobReha" which offers one to three weeks of outpatient, day-patient or inpatient treatment, mainly for musculoskeletal problems, and the "RehaFit" program, which focuses on orthopedic or psychological rehabilitation. Other examples include physiotherapy and general or targeted stamina-building exercises at workplace fitness centers. We are also steadily expanding our provision of support and counseling services for employees with mental-health or psychosomatic problems.

If an employee falls ill, our involvement is not solely limited to providing assistance of a medical nature, however. Volkswagen AG also supplements benefits paid by social insurance providers, such as sick pay, and provides support to relatives of employees who die. The company also has a collective accident insurance scheme which insures employees against accidents resulting in death or disability. In exceptional circumstances of financial need, Volkswagen AG can also offer employees short-term loans.



Robots perform tasks that would not be ergonomic for humans.

# Strategic Objective: Work Organization Fit for the Future



A job's attractiveness depends first and foremost on the workplace itself. Consequently, we endeavor to provide an innovative working environment in our plants and offices which allows individuals to fulfill their potential. This includes introducing new approaches such as Scrum and design thinking in knowledge work, as well as innovative practices on the shop floor, for instance by systematically designing technology around the workforce and creating more opportunities for participation. In addition, we offer working time models tailored to individual employees' requirements and specific programs for workers with performance impairments; in these cases in particular, individually tailored forms of work organization can significantly boost performance and job satisfaction levels.

Volkswagen AG's Work2Work program has been creating new career opportunities for employees with differing abilities since 2001. An employee's current potential is matched to workplace requirements so that despite a given disability, the individual is nevertheless still able to create significant value. More than 2,000 employees have benefited from this program in recent years, and 812 people are currently employed in Work2Work jobs in Wolfsburg across some 100 different activities.

In 2017, we published an Inclusion Report for Volkswagen AG for the first time. This set out our experiences over many years of integrating employees with impairments or differing abilities.

We are also committed to employees with disabilities in other countries. For instance, over 200 people with disabilities work in five sheltered workshops and other workplaces at ŠKODA production plants in Czechia.

Creating the workplaces of the future also involves making them barrier-free for people with disabilities. This includes ensuring that all employees, regardless of any impairment, can access and use all buildings, information and communication facilities without assistance.

## FLEXIBLE WORKING TIME MODELS

Flexible working time plays a significant role in innovative work organization models. Volkswagen is constantly working to further enhance the ease with which our employees can combine work and family life and thus cater to the particular needs of new parents, single parents or employees who are also carers, for example. The high levels of uptake of benefits such as parental leave confirm the success of this policy.

### RETURNING FROM PARENTAL LEAVE

at Volkswagen AG (2017)



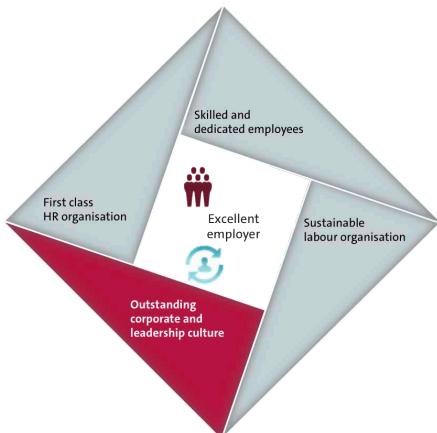
In September 2016, Volkswagen AG introduced a far-reaching company agreement governing mobile working, i.e. work away from the usual workplace. Such agreements are satisfying the wishes of many employees for more flexibility in choosing where and when they work. Other Group brands such as Audi and Porsche have similar arrangements.

Volkswagen AG offers exceptional flexibility in its undertaking to re-employ workers who take extended leave: for the past 20 years or so, employees have been able to take up to eight years' leave of absence without having to give a reason. Regardless of whether this leave is used for a sabbatical, for parental leave or for career development purposes, employees have a guaranteed right to re-employment on the same terms and conditions as before.

We also offer a wide range of options for taking a leave of absence to care for close family members. Employees are entitled to take up to 10 working days of leave at short notice, for example to make arrangements for the appropriate care of a relative who has been taken ill. They may also take up to six months part-time or full-time leave to care for a family member themselves. Another option offered is part-time working for up to 24 months in order to meet care obligations.

We believe these options greatly contribute to the present and future attractiveness of work at Volkswagen, and consequently help ensure that the company remains competitive.

# Strategic Objective: Exemplary Leadership and Corporate Culture



As part of the Group's TOGETHER – Strategy 2025 program, we began a process of radical transformation from the ground up. This includes ideas and initiatives for revitalizing our corporate culture. For instance, back in 2016 we formulated new Group-wide management principles and reviewed the criteria for appointments to management positions. In 2017, we worked on implementing this new model throughout the Group. Another important new policy introduced in 2016 was the Code of Cooperation, which establishes a clearly defined set of values for all interactions within the Group. As the code defines the ground rules for trust-based collaboration within the Group, it also constitutes a key pillar of our strategy. Using terms such as "trust", "genuine", "straightforward", "open-minded", "as equals" and "united", it describes how employees should cooperate within our brand network.

Following the definition of the new corporate culture through wide-ranging participative processes the year before, 2017 saw the rollout of this new culture. Company executives are important role models during cultural transformation. Accordingly, in 2017 around 7,300 executives, managers and works council representatives from Volkswagen AG, Volkswagen Sachsen and Volkswagen Osnabrück took part in the Volkswagen Integrity, Culture and Compliance Convention, spread over 14 days. They discussed the importance of the issues for the company and for themselves. In particular, discussions centered on how executives can set an example by showing integrity and communicating corporate culture and compliance in their everyday working lives. An e-learning program on these three aspects enabled participants to prepare the topics in advance.

## EQUAL OPPORTUNITIES AS LEVERS OF CHANGE

As part of our commitment to the United Nations Sustainable Development Goals, we champion diversity and equal opportunities at all our locations around the world. Our position is crystal clear: Volkswagen stands for respect, tolerance and cultural openness. We guarantee equal opportunities and equal treatment irrespective of ethnicity, race, gender, disability, ideology, faith, nationality, sexual orientation, social background or political conviction, provided the latter is based on democratic principles and tolerance toward those who hold different views. The Volkswagen Group Code of Conduct, which was jointly agreed with our social partners in the Social Charter in 2002, underpins these aspirations throughout the Group. Under the code, every employee and member of an executive board is responsible for ensuring that colleagues work together in partnership and is obliged to report any breaches immediately.

If any employee feels they are a victim of discrimination, they may contact trained Group experts for advice and support. At the initiative of the Works Council, employees' obligations and rights to non-discrimination were laid down in 1996 in the "Cooperative Conduct at the Workplace" company agreement applicable to all Volkswagen AG employees at all its sites. The agreement also covers bullying and other forms of discrimination. Every new employee receives a copy of it when they join the company and the contents are also covered in management training courses. In the event of any breaches, employees can also reference the agreement when submitting a complaint. All complaints must be investigated; if they are found to be substantiated, appropriate action must be taken immediately.



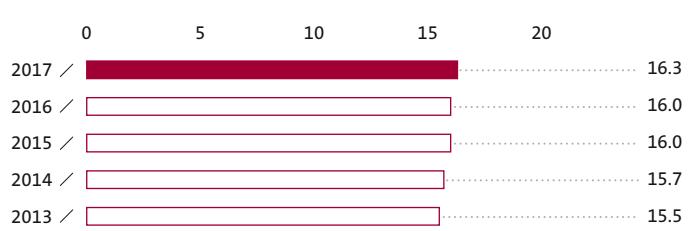
Further information on diversity at our brands can be found at:  
– Scania | Skill Capture

## ENHANCING EMPLOYER ATTRACTIVENESS AND TARGETED ADVANCEMENT PROGRAMS

To Volkswagen, a family-aware human resources policy represents one of the key qualities of an attractive employer and is an important lever for ensuring greater gender equality. Accordingly, we are continuously working to develop family-friendly working time models and increase the proportion of women in management roles.

As a voluntary undertaking, the Group first proposed differentiated targets for the proportion of female employees in our German workforce back in 2011. The following principle applies: we recruit the best graduates from each year in the required disciplines, taking as our starting point the proportion of female graduates on each course. When all the courses of relevance to Volkswagen are averaged out, these differentiated quotas produce a female graduate recruitment target of 30%.

**FEMALE EMPLOYEES\***  
in the Volkswagen Group (in %)



\* Since 2013 incl. MAN and Porsche.

Bringing more qualified women into the company will enable us to steadily increase the percentage of female executives over the coming years.

As part of the revitalization of our corporate culture, in 2017 we also focused our efforts on implementing a specific diversity management approach. This drive centers around binding quotas stipulated for women in managerial positions and targets for the international composition (internationality) of our management boards. These two figures are combined in our diversity index, which has been in force since 1 January 2017. The diversity index forms part of our human resources strategy and applies throughout the Volkswagen Group. We use the index as a tool for measuring and managing the implementation of our equal opportunities and internationality targets for top management. The calculation is based on current workforce figures. In 2017, the proportion of women in management positions was 13.8%; we are targeting 20.2% by 2025. We are also aiming to increase the internationality of our top management level from 18.7% in the financial year just ended to 25.0% by 2025. These targets are decided by the Group's Board of Management and are binding for the whole organization.

As well as introducing systematic diversity management, as required by German law we have also defined targets for the percentage of female managers at Volkswagen AG. In tune with Germany's law on equal participation for women and men in executive positions, Volkswagen AG has set itself targets for increasing the proportion of women in management by the end of 2021: 13% on the first level of management and 16.9% on the second level. As at 31 December 2017, the proportion of women in the active workforce on the first level of management was 10.4% (2016: 9.8%), while on the second level the proportion was 14.0% (2016: 13.5%).

The Group's Board of Management and Supervisory Board are regularly updated on the progress we are making toward these targets.

#### PROPORTION OF WOMEN<sup>1</sup>

in the Volkswagen Group in Germany (in %)

	2017	2016
Total management	11.4	11.0
Total apprentices	28.8	29.5
Industrial apprentices	23.0	23.3
Commercial apprentices	55.4	58.6
Students on "dual system" courses	33.6	33.5
University graduates recruited <sup>2</sup>	30.3	26.0
<b>Total Volkswagen Group in Germany</b>	<b>18.2</b>	<b>18.1</b>

<sup>1</sup> Excl. Scania, MAN and Porsche.

<sup>2</sup> Volkswagen AG.

In the year under review, the proportion of women in managerial roles in the Volkswagen Group in Germany rose to 9.2% in senior management and 13.2% in management generally (as at year end, excluding Scania, MAN and Porsche). The proportion of women in top management increased from 4.7% in 2016 to 6.5% in the reporting year (as at year end, excluding Scania, MAN and Porsche). The proportion of women in management across the Group in Germany (excluding Scania, MAN and Porsche) therefore came to 11.4%, up from 11.0% the year before.

We are taking a variety of measures to encourage this trend. For instance, 2017 saw a fourth cohort embark on our cross-brand management mentoring program, with 55 women participating (mainly from the Volkswagen Group in Germany). In addition, Volkswagen offers the "Kompass" program specifically to encourage female talent to aim for a career in management. Over the reporting period, 60 women from Volkswagen AG, MAN, Volkswagen Sachsen GmbH, Volkswagen Osnabrück, Volkswagen Financial Services AG and Autovision GmbH took part in this program. There is a key difference between the objectives of the two programs: while "Kompass" prepares women for potential leadership roles at Volkswagen, the mentoring program is aimed at women in the talent pipeline who have already been identified as potential high flyers.

Volkswagen aims to attract female students at an early stage. Our Germany-wide "Woman DrivING Award" and "Woman Experience Day" both target female engineering and IT students and graduates, aiming to interest them in technical careers with us.

-  > Further information on our brands' initiatives for advancing women can be found at:  
– SEAT | Women in management  
– Scania | Women Moving the City!  
– India | Sakhî Group

In addition, Volkswagen is aiming to increase the proportion of female skilled workers and group leaders in Germany to 10%. In the 2017 fiscal year, the percentage of female skilled workers in the Volkswagen Group in Germany (excluding Scania, MAN and Porsche) was 7.6%, and 4.9% for group leaders.

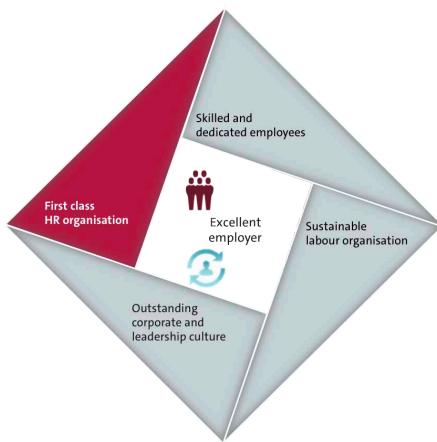
In order to increase the proportion of female trainees in industrial and technical trades from 23.0% in 2017 to 30% in 2020, we are specifically seeking to attract female talent, for example by arranging special work experience and orientation days for young women. The aim of these events is to give these young women a taste of training in these technical occupations and help them make career choices. For many years, the Volkswagen Passenger Cars, Audi, Porsche, Volkswagen Commercial Vehicles, MAN and Volkswagen Financial Services brands have participated in the Germany-wide "Girls' Day" or "Day of the Future" event. During the reporting year, the "Girls' Day" format offered more than 2,000 female school students a practical insight into the industrial/technical careers on offer in the automotive sector.

Another step on the way to becoming a family-friendly enterprise is our ongoing expansion of tailored childcare provision. Both in Germany and other countries, we have found that providing childcare facilities in the vicinity of company premises is beneficial. In addition to well-established existing facilities, in recent years we have set up a number of daycare centers near our operating locations.

All German sites of the Volkswagen Passenger Cars, Audi, Porsche, Volkswagen Commercial Vehicles and MAN brands also offer childcare during school holidays.

With these wide-ranging measures, we are confident that we are making a real contribution not only to greater diversity, but also to a culture of openness and inclusiveness across all our brands and companies.

# Strategic Objective: First-Rate HR Organization



All the objectives and activities described here require a solid foundation. As a company, we believe only strong personnel management focused on the interests of both the company and our employees can provide the basis for good work policies in an environmentally and socially responsible enterprise.

Highly skilled and qualified HR staff are crucial for implementing human resources policies that motivate people to perform their best. Accordingly, our final strategic objective is to continuously improve our HR organization. The goal we have set ourselves is ambitious – to shape and support all upcoming change and transformation processes in the company, without ever losing sight of our objective of creating highly productive, people-friendly working environments.

To attain this vision, we are currently improving the organization of our personnel management function. Future efforts will center firstly on the digital transformation of work processes, and secondly on realigning personnel management.

Our “Empower to transform” human resources strategy formulates our previous personnel management objectives in more detail. Not only will we ensure that our top teams have the requisite skills; in collaboration with our specialist departments we will work on laying the foundations for enabling the teams to achieve their full potential – among other things by bolstering their ability to continually adapt to constantly changing circumstances.

# Human Rights

As globalization continues to advance, value creation is increasingly shifting toward individual sales markets. This trend effectively increases our responsibility for our activities worldwide – including the safeguarding of human rights.

Consequently, as the fundamental bedrock underlying all our activities, we respect, protect and support all laws around the world that aim to protect universal human rights. We reject all forms of child, forced or compulsory labor, modern slavery and human trafficking. Naturally, this not only applies to our own activities within the Group, but also to our relationships with business partners and to their conduct.

Our production and sales exist within globally interlinked structures. Human rights risks lie primarily in our upstream value chain and in resource extraction industries. Nevertheless, we clearly recognize the fact that our company is not completely immune to these risks. The cornerstones of collaborative and harmonious labor relations at Volkswagen Group are a raft of charters and declarations agreed with our Group European Works Council and Global Group Works Council. They safeguard employment rights and human rights, such as the right to freedom of association, collective bargaining, equal pay, and the prohibition of discrimination in the workplace.

To safeguard universal human rights, we take our lead from various international, European and national agreements. These include:

- the United Nations Universal Declaration of Human Rights,
- the UN Guiding Principles on Business and Human Rights,
- the Declaration on Fundamental Principles and Rights at Work by the International Labour Organization (ILO),
- the European Convention on Human Rights,
- the OECD Guidelines for Multinational Enterprises, and
- the German federal government's National Action Plan for Business and Human Rights.

Furthermore, we have clearly set out our Group-wide policy on safeguarding universal human rights and what we expect of our employees in this regard in our Code of Conduct. The issue of human rights is covered in the section on “Our responsibilities as a member of society”.

Extensively revised in 2017, the Code of Conduct now applies to all employees at all levels across all our brands and companies. The parts pertaining to human rights were completely revised and substantially expanded. Our Corporate Guidelines also lay down further principles.

 > The Volkswagen Group's complete Code of Conduct can be found at:  
[https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/Code\\_of\\_Conduct\\_2017\\_VW\\_Group\\_english.pdf](https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/Code_of_Conduct_2017_VW_Group_english.pdf)

## PROCESSES FOR SAFEGUARDING HUMAN RIGHTS

We aim to identify human rights risks at the earliest possible juncture and act to continually minimize them. We consider the Group's impact on people along our entire value chain. For this reason, we are constantly working toward establishing human rights due diligence at all levels of our value chain.

Our Risk Management System (RMS) and Internal Control System (ICS) are described in Volkswagen AG's Annual Report (in the Report on Risks and Opportunities). The application of these RMS/ICS systems across the Group enables the timely identification of risks, including the risk of human rights violations.

Other tools used for this purpose include country risk analyses, business partner screenings, questionnaire-based monitoring, plus the installation of early warning systems and performance of supplier audits where human rights violations are suspected.

Volkswagen's worldwide ombudsman system is our point of contact for reporting suspected internal or external cases of non-compliance with our sustainability requirements, including infringements of human rights in the supply chain. This system can be used to confidentially report any suspicions – in one of 11 different languages – to two independent lawyers appointed by the Group.

If employees, business partners or customers suspect that anyone in our employ is acting unlawfully, they can report this transparently via a number of whistleblower system channels. The main focus of our whistleblower system is on obtaining information about serious breaches as specified in our guidelines. Human rights violations are a typical example of issues where the criteria for a serious breach are

automatically met. The whistleblower system guarantees the greatest possible protection for both whistleblowers themselves and the people affected, and follows strict rules to ensure that the process is fair, transparent and swift.

Both employees and third parties can report possible breaches to the Volkswagen Group's national and international employee representative bodies, or to national and international trade union federations.

As part of our Sustainability in Supplier Relations program, we raise our employees' awareness of and provide them with continuous training in issues relating to human rights, risks and trends, as well as the principles enshrined in our Group-wide Code of Conduct. We are currently also conducting an in-depth review of the human rights section of our Code of Conduct. We use real-life examples of potential human rights violations to illustrate the individual issues and help employees put the Code of Conduct's rules into practice. Informing and training employees at all levels in our companies is an essential part of our compliance efforts.

-  > Further information on the whistleblower system, our Code of Conduct and our Sustainability in Supplier Relations concept can be found in sections:  
– Risk management  
– Compliance  
– Supplier management

## CONFLICT MINERALS

We also believe we have a special responsibility to protect groups along our supply chain who are potentially at high risk of human rights abuses. Our supplier management therefore includes due diligence guidance for building responsible supply chains of minerals from conflict-affected and high-risk areas.

# Social Responsibility

We aim to be an attractive employer for our workforce and a good partner for society. Reliability, trustworthiness and fairness are our watchwords – no matter whether we are talking to individual employees, negotiating with collective representative bodies, collaborating with regional partners in local infrastructure development projects, or cooperating with civil society initiatives and associations.

Our “Empower to transform” human resources strategy seeks to ensure that the Group, our brands and our workforce are well placed to adapt to the ever more rapidly evolving challenges of the networked digital world. Our human resources strategy is designed to help the Volkswagen Group become a global leader in sustainable mobility on an enduringly profitable basis.

Nor does our responsibility to people stop at our factory gates – as a good “corporate citizen”, we see ourselves as a driver of local growth, contributing to structural development and equal opportunities wherever we operate. As part of our strategic approach, we are constantly looking to expand our support for social, cultural and community projects that are building a better future.

## CORPORATE CITIZENSHIP

We have always believed in the importance of recognizing our social responsibilities toward our stakeholders. As a multinational enterprise, we bear a global responsibility that extends beyond our factory gates. The main focus of our corporate social engagement activities is on supporting local development, educational and community projects at many of our sites. Actively responding to societal challenges such as the current refugee situation represents one of the core imperatives of our corporate social responsibility.

We consider it important to take a strategic approach to social engagement, so we select and develop our projects with great care – both independently and in collaboration with local partner organizations and NGOs. Local on-site project management allows us to react flexibly to our stakeholders’ needs or anxieties.

We are also seeking to obtain a more complete picture of the effectiveness of our projects. Building on the London Benchmarking Group’s input-output-impact (IOI) model for measuring the effectiveness of community engagement initiatives, we have analyzed selected projects to find out who they benefit. As part of this process, we have also

aggregated our inputs across the Group and recorded the different objectives in detail. This extensive pool of data provides us with an overview of the contexts, objectives and impacts of our involvement in environmental and community projects.

Based on this information, we will revise our corporate citizenship strategy in 2018 and define new areas of focus in line with TOGETHER – Strategy 2025. Following a review of our corporate citizenship concepts, we will define appropriate objectives and specific performance indicators, along with methods for measuring the effectiveness of these strategic initiatives.

In our corporate citizenship endeavors, we have always been guided by two principles: continuity and participation.

Over the reporting year, we were extensively involved in some 250 projects around the globe aiming to improve economic and social structures. We also provided emergency assistance on an ad-hoc basis, following natural disasters such as, for example, the severe flooding in South Asia and the USA.

Project selection and implementation are guided by our Group-wide policies, which provide the decision-making framework for all our community activities:

- The projects align with our corporate mission while addressing a global challenge or a specific local issue.
- They are an expression of the diversity within the Group and the socio-cultural environment in which the projects are carried out.
- They are developed in close consultation with local stakeholders, who are also involved in their implementation.
- Projects are managed locally under the responsibility of the units operating there.

By taking into account both local and wider priorities, we are able to meet the diverse expectations of our stakeholders. In 2017, the Group and all our brands and regions were involved in around 250 projects that encompassed development, infrastructure and educational initiatives, as well as community projects. Due to the various different local circumstances and challenges involved, the projects took on numerous different forms.

 > Further information regarding our brands' social responsibility can be found at:  
**MAN | Man Impact Accelerator**



Integrating – Work placements offer initial insights into working in Germany.



Educating – Language courses for various levels of ability (here at AUDI AG).

## MAIN CORPORATE SOCIAL ENGAGEMENT ACTIVITIES

We give donations in cash and in kind to support activities and projects primarily devoted to research and education, culture, sports and social causes. Donations may only be given to recognized non-profit organizations or ones specifically endorsed to receive donations. We do not make any donations to political parties, party-affiliated foundations or individual politicians. In the reporting period, Volkswagen AG made donations amounting to €28.2 million.

Added to this amount are the donations made by our employees, which go to help support people in need in the vicinity of Volkswagen AG's various locations. In 2017, Wolfsburg employees alone donated more than €460,000.

One of our largest projects is our strategic partnership with the German Red Cross, which will remain in place for the next three years.

Since the summer of 2003, this initiative has also included the collection of "spare cents", whereby Volkswagen employees in Germany and abroad donate the odd cents on their monthly pay slips to the "One Hour for the Future" campaign. The funds raised are used to support a total of 140 projects in seven countries around the world.

Another workforce initiative led to the sale of sustainably farmed fair-trade products in the company's cafes and restaurants, where the sale of products bearing the Fairtrade seal has been promoted since 1999. Through this commitment, we are helping producers in developing countries establish socially sustainable businesses.

The Volkswagen Employees' Foundation, established in 2011, is playing an increasingly significant role in our community activities. This charitable foundation aims to support youth outreach as well as vocational education and training at all levels, with projects that focus on the neighborhoods of Group sites worldwide. It runs projects in cooperation with children's charity terre des hommes. Since 2011, the Volkswagen Employees' Foundation has launched or supported more than 20 projects in Germany and elsewhere.

Alongside these projects, which are directly supported by Volkswagen or the Volkswagen Works Council, we also encourage our employees to volunteer for local causes in their free time. To coordinate and provide targeted support for volunteering activities, we have made the "Volkswagen pro Ehrenamt" (Volkswagen Supports Volunteering) initiative an integral part of our personnel management. Since 2007, around 2,600 volunteers have been matched to suitable vacancies through this volunteer exchange.

Volkswagen employees who are looking for a new challenge following retirement can register with our company "Senior Experts" team. This offers them the opportunity to contribute their expertise regionally or globally, either within the company or by providing voluntary support to external organizations. In 2017, around 135 Senior Experts took part in projects of their choosing, putting their accumulated specialist knowledge to good use and contributing to a valuable inter-generational exchange of experience. During the reporting year, 28 departments and more than 20 Volkswagen sites worldwide benefited from the program.

-  > Detailed information on our brand's social engagement activities can be found on our CSR world map under:  
– Volkswagen | Volkswagen Supports Volunteering  
– ŠKODA | Employee donation  
– Bentley | Voluntary community work  
– Lamborghini | Partnership Teatro Comunale  
– Volkswagen Commercial Vehicle | Foundation "On the Bult"  
– Scania | Scania for Nutrition  
– Volkswagen Financial Services | Project training wheels  
– MAN | Education for a better future in Africa  
– Argentina | Volunteer group  
– India | Mobile medical service and water shortage  
– Mexico | Help for earthquake victims  
– USA | Volkswagen Group of America Foundation  
– China | German 8

- **Meeting:** Providing support for several thousand refugees by means of donations, volunteering and social events.
- **Educating:** Grants for 100 refugees; language and integration courses for 1,600+ refugees over several months; classes for systematic help with integration and employability skills for 90 refugees; support for minors at school.
- **Integrating:** Work placements and internships for 500 refugees; skills assessments and career guidance for over 1,300 refugees, introductory training, vocational training and work for around 130 refugees.

In addition, we complement the large-scale voluntary work of our workforce by contributing the services of experts, making donations in kind and providing vehicles for aid organizations. Evolving out of initial efforts to provide immediate aid, our brands and their employees have been involved in developing a wide variety of short and long-term social support initiatives.

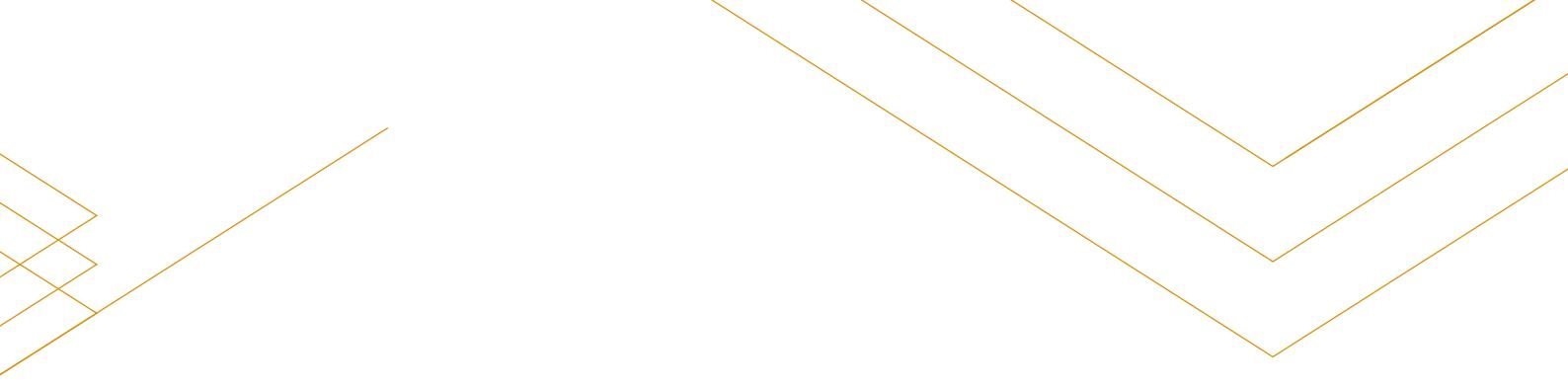
At various stages of their educational journey, we also help refugees learn the language, obtain qualifications and understand German culture. This begins with the very youngest: the Volkswagen Employees' Foundation supports children and adolescents through three years of school by funding language learning, integration and the acquisition of qualifications with donations totaling around €2.5 million. We also help refugees obtain university degrees. In cooperation with the charity start-up "Kiron Open Higher Education", we sponsor university places in IT and engineering.

-  > Further information on our brands' qualification offers for refugees can be found at:  
– Volkswagen Commercial Vehicle | German 360°  
– MAN | Integration of refugees  
– Argentina | Ferdinand Porsche Institute

## HELPING REFUGEES: MEETING, EDUCATING, INTEGRATING

Since the summer of 2015, we have been enthusiastically helping to support the wave of refugees arriving in Germany. At present, we believe the most urgent priorities for refugees are to learn German and acquire entry-level qualifications, as these are the keys for unlocking access to further education and training and entering the labor market. By the end of 2017, we had helped approximately 3,500 refugees access language and foundation training courses. The help provided by the Volkswagen Group, its brands and companies centered on the following three strands, in which the following activities were organized for refugees during 2017:





# Appendix

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The Volkswagen Group is committed to sustainable, transparent and responsible corporate governance. In this section, we report in more detail on how our sustainability indicators relating to products and production and to people and responsibility have developed over recent years.

# Products and Production

As in previous years, we present key environmental indicators for our production operations in reporting year 2017.

The indicators presented here include selected environmental data for the Volkswagen Group in aggregated form. The data is collected, checked and approved at our production sites in line with an internal standard (VW Standard 98 000). In order to improve the accuracy and consistency of the resulting information, the collection of environmentally relevant consumption and emission data is subject to a continuous improvement process. This applies in particular to those items of information that are calculated using special algorithms. Furthermore, the values for December of the preceding year may include some estimated data if, for example, they are based on bills from power suppliers or waste disposal providers which were not yet available at the time of compilation. In the next data collection round, this estimated data will be replaced with the finalized figures for December.

In line with corporate monitoring of our environmental strategy, the reported time series are related back to the 2010 baseline. The current reporting year and the preceding year complete the reporting period.

Overall, environmental data is collected from the Group's production sites.

As in the Volkswagen Group's Annual Report, data in the "Car and light commercial vehicles" category is reported for 2010, 2016 and 2017. Data for the brands Scania AB, MAN SE, Ducati Motor Holding S.p.A. and VW Kraftwerk GmbH is reported in the "Other divisions" category; the respective proportions are shown separately in the graphs. Unless otherwise indicated, all the Group's production sites, together with the power stations and boiler plants operated by Volkswagen AG in Wolfsburg, Kassel and Hanover in Germany, are included in both categories.

The data covers 113 of the Group's 120 production sites. No data is available for Scania's seven Regional Product Centers. These correspond to approx. 0.1% of the workforce at the production sites, hence have no relevant influence on the Group's KPIs.

The Volkswagen Group is essentially an automotive manufacturer which produces cars and light commercial vehicles, as well as heavy-duty commercial vehicles and buses. MAN SE does, however, also manufacture marine engines and power station components. In view of this product diversity, our overall environmental impact cannot simply be expressed in terms of the volume of vehicles produced. Consequently, relative indicators are only shown for the "Car and light commercial vehicles" category. The number of vehicles produced in 2017 totaled 10,667,549 cars and light commercial vehicles, as well as 207,451 heavy-duty commercial vehicles.

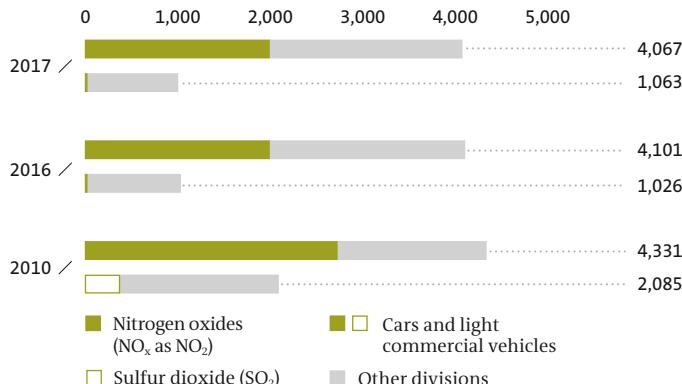
The changing production volumes and associated fluctuations in capacity utilization levels at our various locations are reflected in changes in the absolute values of many indicators. However, increased efficiency did result in improvements in the specific values of a number of indicators.

Weather conditions have an appreciable but uncontrollable impact on the consumption of resources. This relates primarily to space heating demand for both production and non-production areas, since the annual average temperatures impact the direct consumption of energy sources, as well as the amount of energy purchased from third parties.

The specific values are also influenced by a range of factors. On the one hand, absolute consumption or emission levels may change, while on the other, rising or falling production volumes at the individual production sites also influence the indicators.

**DIRECT NO<sub>x</sub> AND SO<sub>2</sub> EMISSIONS\***

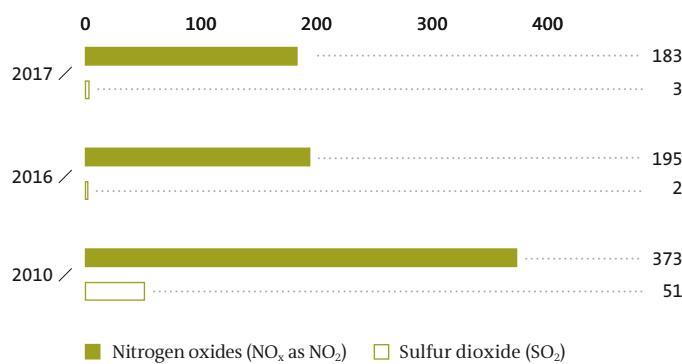
in tonnes/year



\* Cars and light commercial vehicles and other divisions.

**DIRECT NO<sub>x</sub> AND SO<sub>2</sub> EMISSIONS\***

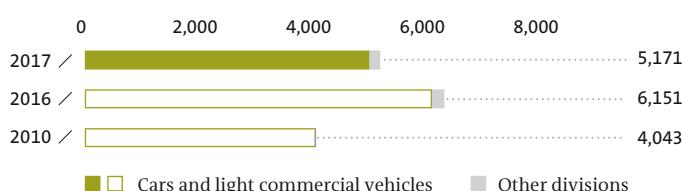
in kg/vehicle



\* Cars and light commercial vehicles.

**CHEMICAL OXYGEN DEMAND (COD)\***

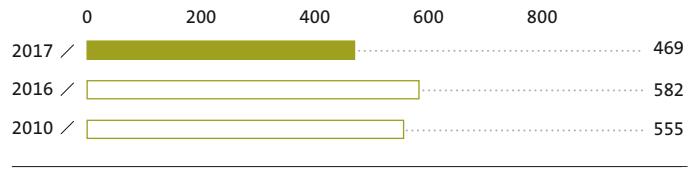
in tonnes/year



\* Cars and light commercial vehicles.

**CHEMICAL OXYGEN DEMAND (COD)\***

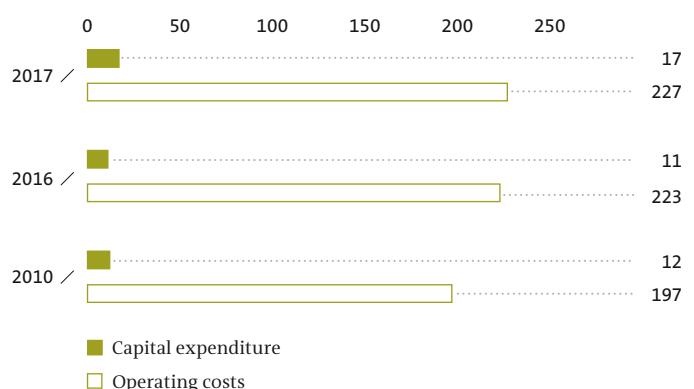
in g/vehicle



\* Cars and light commercial vehicles.

**ENVIRONMENTAL PROTECTION COSTS\***

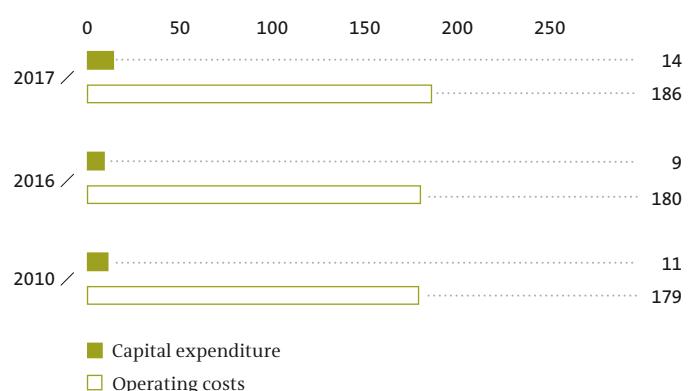
in € million/year



\* Volkswagen AG production locations in Germany.

**ENVIRONMENTAL PROTECTION COSTS\***

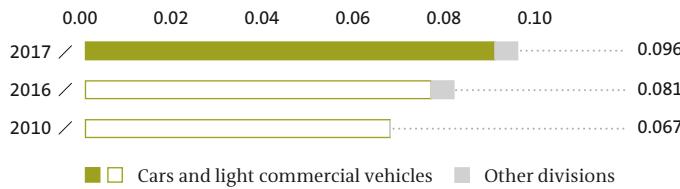
in € million/vehicle



\* Volkswagen AG production locations in Germany.

**CO<sub>2</sub> EQUIVALENTS\***

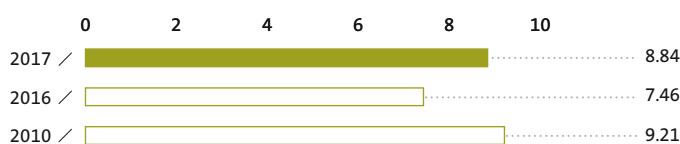
in million tonnes/year



\* Cars and light commercial vehicles and other divisions.

**CO<sub>2</sub> EQUIVALENTS\***

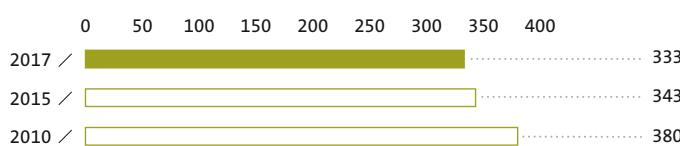
in kg/vehicle



\* Cars and light commercial vehicles.

**PARTICULATE EMISSIONS\***

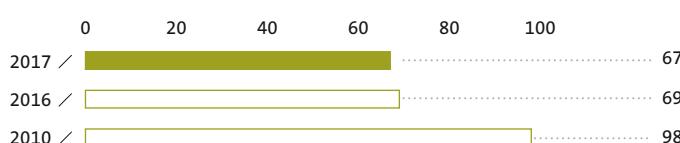
in tonnes/year



\* Cars and light commercial vehicles.

**PARTICULATE EMISSIONS\***

in g/vehicle

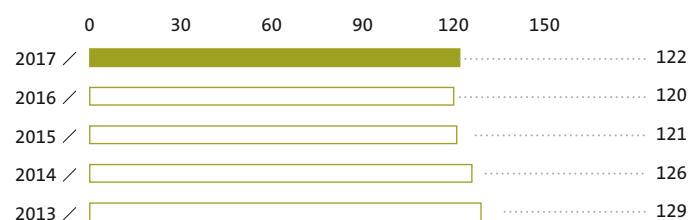


\* Cars and light commercial vehicles.

**CO<sub>2</sub> EMISSIONS\***

of the Volkswagen Group's European (EU 28)

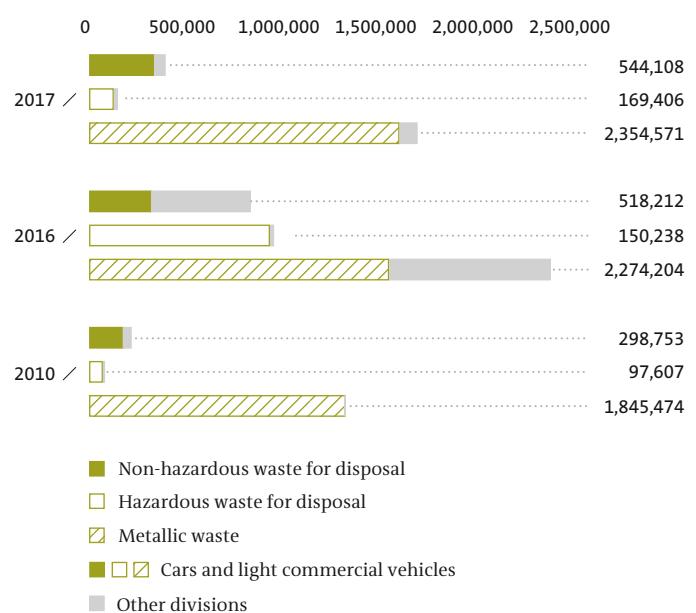
New Passenger Car Fleet in g/km.



\* Subject to official publication by the European Commission. ("NEDC test cycle").

**WASTE FOR RECYCLING<sup>1,2</sup>**

in million tonnes/year

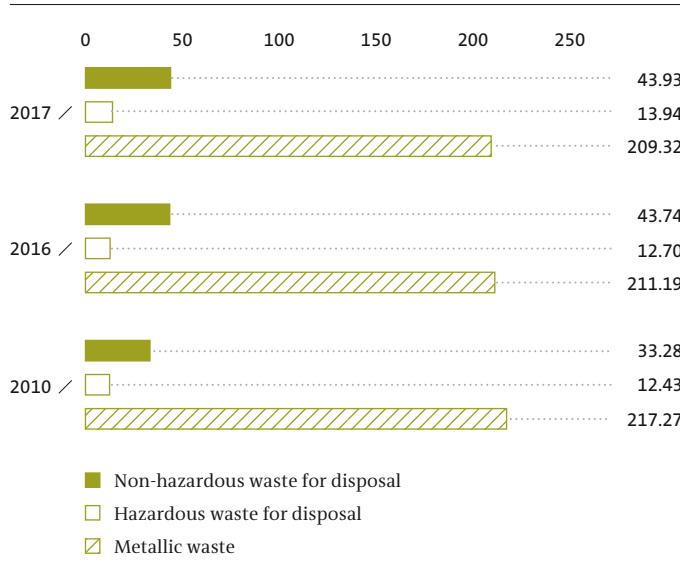


<sup>1</sup> The bars for "Non-hazardous waste for recycling", "Hazardous waste for recycling" and "Metallic waste" indicate the share attributable to other Group divisions. This is not depicted for the other fractions, however, due to their minimal share in these amounts.

<sup>2</sup> Cars and light commercial vehicles and other divisions.

**WASTE FOR RECYCLING<sup>1</sup>**

in kg/vehicle

<sup>1</sup>Cars and light commercial vehicles.**PLANTS IN THE VICINITY OF NATURE CONSERVATION AREAS**

Plant	Distance (km)	Area* (ha)
Braunschweig (D): Oker	0.8	53
Poznań, Logistics (PL): Dolina Cybiny	2.7	30
Chemnitz (D): Zwönitz	2.5	21.3
Poznań, Foundry (PL): Fortyfikacje-w-Poznańiu	6.7	40
Dresden (D): Mühlberg	1	8.3
Poznań, Production (PL): Dolina Cybiny	0.6	40
Ehra-Lessien (D): Vogelmoor	3.9	
Mlada Boleslav, Production (CZ): Radouci	1.2	212
Emden (D)	0.9	400
Vrachlabí, Production (CZ): Krkonose	1.1	23
Hannover (D): Leine	0.75	118
Kvasiny, Production (CZ): Uh inov-Benátky	5	42
Ingolstadt (D): Training ground	3.8	200
Martin, Components (SK): Malá Fatra	< 5	12.4
Kassel (D): Fuldata	1.6	280
Bratislava, Production (SK): Moravy	< 2	178
Leipzig (D): Tannenwald, Strohgäu	0	20
Palma de Mallorca, Production (POR): Arrabida	3.5	24.5
Neckarsulm (D): Jagst, Kocher	0.1	95
Barcelona, Production (ES): Llobregat	3.6	39.3
Osnabrück (D): Mausohr, Belm	5.45	36.1
Martorell, FE, Production (ES): Llobregat	0.85	800
Salzgitter (D): Heerter See	7.5	280
Pamplona, Production (ES): Pena de Etxauri	15	163
Stuttgart (D): Max-Eyth-See	0.75	28.8
Prat, Components (ES): Llobregat	0.7	15.5
Weissach (D): Enztal, Stuttgarter Bucht	0.05	84.9
Brüssel, Production (B): Verrewinkel-Kinsendael	3	44
Wolfsburg (D): Barnbruch	0.2	800
Györ, Components (HU): Göny i homokvidék	< 1	30
Zwickau (D): Zwickauer Muldetal	0.1	180
Crewe (UK): West Midlands Moor	5.7	
Polkovice, Components (PL): Jelonek	7.9	
Polkovice, Sitech (PL): Jelonek	3.2	

\*Area = Surface area of production location.

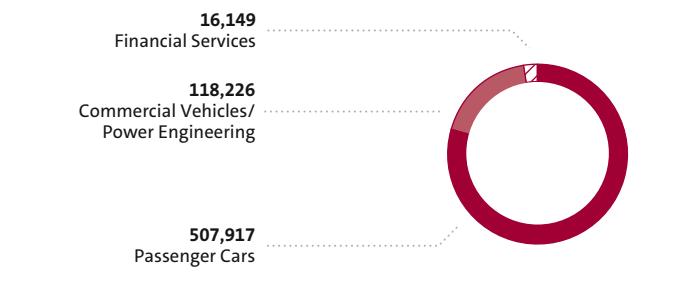
# People and Responsibility

In fiscal year 2017, the Volkswagen Group – including our Chinese joint-venture companies but excluding trainees – employed 634,396 people on average (+2.4%). In Germany, an average of 284,734 employees were working under contract in 2017; at 44.9% (45.2%), their share of the total workforce fell slightly below the previous year's level.

As at 31 December 2017, the number of active employees in the Volkswagen Group rose by 2.3% to 615,081. Another 8,004 employees were in the passive phase of semi-retirement and 19,207 young people were on training or apprenticeship programs. At the end of the year under review, the Volkswagen Group had 642,292 employees (+2.5%). The production-related buildup, further hiring of skilled workers in Germany and abroad, and an increase in the number of employees working at our new plants in Mexico, China and Poland were offset by the departure of around 9,800 personnel as a result of the partial sale of PGA Group SAS. The number of employees in Germany came to 287,480 (+2.1%); employees abroad numbered 354,812 (+2.8%).

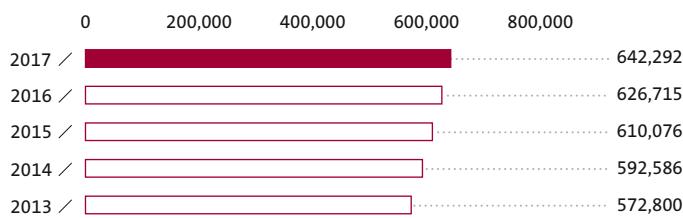
## NUMBER OF EMPLOYEES

in the Volkswagen Group by Segment



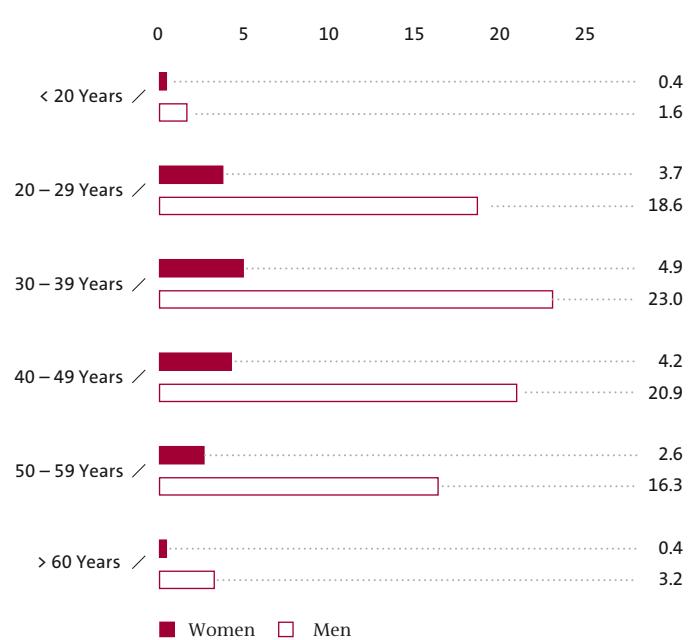
## WORKFORCE

in the Volkswagen Group



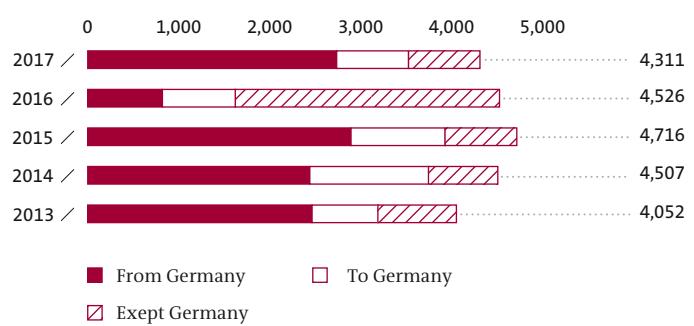
## EMPLOYEE AGE STRUCTURE

in the Volkswagen Group (in %)



## FOREIGN SERVICE EMPLOYEES\*

in the Volkswagen Group



\* From 2013 incl. new Group companies MAN, Scania, Porsche AG, Ducati and Porsche Holding.

**APPRENTICES IN THE VOLKSWAGEN GROUP**

	December 2016			December 2017		
	Total	Domestic country	Foreign country	Total	Domestic country	Foreign country
Volkswagen Passenger cars	6,807	5,359	1,448	6,306	4,973	1,333
Audi	2,770	2,650	120	2,851	2,753	98
ŠKODA	913	2	911	936	—	936
Porsche	794	759	35	840	796	44
Porsche Holding Salzburg	2,042	1,116	926	1,766	1,114	652
SEAT	202	47	155	237	64	173
Bentley	155	0	155	135	—	135
Weitere	581	18	563	797	366	431
<b>Automotive Division</b>	<b>14,264</b>	<b>9,951</b>	<b>4,313</b>	<b>13,868</b>	<b>10,066</b>	<b>3,802</b>
MAN	3,145	2,245	900	3,132	2,169	963
Scania	944	0	944	1,081	—	1,081
Volkswagen Commercial Vehicles	956	726	230	932	732	200
<b>Bereich Nutzfahrzeuge/Bereich Power Engineering</b>	<b>5,045</b>	<b>2,971</b>	<b>2,074</b>	<b>5,145</b>	<b>2,901</b>	<b>2,244</b>
Commercial Vehicles/Power Engineering Division	181	143	38	194	148	46
<b>Group</b>	<b>19,490</b>	<b>13,065</b>	<b>6,425</b>	<b>19,207</b>	<b>13,115</b>	<b>6,092</b>

**NUMBER OF EMPLOYEES IN THE VOLKSWAGEN GROUP**

by type of work

	2017	2016	2015	2014	2013	2012
Production workers	310,083	289,438	279,771	273,418	265,474	258,685
Non-production workers	313,002	317,787	311,654	300,709	289,623	274,364
Apprentices	19,207	19,490	18,651	18,459	17,703	16,714
<b>Total workforce</b>	<b>642,292</b>	<b>626,715</b>	<b>610,076</b>	<b>592,586</b>	<b>572,800</b>	<b>549,763</b>
of whom: active employees*	615,081	601,443	585,242	566,998	545,596	525,245
in passive phased retirement	8,004	5,782	6,183	7,129	9,501	7,804

\*All employees with a current contract of employment in a Group company who are involved in the value creation process.

**NUMBER OF EMPLOYEES IN THE VOLKSWAGEN GROUP**

by region

	2017	2016	2015	2014	2013	2012
Europe	474,522	464,199	451,257	438,631	424,964	410,427
The Americas	59,086	58,491	59,329	59,790	61,796	63,193
Africa	5,918	6,082	6,388	6,330	6,356	6,461
Asia	101,643	96,823	91,991	86,752	78,672	68,704
Australia	1,123	1,120	1,111	1,083	1,012	978
<b>Total</b>	<b>642,292</b>	<b>626,715</b>	<b>610,076</b>	<b>592,586</b>	<b>572,800</b>	<b>549,763</b>
of whom: temporary staff	27,684	21,806	17,909	15,161	17,419	24,914
permanent staff	614,608	604,909	592,167	577,425	555,381	524,849

**AVERAGE AGE AT VOLKSWAGEN AG**

	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Women	39.5	39.0	38.6	38.4	38.3
Men	44.5	44.2	43.7	43.6	43.7
<b>Total</b>	<b>43.6</b>	<b>43.2</b>	<b>42.9</b>	<b>42.8</b>	<b>42.9</b>

**PARENTAL LEAVE\* AT VOLKSWAGEN AG**

	<b>2017</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>
Women	889	821	718	601	537
Men	2,743	2,540	2,112	1,658	1,285
<b>Total</b>	<b>3,632</b>	<b>3,361</b>	<b>2,830</b>	<b>2,259</b>	<b>1,822</b>

\* Number of employees who started their parental leave in the year in question.



# GRI Content Index




This Sustainability Report was drawn up in compliance with the GRI Standards (applying the “Comprehensive” option). At the same time, we show how we are implementing the requirements of the United Nations Global Compact (UNGC) and living up to the Sustainable Development Goals (SDG) as well as the criteria of the German Sustainability Code (DNK).

The declarations, disclosures and references that appear in the Index relate to the 2017 fiscal year (January 1 to December 31, 2017).

## GRI CONTENT INDEX

GRI Standard	Disclosure	References	Comments	UNGC	SDG	GSC
<b>GRI 101: Foundation 2017</b>						
<b>GENERAL DISCLOSURES</b>						
<b>GRI 102: General Disclosures 2017</b>						
<b>ORGANIZATIONAL PROFILE</b>						
102-1	Name of the organization	16				
102-2	Primary brands, products, and services	16–19; Annual Report 2017: Divisions				
102-3	Location of the organization’s headquarters	16				
102-4	Countries with significant operations	18				14
102-5	Nature of ownership and legal form	16; Annual Report 2017: Structure and Business Activities				
102-6	Markets served	18; Annual Report 2017: Divisions				
102-7	Scale of the organization	18; Annual Report 2017: Divisions				
102-8	Information on employees and other workers	102–103	No breakdown by employees and supervised workers nor within the individual categories by gender (level of coverage not material).	6	8	
			The moderate use of temporary work represents an essential flexibility instrument for Volkswagen. The principles of our Charter on Temporary Work serve to ensure appropriate conditions of employment and remuneration for temporary external personnel and the standardized use of temporary work as an instrument across the Volkswagen Group. Volkswagen does not use external personnel to replace its own employees. Contracts for work and services are an essential instrument for meeting special personnel requirements (such as specific knowledge). The use of contracts for work and services is a normal procedure. Volkswagen concludes such contracts for example with companies from the trades who are engaged in building work at the factories, with companies who supply, maintain and repair plant and equipment, with cleaning firms, as well as with IT and development companies in order to access their specific knowledge. Volkswagen attaches great importance to ensuring that the Group’s high social standards are integrated into its supplier management. We take reports of possible violations seriously and follow them up. If violations are determined, we ensure they do not recur.			
102-9	Supply chain	19				4
102-10	Significant changes to the organization and its supply chain	Annual Report 2017: Structure and Business Activities				4

**GRI CONTENT INDEX**

<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
102-11	Precautionary Principle or approach	27–28, 44–47 Annual Report 2017: Risk Management and Internal Control System		7		1
102-12	External initiatives	4, 27				1
102-13	Membership of associations	30–34; Volkswagen memberships ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )				19
<b>STRATEGY</b>						
102-14	Statement by the most senior decision-maker	12–13				1
102-15	Key impacts, risks, and opportunities concerning sustainability	12–13, 46–47				2
<b>ETHICS AND INTEGRITY</b>						
102-16	Values, principles, standards, and norms of behavior	12–13, 27; Group Values, Model of Sustainable Development, Code of Conduct ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )		10	16	5, 6, 7
102-17	Mechanisms for advice and concerns about ethics	42–43		10	17	20
<b>GOVERNANCE</b>						
102-18	Governance structure	27–28				
102-19	Delegating authority for economic, environmental, and social topics	27–28; Annual Report 2017: Report of the Supervisory Board				
102-20	Executive-level responsibility for economic, environmental, and social topics	27–28; 44–45; Annual Report 2017: Sustainable Value Enhancement				5
102-21	Consulting stakeholders on economic, environmental, and social topics	Annual Report 2017: Disclosures Required under Takeover Law; Annual Report 2017: Shares and Bonds			16	9
102-22	Composition of the highest governance body and its committees	27–28; Annual Report 2017: Report of the Supervisory Board; Annual Report 2017: Corporate Governance Report; Annual Report 2017: Executive Bodies			5, 16	
102-23	Chair of the highest governance body	Annual Report 2017: Cooperation; Annual Report 2017: Report of the Supervisory Board			16	
102-24	Nominating and selecting the highest governance body	Annual Report 2017: Corporate Governance Report			5, 16	
102-25	Conflicts of interest	Annual Report 2017: Cooperation; Annual Report 2017: Report of the Supervisory Board			16	
102-26	Role of highest governance body in setting purpose, values, and strategy	Annual Report 2017: Report of the Supervisory Board; Annual Report 2017: Corporate Governance Report				5

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
102-27	Collective knowledge of highest governance body	Annual Report 2017: Corporate Governance Report			4	
102-28	Evaluating the highest governance body's performance	Annual Report 2017: Corporate Governance Report			8	
102-29	Identifying and managing economic, environmental, and social impacts	46–47; Annual Report 2017: Corporate Governance Report		16	5	
102-30	Effectiveness of risk management processes	46–47; Annual Report 2017: Corporate Governance Report			5	
102-31	Review of economic, environmental, and social topics	46–47; Annual Report 2017: Corporate Governance Report			5, 7	
102-32	Highest governance body's role in sustainability reporting	27–28			5	
102-33	Communicating critical concerns	Annual Report 2017: Corporate Governance Report			14	
102-34	Nature and total number of critical concerns	Annual Report 2017: Report of the Supervisory Board			9	
102-35	Remuneration policies	77; Annual Report 2017: Remuneration Report			8	
102-36	Process for determining remuneration	Annual Report 2017: Remuneration Report			15	
102-37	Stakeholders' involvement in remuneration	Annual Report 2017: Remuneration Report		16		
102-38	Annual total compensation ratio	77; Annual Report 2017: Remuneration Report			8	
102-39	Percentage increase in annual total compensation ratio	77; Annual Report 2017: Remuneration Report				

**STAKEHOLDER ENGAGEMENT**

102-40	List of stakeholder groups	31			9	
102-41	Collective bargaining agreements	75–76	Percentage not given (not a relevant indicator)	3	8	14
102-42	Identifying and selecting stakeholders	31–34			9	
102-43	Approach to stakeholder engagement	28, 31–34			9	
102-44	Key topics and concerns raised	28, 32–34			9	

**REPORTING PRACTICE**

102-45	Entities included in the consolidated financial statements	4; Annual Report 2017: Basis of Consolidation				
102-46	Defining report content and topic boundaries	28–31				
102-47	List of material topics	27–28			2	
102-48	Restatements of information	4				
102-49	Changes in reporting	4; 28–30			2	
102-50	Reporting period	4				

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
102-51	Date of most recent report	4				
102-52	Reporting cycle	4				
102-53	Contact point for questions regarding the report	126				
102-54	Claims of reporting in accordance with the GRI Standards	106				
102-55	GRI content index	106–117				
102-56	External assurance	122–123				

**GRI STANDARDS: ECONOMIC TOPICS****ECONOMIC PERFORMANCE****GRI 103: Management Approach 2017**

103-1	Explanation of the material topic and its Boundary	16			2, 4
103-2	The management approach and its components	16–22, 35–36		1, 5, 8	3, 6
103-3	Evaluation of the management approach	44–47			3, 7

**GRI 201: Economic Performance 2017**

201-1	Direct economic value generated and distributed	96–97; Annual Report 2017: Value Added Statement		2, 5, 7, 8, 9	18
201-2	Financial implications and other risks and opportunities due to climate change	47		7	13
201-3	Defined benefit plan obligations and other retirement plans	77; Annual Report: Provisions for Pensions			
201-4	Financial assistance received from government	16, 97; Annual Report 2017: Cost of Sales		10	

**MARKET PRESENCE****GRI 103: Management Approach 2017**

103-1	Explanation of the material topic and its Boundary	75, 77		
103-2	The management approach and its components	75, 77		
103-3	Evaluation of the management approach	75, 77		

**GRI 202: Market Presence 2017**

202-1	Ratios of standard entry level wage by gender compared to local minimum wage	75, 77; Charter on Labour Relations, Social Charter, Charter on Temporary Work ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )		1, 2, 6	1, 5, 8
202-2	Proportion of senior management hired from the local community	75, 77; Charter on Labour Relations ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )		1, 2, 6	8

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>INDIRECT ECONOMIC IMPACTS</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	26, 72, 91				
103-2	The management approach and its components	26–27, 91–92				
103-3	Evaluation of the management approach	27, 91–92				
<b>GRI 203: Indirect Economic Impacts 2017</b>						
203-1	Infrastructure investments and services supported	91–92		2, 5, 7, 9, 11		
203-2	Significant indirect economic impacts	91–92		1, 2, 3, 8, 10, 17		
<b>PROCUREMENT PRACTICES</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	37			2, 4	
103-2	The management approach and its components	37–41			3, 4, 6	
103-3	Evaluation of the management approach	39–41			3, 7	
<b>GRI 204: Procurement Practices 2017</b>						
204-1	Proportion of spending on local suppliers	37; Annual Report 2017: Procurement	Percentage not indicated (data not collectable)		12	
<b>ANTI-CORRUPTION</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	44		10		2, 4
103-2	The management approach and its components	35, 44–45		10		3, 6
103-3	Evaluation of the management approach	46–47		10		3, 7
<b>GRI 205: Anti-Corruption 2017</b>						
205-1	Operations assessed for risks related to corruption	44	No breakdown by location (distribution is immaterial) and risks identified (confidential information)	10	16	20
205-2	Communication and training about anti-corruption policies and procedures	45	Percentage not indicated (data not collectable) No further breakdown by governance body members, employee category and regions (data is not collectable and publishable respectively due to local labor laws)	10	16	20
205-3	Confirmed incidents of corruption and actions taken	44; Annual Report 2017: Ombudsman System	No breakdown by nature of confirmed incidents of corruption (confidential information)	10	16	20
<b>ANTI-COMPETITIVE BEHAVIOR</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	44		10		2, 4
103-2	The management approach and its components	35, 44–45		10		3, 6
103-3	Evaluation of the management approach	46–47		10		3, 7

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>GRI 206: Anti-Competitive Behavior 2017</b>						
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Annual Report 2017: Litigation		10	16	20

**GRI STANDARDS: ENVIRONMENTAL TOPICS****MATERIALS**

<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50, 64		7, 8, 9		2, 4
103-2	The management approach and its components	50–54		7, 8, 9		3, 6, 11, 12
103-3	Evaluation of the management approach	50–51		7, 8, 9		3, 7
<b>GRI 301: Materials 2017</b>						
301-1	Materials used by weight or volume	64–65		8, 9	8, 12	11, 12
301-2	Recycled input materials used	64–65		8, 9	8, 12	11, 12
301-3	Reclaimed products and their packaging materials	64		8, 9	8, 12	11, 12

**ENERGY**

<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50, 55, 59		7, 8, 9		2, 4
103-2	The management approach and its components	50–62		7, 8, 9		3, 6, 10, 11, 12
103-3	Evaluation of the management approach	50–51		7, 8, 9		3, 7
<b>GRI 302: Energy 2017</b>						
302-1	Energy consumption within the organization	60		8	7, 12, 13	11, 12
302-2	Energy consumption outside of the organization	—	Energy consumption not indicated; we report Scope 3 emissions instead (see GRI 305-3).	8, 9	7, 8, 12, 13	11
302-3	Energy intensity	60		8	7, 8, 12, 13	11
302-4	Reduction of energy consumption	59–62		8, 9	7, 8, 12, 13	10, 12
302-5	Reduction in energy requirements of products and services	58–59		8, 9	7, 8, 12, 13	10, 12

**WATER**

<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50, 65		7, 8		2, 4
103-2	The management approach and its components	50–54, 65–66		7, 8		3, 6, 11, 12
103-3	Evaluation of the management approach	50–51		7, 8		3, 7
<b>GRI 303: Water 2017</b>						
303-1	Water withdrawal by source	65–66		8	6	11, 12
303-2	Water sources significantly affected by withdrawal of water	65		8	6	11, 12
303-3	Water recycled and reused	—	Total volume of recycled water not indicated; data uncollectable due to the complexity of the company.	8	6, 8, 12	11, 12

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>BIODIVERSITY</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50, 68		7, 8		2, 4
103-2	The management approach and its components	54, 68		7, 8		3, 6, 11, 12
103-3	Evaluation of the management approach	50–51		7, 8		3, 7
<b>GRI 304: Biodiversity 2017</b>						
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	68, 101		8	6, 14, 15	11
304-2	Significant impacts of activities, products, and services on biodiversity	68; Mission Statement on Biodiversity, Engagement for biodiversity ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )		8	6, 14, 15	11
304-3	Habitats protected or restored	68; Mission Statement Biodiversity, Engagement for biodiversity ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )		8	6, 14, 15	11
304-4	Species with habitats in areas affected by operations	68		8	6, 14, 15	11
<b>EMISSIONS</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50, 55, 59		7, 8, 9	12, 13, 14, 15	2, 4
103-2	The management approach and its components	50–59, 61–63		7, 8, 9	12, 13, 14, 15	3, 6, 11, 12, 13
103-3	Evaluation of the management approach	50–51		7, 8, 9	12, 13, 14, 15	3, 7
<b>GRI 305: Emissions 2017</b>						
305-1	Direct (Scope 1) GHG emissions	60		8, 9	3, 12, 13, 14, 15	13
305-2	Energy indirect (Scope 2) GHG emissions	61		8, 9	3, 12, 13, 14, 15	13
305-3	Other indirect (Scope 3) GHG emissions	62		8, 9	3, 12, 13, 14, 15	13
305-4	GHG emissions intensity	61		8	13, 14, 15	13
305-5	Reduction of GHG emissions	61–62		8, 9	13, 14, 15	13
305-6	Emissions of ozone-depleting substances (ODS)	—	No significant emissions	8, 9	3, 12, 13	13
305-7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	67, 99–100		8, 9	3, 12, 13, 14, 15	

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>EFFLUENTS AND WASTE</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50, 65, 66		7, 9	12, 13, 14, 15	2, 4
103-2	The management approach and its components	50–52, 54, 65–67		7, 9	12, 13, 14, 15	3, 6, 11, 12
103-3	Evaluation of the management approach	50–51		7, 9	12, 13, 14, 15	3, 7
<b>GRI 306: Effluents and Waste 2017</b>						
306-1	Water discharge by quality and destination	66		8, 9	3, 6, 12, 14	11
306-2	Waste by type and disposal method	67, 100–101		8, 9	3, 6, 12	11, 12
306-3	Significant spills	—	No significant spills were registered in the reporting period.	8, 9	3, 6, 12, 14, 15	11
306-4	Transport of hazardous waste	—	Total weight cannot be computed due to the size and complexity of the company. We do not import any waste, we only export small volumes of waste, and we only dispose of waste in the countries in which it is generated or export it to other countries if these offer better disposal methods.	8	3, 12	11, 12
306-5	Water bodies affected by water discharges and/or runoff	66, 101		8, 9	6, 15	11, 12
<b>ENVIRONMENTAL COMPLIANCE</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	63		7	12, 13, 14, 15	2, 4
103-2	The management approach and its components	44–45, 63		7	12, 13, 14, 15	3, 6, 11, 12
103-3	Evaluation of the management approach	44–45, 63		7	12, 13, 14, 15	3, 7
<b>GRI 307: Environmental Compliance 2017</b>						
307-1	Non-compliance with environmental laws and regulations	Annual Report 2017: Litigation		7	16	
<b>SUPPLIER ENVIRONMENTAL ASSESSMENT</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	50		7, 8, 9		2, 4
103-2	The management approach and its components	36–41		7, 8, 9		3, 6, 11, 12
103-3	Evaluation of the management approach	39–41		7, 8, 9		3, 7
<b>GRI 308: Supplier Environmental Assessment 2017</b>						
308-1	New suppliers that were screened using environmental criteria	39; Code of Conduct for Business Partners ( <a href="https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/2016%20Code%20of%20Conduct%20for%20Business%20Partners%20DE-EN.pdf">https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/2016%20Code%20of%20Conduct%20for%20Business%20Partners%20DE-EN.pdf</a> )		8		11, 12
308-2	Negative environmental impacts in the supply chain and actions taken	37–38, 40; Annual Report 2017: Procurement		8		4, 11, 12

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>GRI STANDARDS: SOCIAL TOPICS</b>						
<b>EMPLOYMENT</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	72, 75				2, 4
103-2	The management approach and its components	72–76, 88				3, 6, 14
103-3	Evaluation of the management approach	72–73, 75–76, 88				3, 7
<b>GRI 401: Employment 2017</b>						
401-1	New employee hires and employee turnover	75	The selection and recruitment of new employees is undertaken in line with their qualifications and suitability. Age is not a consideration in this process. Another control metric is the recruitment of women. When recruiting university graduates we take our lead from the proportion of women graduates on the degree courses relevant for Volkswagen. As an average across all such courses this gives us a recruitment target of 30% of female graduates. As a matter of principle, Volkswagen also supports the employment and qualification of local people, both at existing locations and when establishing new ones.	6	5, 8	
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	77	Both full-time and part-time employees are entitled to company benefits.	6	8	15
401-3	Parental leave	84, 104	Volkswagen offers its employees a whole range of options and rulings to facilitate the return to work after parental leave, including information events on current working-hour models, as well as on the flexible and personalized design of their return to work.	6	5, 8	15
<b>LABOR/MANAGEMENT RELATIONS</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	76		3		2, 4
103-2	The management approach and its components	72–74, 76		3		3, 6
103-3	Evaluation of the management approach	72–73, 75–77		3		3, 7
<b>GRI 402: Labor/Management Relations 2017</b>						
402-1	Minimum notice periods regarding operational changes	76; Annual Report 2017: Disclosures Required under Takeover Law; Charter on Labour Relations, Charter on Temporary Work ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )		3	8	14
<b>OCCUPATIONAL HEALTH AND SAFETY</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	72, 80				2, 4
103-2	The management approach and its components	72–76, 80–82				3, 6, 14
103-3	Evaluation of the management approach	72–76, 80–81				3, 7

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>GRI 403: Occupational Health and Safety 2017</b>						
403-1	Workers representation in formal joint management-worker health and safety committees	75–76; Charter on Labour Relations ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )			8	
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	81	No additional breakdown by gender and region provided (confidential information). Current contracts with the companies working for Volkswagen do not allow us to access the required information.		3, 8	16
403-3	Workers with high incidence or high risk of diseases related to their occupation	80–82			3, 8	16
403-4	Health and safety topics covered in formal agreements with trade unions	75–76; Charter on Labour Relations ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )			8	16
<b>TRAINING AND EDUCATION</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	72, 78		6		2, 4
103-2	The management approach and its components	72–74		6		3, 6, 15
103-3	Evaluation of the management approach	72–73, 79		6		3, 7
<b>GRI 404: Training and Education 2017</b>						
404-1	Average hours of training per year per employee	80	Vocational education and training to the highest standards form a vital basis for the specialist knowledge and skills of our employees and thus also for the top quality of our products and the long-term commercial success of the Volkswagen Group. The specific qualification requirements of each individual employee are derived from the competency requirements of the respective Berufsfamilie (professional family) and are identified at almost all of the Group's brands and companies at least once a year through the individual employee appraisal or qualification appraisal. The focus here is above all on the specialist content, the appropriate form of communicating this content and, in particular, the marked integration of theory and practice.	6	4, 5, 8	16
404-2	Programs for upgrading employee skills and transition assistance programs	79–80		6	8	16
404-3	Percentage of employees receiving regular performance and career development reviews	80	Every employee of Volkswagen AG, Volkswagen Financial Services AG and Volkswagen Immobilien Service GmbH has an individual appraisal with their supervisor once a year. This practice is also becoming increasingly established at the various brands and companies of the Volkswagen Group. The annual individual appraisal is conducted irrespective of gender and employee category.	6	5, 8	16
<b>DIVERSITY AND EQUAL OPPORTUNITY</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	73, 85–86		4, 6		2, 4
103-2	The management approach and its components	72–74, 84, 86–87		4, 6		3, 6, 14, 15
103-3	Evaluation of the management approach	72–73, 86		4, 6		3, 7
<b>GRI 405: Diversity and Equal Opportunity 2017</b>						
405-1	Diversity of governance bodies and employees	87; Annual Report 2017: Objectives for the composition	There is enormous potential within the diversity of the Volkswagen Group workforce. As we move towards becoming top employer in the automotive sector, we want to make use of this potential by explicitly advancing women, improving the scope for combining work and family, and making full use of the cultural diversity that exists within the Group. In our experience a breakdown by minority group membership is not a relevant indicator.	4, 6	5, 8	15, 16
405-2	Ratio of basic salary and remuneration of women to men	77, 86; Social Charter ( <a href="http://www.volkswagenag.com/de/sustainability/policy.html">www.volkswagenag.com/de/sustainability/policy.html</a> )	At Volkswagen remuneration is a function of the activity performed by the employee. In this respect we make no distinction between women and men.	4, 6	5, 8, 10	15

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<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>NON-DISCRIMINATION</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	72, 85		6		2, 4
103-2	The management approach and its components	72–74, 83, 85–87		6		3, 6, 14, 15, 17
103-3	Evaluation of the management approach	72–73, 85–86		6		3, 7
<b>GRI 406: Non-Discrimination 2017</b>						
406-1	Incidents of discrimination and corrective actions taken	40–41; Annual Report 2017: Ombudsman System	In the event of discrimination, the Company will take appropriate action against an individual who is acting in a discriminatory way; sanctions range from a formal warning through relocation to dismissal. If an employee feels he or she is being discriminated against, the Company not only meets the statutory provisions for reporting a grievance, but also provides the individual concerned with access to trained personnel for support and advice.	6	5, 8, 16	16, 17
<b>FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	72		1, 2, 3		2, 4
103-2	The management approach and its components	72–74, 76–77		1, 2, 3		3, 6, 14, 17
103-3	Evaluation of the management approach	72–73, 76–77		1, 2, 3		3, 7
<b>GRI 407: Freedom of Association and Collective Bargaining 2017</b>						
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	76		1, 2, 3	8	17
<b>CHILD LABOR</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	89		1, 2, 5		2, 4
103-2	The management approach and its components	89–91		1, 2, 5		3, 6, 14, 17
103-3	Evaluation of the management approach			1, 2, 5		3, 7
<b>GRI 408: Child Labor 2017</b>						
408-1	Operations and suppliers at significant risk for incidents of child labor	89		1, 2, 5	16	17
<b>FORCED OR COMPULSORY LABOR</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	89		1, 2, 4		2, 4
103-2	The management approach and its components	89–90		1, 2, 4		3, 6, 14, 17
103-3	Evaluation of the management approach	89–90		1, 2, 4		3, 7
<b>GRI 409: Forced or Compulsory Labor 2017</b>						
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	89		1, 2, 4	8	17

**GRI CONTENT INDEX**

<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>SECURITY PRACTICES</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	89		1, 2		2, 4
103-2	The management approach and its components	89–90		1, 2		3, 6, 14
103-3	Evaluation of the management approach	89–90		1, 2		3, 7
<b>GRI 410: Security Practices 2017</b>						
410-1	Security personnel trained in human rights policies or procedures	89	Percentage not indicated (data not collectable)	1, 2	16	17
<b>RIGHTS OF INDIGENOUS PEOPLES</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	89		1, 2		2, 4
103-2	The management approach and its components	89–90		1, 2		3, 6, 14, 17
103-3	Evaluation of the management approach	89–90		1, 2		3, 7
<b>GRI 411: Rights of Indigenous Peoples 2017</b>						
411-1	Incidents of violations involving rights of indigenous peoples	89		1, 2	2	17
<b>HUMAN RIGHTS ASSESSMENT</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	89		1, 2, 3, 4, 5, 6		2, 4
103-2	The management approach and its components	72–74, 89–90		1, 2, 3, 4, 5, 6		3, 6, 14, 17
103-3	Evaluation of the management approach	72–73, 76–77, 89–90		1, 2, 3, 4, 5, 6		3,7
<b>GRI 412: Human Rights Assessment 2017</b>						
412-1	Operations that have been subject to human rights reviews or impact assessments	89–90		1, 2, 3, 4, 5, 6		17, 18
412-2	Employee training on human rights policies or procedures	89–90	No indication of the number of hours or percentage of employees (data not collectable)	1, 2, 3, 4, 5, 6		17, 18
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	37–38; Charter on Labour Relations ( <a href="http://www.volksagenag.com/de/sustainability/policy.html">www.volksagenag.com/de/sustainability/policy.html</a> ); Code of Conduct for Business Partners ( <a href="https://www.volksagenag.com/presence/nachhaltigkeit/documents/pol-ic-intern/2016%20Code%20of%20Conduct%20for%20Business%20Partners%20DE-EN.pdf">https://www.volksagenag.com/presence/nachhaltigkeit/documents/pol-ic-intern/2016%20Code%20of%20Conduct%20for%20Business%20Partners%20DE-EN.pdf</a> )		1, 2, 3, 4, 5, 6		17, 18

**GRI CONTENT INDEX**

<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
<b>LOCAL COMMUNITIES</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	72, 91		2, 4		
103-2	The management approach and its components	26, 31–33, 72, 91–93			3, 4, 6	
103-3	Evaluation of the management approach	91–92			3, 7	
<b>GRI 413: Local Communities 2017</b>						
413-1	Operations with local community engagement, impact assessments, and development programs	91–93			17, 18	
413-2	Operations with significant actual and potential negative impacts on local communities	26, 47, 91		1, 2	4	
<b>SUPPLIER SOCIAL ASSESSMENT</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	37		1, 2, 3, 4, 5, 6	2, 4	
103-2	The management approach and its components	36–41		1, 2, 3, 4, 5, 6	3, 4, 6	
103-3	Evaluation of the management approach	39–41		1, 2, 3, 4, 5, 6	3, 7	
<b>GRI 414: Supplier Social Assessment 2017</b>						
414-1	New suppliers that were screened using social criteria	38, 39–40; Code of Conduct for Business Partners ( <a href="https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/2016%20Code%20of%20Conduct%20for%20Business%20Partners%20DE-EN.pdf">https://www.volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/2016%20Code%20of%20Conduct%20for%20Business%20Partners%20DE-EN.pdf</a> )	Percentage not indicated (data not collectable)	1, 2, 3, 4, 5, 6	5, 8, 16	17, 18
414-2	Negative social impacts in the supply chain and actions taken	38, 40–41	No details stated for individual subpoints (data not obtainable)	1, 2, 3, 4, 5, 6	5, 8, 16	17, 18
<b>PUBLIC POLICY</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	91		2, 4		
103-2	The management approach and its components	91–92			3, 6	
103-3	Evaluation of the management approach	91–92			3, 7	
<b>GRI 415: Public Policy 2017</b>						
415-1	Political contributions	92		10	16	19
<b>CUSTOMER HEALTH AND SAFETY</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	23, 50, 69		2, 4		
103-2	The management approach and its components	23–24, 54, 63, 69			3, 4, 6	

**GRI CONTENT INDEX**

<b>GRI Standard</b>	<b>Disclosure</b>	<b>References</b>	<b>Comments</b>	<b>UNGC</b>	<b>SDG</b>	<b>GSC</b>
103-3	Evaluation of the management approach	23–24, 69				3,7
<b>GRI 416: Customer Health and Safety 2017</b>						
416-1	Assessment of the health and safety impacts of product and service categories	69				10
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	69; Annual Report 2017: Litigation				16
<b>MARKETING AND LABELING</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	23, 50, 69				
103-2	The management approach and its components	23–24, 54, 63, 69				
103-3	Evaluation of the management approach	23–24, 69				
<b>GRI 417: Marketing and Labeling 2017</b>						
417-1	Requirements for product and service information and labeling	69		8, 9	12, 16	
417-2	Incidents of non-compliance concerning product and service information and labeling	Annual Report 2017: Litigation				16
417-3	Incidents of non-compliance concerning marketing communications	Annual Report 2017: Litigation				
<b>CUSTOMER PRIVACY</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	26		10		
103-2	The management approach and its components	26, 44–45		10		
103-3	Evaluation of the management approach	44–45		10		
<b>GRI 418: Customer Privacy 2017</b>						
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	—	Confidential information	10	16	
<b>SOCIOECONOMIC COMPLIANCE</b>						
<b>GRI 103: Management Approach 2017</b>						
103-1	Explanation of the material topic and its Boundary	44				2,4
103-2	The management approach and its components	44–45				3, 4, 6
103-3	Evaluation of the management approach	44–45				3,7
<b>GRI 419: Socioeconomic Compliance 2017</b>						
419-1	Non-compliance with laws and regulations in the social and economic area	Annual Report 2017: Litigation		16	14, 20	

Key:

SDG = Sustainable Development Goals  
 UN GC = United Nations Global Compact  
 GSC = German Sustainability Code

# Ratings and Indices

Because analysts and investors view corporate social responsibility (CSR) and sustainability as key indicators of forward-thinking corporate governance, their recommendations and decisions are increasingly based on factors that include companies' CSR and sustainability profiles. They look to sustainability ratings in particular to evaluate a company's performance in terms of environmental compatibility, social responsibility and economy. Achieving top marks in these ratings not only sends a clear signal to stakeholders, but also helps make a company more attractive as an employer and boosts the motivation of its employees.

## STRATEGY AND MANAGEMENT

Before the emissions issue, Volkswagen held leading positions in sustainability rankings and indices such as the Dow Jones Sustainability Indices, the CDP Carbon Disclosure Project, Sustainalytics and oekom research. Now, however, Volkswagen has been downgraded or removed from these ratings.

In terms of customer satisfaction with their products, Audi and Porsche are leaders in the core European markets when compared with other Group brands and with their competitors. The other brands in the Group also score higher than competing brands. In terms of customer satisfaction with dealers, all Group brands achieve figures at or above the level of the competition. The Volkswagen Passenger Cars brand has maintained a high level of customer loyalty in its core European markets for several years in a row. However, the emissions issue had a negative impact on brand image, brand trust, and customer satisfaction with products compared with 2015. The loyalty of Audi, Porsche and ŠKODA customers has kept these brands in the upper rankings in comparison with competitors for a number of years.

 > Detailed information on the Volkswagen Group's awards can be found in the more detailed Sustainability sections of our brands and regions.

## PRODUCTS AND PRODUCTION

Volkswagen Group wins fleet awards in the UK: five Golds in the Fleet News Award 2017; Audi UK named "Fleet Manufacturer of the year". (At the presentation of the Fleet News Award 2017 by UK trade journal Fleet News, the Volkswagen Group succeeded in taking five first places. The best fleet models in the UK in 2016 were evaluated in a total of 12 automobile categories. This year's Fleet News Award was presented in London for the twenty-ninth time. The jury, made up of fleet customers, Fleet News editors and representatives of associations and carmakers, assessed the vehicles' quality, maintenance costs (including residual values) and CO<sub>2</sub> emissions.

The evening's overall winner was the Audi brand, with three first places. In the "Best Compact Premium Car" category, the jury put the A3 in first place, while the A4 took first place in the "Best Premium Car" class. Being voted "Fleet Manufacturer of the year" was the evening's icing on the cake for the Audi brand. The ŠKODA brand won another first place for the Group with the Superb in the "Best Upper Medium Car" category, as did the SEAT Ateca in the "Best Mid-Size SUV" class.).

At the WAVE Trophy 2017 event in Switzerland, the new e-Golf won a double victory. The world's biggest e-mobile rally was held in Switzerland in June. It lasted eight days and covered around 1,600 kilometers. Leading the rest of the pack were two e-Golfs, which eventually finished first and second – clearly demonstrating that e-mobility is suitable for everyday use and also makes for a great driving experience. The natural gas-powered VW Caddy 1.4 TGI took the trophy in the 5-seater van class.

Further successes were achieved in the VCS Environmental ranking published in March 2017. In the subcompact class, the VW eco up!, Škoda Citigo and Seat Mii, all equipped with the 1.0 natural-gas engine, took first place with equal points, to become the test winners in 2017. In the compact (small family) class, the Audi A3 Sportback TFSI g-tron took first place just ahead of the VW Golf TGI; again, both run on natural gas.

As part of optimizing the entire value chain in the most holistic way, we aim to minimize the environmental impact of our vehicles by working closely with our suppliers. This is why Volkswagen joined the CDP Supply Chain Program (SCP) back in 2015. In addition, we seek to stay in direct contact with our suppliers by organizing targeted workshops in which we jointly discuss and develop innovative approaches to the environmental optimization of components and processes.

In 2016, we used the CDP SCP to send out a questionnaire to 119 suppliers. We received comprehensive responses from 83% of them – 13% more than the average response rate in the SCP.

This year, the CDP evaluated the “Ability” of the 3,300 participating companies to make contact with their suppliers. On a scale from A to D, Volkswagen achieved an A- ranking, versus an average rating of C-. The ranking was based on an analysis of the answers to the questionnaire.

 > Detailed information on the Volkswagen Group's awards can be found in the more detailed Sustainability sections of our brands and regions.

Through our involvement in national and international industry and sector associations, we continue to work with other automotive manufacturers to create shared communication platforms with the aim of driving forward sustainability in the supply chain.

## PEOPLE AND RESPONSIBILITY

Once a year, Volkswagen honors its highest-achieving trainees across the Group with the “Best Apprentice Award”. In 2017, ten young women and 36 young men from a total of 43 Group locations received this award for their outstanding performance and technical expertise.

 > Detailed information on the Volkswagen Group's awards can be found in the more detailed Sustainability sections of our brands and regions.

# Supplementary Information

## LINKS AND WEBSITES

### GENERAL INFORMATION

<b>Content</b>	<b>Type of information</b>
Online Annual Report	Link
Volkswagen online brand portal	Link
Associated companies	Link

### STRATEGY AND MANAGEMENT

<b>Content</b>	<b>Type of information</b>
Group Values	Link
Model of Sustainable Development	Document
Code of Conduct	Document
Board remuneration	Link
Risks and opportunities in the Management Report	Link
Volkswagen in the Transparency Register	Link
Opportunities for dialog with the Volkswagen Group	Document
Group memberships	Document
Principles and Guidelines for Political Lobbying	Document
Appendix to the Principles and Guidelines for Political Lobbying	Document
Volkswagen Group website	Link
Stakeholder panel and evaluation 2014	Document
Volkswagen Group requirements regarding sustainability in its relationships with business partners	Document
Taxes and duties policy	Document
Ombudsman system	Video-Link
Sustainability in Supplier Relations brochure	Document
Compliance in the Annual Report	Link

**PEOPLE AND RESPONSIBILITY**

<b>Content</b>	<b>Type of information</b>
Social Charter	Document
Charter on Labour Relations	Document
Charter on vocational educational training	Document
Charter on Temporary Work	Document
CSR Projects Worldwide	Link

**PRODUCTS AND PRODUCTION**

<b>Content</b>	<b>Type of information</b>
Group Environmental Policy	Document
Group Environmental Principles Locations/Production	Document
Group Environmental Principles Product	Document
Mission Statement on Biodiversity	Document
Overview of environmentally certified locations	Table
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Engagement for biodiversity	Link
CO <sub>2</sub> -neutral production	Document
Renewable raw materials	Document
Think Blue. Nature.	Document
Mobility Management at Locations	Link

# Independent Practitioner's Report on a Limited Assurance Engagement on Non-financial Reporting<sup>1</sup>

## TO VOLKSWAGEN AG, WOLFSBURG

We have performed a limited assurance engagement on the combined separate non-financial report pursuant to §§ (Articles) 289b Abs. (paragraph) 3 and 315b Abs. 3 HGB ("Handelsgesetzbuch": "German Commercial Code") of Volkswagen AG, Wolfsburg, (hereinafter the "Company") for the period from 1 January 2017 to 31 December 2017 which comprises the sections marked with a grey background in the Group Sustainability Report 2017 of the Company (hereinafter the "Non-financial Report").

## RESPONSIBILITIES OF THE EXECUTIVE DIRECTORS

The executive directors of the Company are responsible for the preparation of the Non-financial Report in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB and the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter the "GRI-Criteria").

This responsibility of Company's executive directors includes the selection and application of appropriate methods of non-financial reporting as well as making assumptions and estimates related to individual non-financial disclosures which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal control as they have considered necessary to enable the preparation of a Non-financial Report that is free from material misstatement whether due to fraud or error.

## INDEPENDENCE AND QUALITY CONTROL OF THE AUDIT FIRM

We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der

Wirtschaftsprüferpraxis – IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## PRACTITIONER'S RESPONSIBILITY

Our responsibility is to express a limited assurance conclusion on the Non-financial Report based on the assurance engagement we have performed.

Within the scope of our engagement we did not perform an audit on external sources of information or expert opinions, referred to in the Non-financial Report.

We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the Company's Non-financial Report for the period from 1 January 2017 to 31 December 2017 has not been prepared, in all material aspects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB and the relevant GRI-Criteria.

In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement, and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner's judgment.

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

- Obtaining an understanding of the structure of the sustainability organization, of the stakeholder engagement and of the conduct of the materiality analysis
- Inquiries of personnel involved in the preparation of the Non-financial Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Non-financial Report

<sup>1</sup> PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the separate non-financial report and issued an independent assurance report in German language, which is authoritative. The following text is a translation of the independent assurance report.

- Identification of the likely risks of material misstatement of the Non-financial Report
- Analytical evaluation of selected disclosures in the Non-financial Report
- Evaluation of the implementation of group management requirements, processes and specifications regarding data collection through onsite visits at selected sites and brands of the VW Group
  - Volkswagen AG (Wolfsburg, Germany)
  - Volkswagen do Brasil Indústria de Veículos Automotores Ltda. (Anchieta, Brasil)
  - Volkswagen de México, S.A. de C.V. (Puebla, Mexico)
  - Volkswagen of South Africa (Pty) Ltd. (Uitenhage, South Africa)
  - Volkswagen Slovakia a.s. (Bratislava, Slovakia)
  - SAIC Volkswagen Automotive Co. Ltd. Shanghai (Shanghai/Anting, China)
  - Audi AG (Ingolstadt, Germany)
  - Audi AG (Neckarsulm, Germany)
  - Audi Hungaria Motor Kft. (Győr, Hungary)
  - Porsche Leipzig GmbH (Leipzig, Germany)
  - Škoda Auto a.s. (Mladá Boleslav, Czech Republic)
- Assessment of the aggregation of Scope-3-GHG-emissions (categories 1 and 11) on group level
- Comparison of selected disclosures with corresponding data in the annual and consolidated financial statements and in the group management report which is combined with the Company's management report
- Evaluation of the presentation of the non-financial information

The report is not intended for any third parties to base any (financial) decision thereon. Our responsibility lies only with the Company. We do not assume any responsibility towards third parties.

Frankfurt am Main, 23 February 2018

PricewaterhouseCoopers GmbH  
Wirtschaftsprüfungsgesellschaft

Frank Hübner  
Wirtschaftsprüfer  
[German public auditor]

Michael Conrad  
Wirtschaftsprüfer  
[German public auditor]

## ASSURANCE CONCLUSION

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the Company's Non-financial Report for the period from 1 January 2017 to 31 December 2017 has not been prepared, in all material aspects, in accordance with §§ 315b and 315c in conjunction with 289c to 289e HGB and the relevant GRI-Criteria.

## INTENDED USE OF THE ASSURANCE REPORT

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company about the results of the limited assurance engagement.

# Imprint

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Volkswagen Group and its brands

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## DISCLAIMER

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

## FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements on the development of the Volkswagen Group and its companies as well as on economic and political developments. These statements are assumptions that we based on all the information available to us at the time of reporting. If the assumptions made fail to materialize or additional risks occur, then the actual results, development and performance of the Group may differ from the forecasts given. The Volkswagen Group therefore assumes no liability for the forward-looking statements presented here.

The German version is binding. The English version is a convenience translation for information purposes only.

## YOUR FEEDBACK

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

