



**VOLKSWAGEN**

AKTIENGESELLSCHAFT

Shaping the  
transformation  
together.

ANNUAL REPORT 2017



# Key Figures

## VOLKSWAGEN GROUP

	2017	2016	%
<b>Volume Data<sup>1</sup> in thousands</b>			
Deliveries to customers (units)	10,741	10,297	+4.3
Vehicle sales (units)	10,777	10,391	+3.7
Production (units)	10,875	10,405	+4.5
Employees at Dec. 31	642.3	626.7	+2.5
<b>Financial Data (IFRSs), € million</b>			
Sales revenue	230,682	217,267	+6.2
Operating result before special items	17,041	14,623	+16.5
as a percentage of sales revenue	7.4	6.7	
Special items	−3,222	−7,520	−57.1
Operating result	13,818	7,103	+94.5
Operating return on sales (%)	6.0	3.3	
Earnings before tax	13,913	7,292	+90.8
Return on sales before tax (%)	6.0	3.4	
Earnings after tax	11,638	5,379	x
<b>Automotive Division<sup>2</sup></b>			
Total research and development costs	13,135	13,672	−3.9
R&D ratio (%)	6.7	7.3	
Cash flows from operating activities	11,686	20,271	−42.4
Cash flows from investing activities attributable to operating activities <sup>3</sup>	17,636	15,941	+10.6
of which: capex	12,631	12,795	−1.3
capex/sales revenue (%)	6.4	6.9	
Net cash flow	−5,950	4,330	x
Net liquidity at Dec. 31	22,378	27,180	−17.7
Return on investment (ROI) in %	12.1	8.2	
<b>Financial Services Division</b>			
Return on equity before tax <sup>4</sup> (%)	9.8	10.8	

## VOLKSWAGEN AG

	2017	2016	%
<b>Volume Data in thousands</b>			
Employees at Dec. 31	117.4	113.9	+3.1
<b>Financial Data (HGB), € million</b>			
Sales	76,729	75,310	+1.9
Net income for the fiscal year	4,353	2,799	+55.5
Dividends (€)			
per ordinary share	3.90	2.00	
per preferred share	3.96	2.06	

1 Volume data including the unconsolidated Chinese joint ventures. These companies are accounted for using the equity method. 2016 deliveries updated to reflect subsequent statistical trends.

2 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

3 Excluding acquisition and disposal of equity investments: €17,512 (€18,224) million.

4 Earnings before tax as a percentage of average equity.

# Moving Globally

VOLKSWAGEN GROUP deliveries – in thousand units

Moving  
Globally

Key  
Figures



## EUROPE/OTHER MARKETS

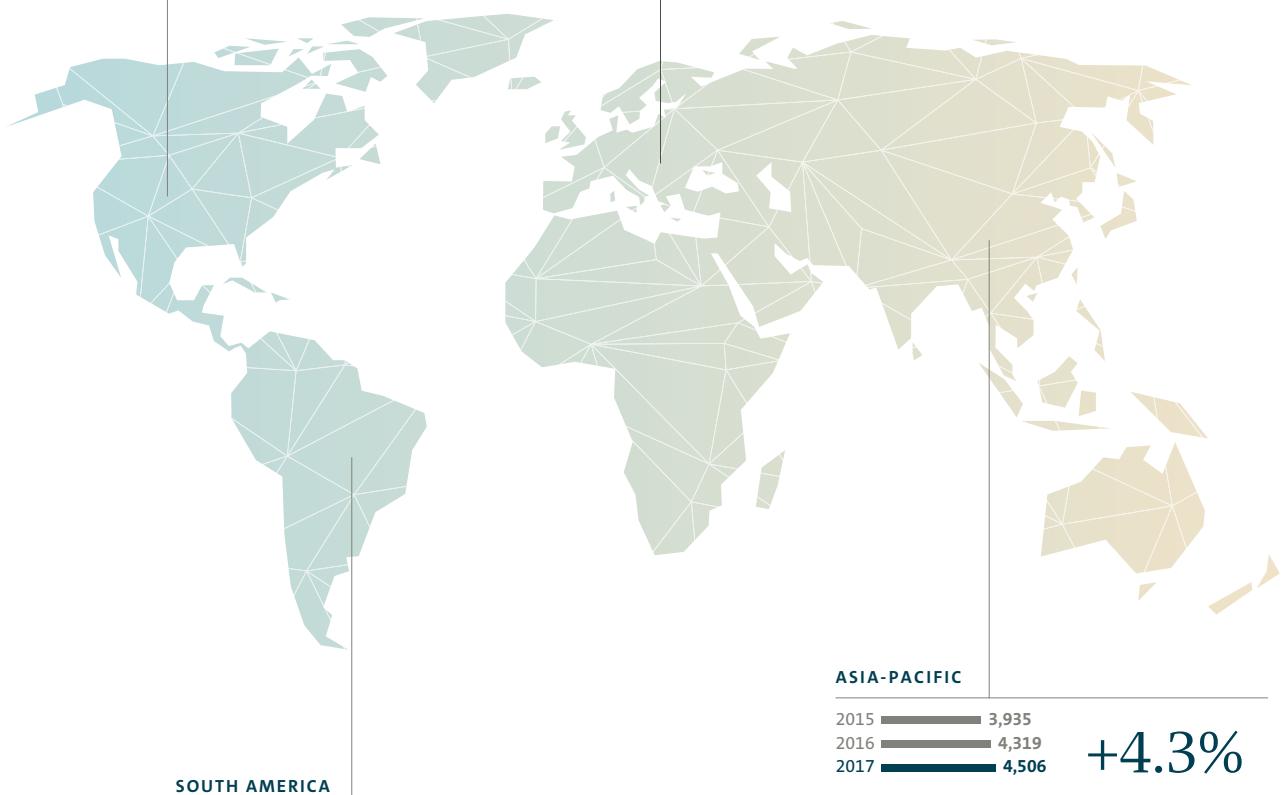
2015	4,505
2016	4,618
2017	4,738

+2.6%

## NORTH AMERICA

2015	932
2016	939
2017	976

+4.0%





We are making the Volkswagen Group  
more open and efficient,  
more innovative and customer-centric.

The figures show  
that we are on the right track.

# VOLKSWAGEN

AKTIENGESELLSCHAFT

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Volkswagen



Audi



SEAT



ŠKODA



BENTLEY



BUGATTI



PORSCHE



Commercial  
Vehicles



SCANIA



## VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY

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This annual report was published on the occasion of the Annual Media Conference on March 13, 2018.



A completely new ball game has begun.  
With new trends, new technologies,  
new alliances. At Volkswagen,  
we are harnessing the radical changes in  
our industry to make a new beginning.

– MATTHIAS MÜLLER –



# 1

## To our Shareholders



## **TO OUR SHAREHOLDERS**

- 07** Letter to our Shareholders
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# Letter to our Shareholders

*Dear Shareholders,*

What do you think makes a good company?

First of all, a good company certainly delivers compelling business results. And definitely implements the necessary measures to remain successful tomorrow and far into the future. But I imagine that you, just like me, also believe there is more to a good company than this – namely the essence of the organization: what drives it and keeps it together. So ultimately it's about attitude and values.

Results, future, attitude: where does your Company stand, where does the Volkswagen Group stand now, in these three dimensions?

As far as business figures are concerned, the answer could hardly be clearer: 2017 was an exceedingly successful year for us. Around the world, 10.7 million customers – more than ever before – chose a vehicle from one of our brands. We are grateful for the trust that this embodies. Our financial figures were also very convincing: sales revenue rose to €230.7 billion. At €13.8 billion, our operating profit was better than ever – despite negative special items of €3.2 billion. And at 7.4 percent, the operating return on sales before special items also exceeded the original forecast. The key performance indicators show that our operating business is strong and the Group's financial situation is solid. The fact that we are in such a good position today after everything that has happened in recent years is the result of really great teamwork. And I would like to thank our employees all over the world for that.

It goes without saying that you as shareholders will participate in your Company's success. The Board of Management and Supervisory Board will therefore propose a dividend of €3.90 per ordinary share and €3.96 per preferred share for fiscal year 2017. This corresponds to a payout ratio of 17.3 percent.

Looking ahead, we – like the entire industry – are facing major challenges and radical change. But here, too, there is reason to be optimistic. This is also reflected in our share price, which returned to the pre-crisis level at the end of 2017. We believe this also expresses the confidence shown by financial markets in our realignment. And, indeed, TOGETHER – Strategy 2025, our plan for the future, is taking effect and becoming increasingly tangible.

With Roadmap E as a key element of this strategy, we are demonstrating how we intend to help e-mobility achieve its breakthrough – not just in our Company, but throughout the entire industry. At the same time, on the road to emission-free mobility, we are pressing ahead with the full range of drive-trains including efficient, ultra-modern combustion engines. Throughout the Group, we have begun working hard on the other major future trends as well. On artificial intelligence, new mobility services, digital connectivity and, last but not least, on fully automated vehicles like our Sedric: the first car from the Group to come without a steering wheel or pedals.

By the end of 2022, we plan to invest over €34 billion from our own resources in the key technologies of tomorrow.



Each setback should above all encourage us to devote all our energy to bringing about the transformation at Volkswagen.

— MATTHIAS MÜLLER —

This, too, shows that Volkswagen is changing course. We are steering towards the future. We are not stopping halfway, we are picking up the pace. With a clear goal in front of us: to transform the Volkswagen Group from an automaker into a company that brings sustainable mobility to people all over the world. I firmly believe that we can do this. Because we are following a clear plan for the future. Because we have very successful operations. And because within the Group we have the critical mass, innovative capacity and financial discipline to spearhead this change.

You might be asking yourself: "That's all well and good, but what about the third criterion you mentioned at the beginning, the attitude in the company, our values?" I have to admit: it is here that we are still furthest from our goal.

Changing the culture of a large organization is hard. It requires time, endurance and determination. In spite of all the progress I see every day – and which I find heartening – we still repeatedly encounter setbacks. They hurt, but they are inevitable. What's important is how we deal with them. What we learn from them. Each setback should above all encourage us to devote all our energy to bringing about the transformation at Volkswagen. It's about more open cooperation between our brands. About more speed, pragmatism and decisiveness. A critical ability and the reduction of power distances. And last but not least, we need authentic, vibrant leadership based on values and integrity.

So if you were to ask me today: "Is Volkswagen a good company?", then my answer would be: "Yes, Volkswagen is an exceedingly successful global company. Yes, we are working very hard on the future of mobility and therefore also on our own future. And yes, at Volkswagen we have recognized how essential a solid foundation of values and a healthy corporate culture is."

But at the same time, it's also true that our Group is not yet as good as it could be. We still have quite a way to go. For me, this means one thing in particular: we have many opportunities to turn Volkswagen into an even more successful – and an even better – company. For our customers, employees and business partners. For the environment and society. For our investors. And for you, our shareholders.

Our Group still has enormous potential. We want and we will exploit this. I am looking forward to counting on your continued support as we move forward together on this journey.

Sincerely,



Matthias Müller

# The Board of Management

of Volkswagen Aktiengesellschaft

**Prof. Rupert Stadler**

Chairman of the Board of Management of AUDI AG



**Matthias Müller**

Chairman of the Board of Management of Volkswagen Aktiengesellschaft



**Hiltrud Dorothea Werner**  
Integrity and Legal Affairs



**Dr.-Ing. Herbert Diess**  
Chairman of the Brand Board of Management of Volkswagen Passenger Cars



**Prof. Dr. rer. pol. Dr.-Ing. E.h. Jochem Heizmann**  
China



**Frank Witter**  
Finance and Controlling



**Dr. rer. pol. h.c. Francisco Javier Garcia Sanz**  
Procurement



**Dr. rer. soc. Karlheinz Blessing**  
Human Resources and Organization



**Andreas Renschler**  
Commercial Vehicles



# Report of the Supervisory Board

(in accordance with section 171(2) of the AktG)

Ladies and gentlemen,

In fiscal year 2017, the work of the Supervisory Board of Volkswagen AG and its committees focused once again on realigning the Volkswagen Group as part of the Group's TOGETHER – Strategy 2025, and the investigation of the diesel issue. The Supervisory Board of Volkswagen AG addressed the Company's position and development regularly and with particular intensity in the reporting period. We supervised and supported the Board of Management in its running of the business and advised it on issues relating to the management of the Company in accordance with our duties under the law, the Articles of Association and the rules of procedure. We also observed the relevant recommendations and suggestions of the German Corporate Governance Code (the Code) at all times. The Supervisory Board was directly involved in all decisions of fundamental importance to the Group. We additionally discussed strategic considerations with the Board of Management at regular intervals.

The Board of Management regularly, promptly and comprehensively informed the Supervisory Board in writing or in person on all matters of relevance to the Company relating to its strategy, the business development and the Company's planning and position. This also included the risk situation and risk management. In this respect, the Board of Management also informed it in particular of improvements to the risk and compliance management system with regard to the diesel issue. In addition, the Board of Management informed the Supervisory Board on an ongoing basis about compliance-related topics and other topical issues.

In all cases, we received the documents relevant to our decisions in good time for our meetings. At regular intervals, we also received a detailed report from the Board of Management on the current business position and the forecast for the current year. Any variances in performance that occurred as against the plans and targets previously drawn up were explained by the Board of Management in detail, either in person or in writing. Together with the Board of Management we analyzed the reasons for the variances so as to enable countermeasures to be derived. In addition, the Board of Management presented regular reports on current developments in connection with the diesel issue at the meetings of the Special Committee on Diesel Engines.

The Chairman of the Supervisory Board consulted with the Chairman of the Board of Management at regular intervals between meetings to discuss important current issues. Apart from the diesel issue, they included the Volkswagen Group's strategy and planning, the business development, the Group's risk situation and risk management, including integrity and compliance issues.

The Supervisory Board held a total of twelve meetings in fiscal year 2017. The average attendance ratio was 84.6 %; all of the members of the Supervisory Board attended over half of the meetings of the Supervisory Board and the committees of which they are members. In addition, resolutions on urgent matters were adopted in writing or using electronic communications media.

#### COMMITTEE ACTIVITIES

The Supervisory Board has established five committees in order to discharge the duties entrusted to it: the Executive Committee, the Nomination Committee, the Mediation Committee in accordance with section 27(3) of the Mitbestimmungsgesetz (MitbestG – German Codetermination Act), the Audit Committee and, since October 2015, the Special Committee on Diesel Engines. The Executive Committee and the Special Committee on Diesel Engines each consist of three shareholder representatives and three employee representatives. The members of the Nomination Committee are the shareholder representatives on the Executive Committee. The remaining two committees are each composed of two shareholder representatives and two employee representatives. The members of these committees as of December 31, 2017 are given on page 87 of this annual report.

The Executive Committee met 17 times during the past fiscal year, mainly discussing current matters related to the diesel issue. The Committee also prepared the resolutions by the Supervisory Board in detail and dealt with the composition of, and contractual issues concerning the Board of Management other than remuneration.

The Nomination Committee is responsible for proposing suitable candidates for the Supervisory Board to recommend for election to the Annual General Meeting. This Committee did not hold any meetings in 2017.

The Mediation Committee did not have to be convened in the reporting period.

The Audit Committee held five meetings in fiscal year 2017. It focused primarily on the consolidated financial statements, the risk management system including the effectiveness of the internal control system, and the work performed by the Company's Compliance organization. In addition, the Audit Committee concerned itself with the Group's quarterly reports and the half-yearly financial report, as well as with current issues and the supervision of financial reporting and

the financial reporting process, and the examination thereof by the auditors. Moreover, the Audit Committee initiated the call for bids for audits and other audit-related services in the Volkswagen Group from fiscal year 2020. In this process, Volkswagen AG and other public-interest entities of the Volkswagen Group follow the selection procedure within the meaning of Article 16(3) of Regulation (EU) No 537/2014.

The Special Committee on Diesel Engines is responsible for coordinating all activities relating to the diesel issue and preparing resolutions by the Supervisory Board. To this end, the Special Committee on Diesel Engines is also provided with regular information by the Board of Management. It is also entrusted with examining any consequences of the findings. The Chairman of the Special Committee on Diesel Engines reports regularly on its work to the Supervisory Board. In fiscal year 2017, the Special Committee on Diesel Engines met on eleven occasions, in which, among other topics, details pertaining to the settlements with the US authorities as well as the Supervisory Board's proposed resolutions regarding formal approval of actions of incumbent members in fiscal year 2016 were discussed.

Furthermore, as a rule, the shareholder and employee representatives met for separate preliminary discussions before each of the Supervisory Board meetings.

#### TOPICS DISCUSSED BY THE SUPERVISORY BOARD

The Supervisory Board's first meeting in the reporting period was held on January 11, 2017. A key topic at this meeting was the approval regarding the conclusion of settlements with US authorities.

On January 26, 2017, the Supervisory Board held a conference call to discuss changes in the composition to the Board of Management.

At the Supervisory Board meeting on February 24, 2017, we dealt in detail with the new remuneration systems for the Board of Management and Supervisory Board of Volks-



Hans Dieter Pötsch

wagen AG. Following a detailed examination, we also approved the consolidated financial statements and the annual financial statements of Volkswagen AG for 2016 prepared by the Board of Management, as well as the combined management report. We examined the dependent company report submitted by the Board of Management and, following completion of our examination, we came to the conclusion that there were no objections to be raised to the concluding declaration by the Board of Management in the report. In addition, we particularly discussed the current state of affairs with respect to the diesel issue.

Another meeting of the Supervisory Board was held on March 28, 2017 at which we mainly discussed the current state of affairs with respect to the diesel issue and the agenda for the 57th Annual General Meeting of Volkswagen AG, particularly the Supervisory Board's proposed resolutions.

The Supervisory Board meeting on April 26, 2017 concentrated on strategic topics such as e-mobility and the focus of the China business. Furthermore, the Board of Management reported, among other things, on the collaboration with the monitor.

Two more Supervisory Board meetings were held on May 9 and 10, 2017 within Volkswagen AG's 2017 Annual General Meeting. Their agenda included in particular preparations for and the post-completion analysis of the 57th Annual General Meeting of Volkswagen AG on May 10, 2017, the composition of the committees, and the current state of affairs with respect to the diesel issue.

A meeting of the Supervisory Board was held on July 26, 2017 at which we addressed the topic of the allegations of supposed cartel infringements that were discussed in the media.

In a conference call on August 1, 2017, the Supervisory Board received information on the measures taken as part of the "National Forum Diesel".

The agenda of the Supervisory Board meeting on September 29, 2017 included a status report on the Group strategy TOGETHER – Strategy 2025 and the current state of affairs with respect to the diesel issue.

The Supervisory Board held a meeting on November 2, 2017, in which we discussed not only the current state of affairs with respect to the diesel issue, but also the Volkswagen Group's investment and financial planning.

At the Supervisory Board meeting on November 17, 2017, we discussed in detail the Volkswagen Group's investment and financial planning for the period from 2018 to 2022. The current state of affairs with respect to the diesel issue was another focus of the meeting. When issuing our annual declaration of conformity with the Code, we also decided on the diversity concepts for the Board of Management and the Supervisory Board as well as the profile of skills and expertise for the Supervisory Board as a whole, and the targets for the composition of the Board. The profile of skills and expertise for the Supervisory Board as a whole, and the targets for the composition of the Board, are described on pages 61 to 62 of the Corporate Governance Report.

In addition to the above, we voted in writing on a variety of items in the reporting period, including an increase in the

equity of Volkswagen Bank GmbH by Volkswagen Financial Services AG, and an advisory mandate.

#### **CONFLICTS OF INTEREST**

Mr. Hans Dieter Pötsch was a member of the Board of Management of Volkswagen AG until October 2015. His move to the Supervisory Board had already been planned irrespective of the diesel issue. In order to avoid conceivable conflicts of interest, Mr. Pötsch always left the meeting room prior to discussions and resolutions adopted by the Supervisory Board that might relate to his conduct in connection with the diesel issue.

No other conflicts of interest were reported or were discernible in the reporting period.

#### **CORPORATE GOVERNANCE AND DECLARATION OF CONFORMITY**

The Supervisory Board meeting on November 17, 2017 focused on the implementation of the recommendations and suggestions of the Code at the Volkswagen Group. We discussed in detail the version of the Code dated February 7, 2017, as published by the relevant government commission on April 24, 2017, and issued the annual declaration of conformity with the recommendations of the Code in accordance with section 161 of the Aktiengesetz (AktG – German Stock Corporation Act) together with the Board of Management.

The joint declarations of conformity by the Board of Management and the Supervisory Board are permanently available at [www.volkswagengroup.com/ir](http://www.volkswagengroup.com/ir). Additional information on the implementation of the recommendations and suggestions of the Code can be found in the corporate governance report starting on page 59 and in the notes to the consolidated financial statements on page 312 of this annual report.

#### **MEMBERS OF THE SUPERVISORY BOARD AND BOARD OF MANAGEMENT**

In the election of employee representatives to the Supervisory Board of Volkswagen AG on April 6, 2017, Ms. Ulrike Jakob, Deputy Chairwoman of the Works Council of Volkswagen AG, Kassel plant, Ms. Bertina Murkovic, Deputy Chairwoman of

the Works Council of Volkswagen Commercial Vehicles, and Mr. Athanasios Stimoniaris, Chairman of the Group Works Council of MAN SE and of the MAN SE Works Council, were elected as members of the Supervisory Board. They succeeded Mr. Uwe Fritsch, Mr. Stephan Wolf and Mr. Thomas Zwiebler. The term of office began at the end of the Annual General Meeting on May 10, 2017. The remaining employee representatives on the Supervisory Board were reappointed for a further term.

Effective December 14, 2017, the State of Lower Saxony delegated the new Deputy Minister-President and Minister of Economic Affairs, Labor, Transport and Digitalization, Dr. Bernd Althusmann, to the Supervisory Board of Volkswagen AG to succeed Olaf Lies for the latter's remaining term of office.

Ms. Annika Falkengren stepped down as a member of the Supervisory Board with effect from February 5, 2018. Effective February 14, 2018, the Braunschweig Registry Court temporarily appointed Ms. Marianne Heiß as a member of the Supervisory Board until the end of the Annual General Meeting on May 3, 2018. The Supervisory Board will propose electing Ms. Heiß as a member of the Supervisory Board at the Annual General Meeting on May 3, 2018.

Ms. Hiltrud Dorothea Werner has been the Group Board of Management member responsible for "Integrity and Legal Matters" since February 1, 2017. She succeeded Dr. Christine Hohmann-Dennhardt, who left the Board of Management of Volkswagen AG on January 31, 2017.

The Honorary Chairman of the Supervisory Board, Dr. Klaus Liesen, passed away on March 30, 2017 at the age of 85. Dr. Liesen served as a member of the Supervisory Board of Volkswagen AG between 1987 and 2006 and as its Chairman from 1987 to 2002. During this time, he made a considerable contribution to the expansion and internationalization of the Group. With his experience in business and his shrewd and

diplomatic manner, he earned great respect and recognition in the process.

Dr. Martin Posth, a former member of the Board of Management of Volkswagen AG, died on September 17, 2017 at the age of 73. Dr. Posth was Board member with responsibility for Human Resources from 1988 to 1993 and for the Asia-Pacific region from 1993 to 1997. During his tenure in the Volkswagen Group, he decisively shaped the development of the Company, demonstrating great commitment and expertise.

They will not be forgotten.

#### AUDIT OF THE ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS

In line with our proposal, the Annual General Meeting of Volkswagen AG on May 10, 2017 elected PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC) as auditors for fiscal year 2017. The auditors audited the annual financial statements of Volkswagen AG, the consolidated financial statements of the Volkswagen Group and the combined management report, and issued unqualified audit reports in each case.

The Supervisory Board commissioned (PwC) on November 17, 2017 with an external content-related audit of the combined separate nonfinancial report for 2017.

In addition, the auditors analyzed the risk management and internal control systems, concluding that the Board of Management had taken the measures required by section 91(2) of the AktG to ensure early detection of any risks endangering the continued existence of the Company. The Report by the Board of Management on Relationships of Volkswagen AG with Affiliated Companies in Accordance with Section 312 of the AktG for the period from January 1 to December 31, 2017 (dependent company report) submitted by the Board of Management was also reviewed by the auditors, who issued the following opinion: "In our opinion and in accordance with

our statutory audit, we certify that the factual disclosures provided in the report are correct and that the Company's consideration concerning legal transactions referred to in the report was not unduly high."

The members of the Audit Committee and the members of the Supervisory Board were provided in each case with the documentation relating to the annual financial statements, including the dependent company report, and the audit reports prepared by the auditors in good time for their meetings on February 22, 2018 and February 23, 2018 respectively and the report from PwC on the external content-related audit of the combined separate nonfinancial report for 2017. The auditors reported extensively at both meetings on the material findings of their audit and were available to provide additional information.

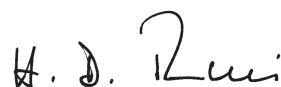
Taking into consideration the audit reports and the discussion with the auditors and based on its own conclusions, the Audit Committee prepared the documents for the Supervisory Board's examination of the consolidated financial statements, the annual financial statements of Volkswagen AG, the combined management report, the dependent company report as well as the combined separate nonfinancial report and reported on these at the Supervisory Board meeting on February 23, 2018. Following this, the Audit Committee recommended that the Supervisory Board approve the annual financial statements. We examined the documents in depth in the knowledge and on the basis of the report by the Audit Committee and the audit report as well as in talks and discussions with the auditors. We came to the conclusion that they are due and proper and that the assessment of the position of the Company and the Group presented by the Board of Management in the management report corresponds to the assessment by the Supervisory Board.

We therefore concurred with the auditors' findings and approved the annual financial statements prepared by

the Board of Management and the consolidated financial statements at our meeting on February 23, 2018, at which the auditors also took part in discussions on the agenda items relating to the financial statements. The annual financial statements are thus adopted. Upon completion of our examination of the dependent company report, there are not any objections to be raised to the concluding declaration by the Board of Management. We reviewed the proposal on the appropriation of net profit submitted by the Board of Management, taking into account in particular the interests of the Company and its shareholders, and endorsed the proposal. PwC conducted an external content-related audit of the combined separate nonfinancial report for 2017 to attain limited assurance and issued an unqualified report. Upon completion of its own independent examination of the combined separate nonfinancial report for 2017, the Supervisory Board did not have any objections.

We would like to express our thanks and particular appreciation to the members of the Board of Management, the Works Council, the management and all the employees of Volkswagen AG and its affiliated companies for their work in 2017. With your immense personal commitment, great loyalty and readiness to support the changes implemented, you all helped the Volkswagen Group to conclude fiscal year 2017 successfully and develop positively in many areas under the Group's TOGETHER – Strategy 2025.

Wolfsburg, February 23, 2018



Hans Dieter Pötsch  
Chairman of the Supervisory Board



# 2

# Divisions

## DIVISIONS

- 21** Brands and Business Fields
- 24** Volkswagen Passenger Cars
- 26** Audi
- 28** ŠKODA
- 30** SEAT
- 32** Bentley
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# Brands and Business Fields

Amid fierce competition in a market environment that remained challenging, we achieved a new vehicle sales record with our brands in 2017. Special items from the diesel issue again affected the operating profit.

## GROUP STRUCTURE

The Volkswagen Group consists of two divisions: the Automotive Division and the Financial Services Division. The Automotive Division comprises the Passenger Cars, Commercial Vehicles and Power Engineering business areas. We report on the Passenger Cars segment and the reconciliation in the Passenger Cars Business Area. The Commercial Vehicles Business Area and Power Engineering Business Area correspond to the segments of the same name. Accordingly, the activities of the Automotive Division comprise the development of vehicles and engines, the production and sale of passenger cars, light commercial vehicles, trucks, buses and motorcycles, as well as the genuine parts, large-bore diesel engines, turbomachinery, special gear units, propulsion components and testing systems businesses. The Ducati brand is allocated to the Audi brand and thus to the Passenger Cars Business Area. The Financial Services Division, which corresponds to the Financial Services segment, combines dealer and customer financing, leasing, banking and insurance activities, fleet management and the mobility offerings.

## VOLKSWAGEN GROUP REPORTING STRUCTURE

AUTOMOTIVE DIVISION	FINANCIAL SERVICES DIVISION		
<b>Passenger Cars Business Area</b> Volkswagen Passenger Cars Audi ŠKODA SEAT Bentley Porsche Automotive Others	<b>Commercial Vehicles Business Area</b> Volkswagen Commercial Vehicles Scania Vehicles and Services MAN Commercial Vehicles	<b>Power Engineering Business Area</b> MAN Power Engineering	<b>Dealer and customer financing</b> Leasing Direct bank Insurance <b>Fleet management</b> Mobility offerings

In this chapter, we present the key volume and financial data relating to the Group brands and to Volkswagen Financial Services. In light of the considerable importance of the development of business in the world's largest single market for the Volkswagen Group, we also report on business developments and the results of our activities in China in this chapter.

The production figures and deliveries to customers are differentiated by brands and their models that carry the corresponding brand logo. Unit sales figures contain vehicles sold by respective brand companies, including models of other Group brands. In some cases, there are marked differences between delivery figures and unit sales as a result of our business development in China.

When realigning our Group structures, we have reclassified companies from the Volkswagen Passenger Cars brand to the Group starting in 2017. This will allow us to increase transparency and comparability. Along with cross-brand logistics and services, importers that also distribute vehicles from other Group brands have been separated out from the Volkswagen Passenger Cars brand. These will be disclosed in the line "Other" and will continue to be presented in the Passenger Cars Business Area. For the Volkswagen Passenger Cars brand, the reclassifications lead to reductions in unit sales, sales revenue and operating profit.

In addition, we explain unit sales and sales revenue in the Europe/Other markets, North America, South America and Asia-Pacific regions.

#### KEY FIGURES BY MARKET

At €17.0 (14.6) billion, the operating profit before special items in fiscal year 2017 exceeded the prior-year figure. Special items, which resulted solely from the diesel issue in the reporting year, weighed on the operating profit by €3.2 billion (previous year: operating profit reduced by €7.5 billion).

Amid fierce competition in a challenging market environment, the Volkswagen Group set a new sales record of 10.8 (10.4) million vehicles in fiscal year 2017. Sales revenue increased by 6.2% to €230.7 billion.

In the Europe/Other markets region, unit sales rose by 2.1% year-on-year to 4.7 million vehicles. At €142.8 billion, sales revenue was 3.4% higher than in 2016, due among other things to higher volumes. Exchange rate effects had a negative impact.

In North America, we sold 1.0 million vehicles, a 2.5% increase compared with the previous year, driven by stronger demand in the USA and Canada. Volume and mix effects lifted sales revenue by 9.5% to €38.8 billion.

The economic environment in the markets of the South America region improved during the reporting year. The Volkswagen Group's sales there rose by 25.1% to 0.5 million vehicles. Sales revenue rose by 25.3% to €10.0 billion, which was due both to higher volumes and positive mix effects.

In the Asia-Pacific region – including the Chinese joint ventures – we sold a total of 4.5 (4.4) million vehicles in fiscal year 2017. At €39.1 billion, sales revenue exceeded the prior year by 9.4%. This increase especially resulted from a higher import volume and an improved components business at our fully consolidated companies. This figure does not include the sales revenue of our equity-accounted Chinese joint ventures.

KEY FIGURES BY BRAND AND BUSINESS FIELD<sup>1</sup>

Thousand vehicles/€ million	VEHICLE SALES		SALES REVENUE		OPERATING RESULT	
	2017	2016	2017	2016	2017	2016
Volkswagen Passenger Cars <sup>2</sup>	3,573	4,347	79,979	105,651	3,301	1,869
Audi	1,530	1,534	60,128	59,317	5,058	4,846
ŠKODA	937	814	16,559	13,705	1,611	1,197
SEAT	595	548	9,892	8,894	191	153
Bentley	11	11	1,843	2,031	55	112
Porsche Automotive <sup>3</sup>	248	239	21,674	20,710	4,003	3,733
Volkswagen Commercial Vehicles	498	478	11,909	11,120	853	455
Scania <sup>4</sup>	92	83	12,789	11,303	1,289	1,072
MAN Commercial Vehicles	114	102	11,087	10,005	362	230
MAN Power Engineering	—	—	3,283	3,593	193	194
VW China <sup>5</sup>	4,020	3,873	—	—	—	—
Other <sup>6</sup>	-840	-1,638	-30,288	-56,617	-2,335	-1,343
Volkswagen Financial Services <sup>7</sup>	—	—	31,826	27,554	2,460	2,105
<b>Volkswagen Group before special items</b>	<b>10,777</b>	<b>10,391</b>	<b>230,682</b>	<b>217,267</b>	<b>17,041</b>	<b>14,623</b>
Special items	—	—	—	—	-3,222	-7,520
<b>Volkswagen Group</b>	<b>10,777</b>	<b>10,391</b>	<b>230,682</b>	<b>217,267</b>	<b>13,818</b>	<b>7,103</b>
Automotive Division <sup>8</sup>	10,777	10,391	196,949	186,016	11,146	4,668
of which: Passenger Cars Business Area	10,077	9,729	158,466	150,343	9,309	4,167
Commercial Vehicles Business Area	700	662	35,200	32,080	1,892	718
Power Engineering Business Area	—	—	3,283	3,593	-55	-217
Financial Services Division	—	—	33,733	31,251	2,673	2,435

1 All figures shown are rounded, so minor discrepancies may arise from addition of these amounts.

2 2017 figures take account of the reclassification of companies; prior-year figures were not adjusted.

3 Porsche (Automotive and Financial Services): sales revenue €23,491 (22,318) million, operating profit €4,144 (3,877) million.

4 Including financial services.

5 The sales revenue and operating profits of the joint venture companies in China are not included in the figures for the Group. These Chinese companies are accounted for using the equity method and recorded a proportionate operating profit of €4,746 (4,956) million.

6 Prior year adjusted. In operating profit, mainly intragroup items recognized in profit or loss, in particular from the elimination of intercompany profits; the figure includes depreciation and amortization of identifiable assets as part of purchase price allocation for Scania, Porsche Holding Salzburg, MAN and Porsche.

7 Starting January 1, 2017, Porsche's financial services business is reported as part of Volkswagen Financial Services. Prior-year figures were not adjusted.

8 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

KEY FIGURES BY MARKET<sup>1</sup>

Thousand vehicles/€ million	VEHICLE SALES		SALES REVENUE	
	2017	2016	2017	2016
Europe/Other markets	4,731	4,635	142,753	138,079
North America	992	968	38,818	35,454
South America	526	421	9,988	7,973
Asia-Pacific <sup>2</sup>	4,527	4,367	39,123	35,761
<b>Volkswagen Group<sup>2</sup></b>	<b>10,777</b>	<b>10,391</b>	<b>230,682</b>	<b>217,267</b>

1 All figures shown are rounded, so minor discrepancies may arise from addition of these amounts.

2 The sales revenue of the joint venture companies in China is not included in the figures for the Group and the Asia-Pacific market.



The Volkswagen Passenger Cars brand systematically pushed ahead with its “Transform 2025+” strategy in 2017 and considerably improved its operating profit. The global product initiative has launched successfully with more than ten new models.

#### **BUSINESS DEVELOPMENT**

The Volkswagen Passenger Cars vision is “Moving people and driving them forwards”. The “TRANSFORM 2025+” strategy therefore centers on a global model initiative through which the brand aims to lead innovation, technology and quality in the volume segment. More than ten new models were launched on the market in the reporting year. The Arteon, Volkswagen’s new top-of-the-range saloon, received the Golden Steering Wheel 2017, among other accolades. The Polo set new benchmarks in the small car segment. In the SUV segment, the brand expanded its range with the young, sporty T-Roc, the Tiguan Allspace, the Atlas for the US market and the Teramont for China.

Volkswagen wants to actively shape the current phase of technological transformation in the automotive industry. The brand is therefore developing a new generation of fully networked electric vehicles based on the Modular Electrification Toolkit (MEB). The MEB concept car, the I.D. BUZZ, turned heads at the Detroit Auto Show: This fully electric microbus brings the legendary VW camper-van feeling right up to date. The brand showcased another member of the I.D. family in 2017: the I.D. CROZZ concept SUV. The first vehicles in the I.D. family are being produced at the Zwickau site, which is being developed into the Group’s European center of expertise for e-mobility.

Worldwide, the Volkswagen Passenger Cars brand delivered a record 6.2 million vehicles in 2017 (+4.2%). While sales slipped slightly in Germany due to the diesel issue, they rose in all other core regions of the world. The brand recorded strong growth above all in China (+5.9%), Brazil (+19.7%) and the USA (+5.2%). The Tiguan was especially popular. With 720,000 vehicles delivered in the reporting year, it was one of the world’s most successful automobiles in 2017.

Sales by the Volkswagen Passenger Cars brand in 2017 totaled 3.6 (4.3) million vehicles; the decline results from the reclassification of companies in the Group. The difference between deliveries and unit sales is mainly due to the fact that the vehicle-producing joint ventures in China are not attributed to Volkswagen Passenger Cars brand companies.

The Volkswagen Passenger Cars brand produced 6.3 million vehicles worldwide in 2017; this was 4.0% more than in 2016. In late August, the 150 millionth Volkswagen rolled off the assembly line at Volkswagen’s main plant in Wolfsburg.

#### **SALES REVENUE AND EARNINGS**

Sales revenue at the Volkswagen Passenger Cars brand in 2017 was down 24.3% year-on-year at €80.0 billion. This was due to the reclassification of companies. Operating profit before special items rose to €3.3 (1.9) billion. Volume-, mix- and margin-related factors as well as product cost optimization had a positive effect, while higher fixed costs as a result of expansion and higher depreciation and amortization charges due to the large volume of capital expenditure had a negative impact. The operating return on sales before special items increased to 4.1 (1.8)%. The diesel issue gave rise to special items of €-2.8 (previous year’s total -5.2) billion.

# 150 million

Vehicles manufactured since 1945

**PRODUCTION**

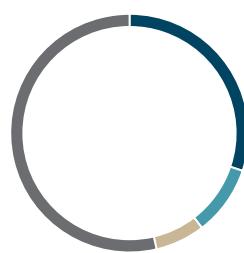
Units	2017	2016
Golf	968,284	982,495
Jetta/Sagitar	883,346	968,135
Tiguan	769,870	548,687
Polo	755,506	794,388
Passat/Magotan	660,996	711,878
Lavida	507,574	547,187
Bora	334,900	236,427
Santana	293,313	312,177
Gol	203,148	160,130
up!	158,795	169,970
Touran	144,676	164,248
Lamando	138,943	146,285
Atlas/Teramont	129,724	386
Saveiro	66,431	47,460
Beetle	59,483	61,940
Fox	50,739	50,273
Sharan	45,695	41,949
Touareg	42,407	47,495
Arteon/CC	37,972	44,091
T-Roc	22,724	—
Suran	21,093	20,163
Phideon	13,014	5,131
Scirocco	8,199	11,963
Phaeton	—	452
	<b>6,316,832</b>	<b>6,073,310</b>

**VOLKSWAGEN PASSENGER CARS BRAND<sup>1</sup>**

	2017	2016	%
Deliveries (thousand units)	6,230	5,980	+4.2
Vehicle sales	3,573	4,347	-17.8
Production	6,317	6,073	+4.0
Sales revenue (€ million)	79,979	105,651	-24.3
Operating result before special items	3,301	1,869	+76.6
as % of sales revenue	4.1	1.8	

<sup>1</sup> 2017 figures take account of the reclassification of companies; prior-year figures were not adjusted.

# T-Roc

**DELIVERIES BY MARKET**  
*in percent*

Europe/Other markets	30.1%
North America	9.5%
South America	6.7%
Asia-Pacific	53.7%

FURTHER INFORMATION [www.volkswagen.com](http://www.volkswagen.com)



Audi set another sales record in 2017. The new generation of the Audi A8 is designed for highly automated driving. The “Audi AI” trademark will prospectively stand for autonomy, intelligence and innovation.

#### BUSINESS DEVELOPMENT

“Vorsprung” is an active brand promise that is delivered throughout the world, making Audi one of the most highly desired brands in the premium segment. In 2017, the brand with the four rings unveiled the new Audi A8. At the first Audi Summit, it also presented further technological milestones in cutting-edge fields such as sustainable production, lightweight construction, connectivity, automated driving and digital services. The fourth generation of the A8, Audi’s flagship, is rolling off the assembly line as the world’s first production model designed for highly automated driving. The “Audi AI” trademark will prospectively stand for autonomy, intelligence and innovation. The Audi of the future will use machine learning to continuously develop its capabilities, adapt to users’ individual needs and suggest services. This will make our customers’ lives easier and their journeys safer.

In the 2017 fiscal year, the Audi brand set a new sales record, delivering 1.9 million vehicles (+0.6%). Sales increased in North America (+8.4%) and China (+1.1%), among other regions.

Audi sold 1.5 (1.5) million vehicles in 2017. The Chinese joint venture FAW-Volkswagen sold a further 552 (536) thousand Audi vehicles. The Q2 and A5 models proved particularly popular with customers. Unit sales at Automobili Lamborghini S.p.A. amounted to 3,897 (3,465) vehicles.

Audi produced 1.9 (1.9) million vehicles globally in the reporting year; this was 1.3% fewer than in the previous year. At Lamborghini, production of the Urus, the world’s first super sport utility vehicle, started in 2017. Lamborghini produced a total of 4,056 (3,579) vehicles in the reporting period.

#### SALES REVENUE AND EARNINGS

At €60.1 billion, sales revenue for the Audi brand in 2017 exceeded the prior-year figure by €0.8 billion. At €5.1 (4.8) billion, operating profit before special items was higher than in the previous year. Product cost optimization and improved price positioning had a positive effect. This was offset by, among other factors, higher depreciation and amortization charges connected with the expansion of the international model and technology portfolio as well as international production structures. The operating return on sales before special items amounted to 8.4 (8.2)%. The diesel issue gave rise to special items of €–0.4 (previous year’s total –1.8) billion. The financial key performance indicators for the Lamborghini and Ducati brands are included in the financial figures for the Audi brand.

# A8

Highly automated driving

**PRODUCTION**

Units	2017	2016
<b>Audi</b>		
A4	325,307	357,999
A3	313,380	361,983
Q5	289,959	297,750
A6	259,618	276,211
Q3	205,006	231,452
A5	119,595	65,117
Q7	106,515	103,344
Q2	102,084	19,419
A1	95,346	105,252
TT	22,174	26,886
A7	16,968	26,308
A8	15,854	24,179
R8	3,179	3,688
Q8/e-tron	368	—
	<b>1,875,353</b>	<b>1,899,588</b>
<b>Lamborghini</b>		
Huracán Coupé	1,822	1,315
Aventador Coupé	1,008	587
Huracán Spyder	827	1,104
Aventador Roadster	278	573
Urus	121	—
	<b>4,056</b>	<b>3,579</b>
<b>Audi brand</b>	<b>1,879,409</b>	<b>1,903,167</b>

**AUDI BRAND**

	2017	2016	%
Deliveries (thousand units)	1,882	1,871	+0.6
Audi	1,878	1,868	+0.6
Lamborghini	4	3	+10.4
Vehicle sales	1,530	1,534	-0.3
Production	1,879	1,903	-1.2
Sales revenue (€ million)	60,128	59,317	+1.4
Operating result before special items	5,058	4,846	+4.4
as % of sales revenue	8.4	8.2	

**A8****DELIVERIES BY MARKET**  
*in percent*

Europe/Other markets	48.4%
North America	14.8%
South America	1.2%
Asia-Pacific	35.6%



The ŠKODA brand continued its SUV initiative in fiscal year 2017 with the new Karoq. The model helped ŠKODA achieve a new sales record, with 1.2 million vehicles delivered.

#### BUSINESS DEVELOPMENT

Intelligent concepts and excellent value for money are the hallmarks of the successful ŠKODA brand. In line with its motto, "Simply Clever", it combines future-oriented functionality with an impressive space concept that is technically simple but delivers sophisticated and practical features. ŠKODA celebrated the world premiere of the new Karoq in 2017, expanding the Czech brand's range of SUV models. The robust, compact vehicle has been completely redeveloped with the emotional and dynamic features of ŠKODA's new SUV design language. The vehicle offers exceptional spaciousness, new driver assistance systems, full-LED headlights and – for the first time in a ŠKODA – a freely programmable digital instrument panel. In addition, ŠKODA presented the Vision E concept car in 2017. The electric-powered concept vehicle enables highly automated driving and takes vehicle-driver connectivity to a new level.

Worldwide, the ŠKODA brand delivered 1.2 million vehicles to customers in the reporting year (+6.6%), thereby achieving a new sales record. China, where deliveries increased by 2.5%, was once again the brand's largest single market. Sales in Western Europe rose by 5.2%. They were up 13.3% in Central and Eastern Europe.

ŠKODA's unit sales rose year-on-year to 937 (814) thousand vehicles in 2017. The new Kodiaq met with a very positive reception in the market and had a major part in boosting unit sales. The difference between figures for deliveries and unit sales is mainly due to the fact that the vehicle-producing joint ventures in China are not attributed to ŠKODA brand companies.

ŠKODA produced 1.2 (1.2) million vehicles worldwide across seven series in fiscal year 2017. At the end of September 2017, the plant in Kvasiny, Czech Republic, produced the 20 millionth vehicle since the brand was established.

#### SALES REVENUE AND EARNINGS

The ŠKODA brand's sales revenue increased by 20.8% year-on-year to €16.6 billion in the past fiscal year. Operating profit improved by 34.6% to €1.6 billion; the increase resulted above all from the higher volume and mix effects, with exchange rate effects having a positive and an increase in fixed costs a negative impact. Operating return on sales rose from the previous year's 8.7% to 9.7%.

# 20 million

Number of vehicles produced since the establishment of the brand

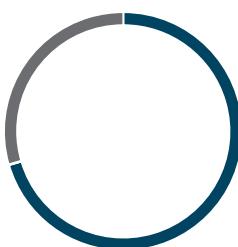
**PRODUCTION**

Units	2017	2016
Octavia	420,802	445,415
Rapid	210,002	216,603
Fabia	209,471	203,308
Superb	147,103	148,880
Kodiaq	123,982	1,167
Karoq/Yeti	81,963	95,417
Citigo	38,749	41,247
	<b>1,232,072</b>	<b>1,152,037</b>

**ŠKODA BRAND**

	2017	2016	%
Deliveries (thousand units)	1,201	1,126	+6.6
Vehicle sales	937	814	+15.2
Production	1,232	1,152	+6.9
Sales revenue (€ million)	16,559	13,705	+20.8
Operating result	1,611	1,197	+34.6
as % of sales revenue	9.7	8.7	

# Karoq

**DELIVERIES BY MARKET**  
*in percent*

Europe/Other markets	70.4%
North America	0.0%
South America	0.1%
Asia-Pacific	29.5%

FURTHER INFORMATION [www.skoda-auto.com](http://www.skoda-auto.com)



In addition to the fifth generation of the Ibiza, the SEAT brand also unveiled its compact Arona in the reporting year, expanding its range of SUVs. The previous year's positive performance continued in impressive fashion in the results for 2017.

#### BUSINESS DEVELOPMENT

SEAT delivers solutions "Created in Barcelona" to make mobility easy. Having entered the SUV market for the first time in the previous year with the Ateca, the Spanish brand continued this path in fiscal year 2017, presenting a further model series in the form of the Arona. This marries the benefits of compact dimensions with the features of a crossover model and underscores the brand's sporty and dynamic claim with its attractive design. It also boasts a wealth of driver assistance systems and impressive connectivity. Other models presented in 2017 included the limited-edition Leon CUPRA R and the new generation Ibiza. The Ibiza is the first model to be based on the Modular Transverse Toolkit and marks a decisive step into the future for the brand.

SEAT increased its deliveries to customers by 14.6% in 2017 to 468 thousand vehicles. Almost all markets contributed to this rise, with the most significant increases achieved in Poland (+24.8%), Spain (+23.1%), the United Kingdom (+18.3%), France (+15.6%) and Germany (+13.4%). This made SEAT one of the fastest-growing brands in Europe. The Ibiza, Leon and Ateca models were particularly popular with customers, and the new Arona was positively received by the market.

The SEAT brand sold 595 thousand units in the reporting period. This was 8.5% more than in the previous year. The Q3 produced for Audi is included in this figure.

In 2017, SEAT produced 479 thousand vehicles, an increase of 14.9% year-on-year.

#### SALES REVENUE AND EARNINGS

SEAT continued its upward trend in fiscal year 2017. At €9.9 billion, sales revenue exceeded the previous year's record figure by 11.2%. Operating profit improved by 24.8% to €191 (153) million, another new record. Negative effects from cost increases were compensated for by the higher volume, positive mix effects and improved margins. The SEAT brand's operating return on sales was 1.9 (1.7)%.

24.8%

Increase in profit in 2017

**PRODUCTION**

Units	2017	2016
Leon	163,306	163,228
Ibiza	160,377	149,988
Ateca	77,483	35,833
Alhambra	33,638	31,214
Arona	17,527	–
Mii	13,825	18,720
Toledo	13,146	18,029
<b>479,302</b>	<b>417,012</b>	

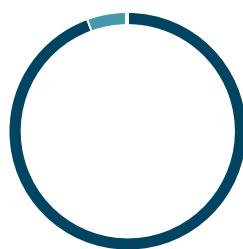
**SEAT BRAND**

	2017	2016	%
Deliveries (thousand units)	468	409	+14.6
Vehicle sales	595	548	+8.5
Production	479	417	+14.9
Sales revenue (€ million)	9,892	8,894	+11.2
Operating result	191	153	+24.8
as % of sales revenue	1.9	1.7	

# Arona



**DELIVERIES BY MARKET**  
*in percent*



Europe/Other markets	94.5%
North America	5.3%
South America	0.2%
Asia-Pacific	0.0%

FURTHER INFORMATION [www.seat.com](http://www.seat.com)



In 2017, Bentley celebrated the world premiere of the third generation of its best-selling Continental GT Coupé, which sets new standards in the luxury grand tourer segment.

#### BUSINESS DEVELOPMENT

The Bentley brand is defined by exclusivity, elegance and power. The third generation of the successful Continental GT debuted at the IAA in Frankfurt am Main in the reporting year. The vehicle sets new standards in the luxury grand tourer segment. Compared to its predecessor, it has a longer bonnet, a flatter front end and an extra-wide radiator grille. The exclusive interior features a virtual cockpit and a 12.3-inch foldaway touch-screen in the center console. The W12 engine puts an impressive 467 kW (635 PS) to the wheels. The Bentayga Diesel, launched in 2017, is the luxury brand's first model to be equipped with a diesel engine. A hybrid version will follow in 2018, marking Bentley's first step into the world of electric driving.

Bentley delivered 11,089 (11,023) vehicles to customers in the reporting period, exceeding the previous year's record figure. While deliveries declined by 6.8% in the USA, the brand's largest single market, they rose by 15.7% in Asia-Pacific and 1.5% in Europe.

At 10,566 (11,298) vehicles worldwide in 2017, the Bentley brand's unit sales were lower than in the previous year; this was above all attributable to the new generation of the Continental GT Coupé. The highest demand was recorded for the Bentayga.

Bentley produced 10,552 vehicles in 2017; the year-on-year decline of 10.7% was attributable to the production cycle.

#### SALES REVENUE AND EARNINGS

Bentley recorded sales revenue of €1.8 billion in the past fiscal year, a decline of 9.2% compared to 2016. Operating profit declined to €55 (112) million; negative volume-, price- and mix-related effects were offset by positive exchange rate effects and lower expenses from the development of the model portfolio. The operating return on sales stood at 3.0 (5.5)%.

3<sup>rd</sup> generation  
Continental GT Coupé

**PRODUCTION**

Units	2017	2016
Bentayga	4,849	5,586
Flying Spur	2,295	1,731
Continental GT Convertible	1,468	1,600
Continental GT Coupé	1,345	2,272
Mulsanne	595	628
<b>10,552</b>	<b>11,817</b>	

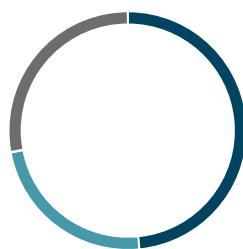
**BENTLEY BRAND**

	2017	2016	%
Deliveries (units)	11,089	11,023	+0.6
Vehicle sales	10,566	11,298	-6.5
Production	10,552	11,817	-10.7
Sales revenue (€ million)	1,843	2,031	-9.2
Operating result	55	112	-50.8
as % of sales revenue	3.0	5.5	

# Continental GT



**DELIVERIES BY MARKET**  
*in percent*



Europe/Other markets	48.5%
North America	23.6%
South America	0.1%
Asia-Pacific	27.9%

FURTHER INFORMATION [www.bentleymotors.com](http://www.bentleymotors.com)



The millionth Porsche 911 rolled off the production line in the past fiscal year. The sports car manufacturer entered a new segment with the Panamera Sport Turismo. The year brought new records in terms of unit sales, sales revenue and profit.

#### BUSINESS DEVELOPMENT

Exclusivity and social acceptance, innovation and tradition, performance and everyday usability, design and functionality – these are the brand values of sports car manufacturer Porsche. In 2017, Porsche put these values into practice in impressive form with the new generation of the Cayenne: the SUV has been completely redeveloped and embodies the typical Porsche attributes better than ever. Even though it comes with more standard features, the Cayenne is up to 65 kg lighter than its predecessor thanks to its lightweight construction. The Cayenne Turbo, the top-of-the-range model in the series, raises the bar for sporty performance in its segment even further. The car's four-liter V8, twin-turbo engine puts out 404 kW (550 PS) of power, accelerating it from 0 to 100 km/h in 4.1 seconds. Porsche's launch of the Sport Turismo, a new bodywork variant of the Panamera, has taken the brand into a new segment. The Sport Turismo uses all the technical and conceptual innovations featured in the Panamera series, which gained a second hybrid version in the reporting year with the 500 kW (680 PS) Panamera Turbo S E-Hybrid. In 2017, Porsche came first in the world's toughest long-distance event in Le Mans for the third time in succession and also won the third consecutive championship title in the WEC world endurance championships.

The Porsche brand delivered 246 thousand sports cars in the past fiscal year; this was 3.6% more than in the previous year. China remained the largest single market for Porsche with deliveries of 72 thousand vehicles (+9.6%). In North America, sales rose by 3.7%.

At 248 thousand vehicles, Porsche's unit sales exceeded the prior-year figure by 3.7% in 2017. Above all, the new Panamera saw marked sales growth.

Porsche celebrated a special anniversary in 2017, when the millionth 911 rolled off the production line at the main plant in Zuffenhausen. In total, Porsche produced 256 thousand vehicles in the reporting year. This was 6.7% more than in 2016.

#### SALES REVENUE AND EARNINGS

Starting January 1, 2017, Porsche's financial services business is reported as part of Volkswagen Financial Services. The 2017 fiscal year was once again very successful for Porsche: Porsche Automotive's sales revenue rose by 4.7% to €21.7 (20.7) billion. Operating profit improved by 7.2% to €4.0 billion; despite cost increases, the increase resulted particularly from the higher volume. The operating return on sales amounted to 18.5 (18.0)%.

# 1 million

Porsche 911s produced

**PRODUCTION**

Units	2017	2016
Macan	98,763	97,177
Cayenne	59,068	71,693
Panamera	37,605	14,218
911 Coupé/Cabriolet	33,820	31,648
718 Boxster/Cayman	26,427	24,882
<b>255,683</b>	<b>239,618</b>	

**PORSCHE AUTOMOTIVE<sup>1</sup>**

	2017	2016 <sup>1</sup>	%
Deliveries (thousand units)	246	238	+3.6
Vehicle sales	248	239	+3.7
Production	256	240	+6.7
Sales revenue (€ million)	21,674	20,710	+4.7
Operating result	4,003	3,733	+7.2
as % of sales revenue	18.5	18.0	

<sup>1</sup> Porsche (Automotive and Financial Services): sales revenue €23,491 (22,318) million, operating profit €4,144 (3,877) million.

# Cayenne


**DELIVERIES BY MARKET**  
*in percent*


Europe/Other markets	35.3%
North America	26.5%
South America	1.0%
Asia-Pacific	37.2%

FURTHER INFORMATION [www.porsche.com](http://www.porsche.com)



Volkswagen Commercial Vehicles continued to move towards emission-free urban mobility and logistics in fiscal year 2017; the e-Crafter is currently in the final stage of real-world testing. Deliveries and production hit new heights in the reporting year.

#### BUSINESS DEVELOPMENT

Volkswagen Commercial Vehicles stands for superior mobility with its three core values – reliability, profitability and partnership. The new Crafter celebrated a successful market launch in 2017. The vehicle has been completely redesigned based on customer requirements and offers customer-friendly functionality and practical, everyday solutions for the most diverse of transport needs in all areas of use. The e-Crafter, currently undergoing final real-world testing with major customers, is to be launched on the market in 2018, setting new standards for trade vehicles, municipal vehicle fleets and courier services in terms of emission-free urban logistics. The California XXL study also attracted attention in the reporting year. Based on the new Crafter and featuring a fixed, high panoramic roof, an extended rear end and user-friendly interior space, the concept demonstrates what a potential big brother for the California could look like in future. More than 15 thousand units of the current California, Europe's most popular campervan, were produced in 2017; this was approximately 20% more than in the previous record year 2016.

Volkswagen Commercial Vehicles delivered 498 thousand vehicles in the past fiscal year, an increase of 4.2% compared with 2016. Sales in Europe rose 2.6%, while in South America they climbed by 28.1%.

Volkswagen Commercial Vehicles sold 498 thousand vehicles in the reporting year, a rise of 4.1%. The Multivan/Transporter and Caddy models were particularly popular.

Production by the Volkswagen Commercial Vehicles brand increased by 16.0% in 2017 to 490 thousand vehicles. These figures include the Crafter, which is manufactured at the new plant in Wrzesnia, Poland. We also manufacture the Caddy and the T6 in Poland. The main plant in Hanover produces the Amarok, Caravelle/Multivan and Transporter models. The Amarok is also produced in Argentina.

#### SALES REVENUE AND EARNINGS

Volkswagen Commercial Vehicles generated sales revenue of €11.9 (11.1) billion in fiscal year 2017. Despite higher costs resulting from expansion of the production network, operating profit climbed 87.6% to €853 million due to margin, volume and exchange rate effects as well as product cost optimization. The operating return on sales improved considerably to 7.2(4.1)%.

87.6%

Increase in profit in 2017

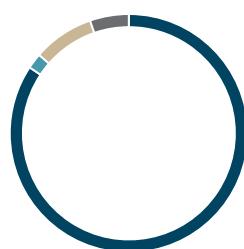
**PRODUCTION**

Units	2017	2016
Caravelle/Multivan, Kombi	115,553	117,554
Caddy Kombi	93,167	86,841
Transporter	92,876	81,932
Amarok	80,328	63,367
Caddy	71,501	71,757
Crafter	36,313	596
<b>489,738</b>	<b>422,047</b>	

**VOLKSWAGEN COMMERCIAL VEHICLES BRAND**

	2017	2016	%
Deliveries (thousand units)	498	478	+4.2
Vehicle sales	498	478	+4.1
Production	490	422	+16.0
Sales revenue (€ million)	11,909	11,120	+7.1
Operating result	853	455	+87.6
as % of sales revenue	7.2	4.1	

# California

**DELIVERIES BY MARKET**  
*in percent*

Europe/Other markets	84.3%
North America	2.1%
South America	8.3%
Asia-Pacific	5.3%

FURTHER INFORMATION [www.volks-wagen-commercial-vehicles.com](http://www.volks-wagen-commercial-vehicles.com)

## VOLKSWAGEN TRUCK & BUS

Volkswagen Truck & Bus made further steps in 2017 towards its strategic objective of becoming a global industry champion. It was helped by innovative cooperation projects between the Volkswagen Truck & Bus brands and the strategic alliance partner Navistar.

### BUSINESS DEVELOPMENT

Volkswagen Truck & Bus aims to become the industry's global champion. Volkswagen Truck & Bus already leads the truck market in Europe and in Brazil. In the coming decade, we want to lead the industry in terms of profitability, innovation for our customers, employee satisfaction and global presence.

Volkswagen Truck & Bus operates under the motto "Driving transportation to the next level". The key to putting this into practice is to promote cooperation in research and development between the brands. An office coordinates the joint development activities across brands and countries and helps the brands get new technologies to market faster. An example is the joint e-Drivetrain platform being designed to revolutionize electric driving in the Group. Parts of the platform are to be used in various Volkswagen Truck & Bus vehicles, such as the electric-powered city buses from MAN and Scania. The first of these buses will be delivered to selected European cities in 2018, including Hamburg and Paris. Our alliance partner Navistar is also planning to use the joint e-Drivetrain platform.

With the launch of the RIO platform at the end of 2017, Volkswagen Truck & Bus cemented its role as a digitalization pioneer. The cloud-based platform is also available to all other brands and new partners. Since January 2018, the RIO box has been available for retrofitting in all vehicles with a fleet management interface. RIO is thus also suited to mixed fleets containing vehicles of different brands. Since August 2017, every MAN truck delivered in Europe has been fitted with the RIO box with access to the RIO platform as a standard feature. Volkswagen Truck & Bus is already Europe's market leader for networked trucks. Scania, Volkswagen Caminhões e Ônibus, Volkswagen Commercial Vehicles and the strategic partner Navistar are also planning to use the RIO platform in future.

# 211 thousand

Vehicles produced

**PRODUCTION**

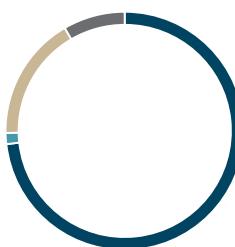
Units	2017	2016
Trucks	188,234	167,354
Buses	19,217	18,713
Light Commercial Vehicles	3,891	–
<b>211,342</b>	<b>186,067</b>	

**DELIVERIES**

Units	2017	2016
Trucks	183,481	165,806
Buses	19,218	17,775
Light Commercial Vehicles	2,212	–
<b>204,911</b>	<b>183,581</b>	

# Strong brands

**DELIVERIES BY MARKET**  
*in percent*



Europe/Other markets	73.3%
North America	1.5%
South America	16.9%
Asia-Pacific	8.4%



Scania expanded its new generation of trucks with vehicles for the construction industry in 2017. New solutions were also presented for sustainable transport in cities.

#### BUSINESS DEVELOPMENT

The Swedish brand Scania follows its values “Customer first”, “Respect for the individual”, “Elimination of waste”, “Determination”, “Team Spirit” and “Integrity”. Scania continued to introduce its new generation of trucks in the reporting year and presented a range of products and services with a special focus on the construction industry. The vehicles are characterized by a robust design and meet the highest standards in respect of reliability and productivity. Scania also presented forward-looking solutions for low-emission transport in cities: the lighter trucks, powered by the new 7-liter range of engines, offer fuel savings of up to 10% for urban transport companies and take efficient transport to a new level. Further engine and cab options were also introduced in 2017, such as the new 13-liter gas-powered engine for long-distance transport and the latest generation of V8 engines. With the hybrid version of the Interlink Low Decker and the battery-powered Citywide Low Floor, Scania boosted its range of buses with alternative drive systems. Scania One, the new digital platform for connected services, enables fleet owners and drivers to access Scania’s connected services and optimize the coordination of their transport assignments. The Scania R 450 was voted “Green Truck of the Year” in a poll by industry magazines to crown the most environmentally friendly commercial vehicles.

The key figures presented in this chapter encompass Scania’s truck and bus, industrial and marine engines and financial services businesses.

Orders at the Scania brand were up 27.9% year-on-year to 109 thousand vehicles in fiscal year 2017. Scania’s leading position in Euro 6 engines, long experience with consumption-optimized vehicles and the wide range of alternative drive systems contributed to growing order books in Western Europe. Globally, Scania delivered 91 (81) thousand vehicles to customers. Sales in Europe were up year-on-year, and impressive increases were also recorded in Brazil. At 8 (8) thousand vehicles, deliveries of buses remained on a level with the previous year. Demand for services and replacement parts as well as for Scania Financial Services was again higher in 2017 than in the previous year.

The Scania brand produced 96 (84) thousand commercial vehicles in the reporting period (+14.1%), including 8 (8) thousand buses.

#### SALES REVENUE AND EARNINGS

Sales revenue at the Scania brand was up €1.5 billion year-on-year at €12.8 (11.3) billion. Operating profit (previous year’s figure excludes special items) improved to €1.3 (1.1) billion. This was due to higher vehicle sales and an expansion of the service business. In the reporting period, the operating return on sales (previous year’s figure excludes special items) amounted to 10.1 (9.5)%.

# €1.3 billion

Operating profit for 2017

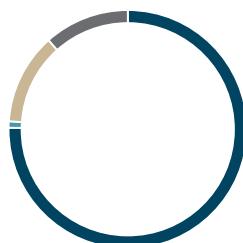
**PRODUCTION**

Units	2017	2016
Trucks	87,454	75,452
Buses	8,327	8,488
<b>95,781</b>	<b>83,940</b>	

**SCANIA BRAND**

	2017	2016	%
Orders received (thousand units)	109	86	+27.9
Deliveries	91	81	+11.6
Vehicle sales	92	83	+11.3
Production	96	84	+14.1
Sales revenue (€ million)	12,789	11,303	+13.1
Operating result <sup>1</sup>	1,289	1,072	+20.3
as % of sales revenue	10.1	9.5	

<sup>1</sup> In the previous year before special items.

**R 650****DELIVERIES BY MARKET**  
*in percent*

Europe/Other markets	75.2%
North America	0.9%
South America	12.3%
Asia-Pacific	11.6%



MAN successfully launched the MAN TGE van in the 2017 fiscal year and is now a comprehensive provider for all transport needs. The future program continued to have a positive impact.

#### **BUSINESS DEVELOPMENT**

Customer focus, enthusiasm for the product and efficiency are the core values at MAN. A new era began for MAN in 2017 with the market launch of the MAN TGE, the first light commercial vehicle from the long-established Munich-based brand. The MAN TGE is a response to high demand from logistics businesses, customer service providers and tradespeople, as well as from couriers, express and parcel delivery services. The vehicle turns MAN into a comprehensive solution provider for all transport needs. MAN also presented its e-Delivery: an electric-powered distribution truck for urban logistics. The vehicle ought to be manufactured in Brazil. The new Lion's Coach also celebrated its premiere; optimized reinforcement enables it to meet the safety standards introduced in November 2017. The NEOPLAN Tourliner received the renowned iF product design award in the reporting period. In Power Engineering, MAN presented a new high-performance diesel engine for its 4x line. The 45/60CR will initially be available in 12V and 14V versions boasting power outputs of 15,600 kW and 18,200 kW respectively.

In South America, MAN Commercial Vehicles recorded rising demand in fiscal year 2017 due to the improved economic environment. MAN also continued to expand in the European commercial vehicle market. Orders received increased by 13.9% in total to 120 thousand vehicles. Deliveries were up year-on-year at 114 (102) thousand commercial vehicles, including 11 (10) thousand buses.

MAN produced 116 (102) thousand commercial vehicles in the reporting year, of which 11 (10) thousand were buses.

Incoming orders in the Power Engineering Business Area increased by €3.7 (3.3) billion despite the continued difficult situation in the shipping industry, economic difficulties in emerging markets and the low price of oil.

#### **SALES REVENUE AND EARNINGS**

Sales revenue at MAN Commercial Vehicles rose by 10.8% year-on-year in 2017 to €11.1 billion. Operating profit (previous year's figure excludes special items) improved to €362 (230) million due to volume and margin effects. The initiated future program had a further positive effect. The operating return on sales (previous year's figure excludes special items) was 3.3 (2.3)%.

Sales revenue in the power engineering segment fell to €3.3 (3.6) billion. In operating profit (previous year's figure excludes special items), which amounted to €193 (194) million, negative volume effects were offset by improvements in the mix. The operating return on sales (previous year's figure excludes special items) increased to 5.9 (5.4)%.

# 116 thousand

Vehicles produced in 2017

**PRODUCTION**

Units	2017	2016
Trucks	100,780	91,902
Buses	10,890	10,225
Light Commercial Vehicles	3,891	—
<b>115,561</b>	<b>102,127</b>	

**MAN**

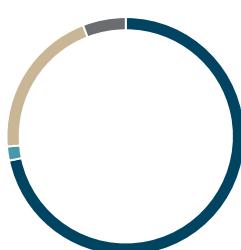
	2017	2016	%
<b>Commercial Vehicles</b>			
Orders received (thousand units)	120	105	+13.9
Deliveries	114	102	+11.6
Vehicle sales	114	102	+11.6
Production	116	102	+13.2
Sales revenue (€ million)	11,087	10,005	+10.8
Operating result <sup>1</sup>	362	230	+57.6
as % of sales revenue	3.3	2.3	
<b>Power Engineering</b>			
Sales revenue (€ million)	3,283	3,593	-8.6
Operating result <sup>1</sup>	193	194	-0.9
as % of sales revenue	5.9	5.4	

1. In the previous year before special items.

# Lion's Coach



## DELIVERIES BY MARKET *in percent*



Europe/Other markets	71.7%
North America	1.9%
South America	20.5%
Asia-Pacific	5.8%

FURTHER INFORMATION [www.man.eu](http://www.man.eu)

# Volkswagen Group China

Volkswagen systematically pushed ahead with its strategic realignment in China in 2017 and launched its SUV initiative. A new joint venture for e-mobility was initiated together with the manufacturer JAC.

## BUSINESS DEVELOPMENT

The Volkswagen Group is shaping the path to tomorrow's world of mobility in China, a key sales market: in presenting the concept vehicles Audi e-tron Sportback, ŠKODA VISION E and Volkswagen I.D. CROZZ at the Shanghai Auto Show, we underscored our ambitious goals for e-mobility and pushed ahead with our strategic realignment. The e-mobility strategy tailored to the Chinese market plans to gradually introduce approximately 40 new, locally produced plug-in hybrids and electric vehicles through our joint ventures in addition to existing and new import models.

Our fully automated concept car, the Sedric, presented in China in the reporting year, gives an insight into the mobility of the future, which is also a focus area at the Future Center Asia.

The Volkswagen Group also launched its SUV initiative in the 2017 fiscal year and introduced exciting models to the market: the Teramont, Tiguan L, ŠKODA Kodiaq and Audi Q7 e-tron.

Volkswagen agreed on a new joint venture for e-mobility in China with the Chinese car manufacturer Anhui Jianghuai Automobile (JAC) in 2017. The two partners each have a 50% interest in the new company, which plans to develop, produce and sell electric vehicles. The agreement includes the construction of a further factory and a research and development center for this purpose. The partnership also comprises the development and production of components for New Energy Vehicles (NEV) as well as the enhancement of vehicle connectivity and automotive services.

In future, we plan to export vehicles produced in China with our joint venture companies SAIC VOLKSWAGEN and FAW-Volkswagen. Under the agreement concluded, models that have already proven their popularity and quality in China will also be offered in other markets. This will supplement our model range, initially for customers in the Philippines and later in other countries of Southeast Asia.

We currently manufacture vehicles and components at 20 sites in China. Together with our joint venture partner, FAW, we are starting the production of environmentally friendly models at two new vehicle plants in Qingdao and Tianjin on the east coast of China in 2018.

On the Chinese market, the Volkswagen Group offers more than 170 imported and locally produced models from the Volkswagen Passenger Cars, Audi, ŠKODA, Porsche, Bentley, Lamborghini, Volkswagen Commercial Vehicles, MAN, Scania and Ducati brands. We delivered 4.2 (4.0) million vehicles (including imports) to Chinese customers in the reporting period. The Tiguan, Teramont, Magotan, New Bora, Audi A4 L, Audi Q7, ŠKODA Kodiaq and Superb models as well as Porsche Cayenne and Panamera saw a particularly strong increase in demand compared with the previous year.

# 4.2 million

Vehicles delivered in 2017

EARNINGS			
Thousand units	2017	2016	%
Deliveries	4,184	3,982	+5.1
Vehicle sales <sup>1</sup>	4,020	3,873	+3.8
Production	4,041	3,896	+3.7

€ million	2017	2016
Operating profit (100%)	11,191	11,094
Operating profit (proportionate)	4,746	4,956

<sup>1</sup> Produced locally.

Our two joint ventures SAIC VOLKSWAGEN and FAW-Volkswagen produced a total of 4.0 million vehicles in fiscal year 2017. This was 3.7% more than in the previous year. The joint ventures produce both established Group models and those specially modified for Chinese customers (e.g. with lengthened wheelbases), as well as vehicles developed exclusively for the Chinese market (such as the Volkswagen Lamando, Lavida, New Bora, New Jetta, New Santana and Teramont). Among other vehicles, the ŠKODA Kodiaq, Octavia Combi and Karoq and the upgraded Golf and Audi A3 entered production in the reporting year.

The proportionate operating profit of the joint ventures in 2017 was €4.7 billion. The negative impact of more intense competition and adverse exchange rate effects was offset by the improvements in the mix, higher volumes and product cost optimization.

The figures of the Chinese joint venture companies are not included in the operating profit of the Group as they are accounted for using the equity method. Their profits are included solely in the Group's financial result on a proportionate basis.

## Audi Q3



### LOCAL PRODUCTION

Units	2017	2016
Volkswagen Passenger Cars	3,156,352	3,012,664
Audi	552,744	555,777
ŠKODA	332,168	327,858
<b>4,041,264</b>	<b>3,896,299</b>	

## VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY

Volkswagen's financial services were in global demand again in 2017 and made a major contribution to the Group's good results. Euro-denominated corporate bonds were again issued in the primary market during the reporting period.

### STRUCTURE OF VOLKSWAGEN FINANCIAL SERVICES

Volkswagen Financial Services comprises dealer and customer financing, leasing, banking and insurance activities, fleet management and mobility services in 51 countries. Volkswagen Financial Services AG is responsible for global coordination of the Group's financial services activities, the only exceptions being the financial services business of the Scania brand and of Porsche Holding Salzburg. In Europe, the principal companies are Volkswagen Bank GmbH, Volkswagen Leasing GmbH and Volkswagen Versicherungsdienst GmbH. VW CREDIT, INC. operates financial services activities in North America.

Volkswagen Financial Services initiated a corporate restructuring in 2016, with the aim of combining the credit and deposit business within the European Economic Area (EEA) in Volkswagen Bank GmbH. Effective September 1, 2017, 100% of the shares in Volkswagen Bank GmbH were therefore transferred from Volkswagen Financial Services AG to Volkswagen AG.

### BUSINESS DEVELOPMENT

Volkswagen Financial Services impressed customers again in the 2017 fiscal year with diverse products, attractive terms and an exceptional range of services. This led it to achieve a record result.

The used-vehicle market is a strategic focus for Volkswagen Financial Services, and 2017 saw the launch of the new online used-vehicle platform HeyCar. Mobility Trader GmbH, a wholly owned subsidiary of Volkswagen Financial Services AG established for this purpose, is a quality portal for all automotive brands, not only those belonging to the Volkswagen Group. HeyCar puts vehicles and quality at its heart. The platform also enables dealers to tap potential earnings from additional sales. HeyCar is completely free of advertising and purchased listings.

Volkswagen Financial Services is driving the further digitalization of its business and will perform all payment service activities for the Volkswagen Group in the future. To establish, expand and operate these services (payment for parking tickets, car sharing, electric charging, fuel and road tolls) around the world, Volkswagen Financial Services has founded a new, independent company in Luxembourg. In addition, Volkswagen Financial Services has acquired the Munich-based start-up ContoWorks GmbH, which provides an integrated platform for payment services.

# €2.5 billion

Operating profit in 2017

The main refinancing sources for Volkswagen Financial Services are money and capital market instruments, asset-backed securities (ABS) transactions and customer deposits from the direct banking business.

In the reporting period, Volkswagen Leasing GmbH successfully returned to the primary market for euro-denominated corporate bonds. On the capital market, it placed two floating-rate bonds with terms of two and four years, as well as a fixed-rate bond with a term of seven and a half years. The total volume was €3.5 billion, making this the largest transaction by Volkswagen Financial Services to date. In addition, two bonds with a total volume of €2.25 billion were placed over the remainder of the year. Volkswagen Bank GmbH conducted its third euro benchmark issue with three bonds and a total volume of €2.0 billion.

Numerous transactions were also successfully placed internationally. The second bond issued by Volkswagen Finance (China) Co., Ltd. in China has an issue volume of CNY 4 billion (approximately €534 million). In Brazil, the local company Banco Volkswagen S.A. issued a bond with a volume of BRL 500 million, which translates to approximately €134 million. Volkswagen Financial Services Australia Pty Limited placed a bond with a volume of AUD 500 million (€339 million) and two bonds with a total volume of AUD 325 million (approximately €217 million). In the United Kingdom, bonds for GBP 850 million (approximately €1 billion) and GBP 300 million (approximately €340 million) were issued by Volkswagen Financial Services N.V. Other bonds were placed in Sweden, Norway, India, Mexico and Turkey.

Volkswagen Financial Services AG successfully issued a borrower's note loan in 2017 with a total volume of approximately €900 million, of which more than 500 million was in US dollars and the remainder in euros. The terms were three, five and seven years.

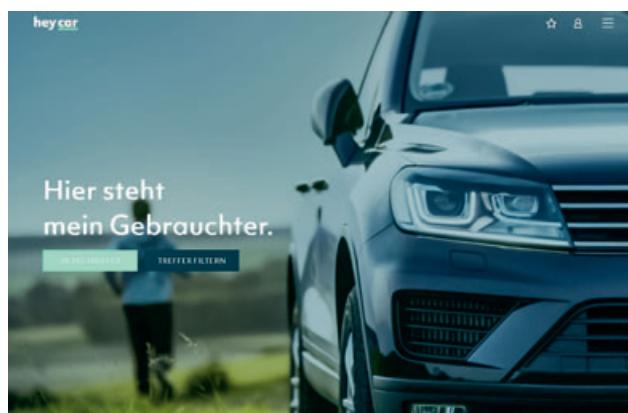
Volkswagen Leasing GmbH was active on the market again in fiscal year 2017 with its asset-backed securities (ABS) transactions. German leasing receivables with a volume of approximately €1.6 billion were securitized in the "Volkswagen Car Lease 25" program.

Outside Germany, Volkswagen Financial Services issued various ABS transactions on the market, including in Australia, the United Kingdom, France and China. A total of eight bonds were placed.

Other instruments used as part of the diversified funding strategy are customer deposits, commercial paper and credit lines.

## Hey Car

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Starting January 1, 2017, Porsche's financial services business is reported as part of Volkswagen Financial Services.

At 6.8 million contracts, the number of new financing, leasing, service and insurance contracts signed in the reporting period was 3.4% higher than in the previous year. The total number of contracts as of December 31, 2017 stood at a new record high of 17.2 million (+6.8%). The customer financing/leasing area accounted for 9.6 million contracts, up 7.6% year-on-year. In the Service/Insurance area, the number of contracts increased by 5.9% to 7.6 million. With credit eligibility criteria remaining unchanged, the penetration rate, expressed as the ratio of financed or leased vehicles to relevant Group delivery volumes – including the Chinese joint ventures – was steady at 33.1 (33.1)%.

At the end of the reporting period, Volkswagen Bank managed 1.5 (1.6) million deposit accounts. Volkswagen Financial Services employed 13,955 people worldwide as of December 31, 2017, 6,809 of them in Germany.

#### **SALES REVENUE AND EARNINGS**

In the 2017 fiscal year, Volkswagen Financial Services generated sales revenue €31.8 billion, 15.5% more than in the previous year. At €2.5 billion, operating profit exceeded the previous year's figure by 16.9%, hitting a new record. In addition to Porsche Financial Services, the increase resulted, above all, from improved margins and business growth.

#### **VOLKSWAGEN FINANCIAL SERVICES**

		2017	2016	%
Number of contracts	thousands	17,234	16,133	+6.8
Customer financing <sup>1</sup>		5,672	5,421	+4.6
Leasing <sup>1</sup>		3,921	3,494	+12.2
Service/Insurance		7,641	7,218	+5.9
Lease assets	€ million	36,422	31,593	+15.3
Receivables from	€ million			
Customer financing <sup>1</sup>		58,125	55,298	+5.1
Dealer financing		19,614	17,921	+9.4
Leasing agreements <sup>1</sup>		39,553	34,902	+13.3
Direct banking deposits	€ million	30,408	32,412	-6.2
Total assets	€ million	186,917	170,070	+9.9
Equity	€ million	25,634	21,178	+21.0
Liabilities <sup>2</sup>	€ million	154,410	141,830	+8.9
Equity ratio	%	13.7	12.5	
Return on equity before tax <sup>3</sup>	%	9.8	10.4	
Leverage <sup>4</sup>		6.0	6.7	
Operating result	€ million	2,460	2,105	+16.9
Earnings before tax	€ million	2,299	2,073	+10.9
Employees at Dec. 31		13,955	13,406	+4.1

1 Prior year adjusted, as some of the receivables from customers are now presented as lease receivables.

2 Excluding provisions and deferred tax liabilities.

3 Earnings before tax as a percentage of average equity (continuing operations).

4 Liabilities as a percentage of equity.

# 3

# Group Management Report

(Combined Management Report of the Volkswagen Group and Volkswagen AG)

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# Goals and Strategies

We are striving for lasting success in tomorrow's world of mobility and intend to be one of the world's leading providers of sustainable mobility. This is the reason we have anchored the future program TOGETHER – Strategy 2025 in the Group.

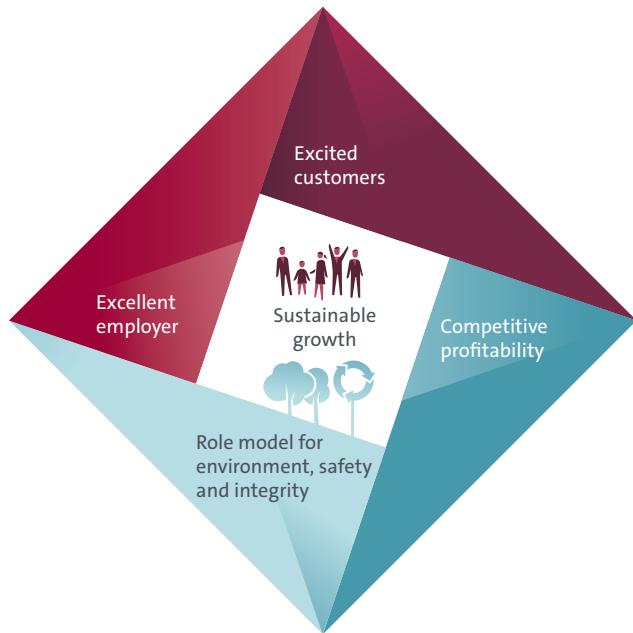
The future program TOGETHER – Strategy 2025, the biggest change process in the history of Volkswagen, was launched in 2016. With the future program, we are making the Volks-

wagen Group more focused, efficient, innovative, customer-oriented and sustainable, and more systematically geared to generating profitable growth. The program creates the framework and lays the cornerstones for us to achieve our vision of being one of the world's leading providers of sustainable mobility.

The time horizon until 2025 shows that our thoughts and actions are long-term and future-oriented. The term TOGETHER describes the mindset that will be even more vital to the Volkswagen Group's long-term success going forward. Our intention with the new Group strategy is for everyone in the Volkswagen Group to join us in producing exciting vehicles and forward-looking, tailor-made mobility solutions that will continue to inspire our customers, meeting their diverse needs with a portfolio of strong brands. Every day, we actively assume and exercise responsibility in relation to the environment, society and safety, and we wish to be a role model in these areas. Integrity, reliability, quality and passion thus form the basis for our work. In this way, we will aim for technological leadership in the industry, ensure our competitive profitability and remain an excellent, reliable and secure employer at the same time.

The Code of Collaboration formulated as part of the future program is the foundation on which the Group strategy rests. This Code describes how collaboration is to take place within the Group and between individuals in their day-to-day work. Its core values are encapsulated in the terms "genuine", "straightforward", "open-minded", "as equals" and "united".

## FUTURE PROGRAM TOGETHER – STRATEGY 2025



## FOUR BUILDING BLOCKS OF THE FUTURE PROGRAM

### TOGETHER – STRATEGY 2025

Our Group strategy comprises a raft of far-reaching strategic decisions and specific initiatives essentially aimed at safeguarding the Group's long-term future and generating profitable growth. It is composed of four building blocks which cover a total of 16 strategic Group initiatives.

The first of these is the transformation of the 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. That is the reason why we are comprehensively restructuring our core business to face this new era of mobility.

The second key building block in our Group strategy is establishing a new mobility solutions business. In this business, we are developing innovative and efficient, attractive yet profitable mobility services that are tailored to customer requirements with the goal of being one of the leading providers in this growth market in the future.

With the third key building block, we are intensifying our traditionally excellent innovative strength and placing it on an even broader footing. This is necessary both for the transformation of our core business and for the establishment of the new mobility solutions business. To this end, we are pushing ahead with the digital transformation in all parts of the Company.

Becoming one of the world's leading providers of sustainable mobility calls for substantial capital expenditure.

This will be financed in particular through efficiency gains along the entire value chain – from product development and procurement through to production and distribution as well as in the central supporting areas. Additional funds for future investments can also be generated by optimizing the existing portfolio of brands and equity investments. Through the fourth key building block of the Group strategy we will safeguard the financing of the Volkswagen Group and place it on a solid basis.

### GOALS AND KEY PERFORMANCE INDICATORS OF THE GROUP'S STRATEGY

The strategic initiatives describe how we intend to achieve our vision of being one of the world's leading providers of sustainable mobility. For this purpose, we have defined four target dimensions – excited customers, excellent employer, role model for the environment, safety and integrity, and competitive profitability – which are designed to help us grow sustainably.

Although these target dimensions apply throughout the Group, the strategic KPIs that we will use in the future to measure how well we have implemented our Group strategy, depend on the business model. After all, the business model for our passenger car-producing brands is different from that for trucks and buses and also from that of our Power Engineering Business Area and our services business.

### BUILDING BLOCKS AND STRATEGIC GROUP 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 toolkits
- 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 organization 4.0

In the following, we describe the Group's strategic goals attached to these target dimensions.

The strategic KPIs of the competitive profitability target dimension have been defined and anchored uniformly in the Group. As the new Group strategy has yet to be specified in detail, the content of some strategic KPIs in the other target dimensions is still being determined. We report on the already defined nonfinancial strategic KPIs in the "Corporate Governance Report" and "Sustainable Value Enhancement" sections.

#### **Target dimension: excited customers**

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

The strategic KPIs consist of the net promoter score, the conquest rate and KPIs pertaining to loyalty, customer satisfaction and quality.

#### **Target dimension: excellent employer**

Skilled and dedicated employees are one of the keys to sustainable success. We wish to promote their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, and a forward-looking organization of work. Exemplary leadership and corporate culture forms the foundation for this, 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 at the Volkswagen Group assume and exercise responsibility in relation to the environment, safety and society. This is reflected in our thoughts and actions and in all our decisions in equal measure.

We pay particular attention to the use of resources and the emissions of our product portfolio as well as those of our sites and plants, with the goal of continuously improving our carbon footprint and lowering pollutant emissions. Through

our innovations and outstanding quality, we aim for maximum product safety. The most important principles in this process include compliance with laws and regulations, the establishment of secure processes, and dealing openly with mistakes so that they can be avoided or rectified in the future. In terms of integrity, Volkswagen aims to become a role model for a modern, transparent and successful enterprise.

The strategic KPIs of this target dimension include the decarbonization index and KPIs pertaining to emissions figures, 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 as regards interest payments and debt repayments. As equity holders, they expect appropriate dividends and a long-term increase in the value of their shares.

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

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

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

#### **STRATEGIC KPIS: COMPETITIVE PROFITABILITY**

	2015	2025
Operating return on sales <sup>1</sup>	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, 11.5%	~10% of consolidated sales revenue
Return on investment (ROI) in the Automotive Division	-0.2%	>15%

<sup>1</sup> 2015 before special items

# Internal Management System and Key Performance Indicators

This chapter describes, on the basis of the Group strategy, how the Volkswagen Group is managed and the key performance indicators used for this purpose. In addition to financial measures, our management system also contains nonfinancial key performance indicators.

The Volkswagen Group's performance and success can be measured by both financial and nonfinancial key performance indicators. With the operational excellence Group initiative, we aim to improve these indicators throughout all areas and along the entire value chain.

In the following, we first describe the internal management process and then explain the Volkswagen Group's core performance indicators.

## INTERNAL MANAGEMENT PROCESS IN THE VOLKSWAGEN GROUP

The "Integrate strategy and planning process" Group initiative is focused on continuity and even closer dovetailing of the Group and brand strategies with the operational planning process. This enhances transparency when it comes to the financial assessment and the evaluation of directional decisions. The operational planning that is conducted once a year and generally covers a period of five years is incorporated into the strategic planning as a key management element of the Group.

Medium-term planning forms the core of our operational planning and is used to formulate and safeguard the requirements for realizing strategic projects designed to meet Group targets in both technical and economic terms – and particularly in relation to earnings, cash flow and liquidity effects. In addition, it is used to coordinate all business areas with respect to the strategic action areas concerned: functions/processes, products and markets.

When planning the Company's future, the individual planning components are determined on the basis of the timescale involved:

- the long-term unit sales plan, which sets out market and segment growth and then derives the Volkswagen Group's delivery volumes from them,
- the product program as the strategic, long-term factor determining corporate policy,
- capacity and utilization planning for the individual sites.

The coordinated results of the upstream planning processes are used as the basis for the medium-term financial planning: the Group's financial planning, including the brands and business fields, comprises the income statement, cash flow and balance sheet planning, profitability and liquidity, as well as the upfront investments needed for alternative products and the implementation of strategic options. The first year of the medium-term planning period is fixed and a budget drawn up for the individual months. This is planned in detail down to the level of the operating cost centers.

The budget is reviewed each month throughout the year to establish the degree to which the targets have been met. Key internal management instruments comprise target/actual comparisons, prior-year comparisons, variance analyses and, where necessary, action plans to ensure targets are met. For the current fiscal year, detailed revolving monthly forecasts are prepared for the coming three months and the full year, taking into account the current risks and opportunities. The focus of intrayear internal management is therefore on adapting ongoing operations. At the same time, the current forecast serves as a potential, ongoing corrective to the medium-term and budget planning that follows on from it.

#### CORE PERFORMANCE INDICATORS IN THE VOLKSWAGEN GROUP

The Volkswagen Group's internal management system is based on nine core performance indicators, which are derived from our strategic goals. Two of these indicators were added in fiscal year 2017 under the future program TOGETHER – Strategy 2025:

- > Deliveries to customers
- > Sales revenue
- > Operating result
- > Operating return on sales
- > Research and development ratio (R&D ratio) in the Automotive Division (from 2017)
- > Capex/sales revenue in the Automotive Division
- > Net cash flow in the Automotive Division
- > Net liquidity in the Automotive Division (from 2017)
- > Return on investment (ROI) in the Automotive Division

Deliveries to customers are defined as handovers of new vehicles to the end customer. This figure shows the popularity of our products and is the measure we use to determine our competitive position in various markets. Deliveries are closely related to our targets of exciting our customers, being a role model in terms of the environment, safety and integrity, and being an excellent employer. One of the most important prerequisites for the Company's long-term success is a strong brand portfolio that – on the basis of outstanding quality – offers tailor-made mobility solutions with safe, resource-efficient vehicles, thus meeting the diverse needs of customers. Demand for our products guarantees not only unit sales and production, but also full utilization of our sites and the jobs of our employees. The goals we are striving for cannot be achieved without a skilled, dedicated workforce and a consensus on shared values.

Sales revenue, which does not include the figures for our equity-accounted Chinese joint ventures, reflects our market success in financial terms. Following adjustment for our use of resources, the operating result reflects the Company's actual business activity and documents the economic success of our core business. The operating return on sales is the ratio of the operating result to sales revenue.

The research and development ratio (R&D ratio) in the Automotive Division shows total research and development costs in relation to sales revenue. Research and development costs comprise a range of expenses, from futurology through to the development of marketable products. Particular emphasis is placed on the environmentally friendly orientation of

our product portfolio. The R&D ratio underscores the efforts made to ensure the Company's future viability: the goal of competitive profitability geared to sustainable growth.

The ratio of capex (investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs) to sales revenue in the Automotive Division reflects both our innovative power and our future competitiveness. It shows our capital expenditure – largely for modernizing and expanding our product range and for environmentally friendly drivetrains, as well as for adjusting the production capacity and improving production processes – in relation to the Automotive Division's sales revenue.

Net cash flow in the Automotive Division represents the excess funds from operating activities available for dividend payments, for example. It is calculated as cash flows from operating activities less cash flows from investing activities attributable to operating activities.

Net liquidity in the Automotive Division is the total of cash, cash equivalents, securities, loans and time deposits not financed by third-party borrowings. To safeguard our business activities, we have formulated the strategic target that net liquidity in the Automotive Division should amount to approximately 10% of the consolidated sales revenue.

We use the return on investment (ROI) to calculate the return on invested capital for a particular period in the Automotive Division, including the Chinese joint ventures on a proportionate basis, by calculating the ratio of the operating result after tax to average invested capital. If the return on investment (ROI) exceeds the market cost of capital, the value of the Company has increased. This is how we measure the financial success of our brands, locations and vehicle projects.

You can find information on and explanations of the sales figures and the Volkswagen Group's financial key performance indicators on pages 101 to 107 and on pages 114 to 129, respectively.

Detailed descriptions of our activities and additional nonfinancial key performance indicators in the areas of sustainability, research and development, procurement, production, sales and marketing, quality assurance, employees, information technology and the environment can be found in the chapter entitled "Sustainable Value Enhancement" beginning on page 134 of this annual report. Nonfinancial key performance indicators related to compliance are described in the "Corporate Governance Report" on page 65.

# Structure and Business Activities

This chapter describes the legal and organizational structure of the Volkswagen Group and explains the material changes in 2017 with respect to equity investments.

## OUTLINE OF THE LEGAL STRUCTURE OF THE GROUP

Volkswagen AG is the parent company of the Volkswagen Group. It develops vehicles and components for the Group's brands, but also produces and sells vehicles, in particular passenger cars and light commercial vehicles for the Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands. In its capacity as parent company, Volkswagen AG holds indirect or direct 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 in accordance with sections 285 and 313 of the Handelsgesetzbuch (HGB – German Commercial Code), which can be accessed at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir) and is part of the annual financial statements.

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

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

## ORGANIZATIONAL STRUCTURE OF THE GROUP

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

The Automotive Division comprises the Passenger Cars, Commercial Vehicles and Power Engineering business areas. The Passenger Cars Business Area essentially consolidates the Volkswagen Group's passenger car brands. Activities focus on the development of vehicles and engines, the production and sale of passenger cars, and the genuine parts business. The product portfolio ranges from fuel-efficient compact cars to luxury vehicles and also includes motorcycles, and will gradually be supplemented by mobility solutions.

The Commercial Vehicles Business Area primarily comprises the development, production and sale of light commercial vehicles, trucks and buses from the Volkswagen Commercial Vehicles, Scania and MAN brands, the corresponding genuine parts business and related services. The collaboration between the MAN and Scania commercial vehicle brands is managed and coordinated under the umbrella of Volkswagen Truck & Bus GmbH. The commercial vehicles portfolio ranges from pickups to heavy trucks and buses.

The Power Engineering Business Area combines the large-bore diesel engines, turbomachinery, special gear units, propulsion components and testing systems businesses.

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 is present in all relevant markets around the world. The Group's key sales markets currently include Western Europe, China, the USA, Brazil and Mexico.

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

Each brand in the Volkswagen Group is managed by a board of management, which ensures its independent and self-contained development and business operations. The Group targets and requirements laid down by the Board of Management of Volkswagen AG must be complied with to the extent permitted by law. This allows Group-wide interests to be pursued, while at the same time safeguarding and reinforcing each brand's specific characteristics. Matters that are of importance to the Group as a whole are submitted to the Group Board of Management in order to reach agreement between the parties involved, to the extent permitted by law. The rights and obligations of the statutory bodies of the relevant brand company remain unaffected.

The companies of the Volkswagen Group are managed separately by their respective managements. In addition to the interests of their own companies, the management of each individual company takes into account the interests of the Group and of the individual brands in accordance with the framework laid down by law.

At Group level, committees also address key strategic issues, for example relating to product planning, investments and management issues.

To continue to enhance the Group's leadership and management model, we redesigned the portfolio of these committees and the regulation landscape at Group level in the reporting period. Among other things, a Committee for Digital Transformation was created and the Committee for Liquidity and Foreign Currency was replaced by the Group Board of Management Committee for Risk Management. These changes have reduced complexity and reinforced governance within the Group. In addition, the Group functions have continued to focus on leveraging substantial synergies across all brands and business fields, pooling competencies and making these available to the brands.

Operational fine-tuning at Group level has also been reduced further and, at the same time, greater entrepreneurial responsibility assigned to the brands and regions, making the Group more agile and speeding up decision-making processes. The Group Board of Management can concentrate more on strategy and the management of major areas in which synergies can be created, for example joint creation of a digitalization architecture, brand positioning, product strategy, development and use of platforms and modules, procurement and plant capacity utilization.

With our future program TOGETHER – Strategy 2025, the Organization 4.0 Group initiative also supports the Company's transformation and is making the Group's organization fit for the future. The aim of this initiative is to connect activities across divisions, initiate new organizational

approaches and anchor these in the Group for the long term. This will not only enable but will actively create holistic stimulus for innovations, entrepreneurship and change, ensuring that the Group remains agile and competitive in future.

#### MATERIAL CHANGES IN EQUITY INVESTMENTS

The control and profit and loss transfer agreement between MAN SE, as the controlled company, and Volkswagen Truck & Bus GmbH, a wholly owned subsidiary of Volkswagen AG, as the controlling company, came into force upon its entry in the commercial register on July 16, 2013. The conclusion of the control and profit and loss transfer agreement replaced the group based on the de facto exercise of management control by a contractual group, permitting considerably more efficient and less bureaucratic cooperation between the MAN Group and the rest of the Volkswagen Group. Noncontrolling interest shareholders of MAN SE have the right to tender MAN ordinary and preferred shares in Volkswagen Truck & Bus GmbH during and two months after the conclusion of the award proceedings instituted in July 2013 to review the appropriateness of the cash settlement set out in the agreement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) and the cash compensation in accordance with section 304 of the AktG. The Munich Regional Court ruled in the first instance at the end of July 2015 that the settlement payable to the shareholders should be increased from €80.89 to €90.29 per share. Both Volkswagen Truck & Bus GmbH and a number of the noncontrolling interest shareholders have appealed to the Higher Regional Court in Munich. At the end of December 2017, Volkswagen Truck & Bus GmbH held 75.73% of the ordinary shares and 46.95% of the preferred shares of MAN SE.

At the beginning of September 2016, Volkswagen Truck & Bus GmbH, a wholly owned subsidiary of Volkswagen AG, and the US-based commercial vehicle manufacturer Navistar International Corporation (Navistar), announced that they had signed an agreement to forge a wide-ranging alliance. The transaction was closed on February 28, 2017. Volkswagen Truck & Bus acquired 16.6% of the shares in Navistar through a capital increase. The interest held was increased to 16.9% by the end of 2017. Navistar is a holding company whose subsidiaries produce trucks, coaches, commercial and school buses, diesel engines and service parts. The alliance includes framework agreements for a strategic technology and supply cooperation and for the joint venture Global Truck & Bus Procurement LLC, based in Lisle (Illinois), which will pursue joint global procurement opportunities. The partnership will focus on developing common powertrain systems, but may

also entail collaboration in other areas of commercial vehicle development and procurement. Opportunities to cooperate in the fields of autonomous driving, alternative fuel technologies and connectivity will also be examined. The aim is to jointly create new synergies and to achieve greater independence from the cycles in the industry.

Part of the PGA Group SAS, Paris, France, was sold by POFIN Financial Services Verwaltungs GmbH, Freilassing, to the Emil Frey Group on June 1, 2017. The sale is in connection with the strategic development of Porsche Holding Salzburg's dealer network and the corresponding focus on dealerships exclusively selling Volkswagen Group brand vehicles. The transaction encompasses dealerships in Poland, the Netherlands, Belgium and in some cases also in France.

With the "Optimize business portfolio" Group initiative, the Board of Management intends to ensure the Volkswagen Group's competitiveness and financial performance as a forward-looking mobility provider by focusing on its core business and using its capital to the best advantage. To this

end, we are continuously monitoring and analyzing our portfolio and can respond in a timely manner by making any necessary purchases or sales.

#### LEGAL FACTORS INFLUENCING BUSINESS

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

 VOLKSWAGEN AG SHAREHOLDINGS  
[www.volkswagenag.com/ir](http://www.volkswagenag.com/ir)

# Corporate Governance Report

Corporate governance is defined as responsible, transparent corporate management and supervision that aims to add long-term value. For us, good corporate governance not only forms the basis for lasting success; it is also an important prerequisite for strengthening the trust of our stakeholders in our work.

## THE GERMAN CORPORATE GOVERNANCE CODE – A BLUEPRINT FOR SUCCESSFUL CORPORATE GOVERNANCE

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

## DECLARATIONS OF CONFORMITY (VALID AS OF THE DATE OF THE RELEVANT DECLARATION)

On November 17, 2017, the Board of Management and the Supervisory Board of Volkswagen AG issued the annual declaration of conformity with the Code as required by section 161 of the Aktiengesetz (AktG – German Stock Corporation Act) with the following wording:

"The Board of Management and the Supervisory Board declare the following:

1. The recommendations of the Government Commission of the German Corporate Governance Code in the version dated 5 May 2015 (the Code) that were published by the German Ministry of Justice in the official section of the Federal Gazette (Bundesanzeiger) on 12 June 2015 were complied

with in the period from the last Declaration of Conformity dated 18 November 2016 until the amended version of the Code dated 7 February 2017 came into effect on 24 April 2017, with the exception of the following numbers listed below with their stated reasons.

- a) 4.2.3(4) (severance cap)  
A severance cap will be included in new contracts concluded with members of the Board of Management, but not in contracts concluded with Board of Management members entering their third term of office or beyond, provided a cap did not form part of the initial contract. Grandfather rights have been applied accordingly.
- b) 5.3.2 sentence 3 (independence of the chair of the Audit Committee)  
It is unclear from the wording of this recommendation whether the Chairman of the Audit Committee is "independent" within the meaning of number 5.3.2 sentence 3 of the Code. Such independence could be considered lacking in view of his seat on the Supervisory Board of Porsche Automobil Holding SE, kinship with other members of the Supervisory Board of the company and of Porsche Automobil Holding SE, his indirect minority interest in Porsche Automobil Holding SE, and business relations with other members of the Porsche and Piëch families who also have an indirect interest in Porsche Automobil Holding SE. However, in the opinion of the Supervisory Board and the Board of Management, these relationships do not constitute a conflict of interest nor do they interfere with his duties as the Chairman of the Audit Committee. This exception is therefore being declared purely as a precautionary measure.
- c) 5.4.1(5 to 7) (disclosure regarding election recommendations)  
With regard to recommendation number 5.4.1(5) to (7) of the Code stating that certain circumstances must be disclosed by the Supervisory Board when making election recommendations to the Annual General Meeting, the stipulations of the Code are vague and the definitions

unclear. Purely as a precautionary measure, the Board of Management and the Supervisory Board therefore declare a deviation from the Code in this respect. Notwithstanding this, the Supervisory Board will make every effort to satisfy the requirements of the recommendation.

- d) 5.4.6(2) sentence 2 (performance-related remuneration of members of the Supervisory Board)

Until the amendment to article 17(1) of the Articles of Association adopted by the Annual General Meeting on 10 May 2017 that came into effect on 1 June 2017, Supervisory Board remuneration was linked in part to the dividends. We therefore assumed that we had complied with the Code and that the variable compensation component was oriented toward the sustainable growth of the company as defined in number 5.4.6(2) sentence 2 of the Code. However, as it could not be ruled out that other views would be taken in this respect, a deviation from this recommendation in the Code is being declared as a precautionary measure.

2. The recommendations of the Government Commission of the German Corporate Governance Code in the version dated 7 February 2017 (the 2017 Code) that were published by the German Ministry of Justice on 24 April 2017 in the official section of the Federal Gazette (Bundesanzeiger) were complied with in the period from when this version came into effect on 24 April 2017 and will continue to be complied with, with the exception of the numbers listed below and their stated reasons.

- a) 4.2.3(4) (severance cap)
- b) 5.3.2(3) sentence 2 (independence of the chair of the Audit Committee)
- c) 5.4.1(6 to 8) (disclosure regarding election recommendations)

The reasons for exceptions a) to c) are listed above in the details under point 1.

- d) 5.4.6(2) sentence 2 (performance-related remuneration of members of the Supervisory Board)

Until the amendment to article 17(1) of the Articles of Association adopted by the Annual General Meeting on 10 May 2017 that came into effect on 1 June 2017, Supervisory Board remuneration was linked in part to the dividends. We therefore assumed that we had indeed complied with the Code and that the variable compensation component was oriented toward the sustainable growth of the company as defined in number 5.4.6(2) sentence 2 of the 2017 Code. However, as it could not be ruled out that other views would be taken in this respect, a deviation from this recommendation in the Code was declared as a precautionary measure. The amendment to the Articles of Association that came into effect on 1 June 2017 introduced fixed remuneration retroactively as of 1 January 2017, so that the recommendation has definitely been complied with since 1 June 2017.

- e) 4.2.3(2) sentence 3 (variable remuneration package in principle future-oriented)

The recommendation that the variable remuneration components based on a multi-year assessment should essentially be forward-looking has been recently added to the Code. The corresponding remuneration components for the members of the Board of Management were in the former system essentially based on the results of the past fiscal year and would therefore not be suitable for this recommendation. In February 2017, the Supervisory Board adopted a new system for the Board of Management remuneration in which the multi-year variable remuneration components were essentially future-oriented. The new remuneration system was fully implemented with retrospective effect to 1 January.

- f) 5.4.1(2) sentence 1 (objectives regarding the composition of the Supervisory Board; profile of skills and expertise)

This recommendation concerning the specification of concrete objectives for the composition of the Supervisory Board was supplemented when the 2017 Code came into force to the effect that the Supervisory Board should also prepare a profile of skills and expertise for the entire committee in addition to specifying objectives for its composition. This recommendation, more specifically the supplement, has not been complied with from when the amended version of the recommendation took effect until today due to the new addition. Following consultations and specifications on the part of the Supervisory Board, this recommendation will be complied with in full as of today.

- g) 5.4.1(5) sentence 2 (curriculum vitae of the members of the Supervisory Board)

The recommendation to publish updated curriculum vitae of all members of the Supervisory Board on the company website every year, including an overview of the main ancillary activities, has been newly added to the 2017 Code. The curriculum vitae of members of the Supervisory Board were published on 1 August 2017; this included an overview of their main ancillary activities beyond their Supervisory Board mandates. The recommendation has been complied with since that time."

The current declaration of conformity is also published on our website, [www.volksvagenag.com/ir](http://www.volksvagenag.com/ir).

With the exception of number 4.2.3(2) sentence 9 (no early disbursements of variable remuneration components) and number 5.1.2(2) sentence 1 (duration of first-time appointments to the Board of Management), the suggestions in the current version of the Code have been complied with. Provision is made to some extent for the early disbursement of multiple-year, variable remuneration components in the event that one member of the Board of Management retires (early) from the Board; independently of this, such remuneration components could be disbursed early. The Supervisory Board will decide the duration of each first-time

appointment to the Board of Management on an individual basis, taking the best interests of the Company into account. The suggestion made in number 2.3.2 sentence 2 (accessibility of the voting proxy during the Annual General Meeting) was implemented at the 2017 Annual General Meeting in such a manner that the shareholders were able to reach the voting proxies named by the Company to exercise their voting rights until 1:00 pm, also by electronic means. The suggestion made in number 2.3.3 (broadcast of the Annual General Meeting) was implemented at the 2017 Annual General Meeting so that the introductory remarks by the Chairman of the Supervisory Board and the speech of the Chairman of the Board of Management were broadcast.

Our listed subsidiaries AUDI AG, MAN SE and Renk AG have also issued declarations of conformity with the German Corporate Governance Code.

The declarations of conformity of our listed subsidiaries can be accessed at the websites shown on this page.

#### COOPERATION BETWEEN THE BOARD OF MANAGEMENT AND THE SUPERVISORY BOARD

The Supervisory Board advises and monitors the Board of Management with regard to the management of the Company and is directly involved in decisions of fundamental importance to the Company. The Board of Management and the Supervisory Board of Volkswagen AG consult closely on the strategic orientation of the Volkswagen Group. The two bodies jointly assess, at regular intervals, the progress made in implementing the corporate strategy. The Board of Management reports to the Supervisory Board regularly, promptly and comprehensively in both written and oral form on all issues of relevance for the Company with regard to strategy, planning and the situation of the Company, the development of the business, the risk situation, risk management and compliance.

More information on cooperation between the Board of Management and the Supervisory Board of Volkswagen AG and on the work and structure of the committees of the Supervisory Board can be found in the Report of the Supervisory Board on pages 12 to 17 of this annual report.

- DECLARATION OF CONFORMITY OF VOLKSWAGEN AG  
[www.volkswagenag.com/ir](http://www.volkswagenag.com/ir)
- DECLARATION OF CONFORMITY OF AUDI AG  
[www.audi.com/cgk-declaration](http://www.audi.com/cgk-declaration)
- DECLARATION OF CONFORMITY OF MAN SE  
[www.corporate.man.eu](http://www.corporate.man.eu)
- DECLARATION OF CONFORMITY OF RENK AG  
[www.renk.biz/corporate-governance.html](http://www.renk.biz/corporate-governance.html)

Information on the members of the Board of Management and Supervisory Board, as well as on the Supervisory Board committees can be found on pages 84 to 87.

#### OBJECTIVES FOR THE COMPOSITION OF THE SUPERVISORY BOARD AND BOARD OF MANAGEMENT AS WELL AS SENIOR EXECUTIVE POSITIONS

In view of the Company's specific situation, its purpose, its size and the extent of its international activities, the Supervisory Board of Volkswagen AG strives to achieve a composition that takes the Company's ownership structure and the following aspects into account:

- At least three members of the Supervisory Board should be persons who embody the criterion of internationality to a particularly high degree.
- At least four shareholder representative members of the Supervisory Board should be persons without potential conflicts of interest, particularly conflicts of interest that could arise from an advisory or board position at customers, suppliers, lenders, or other third parties.
- In addition, at least four of the shareholder representatives must be persons who are independent as defined in number 5.4.2 of the German Corporate Governance Code.
- At least three of the seats on the Supervisory Board should be held by people who make a special contribution to the diversity of the Board.
- Furthermore, proposals for elections should not normally include persons who will have reached the age of 75 on the date of the election or who will have been members of the Supervisory Board for more than 15 years on the date of the election.

The above criteria have been met.

In addition, the Supervisory Board has decided on the following profile of skills and expertise for the full Board:

The Supervisory Board as a whole must collectively have the knowledge, skills, and professional expertise required to properly perform its supervisory function and assess and monitor the business that the Company conducts. For this, the members of the Supervisory Board must collectively be familiar with the sector in which the Company operates. The key skills and requirements of the Supervisory Board as a whole include, in particular:

- Knowledge of or experience in the manufacture and sale of all types of vehicles and engines or other technical products,
- Knowledge of the automotive industry, the business model and the market, as well as product expertise,
- Knowledge in the field of research and development, particularly of technologies with relevance for the Company,
- Experience in corporate leadership positions or in the supervisory bodies of large companies,
- Knowledge in the areas of governance, law or compliance,

- › Detailed knowledge in the areas of finance, accounting, or auditing,
- › Knowledge of the capital markets,
- › Knowledge in the areas of controlling/risk management and the internal control system,
- › Human resources expertise (particularly the search for and selection of members of the Board of Management, and the succession process) and knowledge of incentive and remuneration systems for the Board of Management,
- › Detailed knowledge or experience in the areas of codetermination, employee matters and the working environment in the Company.

The current composition of the Supervisory Board is also in line with this profile of skills and expertise. The independent members of the Supervisory Board within the meaning of article 5.4.2 of the Code are or were Ms. Hessa Sultan Al-Jaber, Ms. Marianne Heiß, Ms. Louise Kiesling, Mr. Hussain Ali Al-Abdulla, Mr. Bernd Althusmann and Mr. Stephan Weil, as well as Ms. Annika Falkengren and Mr. Olaf Lies, who have since left the Supervisory Board. The curriculum vitae of the members of the Supervisory Board are available online at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir).

The statutory quota of at least 30% women and at least 30% men has applied to new appointments to the Supervisory Board of Volkswagen AG since January 1, 2016 as required by the Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern an Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst (FührposGleichberG – Act on the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors). Shareholder and employee representatives have resolved that each side will meet this quota separately. The shareholder representatives have met the quota of at least 30% women and at least 30% men since the 56<sup>th</sup> Annual General Meeting on June 22, 2016. In the election of employee representatives to the Supervisory Board of Volkswagen AG on April 6, 2017, Ms. Ulrike Jakob, Ms. Bertina Murkovic and Mr. Athanasios Stimoniaris were elected to the Supervisory Board for the first time. The remaining employee representatives on the Supervisory Board were reappointed. The term of office began at the end of the Annual General Meeting on May 10, 2017. This means that the legally prescribed proportion of at least 30% women and at least 30% men is also complied with on the employee side of the board. Both the shareholder and the employee representatives fulfilled the quota on December 31, 2017.

For the proportion of female members on the Board of Management that the Supervisory Board was required to set in accordance with the FührposGleichberG, the Supervisory Board set a target quota of 11.1% for the period after December 31, 2016. The new deadline set for achievement of this target is December 31, 2021. The appointment of Ms. Hiltrud Dorothea Werner, the Group Board of Management member responsible for Integrity and Legal Matters since February 1, 2017, brings the percentage of female members on the Group Board of Management to 11.1%. The target quota was thus fulfilled on December 31, 2017.

For the proportion of women in management in accordance with the FührposGleichberG, Volkswagen AG has set itself the target of 13.0% women in the first level of management and 16.9% women in the second level of management for the period up to the end of 2021. As of December 31, 2017, the proportion of women in the active workforce at the first level of management was 10.4 (9.8%) and at the second level of management it was 14.0 (13.5%).

#### **REMUNERATION REPORT**

Extensive explanations of the remuneration system and the individual remuneration of the members of the Board of Management and the Supervisory Board can be found in the Remuneration Report on pages 67 to 83 of the management report, in the notes to the consolidated financial statements on page 313, and on page 63 of the notes to the annual financial statements of Volkswagen AG.

#### **GROUP CORPORATE GOVERNANCE DECLARATION**

The Group corporate governance declaration forms part of the combined management report and is permanently available at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir). It also contains the description of the diversity concepts for the Board of Management and Supervisory Board of Volkswagen AG.

#### **GROUP CORPORATE GOVERNANCE DECLARATION [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir)**

## COMPLIANCE

Acting with integrity and compliant and ethical behavior are essential prerequisites for the success of the Volkswagen Group. For this reason, compliance with national and international laws and regulations, internal rules and voluntary commitments is among our Company's guiding principles. We are striving to strengthen the trust of our customers, our business partners and stakeholders in our Group through fair treatment. Compliant behavior is the basis for this and must be a matter of course for all Group employees. One of our Company's main tasks at the present time is to further enhance awareness of this.

### Commitment to compliance at the highest level

At the Global Management Meeting in March 2017, Matthias Müller, Chairman of the Board of Management of Volkswagen AG, underlined that integrity and compliant behavior are the responsibility of each individual in the Group: "Compliance and integrity are not something that can be delegated to another department or a single person – everyone must play their part."

At the presentation of the new Code of Conduct for the Volkswagen Group in September 2017, Hiltrud Dorothea Werner, member of the Board of Management responsible for Integrity and Legal Matters, said: "It is our shared responsibility to bring the concept of integrity to life at Volkswagen. In practice, this involves us all being familiar with the rules in place, acting responsibly and making the right decisions. The new Code of Conduct provides the basis for this."

### Strengthening the compliance organization

In light of the growing relevance of the topic of compliance, the Group's compliance organization was restructured in the reporting period. Since April 2017, Group Compliance has been a separate unit, with the Group Chief Compliance Officer reporting directly to the Board Member for Integrity and Legal Affairs; he also reports to the Audit Committee of the Supervisory Board.

The structures, responsibilities and processes within this unit have also been honed and reinforced. The Volkswagen Group's compliance organization has been set up with divisional and regional compliance offices. This enables central corporate functions to be supported to an even greater extent and advised by their own compliance contacts. Additional centers of competence develop and manage key compliance issues for the entire Group. The heads of the centers of competence and the divisional and regional compliance offices report directly to the Group Chief Compliance Officer. Communication between the Group and brand compliance officers and networking were enhanced and

intensified in the reporting period through regular meetings and team conferences.

In the reporting period, there was direct communication on compliance issues at meetings of the Supervisory Board, the Board of Management and the Works Council, particularly by the Board Member for Integrity and Legal Affairs and the Group Chief Compliance Officer.

The Group Compliance Committee chaired by the Board Member for Integrity and Legal Affairs was formed at top management level in 2017. This committee ensures that compliance and integrity standards are uniformly applied and communicated on a cross-divisional and cross-brand basis. The core compliance team, which concentrates expertise on compliance issues from different departments, remained unchanged.

### Compliance management system

Our compliance management system is based on national and international standards. Its objective is to encourage and reinforce compliant behavior in the Group. The new Code of Conduct is the key element for strengthening awareness among staff of correct behavior and finding the right contact person in cases of doubt.

Where laws and regulations have been seriously violated, our restructured whistleblower system is a suitable tool for taking appropriate action.

We place value on communication and training seminars to permanently anchor compliance-related content among the workforce.

The basis of compliance work in the Volkswagen Group is a systematic process of risk identification and reporting in accordance with the IDW standard AS 980. We used 2017 to review the content of and the process for the existing compliance risk analysis. The objective is to obtain transparency at Group level of the risk exposure of all Group companies included in the compliance scope.

However, we are also aware that even the best compliance management system can never entirely prevent the criminal actions of individuals.

### Code of Conduct and guidelines

The Volkswagen Group Code of Conduct was completely overhauled in the reporting period and approved by the Group Board of Management. All Group companies are required to introduce the new Code of Conduct. This was completed at the brand level by December 31, 2017.

Based on the 2010 Code of Conduct (for instance on the topic of environmental protection) the content was updated and new content added (such as product conformity). Readability and practical relevance were enhanced through a clear

structure, simpler language and specific examples. It emphasizes each individual employee's responsibility as regards compliant behavior.

The introduction of the new Code of Conduct was accompanied by an intensive internal communication drive in digital and print media.

The Code of Conduct is a key component of compliance training and is also integrated into operating processes. For example, all new employment contracts for employees of Volkswagen AG include a reference to the Code of Conduct and the obligation to comply with it. In addition, compliance with the Code of Conduct remained a component of our employees' annual reviews in the reporting period and was thus taken into account when calculating their variable, performance-related remuneration.

In addition to the Code of Conduct, the Volkswagen Group's compliance framework incorporates the anti-corruption guidelines among others, including checklists and the express prohibition of facilitation payments, as well as guidelines on competition, antitrust law and anti-money laundering. Organizational instructions on dealing with gifts and invitations as well as on making donations also apply across the Group.

Employees have access to the compliance rules and regulations in particular via the compliance pages on the Company intranet.

#### **Whistleblower system**

In the Volkswagen Group, the whistleblower system refers to the internal and external contact points, where employees and third parties can report potentially serious violations of laws and internal regulations by employees of the Volkswagen Group, in addition to the committees that support and monitor the work of these contact points.

The Company has had a system for reporting any breaches of the law or regulations already since 2006. In 2017, the whistleblower system was improved and partially reorganized. The processes were optimized further as of November 1, 2017 to be able to follow up on reports even faster and in a fairer and more transparent manner. Among other things, a central Investigation Office was set up in the Compliance department at the beginning of the year, which is responsible for coordinating the whistleblower system in the

Volkswagen Group and for processing information received concerning Volkswagen AG and its subsidiaries – with the exception of AUDI AG, Dr. Ing. h.c. F. Porsche AG and Volkswagen Truck & Bus GmbH. These companies have separate investigative offices for themselves and their subsidiaries.

The whistleblower system uses defined processes to investigate reports on breaches and to penalize misconduct where appropriate. Protection of both the whistleblower and the party affected has top priority in the applicable procedural principles and guarantees. In addition, a Group Guideline sets out the responsibilities in the Group and the specific procedure for the processing of reports.

Information on misconduct can be submitted in any of the major languages used by the Group and are treated confidentially. The people providing the information need not fear any sanctions from the Company for their actions. They can decide for themselves whether they wish to give their names. For this reason, a specially protected online reporting channel was additionally set up in 2017 through which anonymized reports from whistleblowers can be sent to the Investigation Office. We also continue to rely on existing tried-and-tested channels such as ombudspersons (counsels of trust).

As the whistleblower system was enhanced, reporting was reorganized, for example to ensure standard Group-wide handling. A total of 1,489 reports were registered throughout the Group in 2017. All substantiated reports have been, or will be, investigated, and any misconduct penalized.

#### **Communication, training and advice**

Providing information to employees at all levels on compliance and offering them advice is a core component of our compliance activities.

The compliance organization regularly briefs the workforce on compliance-related issues using the internal Group-wide communication platform called "Group Connect". Content on compliant behavior is also made public through the internal communication channels of the Group and its brands. Focal points of compliance communication in the reporting period were the introduction of the revised Code of Conduct and the further development of the whistleblower system.

Furthermore, the topic of compliant behavior was intensely discussed at employee events and works meetings.

In 2017, approximately 219,000 employees across the Group participated in various forms of training courses on compliance-related topics. Following a risk-based approach, mandatory compliance training is conducted for specific target groups. In addition to traditional lectures and online tutorials, case studies, role-playing games and other interactive formats form a part of the training provided to employees and managers. Another event held in 2017 was the Volkswagen Convention – Integrity, Culture and Compliance, which was attended by more than 7,300 executives and works council members from Volkswagen AG, Volkswagen Sachsen and Volkswagen Osnabrück. The Convention was aimed at driving the change process forward at Volkswagen.

Employees can use special e-mail addresses to solicit advice on compliance issues.

#### **Compliance key performance indicators**

To measure the level of target achievement, we defined a strategic indicator for the major brands that manufacture passenger cars:

› Compliance, process reliability and a zero-defect culture.

This indicator is based on an evaluation of the answers to three questions in the opinion survey relating to compliance with regulations and processes, transparency and monitoring, and dealing with risks and errors. In the case of adverse deviations, the departments will develop and implement measures. The indicator improved to 79.53 (79.03%) during the reporting year.

We have also defined a strategic indicator for the Financial Services Division – the compliance and governance indicator. In addition to achieving our economic objectives, we are also striving to ensure compliance with legislation and legal requirements and are working towards a culture shaped by compliance and integrity. To this end, we have established a compliance function within the individual companies to accompany the implementation of suitable and effective compliance standards for fields of law that have been identified as significant. To evaluate the effectiveness thereof, we will consult examination and inspection findings from both the internal and external auditing, risk management and compliance, as well as the timely processing of the measures defined by these control units.

#### **Strengthening compliance in company processes**

The act to transpose the Fourth EU Money Laundering Directive into German law presented new challenges for Volkswagen AG as a company that is bound by the Gesetz über das Aufspüren von Gewinnen aus schweren Straftaten (GWG –

Law on Tracing Profits from Serious Criminal Offences). A Group Directive, which already exists in draft form, will define the minimum standard to be implemented by all Group companies.

A concept for a new sales-related business partner check was drawn up in the reporting period. A key objective of this new process is the creation of transparency within the Volkswagen Group to prevent Group companies from entering into business relationships with business partners which other Group companies have classified as not acting with integrity. The sales-related business partner check will be gradually introduced in the Group from 2019.

New business models are constantly being considered in the Volkswagen Group as part of the TOGETHER – Strategy 2025 program. Areas on which these focus in particular are digitalization, automation and electrification, but also the development of and involvement in mobility concepts. Group Compliance helps the strategic business units to implement their forward-looking projects through individual risk assessments and recommendations based on these.

In addition, compliance will become anchored in mergers and acquisitions and real estate transactions to a greater extent.

#### **Effectiveness review**

Independent reviews by the Group Internal Audit function at the corporate units and the regular exchange of information with external bodies help ensure continuous improvement of the compliance management system. There are no indications that our current compliance management system was ineffective in 2017.

#### **INTEGRITY**

Volkswagen AG is undergoing the most far-reaching process of change in the Company's history. Particularly the loss of trust as a result of the diesel issue clearly showed that, in terms of integrity, Volkswagen must become a role model for a modern, transparent and successful enterprise. This plan is one of the strategic goals of TOGETHER – Strategy 2025.

By setting up the new Board of Management position for Integrity and Legal Affairs on January 1, 2016, we created the organizational framework for a centralized integrity management function. This Group function is responsible for planning, preparing and implementing programs and projects aimed at raising awareness, providing explanation and intensifying a collective awareness of integrity as well as reinforcing a shared culture of integrity in the Company. A continuous exchange of ideas and discussion of issues relating to integrity are key components of the integrity management function.

Behaving with integrity is a prerequisite for commercial success and for a positive future for the Company. Only with lasting, dependable integrity will our Company gain and strengthen the trust of its staff, customers, shareholders, business partners and the general public. Volkswagen will enhance the culture of integrity in the Company, thus creating a collective Group awareness for integrity. To this end, we launched an integrity program in 2016 that addresses all of the Company's employees.

#### **INDEPENDENT MONITOR**

In June 2017, Larry D. Thompson was appointed as the Independent Compliance Monitor at Volkswagen under the terms of the Plea Agreement with the United States Department of Justice announced on January 11, 2017 and confirmed by a US federal court on April 21, 2017. He will also work as Independent Compliance Auditor under the Third Partial Consent Decree concluded separately with the US Environmental Protection Agency (EPA) and the Third California Partial Consent Decree agreed with the State of California and the environmental authority California Air Resources Board, CARB (for more information on these agreements, please see the Litigation section starting on page 178). Mr. Thompson will assess and oversee Volkswagen's compliance with the terms of the Plea Agreement and Consent Decrees for a period of three years, which includes taking measures to further strengthen the Company's compliance, reporting and monitoring mechanisms and the implementation of an enhanced compliance and ethics program.

#### **RISK MANAGEMENT, AUDIT**

Carefully managing potential risks to the Company is a key component of our daily work. Volkswagen Group's risk management system is oriented toward identifying, assessing, communicating and managing risks at an early stage. This system is reviewed on an ongoing basis and adjusted if and when conditions change. A detailed description of the risk management system and our accounting-related internal control system can be found in the Risk Report on pages 164 to 167 of this annual report.

The Supervisory Board has established an Audit Committee that in particular monitors the financial accounting, the financial accounting process, the effectiveness of the internal control system, the risk management system and the internal audit system, the audit of the financial statements and compliance. Furthermore, the Audit Committee makes a well-founded recommendation for the election of auditor to the Supervisory Board, obtains a declaration of independence from the auditor, supervises the additional services provided

by the auditor and prepares the audit engagement resolution, thereby giving consideration to the annual audit planning, the areas of emphasis for the audit, the agreed fee and the auditor's obligation to provide information.

#### **COMMUNICATION AND TRANSPARENCY**

The Volkswagen Group publishes a financial calendar listing all the relevant dates for its shareholders in its annual report and interim reports as well as on its website at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir). Among other things, invitations to the shareholders' meetings as well as agendas for these meetings and any motions to be added to the agenda or counter motions received are also available on this website. At the shareholders' meetings, shareholders may exercise their voting rights themselves, have this right exercised on their behalf by a third-party proxy whom they have appointed, or use a proxy designated by the Company who votes on their behalf in accordance with their voting instructions. We also give our shareholders the opportunity to watch the introductory remarks of the Chairman of the Supervisory Board and the speech of the Chairman of the Board of Management on the internet. In addition, news and information on the Volkswagen Group are available on our website. The press releases and other information are published in both English and German.

Immediately after their publication in accordance with legal requirements, the Company's ad-hoc releases are also published on the same website under the heading "IR News, Ad-hoc Releases & Publications".

We publish managers' transactions pursuant to Article 19 of the Market Abuse Regulation or section 15a of the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act) under the heading "Corporate Governance", menu item "Directors' Dealings".

On the same web page – under the heading "IR News, Ad-hoc Releases & Publications", menu item "Notifications of changes in voting rights" – you can also access details of the notifications filed in the reporting period in compliance with sections 21 ff. of the WpHG as well as notifications relating to other legal issues.

The supervisory body appointments held by Board of Management members and Supervisory Board members can be found on pages 84 to 87 of this annual report. The shareholder structure is presented on page 110.

# Remuneration Report

The Remuneration Report details the individualized remuneration of the Board of Management and the Supervisory Board of Volkswagen AG, broken down into components, as well as individualized pension provision disclosures for the members of the Board of Management. In addition, we explain in this chapter the main elements of the new remuneration system for the Board of Management.

## PRINCIPLES OF BOARD OF MANAGEMENT REMUNERATION

The full Supervisory Board resolves on the remuneration system and the total remuneration for each individual member of Volkswagen AG's Board of Management on the basis of the Executive Committee's recommendations. The remuneration system implements the requirements of the Aktiengesetz (AktG – German Stock Corporation Act) and the recommendations of the German Corporate Governance Code (the Code). In particular, the remuneration structure is focused on ensuring sustainable business development in accordance with the Gesetz zur Angemessenheit der Vorstandsvergütung (VorstAG – German Act on the Appropriateness of Executive Board Remuneration) and section 87(1) of the AktG.

At the beginning of 2017, the Supervisory Board of Volkswagen AG resolved to adjust the remuneration system of the Board of Management with effect from January 1, 2017. The new system for remuneration of the Board of Management was approved by the Annual General Meeting on May 10, 2017 with 80.96% of the votes cast. The adjustment, in which the Supervisory Board was assisted by renowned, independent external remuneration and legal consultants, resulted in an alignment with the new Group strategy TOGETHER – Strategy 2025.

The level of the Board of Management remuneration should be appropriate and attractive in the context of the Company's national and international peer group. Criteria include the tasks of the individual Board of Management member, their personal performance, the economic situation, the performance of and outlook for the Company, as well as how customary the remuneration is when measured against the peer group and the remuneration structure that applies to other areas of Volkswagen. In this context, comparative studies on remuneration are conducted on a regular basis.

## COMPONENTS OF BOARD OF MANAGEMENT REMUNERATION

In this section, we provide an overview of the new remuneration system before going into the components of the remuneration for the reporting period.

### Overview of the new remuneration system

The new remuneration system of the Board of Management comprises non-performance-related and performance-related components. The performance-related remuneration consists of an annual bonus with a one-year assessment period and a long-term incentive (LTI) in the form of a performance share plan with a forward-looking three-year term. The performance share plan is linked to business development in the next three years and is thus based on a multiyear, forward-looking assessment that reflects both positive and negative developments. The non-performance-related component creates an incentive for individual members of the Board of Management to perform their duties in the interests of the Company and to fulfill their obligation to act with proper business prudence without needing to focus on merely short-term performance targets. The performance-related components, dependent among other criteria on the financial performance of the Company, serve to ensure the long-term impact of behavioral incentives.

If 100% of the respectively agreed targets are achieved, the annual target remuneration for each member of the Board of Management will amount to a total of €4,500,000 (corresponding to a basic remuneration of €1,350,000, a target amount from the annual bonus of €1,350,000 and a target amount from the performance share plan of €1,800,000). The annual target remuneration for the Chairman of the Board of Management amounts to a total of €9,000,000 (basic remuneration of €2,125,000, a target amount from the annual

bonus of €3,045,000, and a target amount from the performance share plan of €3,830,000.

Annual minimum remuneration of €3.5 million (sum of basic and variable remuneration) was contractually agreed with Mr. Blessing.

#### **Non-performance-related remuneration**

The non-performance-related remuneration comprises fixed remuneration and fringe benefits. In addition to the basic level of remuneration, the fixed remuneration also includes differing levels of remuneration for appointments assumed at Group companies. The fringe benefits result from noncash benefits and include in particular the use of operating assets such as company cars and the payment of insurance premiums. Taxes due on these noncash benefits are mainly borne by Volkswagen AG.

The basic level of remuneration is reviewed regularly and adjusted if necessary.

#### **Performance-related remuneration**

The performance-related/variable remuneration consists of an annual performance-related bonus with a one-year assessment period and a long-term incentive (LTI) in the form of a performance share plan with a forward-looking three-year term (long-term incentive components) and phantom preferred shares. The components of performance-related/

variable remuneration therefore reflect both positive and negative developments.

The Supervisory Board may cap the performance-related/variable remuneration components in the event of extraordinary developments.

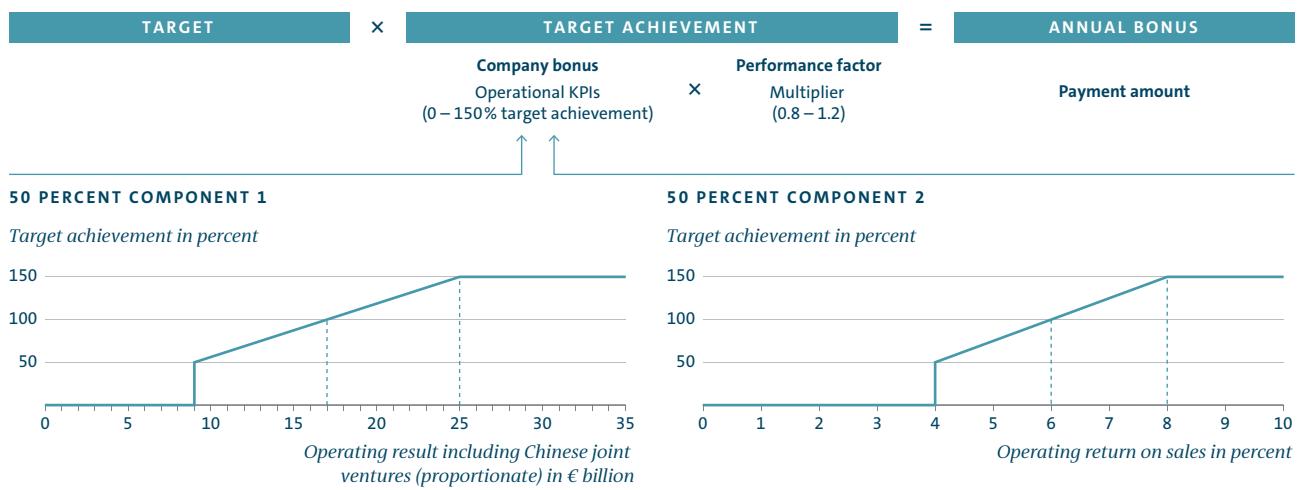
#### **Annual bonus**

The annual bonus is based upon the result for the respective fiscal year. Operating profit achieved by the Volkswagen Group plus the proportionate operating profit of the Chinese joint ventures form half of the basis for the annual bonus, with operating return on sales achieved by the Volkswagen Group making up the second half. Each of the two components of the annual bonus will only be payable if certain thresholds are exceeded or reached.

The calculated payment amount may be individually reduced (multiplier of 0.8) or increased (multiplier of 1.2) by up to 20% by the Supervisory Board, taking into account the degree of achievement of individual targets agreed between the Supervisory Board and the respective member of the Board of Management, as well as the success of the full Board of Management in achieving the transformation of the Volkswagen Group's employees into new areas of activity.

The payment amount for the annual bonus is capped at 180% of the target amount for the annual bonus. The cap arises from 150% of the maximum financial target achievement and a performance factor of a maximum of 1.2.

## CALCULATION OF THE PAYMENT AMOUNT FOR THE ANNUAL BONUS

**COMPONENT 1: OPERATING RESULT INCLUDING CHINESE JOINT VENTURES (PROPORTIONATE)**

	2017
€ billion	25.0
Maximum threshold	25.0
100% level of target	17.0
Minimum threshold	9.0
Actual	18.6
Target achievement (in %)	110

**COMPONENT 2: OPERATING RETURN ON SALES**

	2017
%	8.0
Maximum threshold	8.0
100% level of target	6.0
Minimum threshold	4.0
Actual	6.0
Target achievement (in %)	100

#### Performance share plan – long-term incentive (LTI)

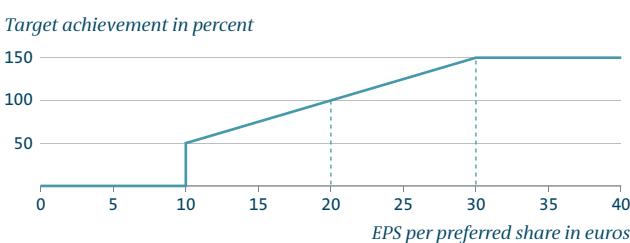
The LTI is granted to the Board of Management in the form of a performance share plan. Each performance period of the performance share plan has a term of three years. At the time the LTI is granted, the annual target amount under the LTI is converted on the basis of the initial reference price of Volkswagen's preferred shares into performance shares of Volkswagen AG, which are allocated to the respective member of the Board of Management purely for calculation purposes. The conversion is performed based on the unweighted average of the closing prices of Volkswagen's preferred shares for the last 30 trading days preceding January 1 of a given fiscal year. At the end of each year, the number of performance shares is determined definitively for one-third of the three-year performance period based on the degree of target achievement for the annual earnings per Volkswagen preferred share (EPS – earnings per share per preferred share in €). A prerequisite for this is that a threshold is reached.

A cash settlement is made at the end of the three-year term of the performance share plan. The payment amount corresponds to the final number of determined performance shares, multiplied by the closing reference price at the end of the three-year period plus a dividend equivalent for the relevant term. The closing reference price is the unweighted average of the closing prices for Volkswagen's preferred shares for the 30 trading days preceding the last day of the three-year performance period.

€	2017
Initial reference price	127.84
Closing reference price	<sup>1</sup>
Dividend equivalent	2.06

<sup>1</sup> Determined at the end of the performance period.

#### EPS PERFORMANCE MEASUREMENT



#### PERFORMANCE PERIOD 2017 – 2019

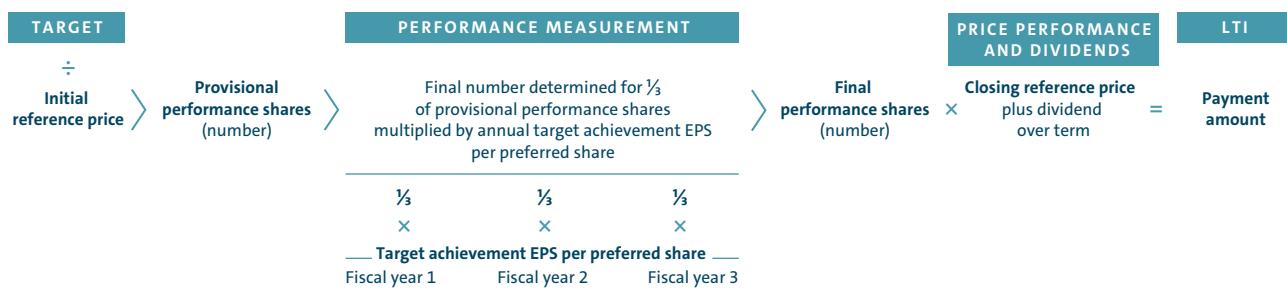
€	2017
Maximum threshold	30.00
100% level of target	20.00
Minimum threshold	10.00
Actual	22.69
Target achievement (in %)	113

The payment amount under the performance share plan is limited to 200% of the target amount. An advance of 20% on the payment amount is paid if the average ratio of capex to sales revenue in the Automotive Division or the R&D ratio of the last three years is smaller than 5%.

Should a member of the Board of Management leave the Company of their own volition without good cause before the performance shares are paid out or should that member start working for a competitor, the unpaid performance shares will expire. For members of the Board of Management who held their seat as of December 31, 2016, this rule only applies in the event of a future reappointment. Ms. Werner was appointed as a member of the Board of Management with effect from February 1, 2017.

In the introductory phase of the performance share plan (2017 – 2018), the members of the Board of Management who were Board members as of December 31, 2016 will receive advances of 80% of their target amount. The Chairman of the Board of Management will receive 100% of his target amount in advance. The two advances will each be paid after the first year of the performance period. After the last day of the relevant three-year performance period, settlement will be made based on actual achievement of targets. The Chairman of the Board of Management has been granted the option of immediate settlement of the performance shares at the end of his contract of service.

## CALCULATION OF THE PAYMENT AMOUNT FROM THE PERFORMANCE SHARE PLAN



## INFORMATION ON THE PERFORMANCE SHARES

PERFORMANCE PERIOD 2017 – 2019		
€	Number of performance shares allocated at the grant date	Fair value at the grant date
Matthias Müller	29,959	4,309,602
Karlheinz Blessing	14,080	2,025,408
Herbert Diess	14,080	2,048,640
Francisco Javier Garcia Sanz	14,080	1,890,944
Jochem Heizmann	14,080	2,031,040
Andreas Renschler	14,080	1,891,648
Rupert Stadler	14,080	2,025,408
Hiltrud Dorothea Werner	12,907	1,856,672
Frank Witter	14,080	2,025,408
<b>Total</b>	<b>141,426</b>	<b>20,104,770</b>

€	Provision as of Dec. 31, 2017	Intrinsic value as of Dec. 31, 2017	Comprehensive income 2017 arising from performance shares
Matthias Müller	10,201,381	4,728,427	10,201,381
Karlheinz Blessing	5,202,356	2,222,245	5,202,356
Herbert Diess	3,673,623	2,222,245	3,673,623
Francisco Javier Garcia Sanz	5,405,211	2,222,245	5,405,211
Jochem Heizmann	4,102,990	2,222,245	4,102,990
Andreas Renschler	4,747,249	2,222,245	4,747,249
Rupert Stadler	4,698,709	2,222,245	4,698,709
Hiltrud Dorothea Werner	623,526	—	623,526
Frank Witter	5,128,707	2,222,245	5,128,707
<b>Total</b>	<b>43,783,751</b>	<b>20,284,141</b>	<b>43,783,751</b>

The number of performance shares includes the provisional performance shares allocated at the grant date of the performance share plan. The fair value as at the grant date was determined using a recognized valuation technique.

The provision recognized as of December 31, 2017 reflects the obligation to the members of the Board of Management. To determine its amount, the performance shares expected for future performance periods were taken into account in addition to the provisional performance shares determined or allocated for the performance period 2017 – 2019. The intrinsic value was calculated in accordance with IFRS 2 and corresponds to the amount that the members of the Board of Management would have received if they had stepped down on December 31, 2017. Only the nonforfeitable (vested) performance shares at the reporting date are included in the calculation. The intrinsic value was calculated based on the unweighted average share price for the 30 trading days (Xetra closing prices of Volkswagen's preferred shares) preceding December 31, 2017, taking the dividends paid per preferred share during the performance period into account. The net value of all amounts recognized in income for the performance shares in fiscal year 2017 is recorded in comprehensive income 2017 arising from performance shares according to IFRS.

#### Phantom preferred shares

The phantom preferred shares for the remuneration withheld for 2015 will form part of the Board of Management remuneration until they are paid out in 2019.

#### Total remuneration cap

In addition to the cap on the individual variable components of the remuneration for the members of the Board of Management, the annual benefits received according to the Code, consisting of basic remuneration and the variable remuneration components (i.e. annual bonus and performance share plan) for one fiscal year, may not exceed an amount of €10,000,000 for the Chairman of the Board of Management and of €5,500,000 for each member of the Board of Management. If the total amount is exceeded, the variable components will be reduced proportionately.

#### Regular review and adjustment

The Supervisory Board regularly reviews and, if necessary, adjusts the level of the total remuneration cap and the individual targets.

#### Other agreements

Members of the Board of Management with contracts entered into on or after January 1, 2010 are entitled to payment of their normal remuneration for six to twelve months in the event of illness. Contracts entered into before that date grant remuneration for six months. In the event of disability, they are entitled to the retirement pension.

Surviving dependents receive a widow's pension of 66 2/3% and orphans' benefits of 20% of the former member of the Board of Management's pension. Contracts with members of the Board of Management whose first term of office began after April 1, 2015, provide for an entitlement – in line with the principles of the works agreement that also applies to employees of Volkswagen AG covered by collective agreements – to a widow's pension of 60%, an orphan's benefit of 10% for half-orphans and an orphan's benefit of 20% for full orphans, based in each case on the former member of the Board of Management's pension.

#### BENEFITS BASED ON PHANTOM PREFERRED SHARES FROM THE REMUNERATION WITHHELD FOR FISCAL YEAR 2015

At its meeting on April 22, 2016, Volkswagen AG's Supervisory Board accepted the offer made by the members of the Board of Management to withhold 30% of the variable remuneration for fiscal year 2015 for the Board of Management members active on the date of the resolution and to make its disposal subject to future share price performance.

This is being effected by first converting the amount withheld based on the average share price for the 30 trading days preceding April 22, 2016 (initial reference price) into phantom preferred shares of Volkswagen AG with a three-year holding period and, at the same time, defining a target reference price corresponding to 125% of the initial reference price. During the holding period, the phantom preferred shares are entitled to a dividend equivalent in the amount of the dividends paid on real preferred shares. The shares will be reconverted and paid out either when the three-year holding period has expired or – in the event that members retire early from office – at the time that they do so.

To determine the payment amount, the average share price for the 30 trading days preceding the last day of the holding period, i.e. April 22, 2019, or preceding the leaving date will be calculated (closing reference price). The difference between the target reference price and the initial reference price will be deducted from the closing reference price, and the dividends distributed on one real Volkswagen preferred share during the holding period (dividend equivalent) will be added to the closing reference price. The figure thus calculated will be multiplied by the number of phantom preferred shares so as to calculate the amount to be paid to each Board of Management member. This will ensure that –

excluding any dividend equivalents accrued – the amount withheld is only paid out in full if the initial reference price of the preferred share has increased by at least 25%. Otherwise, the amount will be reduced accordingly to a minimum of €0. The amount disbursed may not be more than twice the amount originally withheld. If members of the Board of Management retire from office before the expiry of the holding period, the disbursement amount will be calculated and paid out proportionately based on the date that their contract of service ends.

The number of phantom preferred shares granted on April 22, 2016 to the members of the Board of Management who were in office at that time did not change in fiscal year 2017. The fair value as of December 31, 2017 was determined using a recognized valuation technique. The intrinsic value was calculated in accordance with IFRS 2 and corresponds to the amount that the members of the Board of Management would have received if they had stepped down on December 31, 2017. The intrinsic value was calculated based on the average share price for the 30 trading days (Xetra closing prices of Volkswagen's preferred shares) preceding December 31, 2017, taking the initial reference price and the dividends for the relevant fiscal years into account. "Comprehensive income 2017 arising from phantom preferred shares" according to IFRS records the net amount arising from the fair value as of December 31, 2017 and December 31, 2016. "Comprehensive income 2016 arising from phantom preferred shares" in accordance with IFRS records the net amount withheld (nominal) on the basis of acceptance by the Supervisory Board on April 22, 2016 of the statement made by the members of the Board of Management, and the corresponding fair value as of December 31, 2016.

#### INFORMATION ON THE PHANTOM PREFERRED SHARES HELD IN 2017

€	Number of phantom shares	Provision Dec. 31, 2017	Provision Dec. 31, 2016	Intrinsic value Dec. 31, 2017	Intrinsic value Dec. 31, 2016	Comprehensive income 2017 arising from phantom preferred shares	Comprehensive income 2016 arising from phantom preferred shares <sup>1</sup>
Matthias Müller	10,583	1,462,126	1,046,032	1,520,036	1,058,194	416,094	-139,880
Herbert Diess	4,317	596,428	426,696	620,051	431,657	169,732	-57,024
Francisco Javier Garcia Sanz	8,633	1,192,718	853,293	1,239,958	863,214	339,425	-114,147
Jochem Heizmann	8,633	1,192,718	853,293	1,239,958	863,214	339,425	-114,147
Andreas Renschler	7,914	1,093,382	782,226	1,136,688	791,321	311,156	-104,594
Rupert Stadler	8,633	1,192,718	853,293	1,239,958	863,214	339,425	-114,147
Frank Witter	1,990	274,934	196,693	285,824	198,980	78,241	-26,356
<b>Total</b>	<b>50,703</b>	<b>7,005,022</b>	<b>5,011,525</b>	<b>7,282,472</b>	<b>5,069,793</b>	<b>1,993,496</b>	<b>-670,296</b>

<sup>1</sup> Income in 2016.

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT IN ACCORDANCE WITH THE GERMAN COMMERCIAL CODE**

€	2017			2016	
	Non-performance-related components	Performance-related component	Long-term incentive component	Total remuneration	Total remuneration
Matthias Müller <sup>1</sup>	2,317,735	3,513,207	4,309,602	10,140,544	7,251,929
Karlheinz Blessing	1,610,515	1,557,579	2,025,408	5,193,502	3,334,940
Herbert Dies	1,428,104	1,557,579	2,048,640	5,034,323	3,226,587
Francisco Javier Garcia Sanz	1,560,686	1,557,579	1,890,944	5,009,209	3,215,679
Jochem Heizmann	1,551,145	1,557,579	2,031,040	5,139,764	3,155,508
Christine Hohmann-Dennhardt (jan. 1, 2016 – Jan. 31, 2017) <sup>2,3</sup>	109,361	–	–	109,361	10,051,621
Andreas Renschler	1,576,037	1,557,579	1,891,648	5,025,264	3,223,705
Rupert Stadler	1,419,734	1,557,579	2,025,408	5,002,721	3,050,317
Hiltrud Dorothea Werner (since Feb. 1, 2017)	1,341,819	1,427,781	1,856,672	4,626,272	–
Frank Witter	1,421,980	1,557,579	2,025,408	5,004,967	3,037,327
<b>Total</b>	<b>14,337,116</b>	<b>15,844,041</b>	<b>20,104,770</b>	<b>50,285,927</b>	<b>39,547,612</b>

1 The 2016 single-entity financial statements of Volkswagen AG reported total remuneration of €6,420,151.

2 To compensate for lost entitlements resulting from the change in employer, Ms. Hohmann-Dennhardt received €6.3 million in 2016.

3 Includes top-up amount on minimum remuneration of €3.5 million in 2016; variable remuneration determined by termination agreement.

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE**

The amounts shown as benefits received in the Board of Management remuneration tables in accordance with the Code correspond, in principle, to the amounts paid out for the fiscal year in question.

In the introductory phase of the performance share plan (2017 to 2018), the members of the Board of Management who were Board members as of December 31, 2016 receive advances on the target amount, which in accordance with the Code are reported as benefits for the fiscal year in which the performance shares under the plan were allocated.

The amounts shown as benefits granted in the Board of Management remuneration tables in accordance with the Code are based on 100% of the targets for the annual bonus and on the fair value at the grant date for the performance share plan. Since the members of the Board of Management agreed to the new remuneration on different dates, there is an individual grant date for each Board member and, consequently, a different fair value.

The Board of Management remuneration tables in accordance with the Code, that show the benefits received, do not include any entries for the phantom preferred shares from the amount withheld for fiscal year 2015 because no payments were made to the Board of Management members in fiscal year 2017. The three-year holding period did not expire, nor did any Board members participating in the amount withheld step down in fiscal year 2017. Since the benefits based on phantom preferred shares were first agreed upon after the end of fiscal year 2015, consideration of the impact of these agreements is incorporated into the Board of Management remuneration (benefits granted) tables in accordance with the Code in the column for fiscal year 2016. The revised amount listed there is the difference between the fair value of the phantom preferred shares and the amount withheld on the date they were granted (April 22, 2016).

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE**

**MATTHIAS MÜLLER**

Chairman of the Board of Management

€	Benefits received		Benefits granted			
			2016	2017	2017 (minimum)	2017 (maximum)
	2017	2016			2017 (minimum)	2017 (maximum)
Fixed remuneration	2,125,000	1,584,000	1,584,000	2,125,000	2,125,000	2,125,000
Fringe benefits	192,735	178,651	178,651	192,735	192,735	192,735
<b>Total</b>	<b>2,317,735</b>	<b>1,762,651</b>	<b>1,762,651</b>	<b>2,317,735</b>	<b>2,317,735</b>	<b>2,317,735</b>
One-year performance-related remuneration	3,513,207	1,499,278	1,313,200	3,045,000	0	5,481,000
<b>Multiyear performance-related remuneration</b>	<b>3,830,000</b>	<b>3,990,000</b>	<b>6,352,610</b>	<b>4,309,602</b>	<b>0</b>	<b>7,660,000</b>
LTI (performance share plan 2017 – 2019)	3,830,000	–	–	4,309,602	0	7,660,000
Business performance bonus (two-year assessment period)	–	1,335,000	3,283,000	–	–	–
LTI (four-year assessment period)	–	2,655,000	3,375,000	–	–	–
Phantom shares	–	–	–305,390	–	–	–
<b>Total</b>	<b>9,660,942</b>	<b>7,251,929</b>	<b>9,428,461</b>	<b>9,672,337</b>	<b>2,317,735</b>	<b>15,458,735</b>
Pension expense	612,807	526,589	526,589	612,807	612,807	612,807
<b>Total remuneration</b>	<b>10,273,749</b>	<b>7,778,518</b>	<b>9,955,050</b>	<b>10,285,144</b>	<b>2,930,542</b>	<b>16,071,542</b>

**KARLHEINZ BLESSING**

Human Resources and Organization

€	Benefits received		Benefits granted			
			2016	2017	2017 (minimum)	2017 (maximum)
	2017	2016			2017 (minimum)	2017 (maximum)
Fixed remuneration	1,350,000	1,056,000	1,056,000	1,350,000	1,350,000	1,350,000
Fringe benefits	260,515	347,440	347,440	260,515	260,515	260,515
<b>Total</b>	<b>1,610,515</b>	<b>1,403,440</b>	<b>1,403,440</b>	<b>1,610,515</b>	<b>1,610,515</b>	<b>1,610,515</b>
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0	2,430,000
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,732,000</b>	<b>2,025,408</b>	<b>0</b>	<b>3,600,000</b>
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	2,025,408	0	3,600,000
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–	–
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–	–
<b>Total<sup>1</sup></b>	<b>4,608,094</b>	<b>3,334,940</b>	<b>4,628,240</b>	<b>4,985,923</b>	<b>3,760,515</b>	<b>7,640,515</b>
Pension expense	686,413	742,542	742,542	686,413	686,413	686,413
<b>Total remuneration</b>	<b>5,294,507</b>	<b>4,077,482</b>	<b>5,370,782</b>	<b>5,672,336</b>	<b>4,446,928</b>	<b>8,326,928</b>

1 Minimum for 2017 includes a top-up amount on minimum remuneration of €3.5 million.

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE**

**HERBERT DIESS**

Chairman of the Brand Board of Management of Volkswagen Passenger Cars

€	Benefits received		Benefits granted					
	2017		2016		2016	2017	2017 (minimum)	2017 (maximum)
	2017	2016	2016	2017	2017 (minimum)	2017 (maximum)		
Fixed remuneration	1,350,000	1,260,000	1,260,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	78,104	35,087	35,087	78,104	78,104	78,104	78,104	78,104
<b>Total</b>	<b>1,428,104</b>	<b>1,295,087</b>	<b>1,295,087</b>	<b>1,428,104</b>	<b>1,428,104</b>	<b>1,428,104</b>	<b>1,428,104</b>	<b>1,428,104</b>
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0		2,430,000	
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,607,461</b>	<b>2,048,640</b>	<b>0</b>	<b>0</b>	<b>3,600,000</b>	<b>3,600,000</b>
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	2,048,640	0	0	3,600,000	
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–	–	–	–
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–	–	–	–
Phantom shares	–	–	–124,539	–	–	–	–	–
<b>Total</b>	<b>4,425,683</b>	<b>3,226,587</b>	<b>4,395,348</b>	<b>4,826,744</b>	<b>1,428,104</b>	<b>7,458,104</b>		
Pension expense	814,654	699,856	699,856	814,654	814,654	814,654	814,654	814,654
<b>Total remuneration</b>	<b>5,240,337</b>	<b>3,926,443</b>	<b>5,095,204</b>	<b>5,641,398</b>	<b>2,242,758</b>	<b>8,272,758</b>		

**FRANCISCO JAVIER GARCIA SANZ**

Procurement

€	Benefits received		Benefits granted					
	2017		2016		2016	2017	2017 (minimum)	2017 (maximum)
	2017	2016	2016	2017	2017 (minimum)	2017 (maximum)		
Fixed remuneration	1,350,000	1,079,009	1,079,009	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	210,686	205,170	205,170	210,686	210,686	210,686	210,686	210,686
<b>Total</b>	<b>1,560,686</b>	<b>1,284,179</b>	<b>1,284,179</b>	<b>1,560,686</b>	<b>1,560,686</b>	<b>1,560,686</b>	<b>1,560,686</b>	<b>1,560,686</b>
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0		2,430,000	
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,482,839</b>	<b>1,890,944</b>	<b>0</b>	<b>0</b>	<b>3,600,000</b>	<b>3,600,000</b>
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	1,890,944	0	0	3,600,000	
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–	–	–	–
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–	–	–	–
Phantom shares	–	–	–249,161	–	–	–	–	–
<b>Total</b>	<b>4,558,265</b>	<b>3,215,679</b>	<b>4,259,818</b>	<b>4,801,630</b>	<b>1,560,686</b>	<b>7,590,686</b>		
Pension expense	889,410	760,864	760,864	889,410	889,410	889,410	889,410	889,410
<b>Total remuneration</b>	<b>5,447,675</b>	<b>3,976,543</b>	<b>5,020,682</b>	<b>5,691,040</b>	<b>2,450,096</b>	<b>8,480,096</b>		

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE**

€	JOCHEN HEIZMANN							
			China					
	Benefits received		Benefits granted					
	2017	2016		2016	2017	2017 (minimum)	2017 (maximum)	
Fixed remuneration	1,351,278	1,102,017	1,102,017	1,351,278	1,351,278	1,351,278	1,351,278	
Fringe benefits	199,867	121,991	121,991	199,867	199,867	199,867	199,867	
<b>Total</b>	<b>1,551,145</b>	<b>1,224,008</b>	<b>1,224,008</b>	<b>1,551,145</b>	<b>1,551,145</b>	<b>1,551,145</b>	<b>1,551,145</b>	
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0	0	2,430,000	
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,482,839</b>	<b>2,031,040</b>	<b>0</b>	<b>0</b>	<b>3,600,000</b>	
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	2,031,040	0	0	3,600,000	
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–	–	–	
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–	–	–	
Phantom shares	–	–	–249,161	–	–	–	–	
<b>Total</b>	<b>4,548,724</b>	<b>3,155,508</b>	<b>4,199,647</b>	<b>4,932,185</b>	<b>1,551,145</b>	<b>1,551,145</b>	<b>7,581,145</b>	
Pension expense	–	–	–	–	–	–	–	
<b>Total remuneration</b>	<b>4,548,724</b>	<b>3,155,508</b>	<b>4,199,647</b>	<b>4,932,185</b>	<b>1,551,145</b>	<b>1,551,145</b>	<b>7,581,145</b>	

€	CHRISTINE HOHMANN-DENNHARDT							
	Integrity and Legal Affairs							
	Joined: January 1, 2016, left: January 31, 2017							
	Benefits received	2017	2016	Benefits granted	2016	2017	2017 (minimum)	2017 (maximum)
Fixed remuneration <sup>1</sup>	88,000	7,346,000	7,346,000	88,000	88,000	88,000	88,000	
Fringe benefits	21,361	261,621	261,621	21,361	21,361	21,361	21,361	
<b>Total</b>	<b>109,361</b>	<b>7,607,621</b>	<b>7,607,621</b>	<b>109,361</b>	<b>109,361</b>	<b>109,361</b>	<b>109,361</b>	
One-year performance-related remuneration	–	0	492,800	–	–	–	–	
<b>Multiyear performance-related remuneration</b>	<b>–</b>	<b>0</b>	<b>2,732,000</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>	
Business performance bonus (two-year assessment period)	–	0	1,232,000	–	–	–	–	
LTI (four-year assessment period)	–	0	1,500,000	–	–	–	–	
Other <sup>2</sup>	–	2,444,000	–	–	–	–	–	
<b>Total</b>	<b>109,361</b>	<b>10,051,621</b>	<b>10,832,421</b>	<b>109,361</b>	<b>109,361</b>	<b>109,361</b>	<b>109,361</b>	
Pension expense	54,091	704,657	704,657	54,091	54,091	54,091	54,091	
<b>Total remuneration</b>	<b>163,452</b>	<b>10,756,278</b>	<b>11,537,078</b>	<b>163,452</b>	<b>163,452</b>	<b>163,452</b>	<b>163,452</b>	

1 The previous year includes compensation of lost entitlements resulting from the change in employer in the amount of €6.3 million.

2 Includes top-up amount on minimum remuneration of €3.5 million in the previous year; variable remuneration determined by termination agreement.

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE**

€	ANDREAS RENSCHLER				
	Commercial Vehicles				
	Benefits received		Benefits granted		
2017	2016	2016	2017	2017 (minimum)	2017 (maximum)
Fixed remuneration	1,350,000	1,056,000	1,056,000	1,350,000	1,350,000
Fringe benefits	226,037	236,205	236,205	226,037	226,037
<b>Total</b>	<b>1,576,037</b>	<b>1,292,205</b>	<b>1,292,205</b>	<b>1,576,037</b>	<b>1,576,037</b>
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,503,637</b>	<b>1,891,648</b>	<b>0</b>
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	1,891,648	0
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–
Phantom shares	–	–	–228,363	–	–
<b>Total</b>	<b>4,573,616</b>	<b>3,223,705</b>	<b>4,288,642</b>	<b>4,817,685</b>	<b>1,576,037</b>
Pension expense	5,361,551	4,660,006	4,660,006	5,361,551	5,361,551
<b>Total remuneration</b>	<b>9,935,167</b>	<b>7,883,711</b>	<b>8,948,648</b>	<b>10,179,236</b>	<b>6,937,588</b>
					<b>12,967,588</b>

€	RUPERT STADLER				
	Chairman of the Board of Management of AUDI AG				
	Benefits received		Benefits granted		
2017	2016	2016	2017	2017 (minimum)	2017 (maximum)
Fixed remuneration	1,350,000	1,056,000	1,056,000	1,350,000	1,350,000
Fringe benefits	69,734	62,817	62,817	69,734	69,734
<b>Total</b>	<b>1,419,734</b>	<b>1,118,817</b>	<b>1,118,817</b>	<b>1,419,734</b>	<b>1,419,734</b>
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,482,839</b>	<b>2,025,408</b>	<b>0</b>
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	2,025,408	0
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–
Phantom shares	–	–	–249,161	–	–
<b>Total</b>	<b>4,417,313</b>	<b>3,050,317</b>	<b>4,094,456</b>	<b>4,795,142</b>	<b>1,419,734</b>
Pension expense	829,730	665,679	665,679	829,730	829,730
<b>Total remuneration</b>	<b>5,247,043</b>	<b>3,715,996</b>	<b>4,760,135</b>	<b>5,624,872</b>	<b>8,279,464</b>

**REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE**

€	HILTRUD DOROTHEA WERNER					
	Benefits received		Benefits granted			
	2017	2016	2016	2017	2017 (minimum)	2017 (maximum)
Fixed remuneration	1,237,500	–	–	1,237,500	1,237,500	1,237,500
Fringe benefits	104,319	–	–	104,319	104,319	104,319
<b>Total</b>	<b>1,341,819</b>	<b>–</b>	<b>–</b>	<b>1,341,819</b>	<b>1,341,819</b>	<b>1,341,819</b>
One-year performance-related remuneration	1,427,781	–	–	1,237,500	0	2,227,500
<b>Multiyear performance-related remuneration</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>1,856,672</b>	<b>0</b>	<b>3,300,000</b>
LTI (performance share plan 2017 – 2019)	–	–	–	1,856,672	0	3,300,000
<b>Total</b>	<b>2,769,600</b>	<b>–</b>	<b>–</b>	<b>4,435,991</b>	<b>1,341,819</b>	<b>6,869,319</b>
Pension expense	930,689	–	–	930,689	930,689	930,689
<b>Total remuneration</b>	<b>3,700,289</b>	<b>–</b>	<b>–</b>	<b>5,366,680</b>	<b>2,272,508</b>	<b>7,800,008</b>

€	FRANK WITTER					
	Benefits received		Benefits granted			
	2017	2016	2016	2017	2017 (minimum)	2017 (maximum)
Fixed remuneration	1,350,000	1,056,000	1,056,000	1,350,000	1,350,000	1,350,000
Fringe benefits	71,980	49,827	49,827	71,980	71,980	71,980
<b>Total</b>	<b>1,421,980</b>	<b>1,105,827</b>	<b>1,105,827</b>	<b>1,421,980</b>	<b>1,421,980</b>	<b>1,421,980</b>
One-year performance-related remuneration	1,557,579	250,500	492,800	1,350,000	0	2,430,000
<b>Multiyear performance-related remuneration</b>	<b>1,440,000</b>	<b>1,681,000</b>	<b>2,674,522</b>	<b>2,025,408</b>	<b>0</b>	<b>3,600,000</b>
LTI (performance share plan 2017 – 2019)	1,440,000	–	–	2,025,408	0	3,600,000
Business performance bonus (two-year assessment period)	–	501,000	1,232,000	–	–	–
LTI (four-year assessment period)	–	1,180,000	1,500,000	–	–	–
Phantom shares	–	–	–57,478	–	–	–
<b>Total</b>	<b>4,419,559</b>	<b>3,037,327</b>	<b>4,273,149</b>	<b>4,797,388</b>	<b>1,421,980</b>	<b>7,451,980</b>
Pension expense	692,743	587,216	587,216	692,743	692,743	692,743
<b>Total remuneration</b>	<b>5,112,302</b>	<b>3,624,543</b>	<b>4,860,365</b>	<b>5,490,131</b>	<b>2,114,723</b>	<b>8,144,723</b>

#### **POST-EMPLOYMENT BENEFITS**

In the event of regular termination of their service on the Board of Management, the members of the Board of Management are entitled to a pension, including a surviving dependents' pension, as well as the use of company cars for the period in which they receive their pension. The agreed benefits are paid or made available when the Board of Management member reaches the age of 63. As a departure from this principle, Mr. Renschler is able to start drawing his pension when he reaches the age of 62.

The retirement pension is calculated as a percentage of the basic level of remuneration. Starting at 50%, the individual percentage increases by two percentage points for each year of service. In the case of the Chairman of the Board of Management, increases of 4.5 percentage points as of March 1, 2017, 4.5 percentage points as of March 1, 2018 and 5.0 percentage points as of March 1, 2019 are provided for. In specific cases, credit is given for previous employment periods and retirement pensions earned. In a departure from this rule, a retirement pension entitlement of 62% of the basic level of remuneration was set for Mr. Renschler on his appointment. The Supervisory Board has capped the percentage at 70%. These benefits are not broken down any further into performance-related components and long-term incentive components. Mr. Garcia Sanz and Mr. Heizmann reached a retirement pension entitlement of 70% of their basic level of remuneration at the end of 2017 the entitlement for Mr. Renschler and Mr. Stadler is 66%. Mr. Müller had a retirement pension entitlement of 57.5% of the basic level of remuneration as of the end of 2017. The increase in the basic remuneration as a consequence of the new remuneration system in place from fiscal year 2017 is therefore not taken into account for the incumbent members of the Board of Management of Volkswagen AG with an existing occupational pension based on final remuneration.

With regard to the existing defined contribution pension schemes for the current members of the Board of Management of Volkswagen Aktiengesellschaft, the basis used to determine the pension contributions shall in each case be increased by the difference between the previous basic remuneration and the newly determined basic remuneration (at an unchanged contribution rate of 50% of the basic remuneration).

For future members of the Board of Management with a defined contribution pension scheme, a contribution rate of 40% of the basic remuneration will be credited to the pension account.

Ms. Hohmann-Dennhardt and Ms. Werner as well as Mr. Blessing, Mr. Diess and Mr. Witter received a defined contribution plan, which is based in principle on a works agreement that also applies to the employees of Volkswagen AG covered by collective agreements and includes retirement, invalidity and surviving dependents' benefits. A pension con-

tribution in the amount of 50% of the basic level of remuneration is paid to Volkswagen Pension Trust e.V. at the end of the calendar year for each year they are appointed to the Board of Management. The annual pension contributions result in modules of what is, in principle, a lifelong pension in line with the arrangements that also apply to employees covered by collective agreements. The individual pension modules vest immediately upon payment to Volkswagen Pension Trust e.V. Instead of a lifelong pension, benefits can optionally be paid out as a lump sum or in installments when the beneficiary reaches retirement age – currently 63 at the earliest. Volkswagen AG has assumed responsibility for pension entitlements due to Mr. Witter from the time before his service with the Company, although these cannot be claimed before he reaches the age of 60.

On December 31, 2017, the pension obligations for members of the Board of Management in accordance with IAS 19 amounted to €125.4 (113.5) million. €12.9 (11.7) million was added to the provision in the reporting period in accordance with IAS 19. Other benefits such as surviving dependents' pensions and the use of company cars are also factored into the measurement of pension provisions. The pension obligations measured in accordance with German GAAP amounted to €92.4 (77.2) million. Measured in accordance with German GAAP, €15.8 (7.0) million was added to the provision in the reporting period. Current pensions are index-linked in accordance with the index-linking of the highest collectively agreed salary insofar as the application of section 16 of the Gesetz zur Verbesserung der betrieblichen Altersversorgung (BetrAVG – German Company Pension Act) does not lead to a larger increase.

Retired members of the Board of Management and their surviving dependents received €19.9 (11.1) million, or €19.9 (11.1) million measured in accordance with German GAAP, in the past year. Obligations for pensions for this group of persons measured in accordance with IAS 19 amounted to €269.0 (270.0) million, or €214.9 (205.6) million measured in accordance with German GAAP.

The following rule applies to Board of Management contracts entered into for the first term of office before August 5, 2009: the retirement pension to be granted after a member of the Board of Management leaves the Company is payable immediately if the member's contract is not renewed by the Company, and in other cases when the member reaches the age of 63. Any remuneration received from other sources until the age of 63 is deductible from the benefit entitlement up to a certain fixed amount.

The following general rule applies to contracts for the first term of office of members of the Board of Management entered into after August 5, 2009: the retirement pension to be granted after a member of the Board of Management leaves the Company is payable when the member reaches the age of 63.

### EARLY TERMINATION BENEFITS

If the appointment to the Board of Management is terminated for cause through no fault of the Board of Management member, the claims under Board of Management contracts entered into since November 20, 2009 are limited to a maximum of two years' remuneration, in accordance with the recommendation in section 4.2.3(4) of the Code (severance payment cap). For Board of Management members who are commencing their third or later term of office, existing rights under contracts entered into before November 20, 2009 are grandfathered.

No severance payment is made if the appointment to the Board of Management is terminated for good reason for which the Board of Management member is responsible.

The members of the Board of Management are also entitled to a pension and to a surviving dependents' pension as well as the use of company cars for the period in which they receive their pension in the event of early termination of their service on the Board of Management.

Please refer to notes 43 and 46 to the consolidated financial statements and the notes to the annual financial statements of Volkswagen AG for more detailed individual disclosures relating to members of the Board of Management who left the Company in fiscal year 2017.

### PENSIONS OF THE MEMBERS OF THE BOARD OF MANAGEMENT IN 2017 (PRIOR-YEAR FIGURES IN BRACKETS)

€	Pension expense	Present value as of December 31 <sup>1</sup>
Matthias Müller	612,807 (526,589)	30,065,068 (27,254,749)
Karlheinz Blessing	686,413 (742,542)	1,623,275 (742,542)
Herbert Diess	814,654 (699,856)	2,169,255 (1,298,635)
Francisco Javier Garcia Sanz	889,410 (760,864)	22,544,823 (21,752,138)
Jochem Heizmann	–	19,254,055 (19,836,613)
Christine Hohmann-Dennhardt (Jan. 1, 2016 – Jan. 31, 2017)	54,091 (704,657)	– (704,657)
Andreas Renschler	5,361,551 (4,660,006)	16,278,653 (11,231,016)
Rupert Stadler	829,730 (665,679)	22,262,176 (21,530,818)
Hiltrud Dorothea Werner (since Feb. 1, 2017)	930,689	975,823
Frank Witter	–	–
<b>Total</b>	<b>10,872,088 (9,347,409)</b>	<b>125,387,318 (113,451,713)</b>

<sup>1</sup> The amount is reported in the total amount for defined benefit plans reported in the balance sheet (see note 29 to the consolidated financial statements).

#### SUPERVISORY BOARD REMUNERATION

Following its regular review of Supervisory Board remuneration, the Supervisory Board proposed a reorganization of the system of Supervisory Board remuneration to the 2017 Annual General Meeting, which was approved on May 10, 2017 with 99.98% of the votes cast. The remuneration of the members of the Supervisory Board of Volkswagen AG no longer contains any performance-related remuneration components but consists entirely of non-performance-related remuneration components. This is in line with the trend in supervisory board remuneration at DAX-listed companies, most of whose supervisory board remuneration now comprises fixed remuneration only. Compared with other large listed companies in Germany, the amount of the proposed remuneration components is also standard for the market and is appropriate. This was confirmed by a renowned, external remuneration consultant who assisted the Supervisory Board in reorganizing the remuneration system for members of the Supervisory Board. Remuneration for supervisory board work at subsidiaries continues in part to comprise a mix of non-performance-related and performance-related components.

The following applies to members of the Supervisory Board of Volkswagen AG with retroactive effect from January 1, 2017:

- Members of the Supervisory Board receive fixed remuneration of €100,000 per fiscal year.
- The Chairman of the Supervisory Board receives fixed remuneration of €300,000, while the Deputy Chairman receives remuneration of €200,000.

- For their work in the Supervisory Board committees, the members of the Supervisory Board also receive additional fixed remuneration of €50,000 per committee per fiscal year provided the committee met at least once per year for the performance of its duties. Memberships of the Nomination and Mediation Committees established in accordance with section 27(3) of the Mitbestimmungsgesetz (German Codetermination Act) are not taken into account.
- Committee chairpersons receive double this amount, while deputy chairpersons receive one-and-a-half times the committee remuneration listed above.
- Membership of no more than two committees is taken into account, whereby the two functions with the highest remuneration are counted if this maximum number is exceeded.
- Supervisory Board members who belonged to the Supervisory Board or one of its committees for only part of the fiscal year receive proportionate remuneration.
- Supervisory Board members receive an attendance fee of €1,000 for attending a meeting of the Supervisory Board or one of its committees; if several meetings are held on one day, the attendance fee is paid only once.
- The remuneration and attendance fees are each payable after the end of the fiscal year.

In fiscal year 2017, the members of the Supervisory Board received €3,786,839 (5,396,565). Of this figure, €2,000,000 related to the work of the Supervisory Board and €836,389 related to the work in the committees.

## REMUNERATION OF THE MEMBERS OF THE SUPERVISORY BOARD

	FIXED REMUNERA- TION	WORK IN THE COMMITTEES	OTHER <sup>1</sup>	TOTAL	WAIVER FOR 2016		TOTAL 2016
					2017	2016	
Hans Dieter Pötsch	–	–	–	–	65,500	585,800	
Jörg Hofmann <sup>2</sup>	200,000	75,000	20,000	295,000	31,333	330,333	
Hussain Ali Al-Abdulla	100,000	–	7,000	107,000	60,167	170,167	
Hessa Sultan Al-Jaber	100,000	–	11,000	111,000	31,504	89,865	
Bernd Althusmann <sup>3</sup> (since Dec. 14, 2017)	4,583	–	–	4,583	–	–	
Birgit Dietze <sup>2</sup>	100,000	50,000	13,000	163,000	47,807	143,252	
Annika Falkengren	100,000	38,750	12,000	150,750	84,250	249,250	
Hans-Peter Fischer <sup>2</sup>	100,000	–	9,000	109,000	60,167	171,167	
Uwe Fritsch <sup>2</sup> (until May 10, 2017)	35,972	17,986	9,000	62,958	70,629	214,990	
Uwe Hück <sup>2</sup>	100,000	–	80,500	180,500	60,167	234,667	
Johan Järvklo <sup>2</sup>	100,000	–	10,000	110,000	60,167	170,167	
Ulrike Jakob <sup>2</sup> (since May 10, 2017)	64,028	–	4,000	68,028	–	–	
Louise Kiesling	100,000	–	11,000	111,000	60,167	171,167	
Olaf Lies <sup>3</sup> (until Dec. 14, 2017)	95,417	47,639	20,000	163,056	80,250	250,250	
Peter Mosch <sup>2</sup>	100,000	91,007	102,100	293,107	61,250	301,850	
Bertina Murkovic <sup>2</sup> (since May 10, 2017)	64,028	32,014	6,000	102,042	–	–	
Bernd Osterloh <sup>2</sup>	100,000	98,021	28,000	226,021	19,250	251,250	
Hans Michel Piëch	100,000	–	150,600	250,600	60,167	266,736	
Ferdinand Oliver Porsche	100,000	150,000	147,100	397,100	54,333	417,933	
Wolfgang Porsche	100,000	150,000	161,400	411,400	49,333	441,233	
Athanassios Stimoniaris <sup>2</sup> (since May 10, 2017)	64,028	–	106,750	170,778	–	–	
Stephan Weil <sup>3</sup>	100,000	50,000	24,000	174,000	75,250	250,250	
Stephan Wolf <sup>2</sup> (until May 10, 2017)	35,972	17,986	11,000	64,958	75,250	251,250	
Thomas Zwiebler <sup>2</sup> (until May 10, 2017)	35,972	17,986	7,000	60,958	81,250	251,250	
Members of the Supervisory Board who retired in the previous year	–	–	–	–	–	–	183,739
<b>Total</b>	<b>2,000,000</b>	<b>836,389</b>	<b>950,450</b>	<b>3,786,839</b>	<b>1,188,190</b>	<b>5,396,566</b>	

1 Attendance fees, membership of other Group bodies (non-performance-related: €257,000; performance-related: €270,450).

2 These employee representatives have stated that they will transfer their Supervisory Board remuneration to the Hans Böckler Foundation in accordance with the guidelines issued by the German Confederation of Trade Unions (DGB).

3 Under section 5(3) of the Niedersächsisches Ministergesetz (Act Governing Ministers of the State of Lower Saxony), these members of the Supervisory Board are obliged to transfer their Supervisory Board remuneration to the State of Lower Saxony as soon as and to the extent that it exceeds €6,200 per annum. Remuneration is defined for this purpose as Supervisory Board remuneration and attendance fees exceeding the amount of €200.

The remuneration disclosed for members of the Supervisory Board for 2016 shows the amounts determined on the basis of the old system of Supervisory Board remuneration. The members of the Supervisory Board declared to the Management Board that they waive the portion of their remuneration for fiscal year 2016 that exceeds the amount that would have resulted for fiscal year 2016 from implementing the system of Supervisory Board remuneration resolved by the Annual General Meeting on May 10, 2017 with retroactive effect from January 1, 2017. The total amount waived for 2016 by the members of the Supervisory Board is €1,188,190.

Mr. Pötsch additionally waived an amount of €115,700.00 of his variable remuneration for fiscal year 2016 and waived his remuneration for fiscal year 2017 in full. The reason for this waiver is the agreement made in connection with Mr. Pötsch's transfer from the Board of Management to the Supervisory Board as of October 8, 2015, it had been agreed to deduct the amount of Supervisory Board remuneration received up to December 31, 2017 from the compensation payment for his Board of Management remuneration to which he would have been entitled for the period from October 8, 2015 to December 31, 2017.

# Executive Bodies

## Members of the Board of Management and their appointments

Appointments: as of December 31, 2017 or the leaving date from the Board of Management of Volkswagen AG

### MATTHIAS MÜLLER (64)

Chairman (since September 26, 2015)

March 1, 2015<sup>1</sup>

Member of the Executive Board of  
Porsche Automobil Holding SE  
October 13, 2010<sup>1</sup>

### DR. RER. SOC. KARLHEINZ BLESSING (60)

Human Resources and Organization

January 1, 2016<sup>1</sup>

**Appointments:**

Wolfsburg AG, Wolfsburg

### DR.-ING. HERBERT DIES (59)

Chairman of the Brand Board of Management  
of Volkswagen Passenger Cars

July 1, 2015<sup>1</sup>

**Appointments:**

Infineon Technologies AG, Neubiberg

### DR. RER. POL. H.C.

FRANCISCO JAVIER GARCIA SANZ (60)

Procurement

July 1, 2001<sup>1</sup>

**Appointments:**

Hochtief AG, Essen  
 Criteria CaixaHolding S.A., Barcelona

### PROF. DR. RER. POL. DR.-ING. E.H.

### JOCHEN HEIZMANN (65)

China

January 11, 2007<sup>1</sup>

**Appointments:**

Lufthansa Technik AG, Hamburg

### DR. JUR. CHRISTINE HOHMANN-DENNHARDT (67)

Integrity and Legal Affairs

January 1, 2016 – January 31, 2017<sup>1</sup>

**Appointments (as of January 31, 2017):**

Messe Frankfurt GmbH, Frankfurt am Main

### ANDREAS RENSCHLER (59)

Commercial Vehicles

February 1, 2015<sup>1</sup>

**Appointments:**

Deutsche Messe AG, Hanover

### PROF. RUPERT STADLER (54)

Chairman of the Board of Management of AUDI AG

January 1, 2010<sup>1</sup>

**Appointments:**

FC Bayern München AG, Munich

### HILTRUD DOROTHEA WERNER (51)

Integrity and Legal Affairs

February 1, 2017<sup>1</sup>

### FRANK WITTER (58)

Finance and Controlling

October 7, 2015<sup>1</sup>

As part of their duty to manage and supervise the Group's business, the members of the Board of Management hold other offices on the supervisory boards of consolidated Group companies and other significant investees.

Membership of statutory supervisory boards in Germany.

Comparable appointments in Germany and abroad.

<sup>1</sup> Beginning or period of membership of the Board of Management.

## Members of the Supervisory Board and their appointments

Appointments: as of December 31, 2017 or the leaving date from the Supervisory Board of Volkswagen AG

### HANS DIETER PÖTSCH (66)

Chairman (since October 7, 2015)  
 Chairman of the Executive Board and  
 Chief Financial Officer of Porsche Automobil Holding SE  
 October 7, 2015<sup>1</sup>  
**Appointments:**  
 AUDI AG, Ingolstadt  
 Autostadt GmbH, Wolfsburg (Chairman)  
 Bertelsmann Management SE, Gütersloh  
 Bertelsmann SE & Co. KGaA, Gütersloh  
 Dr. Ing. h.c. F. Porsche AG, Stuttgart  
 Wolfsburg AG, Wolfsburg  
 Porsche Austria Gesellschaft m.b.H., Salzburg (Chairman)  
 Porsche Holding Gesellschaft m.b.H., Salzburg (Chairman)  
 Porsche Retail GmbH, Salzburg (Chairman)  
 VfL Wolfsburg-Fußball GmbH, Wolfsburg (Deputy Chairman)  
 Volkswagen Truck & Bus GmbH, Braunschweig

### JÖRG HOFMANN (62)

Deputy Chairman (since November 20, 2015)  
 First Chairman of IG Metall  
 November 20, 2015<sup>1</sup>  
**Appointments:**  
 Robert Bosch GmbH, Stuttgart

### DR. JUR. KLAUS LIESEN (86)

July 2, 1987 – May 3, 2006<sup>1</sup>  
 Honorary Chairman of the Supervisory Board of Volkswagen AG (May 3, 2006 – March 30, 2017)  
 Dr. Liesen died on March 30, 2017.

### DR. HUSSAIN ALI AL-ABDULLA (60)

Minister of State  
 April 22, 2010<sup>1</sup>  
**Appointments:**  
 Gulf Investment Corporation, Safat/Kuwait  
 Kirnaf Finance, Riyadh (Chairman)  
 Masraf Al Rayan, Doha (Chairman)  
 Qatar Holding, Doha  
 Qatar Investment Authority, Doha

### DR. HESSA SULTAN AL-JABER (58)

Minister of State  
 June 22, 2016<sup>1</sup>  
**Appointments:**  
 Droobi Health Technology, Doha  
 Malomatia, Doha  
 Qatar Satellite Company, Doha  
 Trio Investment, Doha

### DR. BERND ALTHUSMANN (51)

Minister of Economic Affairs, Labor, Transport and Digitalization for the Federal State of Lower Saxony  
 December 14, 2017<sup>1</sup>  
**Appointments:**  
 Deutsche Messe AG, Hanover  
 Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG, Wilhelmshaven  
 JadeWeserPort Realisierungs GmbH & Co. KG, Wilhelmshaven  
 JadeWeserPort Realisierungs-Beteiligungs GmbH, Wilhelmshaven  
 Niedersachsen Ports GmbH & Co. KG, Oldenburg (Chairman)

### BIRGIT DIETZE (44)

Secretary to the Board of IG Metall  
 June 1, 2016<sup>1</sup>

### ANNIKA FALKENGREN (55)

Managing Partner of Compagnie Lombard Odier SCmA  
 May 3, 2011 – February 5, 2018<sup>1</sup>  
**Appointments (as of February 5, 2018):**  
 FAM AB, Stockholm

### DR. JUR. HANS-PETER FISCHER (58)

Chairman of the Board of Management of Volkswagen Management Association  
 January 1, 2013<sup>1</sup>  
**Appointments:**  
 Volkswagen Pension Trust e.V., Wolfsburg

### UWE FRITSCH (61)

Chairman of the Works Council of the Volkswagen AG Braunschweig plant  
 April 19, 2012 – May 10, 2017<sup>1</sup>  
**Appointments (as of May 10, 2017):**  
 Eintracht Braunschweig GmbH & Co KGaA, Braunschweig  
 Basketball Löwen Braunschweig GmbH, Braunschweig

### MARIANNE HEISS (45)

Chief Financial Officer of BBDO Group Germany GmbH, Düsseldorf  
 February 14, 2018<sup>1</sup>

Membership of statutory supervisory boards in Germany.  
 Comparable appointments in Germany and abroad.

<sup>1</sup> Beginning or period of membership of the Supervisory Board.

**UWE HÜCK (55)**

Chairman of the General and Group Works Councils of  
Dr. Ing. h.c. F. Porsche AG  
July 1, 2015<sup>1</sup>

**Appointments:**

- Dr. Ing. h.c. F. Porsche AG, Stuttgart  
(Deputy Chairman)

**JOHAN JÄRVKLO (44)**

Chairman of IF Metall at Scania AB  
November 22, 2015<sup>1</sup>  
**Appointments:**  
 Scania CV AB, Södertälje  
 Volkswagen Truck & Bus GmbH, Braunschweig

**ULRIKE JAKOB (57)**

Deputy Chairwoman of the Works Council of  
Volkswagen AG, Kassel plant  
May 10, 2017<sup>1</sup>

**DR. LOUISE KIESLING (60)**

Designer and entrepreneur  
April 30, 2015<sup>1</sup>

**OLAF LIES (50)**

February 19, 2013 – December 14, 2017<sup>1</sup>  
**Appointments (as of December 14, 2017):**  
 Deutsche Messe AG, Hanover  
 Container Terminal Wilhelmshaven JadeWeserPort- Marketing GmbH & Co. KG, Wilhelmshaven  
 Demografieagentur für die niedersächsische Wirtschaft GmbH, Hanover (Chairman)  
 JadeWeserPort Realisierungs GmbH & Co. KG, Wilhelmshaven  
 JadeWeserPort Realisierungs-Beteiligungs GmbH, Wilhelmshaven

**PETER MOSCH (45)**

Chairman of the General Works Council of AUDI AG  
January 18, 2006<sup>1</sup>  
**Appointments:**  
 AUDI AG, Ingolstadt  
 Audi Pensionskasse – Altersversorgung der AUTO UNION GmbH, VVaG, Ingolstadt

**BERTINA MURKOVIC (60)**

Chairwoman of the Works Council of  
Volkswagen Commercial Vehicles  
May 10, 2017<sup>1</sup>

**BERND OSTERLOH (61)**

Chairman of the General and Group Works Councils of  
Volkswagen AG  
January 1, 2005<sup>1</sup>  
**Appointments:**  
 Autostadt GmbH, Wolfsburg  
 Wolfsburg AG, Wolfsburg  
 Allianz für die Region GmbH, Braunschweig  
 Porsche Holding Gesellschaft m.b.H., Salzburg  
 SEAT, S.A., Martorell  
 ŠKODA Auto a.s., Mladá Boleslav  
 VfL Wolfsburg-Fußball GmbH, Wolfsburg  
 Volkswagen Immobilien GmbH, Wolfsburg  
 Volkswagen Truck & Bus GmbH, Braunschweig

**DR. JUR. HANS MICHEL PIËCH (75)**

Lawyer in private practice  
August 7, 2009<sup>1</sup>  
**Appointments:**  
 AUDI AG, Ingolstadt  
 Dr. Ing. h.c. F. Porsche AG, Stuttgart  
 Porsche Automobil Holding SE, Stuttgart  
(Deputy Chairman)  
 Porsche Cars Great Britain Ltd., Reading  
 Porsche Cars North America Inc., Atlanta  
 Porsche Holding Gesellschaft m.b.H., Salzburg  
 Porsche Ibérica S.A., Madrid  
 Porsche Italia S.p.A., Padua  
 Schmittenhöhebahn AG, Zell am See  
 Volksoper Wien GmbH, Vienna

**DR. JUR. FERDINAND OLIVER PORSCHE (56)**

Member of the Board of Management of Familie  
Porsche AG Beteiligungsgesellschaft  
August 7, 2009<sup>1</sup>

**Appointments:**

- AUDI AG, Ingolstadt
- Dr. Ing. h.c. F. Porsche AG, Stuttgart
- Porsche Automobil Holding SE, Stuttgart
- Porsche Holding Gesellschaft m.b.H., Salzburg
- Porsche Lizenz- und Handelsgesellschaft mbH & Co. KG, Ludwigsburg
- Volkswagen Truck & Bus GmbH, Braunschweig

**DR. RER. COMM. WOLFGANG PORSCHE (74)**

Chairman of the Supervisory Board of  
Porsche Automobil Holding SE;  
Chairman of the Supervisory Board of  
Dr. Ing. h.c. F. Porsche AG  
April 24, 2008<sup>1</sup>

**Appointments:**

- AUDI AG, Ingolstadt
- Dr. Ing. h.c. F. Porsche AG, Stuttgart (Chairman)
- Porsche Automobil Holding SE, Stuttgart  
(Chairman)
- Familie Porsche AG Beteiligungsgesellschaft, Salzburg (Chairman)
- Porsche Cars Great Britain Ltd., Reading
- Porsche Cars North America Inc., Atlanta
- Porsche Holding Gesellschaft m.b.H., Salzburg
- Porsche Ibérica S.A., Madrid
- Porsche Italia S.p.A., Padua
- Schmittenhöhebahn AG, Zell am See

Membership of statutory supervisory boards in Germany.  
 Comparable appointments in Germany and abroad.

<sup>1</sup> Beginning or period of membership of the Supervisory Board.

**ATHANASIOS STIMONIARIS (46)**

Chairman of the Works Council and of the General Works Council of MAN Truck & Bus AG and Chairman of the Group Works Council of MAN SE and of the SE Works Council

May 10, 2017<sup>1</sup>

**Appointments:**

- MAN SE, Munich
- MAN Truck & Bus AG, Munich (Deputy Chairman)
- Rheinmetall MAN Military Vehicles GmbH, Munich
- Volkswagen Truck & Bus GmbH, Braunschweig

**STEPHAN WEIL (59)**

Minister-President of the Federal State of Lower Saxony  
February 19, 2013<sup>1</sup>

**STEPHAN WOLF (51)**

January 1, 2013 – May 10, 2017<sup>1</sup>

**Appointments (as of May 10, 2017):**

- Volkswagen Financial Services AG, Braunschweig
- Wolfsburg AG, Wolfsburg
- Volkswagen Pension Trust e.V., Wolfsburg

**THOMAS ZWIEBLER (52)**

May 15, 2010 – May 10, 2017<sup>1</sup>

**COMMITTEES OF THE SUPERVISORY BOARD****AS OF DECEMBER 31, 2017****Members of the Executive Committee**

- Hans Dieter Pötsch (Chairman)
- Jörg Hofmann (Deputy Chairman)
- Peter Mosch
- Bernd Osterloh
- Dr. Wolfgang Porsche
- Stephan Weil

**Members of the Mediation Committee**

established in accordance with section 27(3) of the **Mitbestimmungsgesetz (German Codetermination Act)**

- Hans Dieter Pötsch (Chairman)
- Jörg Hofmann (Deputy Chairman)
- Bernd Osterloh
- Stephan Weil

**Members of the Audit Committee**

- Dr. Ferdinand Oliver Porsche (Chairman)
- Bernd Osterloh (Deputy Chairman)
- Birgit Dietze
- n.n.

**Members of the Nomination Committee**

- Hans Dieter Pötsch (Chairman)
- Dr. Wolfgang Porsche
- Stephan Weil

**Special Committee on Diesel Engines**

- Dr. Wolfgang Porsche (Chairman)
- Peter Mosch
- Bertina Murkovic
- Bernd Osterloh
- Dr. Ferdinand Oliver Porsche
- n.n.

Membership of statutory supervisory boards in Germany.  
 Comparable appointments in Germany and abroad.

<sup>1</sup> Beginning or period of membership of the Supervisory Board.

# Disclosures Required Under Takeover Law

This section contains the Volkswagen Group's disclosures relating to takeover law required by sections 289(4) and 315(4) of the HGB.

## CAPITAL STRUCTURE

Volkswagen AG's share capital amounted to €1,283,315,873.28 (€1,283,315,873.28) on 31 December, 2017. It was composed of 295,089,818 ordinary shares and 206,205,445 preferred shares. Each share conveys a notional interest of €2.56 in the share capital.

## SHAREHOLDER RIGHTS AND OBLIGATIONS

The shares convey pecuniary and administrative rights. The pecuniary rights include in particular the shareholders' right to participate in profits (section 58(4) of the Aktiengesetz (AktG – German Stock Corporation Act)), the right to participate in liquidation proceeds (section 271 of the AktG) and preemptive rights to shares in the event of capital increases (section 186 of the AktG) that can be disapplied by the Annual General Meeting with the approval of the Special Meeting of Preferred Shareholders, where appropriate. Administrative rights include the right to attend the Annual General Meeting and the right to speak there, to ask questions, to propose motions and to exercise voting rights. Shareholders can enforce these rights in particular through actions seeking disclosure and actions for avoidance.

Each ordinary share grants the holder one vote at the Annual General Meeting. The Annual General Meeting elects shareholder representatives to the Supervisory Board and elects the auditors; in particular, it resolves on the appropriation of net profit, formally approves the actions of the Board of Management and the Supervisory Board, and resolves on amendments to the Articles of Association of Volkswagen AG, capitalization measures and authorizations to purchase treasury shares; if required, it also resolves on the performance of a special audit, the removal before the end of their term of office of Supervisory Board members elected at the Annual General Meeting and the winding-up of the Company.

Preferred shareholders generally have no voting rights. However, in the exceptional case that they are granted voting rights by law (for example, when preferred share dividends were not paid in one year and not compensated for in full in the following year), each preferred share also grants the holder one vote at the Annual General Meeting. Furthermore, preferred shares entitle the holder to a €0.06 higher dividend than ordinary shares (further details on this right to preferred and additional dividends are specified in Article 27(2) of the Articles of Association of Volkswagen AG).

The Gesetz über die Überführung der Anteilsrechte an der Volkswagenwerk Gesellschaft mit beschränkter Haftung in private Hand (VW-Gesetz – Act on the Privatization of Shares of Volkswagenwerk Gesellschaft mit beschränkter Haftung) of July 21, 1960, as amended on July 30, 2009, includes various provisions in derogation of the German Stock Corporation Act, for example on the exercise of voting rights by proxy (section 3 of the VW-Gesetz) and on majority voting requirements at the Annual General Meeting (section 4(3) of the VW-Gesetz).

In accordance with the Volkswagen AG Articles of Association (Article 11(1)), the State of Lower Saxony is entitled to appoint two members of the Supervisory Board of Volkswagen AG for as long as it directly or indirectly holds at least 15% of Volkswagen AG's ordinary shares. In addition, resolutions by the Annual General Meeting that are required by law to be adopted by a qualified majority require a majority of more than four-fifths of the share capital of the Company represented when the resolution is adopted (Article 25(2)), regardless of the provisions of the VW-Gesetz.

#### SHAREHOLDINGS EXCEEDING 10% OF VOTING RIGHTS

Shareholdings in Volkswagen AG that exceed 10% of voting rights are shown in the notes to the annual financial statements of Volkswagen AG, which are available online at [www.volkswageng.com/ir](http://www.volkswageng.com/ir). The current notifications of changes in voting rights in accordance with the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act) are also published on this website.

#### COMPOSITION OF THE SUPERVISORY BOARD

The Supervisory Board consists of 20 members, half of whom are shareholder representatives. In accordance with Article 11(1) of the Articles of Association of Volkswagen AG, the State of Lower Saxony is entitled to appoint two of these shareholder representatives for as long as it directly or indirectly holds at least 15% of the Company's ordinary shares. The remaining shareholder representatives on the Supervisory Board are elected by the Annual General Meeting.

The other half of the Supervisory Board consists of employee representatives elected by the employees in accordance with the Mitbestimmungsgesetz (MitbestG – German Codetermination Act). A total of seven of these employee representatives are Company employees elected by the workforce; the other three employee representatives are trade union representatives elected by the workforce.

The Chairman of the Supervisory Board is generally a shareholder representative elected by the other members of the Supervisory Board. In the event that a Supervisory Board vote is tied, the Chairman of the Supervisory Board has a casting vote in accordance with the MitbestG.

The goals for the composition of the Supervisory Board are described on page 61 of the Corporate Governance Report. Information about the composition of the Supervisory Board at the end of the reporting period can be found on pages 85 to 87 of this annual report.

#### STATUTORY REQUIREMENTS AND REQUIREMENTS OF THE ARTICLES OF ASSOCIATION WITH REGARD TO THE APPOINTMENT AND REMOVAL OF BOARD OF MANAGEMENT MEMBERS AND TO AMENDMENTS TO THE ARTICLES OF ASSOCIATION

The appointment and removal of members of the Board of Management are governed by sections 84 and 85 of the AktG, which specify that members of the Board of Management are appointed by the Supervisory Board for a maximum of five years. Board of Management members may be reappointed or have their term of office extended for a maximum of five years in each case. In addition, Article 6 of the Articles of Association of Volkswagen AG states that the number of Board of Management members is stipulated by the Supervisory Board and that the Board of Management must consist of at least three persons.

The Annual General Meeting resolves amendments to the Articles of Association (section 119(1) of the AktG). In accordance with section 4(3) of the VW-Gesetz as amended on July 30, 2009 and Article 25(2) of the Articles of Association of Volkswagen AG, Annual General Meeting resolutions to amend the Articles of Association require a majority of more than four-fifths of the share capital represented.

#### POWERS OF THE BOARD OF MANAGEMENT, IN PARTICULAR CONCERNING THE ISSUE OF NEW SHARES AND THE REPURCHASE OF TREASURY SHARES

According to German stock corporation law, the Annual General Meeting can authorize the Board of Management, for a maximum period of five years, to issue new shares. It can also authorize the Board of Management, for a maximum period of five years, to issue bonds on the basis of which new shares are to be issued. The Annual General Meeting also decides the extent to which shareholders have preemptive rights to the new shares or bonds. The maximum amount of authorized share capital or contingent capital available for these purposes is determined by Article 4 of the Articles of Association of Volkswagen AG, as amended.

The Annual General Meeting on April 19, 2012 resolved to authorize the Board of Management, with the consent of the Supervisory Board, to increase the Company's share capital by a total of up to €110.0 million (corresponding to approximately 43 million shares) on one or more occasions up to April 18, 2017 by issuing new ordinary and/or nonvoting preferred bearer shares – including with shareholders' preemptive rights disapplied – against cash and/or noncash contributions. This authorization was partially exercised in June 2014 by way of a capital increase through the issuance of 10,471,204 new preferred shares from authorized capital against cash contributions, while disapplying shareholders' preemptive rights. This increased the share capital by €26.8 million and generated gross proceeds of €2.0 billion.

At the Annual General Meeting on May 5, 2015, a resolution was passed authorizing the Board of Management, with the consent of the Supervisory Board, to increase the Company's share capital by a total of up to €179.2 million (corresponding to 70 million shares) on one or more occasions up to May 4, 2020 by issuing new nonvoting preferred shares against cash contributions.

Further details of the authorization to issue new shares and their permitted uses may be found in the notes to the consolidated financial statements on page 256.

Opportunities to acquire treasury shares are governed by section 71 of the AktG. The Board of Management was most recently authorized to acquire treasury shares up to a maximum of 10% of the share capital at the Annual General Meeting on April 19, 2012. This authorization applied until April 18, 2017 and has not been exercised.

#### MATERIAL AGREEMENTS OF THE PARENT COMPANY IN THE EVENT OF A CHANGE OF CONTROL FOLLOWING A TAKEOVER BID

A banking syndicate granted Volkswagen AG a syndicated line of credit amounting to €5.0 billion that runs until April 2020. The syndicate members were granted the right to call their portion of the syndicated line of credit if Volkswagen AG is merged with a third party or becomes a subsidiary of another company. However, this call right does not apply in the event of a merger by absorption of Porsche Holding SE, one of its subsidiaries, or one of its holding companies and Volkswagen AG in which Volkswagen AG is the acquiring legal entity.

In addition, Volkswagen AG agreed a supplementary syndicated line of credit of up to €20.0 billion with a banking syndicate, initially running until December 2016 and since extended until June 2017. The syndicate members were granted the right to call their portion of the syndicated line of credit if Volkswagen AG is merged with a third party or group of third parties, or becomes a subsidiary of another company or group of other companies. Exceptions to this call right were agreed with regard to various combinations involving the current majority shareholders. This line of credit was terminated in June 2017 as per the contractual agreement.

# Diesel Issue

During the fiscal year, we reached extensive settlement agreements in the USA. The technical measures for all affected vehicles with type EA 189 engines in the European Union were approved without exception, and implemented in most cases. We also continued to work on resolving the diesel issue. Further special items amounting to €3.2 billion had to be accounted for in the fiscal year.

## IRREGULARITIES CONCERNING NO<sub>x</sub> EMISSIONS

On September 18, 2015, the US Environmental Protection Agency (EPA) publicly announced in a "Notice of Violation" that irregularities in relation to nitrogen oxide (NO<sub>x</sub>) emissions had been discovered in emissions tests on certain vehicles of Volkswagen Group with type 2.0 l diesel engines in the USA. In this context, Volkswagen AG announced that noticeable discrepancies between the figures achieved in testing and in actual road use had been identified in around eleven million vehicles worldwide with type EA 189 diesel engines. On November 2, 2015, the EPA issued a "Notice of Violation" alleging that irregularities had also been discovered in the software installed in US vehicles with type V6 3.0 l diesel engines.

Numerous court and governmental proceedings were subsequently initiated in the USA and the rest of the world. During the reporting period, we succeeded in ending most significant court and governmental proceedings in the USA by concluding settlement agreements. This includes, in particular, settlements with the US Department of Justice (DOJ). Outside the USA, we also reached agreements with regard to the implementation of technical measures with numerous authorities. Detailed information on the individual settlement agreements as well as on the pending court and governmental proceedings can be found in the Report on Risks and Opportunities, starting on page 178.

## EXTENSIVE INVESTIGATIONS INITIATED BY VOLKSWAGEN AG

After the first "Notice of Violation" was issued, Volkswagen AG immediately initiated its own internal inquiries and an external investigation.

The Supervisory Board of Volkswagen AG formed a special committee that coordinates the activities relating to the diesel issue for the Supervisory Board.

The global law firm Jones Day was instructed by Volkswagen AG to carry out an extensive investigation of the diesel issue in light of the DOJ's and the Braunschweig public prosecutor's criminal investigation as well as other investigations and proceedings which were expected at that time.

Jones Day was instructed by Volkswagen AG to present factual evidence to the DOJ. To resolve US-criminal law charges, Volkswagen AG and the DOJ entered into a Plea Agreement, which includes a Statement of Facts containing a summary of the factual allegations which the DOJ considered relevant to the settlement with Volkswagen AG. The Statement of Facts is based in part on Jones Day's factual findings as well as the evidence identified by the DOJ itself.

Jones Day has completed the work required to assist Volkswagen AG in assessing the criminal charges against the company in the USA with respect to the diesel issue. However, work in respect of the legal proceedings which are still pending in the USA and the rest of the world is ongoing and will require considerable efforts and a considerable period of time. In connection with this further work, Volkswagen AG is being advised by a number of external law firms.

Furthermore, in September 2015, Volkswagen AG filed a criminal complaint in Germany against unknown individuals as did AUDI AG. Volkswagen AG and AUDI AG are cooperating with all responsible authorities in the scope of reviewing the incidents.

The diesel issue is rooted in a modification of parts of the software of the relevant engine's control unit – which, according to Volkswagen AG's legal position, is only unlawful in the USA – for the type EA 189 diesel engines that Volkswagen AG was developing at that time. The decision to develop and install this software function was taken in late 2006, below Board of Management level. None of the members of the Board of Management had, at that time and for many years to follow, knowledge of the development and implementation of this software function in the relevant engine control unit of the type EA 189 diesel engines.

In the months after the International Council on Clean Transportation (ICCT) study was published in May 2014, the test set-ups on which the ICCT study was based were repeated in-house at Volkswagen AG and confirmed the unusually high NO<sub>x</sub> emissions from certain type EA 189 2.0 l diesel engines in the USA. The California Air Resources Board (CARB) – a part of the environmental authority of California – was informed of this result, and, at the same time, an offer was made to recalibrate the type EA 189 diesel engines in the USA as part of a service measure that was already planned in the USA. This measure was evaluated and adopted by the Ausschuss für Produktsicherheit (APS – Product Safety Committee), which initiates necessary and appropriate measures to ensure the safety and conformity of Volkswagen AG's products that are placed in the market. There are no findings that an unlawful "defeat device" under US law was disclosed to the APS as the cause of the discrepancies or to the persons responsible for preparing the 2014 annual and consolidated financial statements. Instead, at the time the 2014 annual and consolidated financial statements were being prepared, the persons responsible for preparing the 2014 annual and consolidated financial statements remained under the impression that the issue could be solved with comparatively little effort as part of a service measure.

In the course of the summer of 2015, however, it became successively apparent to individual members of Volkswagen AG's Board of Management that the cause of the discrepancies in the USA was a modification of parts of the software of the engine control unit, which was later identified as an unlawful "defeat device" as defined by US law. This culminated in the disclosure of a "defeat device" to EPA and CARB on September 3, 2015. According to the assessment at that time of the responsible persons dealing with the matter, the scope of the costs expected by the Volkswagen Group (recall costs, retrofitting costs and financial penalties) was not fundamentally dissimilar to that of previous cases involving other vehicle manufacturers, and, therefore, appeared to be controllable overall with a view to the business activities of the Volkswagen Group.

This assessment by the Volkswagen Group was based, among other things, on the advice of a law firm engaged in the USA for approval issues, according to which similar cases in the past were resolved amicably with the US authorities. The publication of the "Notice of Violation" by the EPA on September 18, 2015, which, especially at that time came unexpectedly to the Board of Management, then presented the situation in an entirely different light.

Extensive inquiries were also conducted at AUDI AG in relation to the potential use of unlawful "defeat devices" under US law in type V6 3.0 l diesel engines. The investigation conducted by Jones Day for Volkswagen AG also comprehensively covered this issue.

The AUDI AG Board of Management members in office back at the relevant time have stated that they had no knowledge of the use of unlawful "defeat device" software under US law in V6 3.0 l TDI engines until they were informed by the EPA in November 2015.

Within the Volkswagen Group, Volkswagen AG has development responsibility for the four-cylinder diesel engines such as the type EA 189, and AUDI AG has development responsibility for the six-cylinder diesel engines such as the type V6 3.0 l diesel engines.

Nothing from the publications made up to the time this report was prepared or from the ongoing investigations and interviews on the diesel issue has presented the Volkswagen AG Board of Management with any conclusive findings or assessments of fact that would result in a different assessment of the associated risks (e.g. investor lawsuits).

#### EA 189 VEHICLES IN THE EU/REST OF THE WORLD

Outside the USA and Canada, around 10 million vehicles with type EA 189 diesel engines were affected.

During the first quarter of 2017, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) issued the final outstanding official approvals needed for technical measures of 14 thousand Volkswagen Group vehicles fitted with type EA 189 diesel engines falling within its remit.

The KBA ascertained for all clusters (groups of vehicles) that implementation of the technical measures would not bring about any adverse changes in fuel consumption figures, CO<sub>2</sub> emissions figures, engine power, maximum torque and noise emissions. Once the updates have been made, the vehicles will continue to comply with the legal requirements and the emission standards applicable in each case.

During the second quarter of 2017, the Vehicle Certification Agency in the United Kingdom issued the outstanding official approvals needed for technical measures to modify the ŠKODA and SEAT models with type EA 189 diesel engines falling within its remit.

The technical measures for all affected vehicles with type EA 189 engines in the European Union were approved without exception, and implemented in most cases.

In some countries outside the EU the technical measures have to be approved by the national authorities. With the exception of South Korea and Chile, we were able to complete the approval process in all countries. There, the majority of approvals were likewise granted; in relation to the pending approvals Volkswagen is in close contact with the authorities.

Based on current planning, implementation of the technical measures, which are free of charge for our customers, will run into 2018.

#### FURTHER RETROFIT PROGRAMS FOR TYPE V6/V8 ENGINES

For many months, AUDI AG has been intensively checking all diesel concepts for possible discrepancies and retrofit potentials. A systematic review process for all engine and gear variants has been underway since 2016. This was done in close cooperation with the authorities, which were provided with detailed reports, especially the German Federal Ministry of Transport and the KBA. In this context, AUDI AG announced on July 21, 2017 that it was going to improve the emissions performance of up to 850 thousand vehicles across Europe via service measures. The retrofit package comprises voluntary measures and to a small extent measures directed by the authorities; these are measures taken within the scope of a recall, which were proposed by AUDI AG itself, reported to the KBA and taken up and ordered by the latter.

#### AFFECTED VEHICLES IN THE USA/CANADA

In the USA and Canada three generations of certain vehicles with 2.0 l TDI engines and two generations of certain vehicles with V6 3.0 l TDI engines are affected, which come to a total of approximately 700 thousand vehicles. Due to NO<sub>x</sub> limits that are considerably stricter than in the EU and the rest of the world, it is a greater technical challenge here to refit the vehicles so that the emission standards defined in the settlement agreements for these vehicles can be achieved.

The EPA and CARB have approved emissions modifications and issued resale approvals for the majority of the affected vehicles with 2.0 l TDI engines. The approved modifications relate to certain Generation 1 and Generation 2 vehicles, and the first part of a two-step modification for Generation 3 vehicles. The second part of this modification has been submitted for approval. We are working in close cooperation with the EPA and CARB to obtain the outstanding approval. We have withdrawn the emissions modification proposal for Generation 2 vehicles with manual transmissions.

The EPA and CARB have approved the modification measures for the Generation 2 vehicles with type V6 3.0 l TDI engines. We have submitted proposals for emissions modifications for Generation 1 vehicles with type V6 3.0 l TDI engines. These proposals are under review by the EPA and CARB.

The relevant US and Canadian companies of the Volkswagen Group have withdrawn the affected new and certified used vehicles from sale until the outstanding approvals are issued. The technical solutions that have been approved by the authorities have already been implemented.

#### LEGAL RISKS

Various legal risks are associated with the diesel issue. The provisions recognized for the diesel issue and the contingent liabilities disclosed as well as the other latent legal risks are partially subject to substantial estimation risks given the complexity of the individual factors, the ongoing approval process with the authorities and the fact that the facts have not yet been definitively clarified. Should these legal risks materialize, this could result in considerable financial charges.

A detailed description of these and other risks arising from the diesel issue as stated above can be found in the Report on Risks and Opportunities starting on page 178.

#### OPERATING RESULT

Special items recognized in operating profit relating to the diesel issue amounted to €-3.2 (-6.4) billion in fiscal year 2017, mainly due to higher provisions relating to the buy-back/retrofit programs.

The diesel issue led to total special items of €-25.8 billion in the years 2015 to 2017.

**INDEPENDENT MONITOR**

In June 2017, Larry D. Thompson was appointed as the Independent Compliance Monitor at Volkswagen under the terms of the Plea Agreement with the DOJ announced on January 11, 2017 and confirmed by a US federal court on April 21, 2017. He will also work as Independent Compliance Auditor under the Third Partial Consent Decree concluded separately with the EPA and the Third California Partial Consent Decree agreed with the State of California and CARB (for more information on these agreements, please see the Litigation section starting on page 178). Mr. Thompson will assess and oversee Volkswagen's compliance with the terms of the Plea Agreement and Consent Decrees for a period of three years, which includes taking measures to further strengthen the Company's compliance, reporting and monitoring mechanisms and the implementation of an enhanced compliance and ethics program.

**TO OUR STAKEHOLDERS**

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 stakeholders.

# Business Development

The global economy grew more strongly in fiscal year 2017 than in the previous year. However, global demand for vehicles did not rise as sharply as in the year before. Amid challenging market conditions, the Volkswagen Group delivered 10.7 million vehicles to customers for the first time.

## DEVELOPMENTS IN THE GLOBAL ECONOMY

Global gross domestic product (GDP) rose by 3.2 (2.5)% in 2017. Economic momentum accelerated in both advanced economies and emerging markets year-on-year. Consumer prices increased at a slower pace worldwide than in the previous year, with persistently low interest rates and rising energy and commodity prices.

### Europe/Other Markets

GDP growth in Western Europe edged up slightly during the year to 2.3 (1.8)%, with the majority of the countries in this region seeing higher growth rates. The start of the Brexit negotiations between the United Kingdom and the European Union generated uncertainty, as did the question of what form this relationship would take in the future. The unemployment rate in the eurozone continued to decrease, falling to an average of 9.6 (10.6)%, though rates remained considerably higher in Greece and Spain.

The Central and Eastern Europe region recorded a relatively strong increase in GDP in the reporting period with an increase of 3.8 (1.8)%. In Central Europe, the general uptrend gained traction, and in Eastern Europe the economy also grew at a considerably stronger pace than in the previous year. Higher energy prices led to a stabilization of the economic situation in the countries from this region that export raw materials. A growth rate of 1.6 (−0.4)% marked the end of the recessionary period in Russia.

South Africa's GDP rose by just 0.9 (0.3)%, only slightly higher than the low figure for the previous year. Ongoing structural deficits, social unrest and political challenges weighed on the economy.

### Germany

The German economy continued to profit from optimistic consumer sentiment and a good labor market, which led to a sharper year-on-year increase in GDP to 2.5 (1.9)% in 2017.

### North America

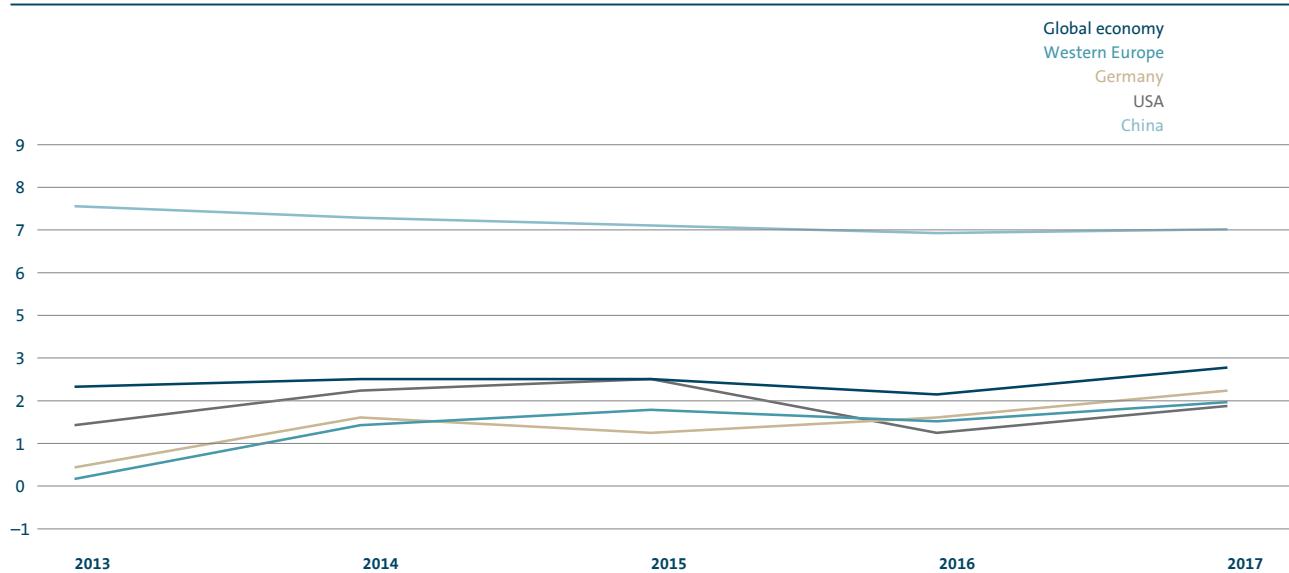
Economic growth in the USA was faster than in the previous year, at 2.2 (1.5)%. The economy was supported mainly by private consumption and the expansionary monetary policy. Private gross investments also developed positively. The average unemployment rate was 4.4 (4.9)%. The US dollar was somewhat weaker than in the previous year. At 3.0 (1.4)%, GDP growth in Canada accelerated significantly. The growth rate of Mexico's economic output fell somewhat to 2.2 (2.7)%.

### South America

In the reporting period, Brazil left behind the economic downswing, with economic output increasing by 1.0 (−3.5)%. The situation in South America's largest economy nevertheless remained tense, due to political uncertainty, among other things. Argentina's GDP rose by 2.8 (−2.2)% in spite of structural deficits and persistently high inflation.

### Asia-Pacific

The Chinese economy expanded at the previous year's high level with a growth rate of 6.9 (6.7)%. The Indian economy continued its positive trend but, with a gain of 6.5 (7.1)%, grew somewhat less strongly than in the previous year. The introduction of reform measures had a temporary dampening effect here. Japan registered solid GDP growth of 1.8 (0.9)%.

**ECONOMIC GROWTH***Percentage change in GDP***TRENDS IN THE PASSENGER CAR MARKETS**

In fiscal year 2017, the global market volume of passenger cars rose by 2.9% to 83.5 million vehicles, achieving a record figure for the seventh time in a row. While demand rose in the Asia-Pacific, South America, Western Europe and Central and Eastern Europe regions, the market volume in North America, the Middle East and Africa fell short of the prior-year figures.

**Sector-specific environment**

The sector-specific environment was influenced significantly by fiscal policy measures, which contributed substantially to the mixed trends in sales volumes in the markets last year. The instruments used were tax cuts or increases, incentive programs and sales incentives, as well as import duties.

In addition, non-tariff trade barriers to protect the respective domestic automotive industry made the movement of vehicles, parts and components more difficult.

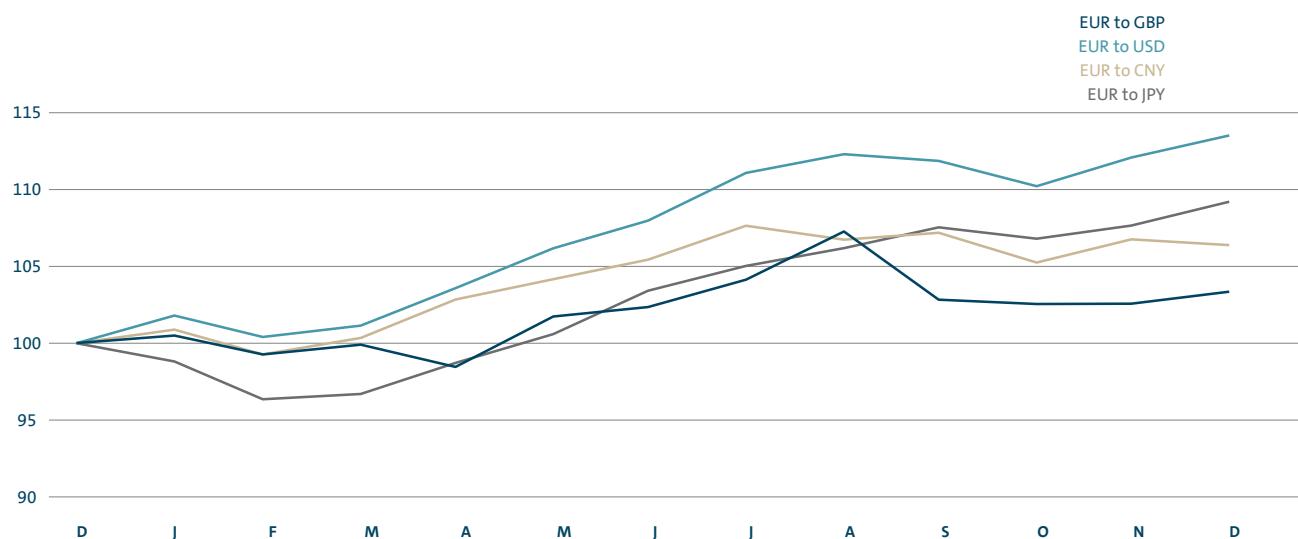
**Europe/Other Markets**

In Western Europe, new passenger car registrations rose by 2.5% to 14.3 million vehicles, the highest level in the past ten years. The positive performance was underpinned in particular by the strong macroeconomic environment, consumer confidence and low interest rates. In Italy (+8.1%) and Spain (+7.7%), the level of demand benefited from demand for

replacement vehicles and particularly from significant growth in sales to commercial customers. The rate of growth in the French passenger car market was lower, at 4.8%. In the United Kingdom, the volume of demand fell 5.7% short of the record level seen in the previous year – due among other things to the change in vehicle taxation as of April 1, 2017. The number of diesel vehicles (passenger cars) in Western Europe slipped to 44.4 (49.5)% in the reporting year.

The passenger car market volume in the Central and Eastern European region in fiscal year 2017 was up considerably on the prior-year figure, with an increase of 12.6% to 3.0 million vehicles. New passenger car registrations in the EU member states of Central Europe increased by 12.5% to 1.3 million units. Passenger car sales in Eastern Europe also achieved a double-digit growth rate (+12.6%), starting from a very low level. The main growth driver in the region was the Russian market, which, with an increase of 12.3% to 1.5 million vehicles, saw demand increase again for the first time after four years of decline.

At a rate of change of 2.4%, the number of new passenger cars registered in South Africa in the reporting period (370 thousand vehicles) was slightly higher than the comparatively low level seen the previous year. Despite the weak overall economic environment, incentive programs and lower interest rates were the principal causes of this increase.

**EXCHANGE RATE MOVEMENTS FROM DECEMBER 2016 TO DECEMBER 2017***Index based on month-end prices: as of December 31, 2016 = 100***Germany**

In fiscal year 2017, demand for passenger cars in Germany exceeded the prior-year figure by 2.7% at 3.4 million units. The fact that this was the highest level since 2009 was attributable not only to the buoyant macroeconomic environment but also to manufacturer discounts in the form of a trade-in bonus for older diesel models as well as to an environmental bonus for electric-powered vehicles (all-electric and plug-in hybrid drives). New registrations for both retail customers (+4.4%) and business customers (+1.7%) increased as a result.

However, domestic production and exports fell short of the comparable prior-year figures in 2017. Passenger car production declined by 1.7% to 5.6 million vehicles. Passenger car exports fell by 0.9% to 4.4 million vehicles; this was mainly due to the fact that the volume of exports to North America was significantly lower because of shifts in production accompanied by a weakening of the North American market.

**North America**

At 20.8 million vehicles (-1.4%) in fiscal year 2017, sales of passenger cars and light commercial vehicles (up to 6.35 tonnes) in the North America region were just under the record level seen in the previous year. In the US market, demand diminished compared with the high level in 2016 by 1.8% to 17.2 million units. A favorable labor market, high consumer confidence and generous manufacturer incentive

programs were unable to stop the downward tendency. The trend in demand towards SUV and pickup models (+5.7%) continued, accompanied by a simultaneous decline in sales of traditional passenger cars (-10.9%).

The Canadian automotive market again recorded growth (+4.6% to 2.0 million vehicles), exceeding the record figure of the previous year. By contrast, sales of passenger cars and light commercial vehicles in Mexico were down on the record volumes achieved in the prior-year period (-4.6% to 1.5 million units).

**South America**

In South America, demand for passenger cars and light commercial vehicles rose from the previously low level by a significant 12.6% to 4.2 million units in the reporting period. After four years of declining new vehicle registrations, growth of 9.4% to 2.2 million vehicles was recorded again for the first time in the Brazilian automotive market. However, the market volume was still around a quarter lower than the average for the last ten years. Brazil's vehicle exports saw a marked increase in 2017, climbing 46.5% to 762 thousand units to exceed the all-time high recorded in 2005. Exports benefited in particular from the dynamic development of the market in Argentina, where demand increased by 26.2% year-on-year to 855 thousand passenger cars and light commercial vehicles. The second-highest number of new registrations in the region's history was primarily driven by price reductions and attractive financing models offered by the manufacturers.

## Asia-Pacific

The market volume in the Asia-Pacific region rose by 4.7% in the past fiscal year to 37.0 million units; this was the highest absolute increase in new vehicle registrations worldwide. Once again, the main growth driver was the Chinese passenger car market, although the growth rate was low compared with previous years, with an increase of 4.5% to 23.9 million vehicles. This was mainly because customers brought forward purchases at the end of 2016 in anticipation of a rise in the tax rate on vehicles of up to 1.61 at the beginning of 2017.

The number of passenger cars sold in India grew 9.3% year-on-year to 3.1 million units, topping the 3 million mark for the first time ever. This was due not only to high consumer confidence, a wealth of new models and attractive financing products, but especially to the goods and services tax introduced on July 1, 2017, which resulted in part in improved purchasing conditions for the consumer.

The Japanese passenger car market showed a substantial improvement over the low prior-year level with sales of 4.4 million vehicles in the reporting period (+6.1%). The main reasons for the positive trend were the market success of new models and the continued government support for fuel-efficient, low-emission vehicles.

### TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

Overall demand for light commercial vehicles in fiscal year 2017 was slightly lower than in the previous year. A total of 9.1 (9.3) million vehicles were registered worldwide.

In Western Europe, the number of new vehicle registrations rose by 4.7% during the year to 1.9 million units, driven by the region's continued positive economic performance. The markets in Italy, France and Spain recorded moderate to high growth rates, while the United Kingdom registered a decline. In Germany, the comparative figure for 2016 was exceeded by 3.6%.

Central and Eastern European markets recorded perceptible growth on the whole with 326 (306) thousand vehicle registrations. In Russia alone, 123 (116) thousand light commercial vehicles were registered. There, market performance benefited from the ruble's recovery and the drop in inflation. Most of the markets in this region succeeded in maintaining or exceeding their prior-year results.

In North and South America, the light vehicle market is reported as part of the passenger car market, which includes both passenger cars and light commercial vehicles.

Registration volumes of light commercial vehicles in the Asia-Pacific region decreased to 6.0 million units in the reporting period (-3.1%). In China, the region's dominant market, demand for light commercial vehicles of 3.4 million units was down a substantial 8.2% on the prior-year figure.

This decline is mainly due to the shift in demand for micro vans towards more cost-effective MPVs and SUVs. As a consequence of the sustained economic growth in India, considerably more vehicles were registered than in 2016; here, 560 (510) thousand new units were registered. The market volume fell in Japan as a result of the persistently weak economic trend (-5.0%).

Global demand for mid-sized and heavy trucks with a gross weight of more than six tonnes in the markets that are relevant for the Volkswagen Group was higher in fiscal year 2017 than in the previous year, with 547 thousand new vehicle registrations (+7.4%).

In Western Europe, the number of new truck registrations remained level with the previous year at a total of 289 thousand vehicles. While the market in Spain remained at the previous year's level, in Italy it expanded. Demand in the United Kingdom and the Netherlands declined. New registrations in Germany, Western Europe's largest market, were on a level with the previous year.

Central and Eastern Europe saw demand rise by 17.7% to 153 thousand units on the back of the positive economic performance. This growth was attributable to the Russian market; here, registrations moved up 47.7% from a low prior-year level to 72 thousand vehicles. Reasons for this were the incipient recovery of the economy, declining inflation rates and demand for replacement vehicles.

South America saw a significant increase in market volume compared with the previous year. Here, the number of new vehicle registrations rose by 11.8% to 105 thousand units. In Brazil, the region's largest market, demand for trucks was up 2.9% on the low prior-year figure. This reflected a recovery of the market once the difficult economic climate improved. There was a very sharp increase in new vehicle registrations in Argentina (+78.7%), buoyed by the political reforms and stimulus from the agricultural sector.

Demand for buses in the markets that are relevant for the Volkswagen Group was considerably higher than in the previous year. The markets in Central and Eastern Europe as well as South America contributed in particular to this growth.

### TRENDS IN THE MARKETS FOR POWER ENGINEERING

The markets for power engineering are subject to differing regional and economic factors. Consequently, their business growth trends are generally independent of each other.

The number of orders for merchant vessels remained very low in the first half of 2017. Construction of new bulk carriers and container ships in particular fell short of expectations on account of overall low freight rates. In the second

half of 2017, however, the market volume in merchant shipping stood at a higher level overall and a slightly positive trend in new orders for ships became apparent. Yet, despite the ongoing recovery in oil prices, existing overcapacity in the offshore sector continued to curb investment in oil production. As a result, new ship construction came to a virtual standstill here. By contrast, a stable uptrend was again recorded in demand for cruise ships, ferries, fishing vessels and dredgers. The special market for government vessels also continued on a positive trajectory. In spite of the still low liquid fuel prices, the somewhat positive trend towards gas-powered ships stabilized in expectation of stricter emission standards. As a whole, the marine market showed slight growth at a low level in 2017 compared with the previous year. China, South Korea and Japan remained the dominant shipbuilding countries, accounting for a global market share of more than 75% measured in terms of the number of ships. On account of low market volumes, all market segments are seeing considerable competition and a sharp drop in prices as a result.

Demand for energy solutions in emerging economies increased slightly once again in 2017. The Middle East, Southeast Asia, Africa and South America regions continue to be relevant markets for energy solutions. Particularly on larger projects, order placement is being delayed due to ongoing muted growth in key emerging markets and persistently difficult financing conditions for customers. Overall, there was a slight year-on-year increase in demand for decentralized diesel and gas engine power plants in 2017. The shift away from oil-fired power plants towards dual-fuel and gas-fired power plants intensified further. Nevertheless, nearly all projects continue to be subject to intense competition and pressure on prices, which has a negative impact on the earnings quality of orders.

The market for the construction of turbomachinery is mainly dominated by investment projects in oil and gas, the processing industry and power generation. In spite of a modest recovery, oil prices remained low on the whole in 2017. As a result, leading oil and gas companies kept capital expenditure at a low level. Planned projects were postponed again or canceled. Demand for products from the processing industry and power generation remained generally weak in 2017. Failure to reduce overcapacity in some industries, such as steel-making, prevented any recovery in the corresponding markets. Insufficient capacity utilization at many manufacturers intensified the level of competition. Overall, the market volume for turbomachinery in the reporting period was

marginally higher than in the prior-year period. Competition and pressure on prices remain fierce.

The marine and power plant after-sales business for diesel engines generally performed positively and benefited from a continued increase in interest in long-term maintenance contracts and retrofit solutions. The after-sales market for turbomachinery showed a slight uptrend.

#### TRENDS IN THE MARKET FOR FINANCIAL SERVICES

Demand for automotive financial services was high once again in 2017, due above all to the expansion of the overall market for passenger cars and low key interest rates in the main currency areas. Particularly insurance and service products such as maintenance and servicing agreements were especially popular, as customers in more advanced automotive financial services markets are putting greater focus on optimizing overall running costs. In the fleet segment, some customers consulted automotive financial service providers in order to optimise their entire mobility management beyond mere fleet operation. There was also increased demand from both private and business customers for mobility services centered on vehicle usage rather than ownership.

In Europe, sales of financial services climbed further in the reporting period, strengthened by higher vehicle sales and demand for after-sales products such as servicing, maintenance and spare parts agreements as well as automotive-related insurance. Demand developed positively in most countries; in the United Kingdom, France, Spain and Italy in particular, automotive financial services products continued to enjoy rising popularity. The UK's decision to leave the EU has not yet had a negative impact on local demand for financial services.

In Germany, the share of loan-financed or leased vehicles remained stable at a high level in 2017. Alongside traditional products, mobility services and after-sales products were particularly popular.

In South Africa, structural deficits and political uncertainty curbed economic growth, which also impacted on the automotive industry. Demand for automotive financial services products remained stable.

Sales of automotive financial services in North America remained at a high level in the fiscal year now ended. In the USA, the overall market for financial services products once again performed positively. In particular, demand for leasing through captive financial service providers was consistently high. In Mexico, demand for automotive financial services products continued at a high level.

The macroeconomic and political situation in Brazil remained tense in 2017 and had a negative impact on the consumer credit business for new vehicles as well as on sales of the country-specific financial services product Consorcio, a lottery-style savings plan. The negative trend tapered off slightly in the second half of the year, however. Argentina's automotive industry was helped in 2017 by price reductions and attractive financing models from manufacturers. The above-average demand for vehicles was the basis for a good year for automotive financial services.

The performance of markets in the Asia-Pacific region during the reporting period was mixed. In China, the proportion of loan-financed vehicle purchases rose. Despite increasing restrictions on registrations in metropolitan areas, there is still considerable potential to acquire new customers for automotive-related financial services, particularly in the interior of the country. Demand for automotive financial services in Japan and Korea was stable on the whole. In Australia, the central bank's continued policy of low interest rates stimulated demand for automotive-related financial services and service contracts.

In the commercial vehicles segment, the European market for financial services again performed positively; demand also rose in China. The tense economic situation in Brazil once again put pressure on the truck and bus business and the related financial services market, though this negative trend weakened somewhat in the second half of the year.

#### NEW GROUP MODELS IN 2017

The Volkswagen Group launched a large number of attractive new models on the market in fiscal year 2017. The current product portfolio comprises 355 models. It covers almost all key segments and body types, with offerings from small cars to super sports cars in the passenger car segment, and from pickups to heavy trucks and buses in the commercial vehicles segment, as well as motorcycles.

The Volkswagen Passenger Cars brand kicked off its global product initiative in 2017, starting with the new Golf. The updated bestseller not only features improved design and new engines, but also a large number of new digital driver assistance systems and an innovative infotainment system. The range of the all-electric e-Golf was extended to 300 km. The Arteon, the brand's new top-of-the-range saloon, celebrated its world premiere. The elegant and dynamic five-door vehicle with the proportions of a Gran Turismo and coupé lines is impressively spacious and comfortable. The new Polo, which is now based on the Modular Transverse Toolkit (MQB) too, brings technological innovations to the small car segment that were previously available only in higher vehicle classes. The Polo is ushering in a new era in Brazil, where it is setting new standards in terms of quality, driving dynamics and digital innovations. In 2017, Volkswagen Passenger Cars substantially expanded its range of vehicles in the SUV seg-

ment. The new T-Roc is a young, sporty crossover model with which the brand hopes to kindle enthusiasm among new groups of customers. A long version of the Tiguan, the successful compact SUV, was also launched on the market. This version is available in Europe as the Tiguan Allspace as well as in China and the USA. Of the large SUVs, the Teramont came on the market in China and the Atlas in the USA. This means that the brand is now represented in four of the five largest vehicle segments in the USA.

The Audi brand launched the new Q5 in 2017. The sporty, progressive A5 family was also supplemented by the revamped A5 Sportback and A5 Cabriolet. At the same time, Audi expanded its range of environmentally friendly models with the A4 Avant g-tron and A5 Sportback g-tron. The brand's flagship, the new Audi A8, was developed as the world's first production model designed for highly automated driving. With a new design language, an innovative touch control interface and systematic electrification of the drive, the A8 is once again a reflection of the slogan "Vorsprung durch Technik". Audi also launched its fastest open-top production model, the R8 Spyder V10 plus, on the market. In China, the locally built Audi A3 was revamped.

ŠKODA began its SUV drive in 2017: the self-confident, powerful Kodiaq, which is based on the MQB platform, has carved out a new segment for the brand. It features all of the brand's strengths: sophisticated functionality, effortless spaciousness, cutting-edge technology and outstanding value for money. The compact SUV Karoq followed during the year. The completely redeveloped model stands out from the crowd thanks to its emotional and dynamic design as well as a wealth of innovations. The popular Octavia received an upgrade. The Citigo, the Rapid and the Rapid Spaceback were also given a face-lift.

The SEAT brand continued its major product initiative in the reporting period with the revitalized Leon. The fifth generation of the Ibiza also came onto the market. SEAT made its debut in the crossover segment with the Arona. The Ateca's younger brother combines the special merits of a compact city car with the robust features of an SUV.

In 2017, Porsche supplemented the second generation of the Panamera by adding several model variants, including the Panamera 4 E-Hybrid and Panamera Turbo S E-Hybrid, the Executive models and the Sport Turismo. In the 911 model series, Porsche launched the GTS models, the new 911 GT3 and the 911 GT2 RS – the sporty vanguard of the model series. Porsche also celebrated the world premiere of the new Cayenne. The successful model, which has been redeveloped from the ground up, combines more than ever before the performance typical of a Porsche with utmost everyday practicality.

In 2017, Bentley rolled out the Bentayga Diesel, the first of the brand's models with a diesel engine and also the world's

fastest diesel SUV. The Continental GT Supersports also celebrated its market debut.

Lamborghini launched the new Huracán RWD Spyder on the market and the Huracán Performante, along with the upgraded Aventador in the versions S Coupé and S Roadster.

Bugatti began 2017 with deliveries of the 1,500 PS super sports car Chiron, which is limited to 500 vehicles.

In the reporting period, the Volkswagen Commercial Vehicles brand launched the fully re-engineered Crafter on the market, which has been designed systematically with a strong focus on customer needs.

Scania presented a new generation of trucks for the construction and forestry industries, new engines and cabs as well as new services. With the latest generation of Euro 6 V8 engines, Scania is setting new standards in terms of fuel efficiency.

MAN entered the world of vans for the first time in 2017 with the TGE. In the bus segment, the new Lion's Coach celebrated its premiere. This marks the beginning of a new design language for buses. In the high-performance diesel engine segment, MAN Power Engineering presented the successor to the 48/60CR, the latest addition to its 4x line.

Ducati rolled out a total of seven new models in 2017: the Ducati SuperSport, the Monster 797 and 1200, the Multistrada 950, two new Scrambler models and the limited 1299 Superleggera.

#### VOLKSWAGEN GROUP DELIVERIES

In fiscal year 2017, the Volkswagen Group increased its deliveries to customers worldwide by 4.3% year-on-year and once again achieved a new record of 10,741,455 vehicles. The chart on the next page shows how deliveries changed from month to month and compares each monthly figure to the same month of the previous year. Deliveries of passenger cars and commercial vehicles are reported separately in the following.

#### VOLKSWAGEN GROUP DELIVERIES<sup>1</sup>

	2017	2016	%
Passenger Cars	10,038,650	9,635,486	+4.2
Commercial Vehicles	702,805	661,555	+6.2
<b>Total</b>	<b>10,741,455</b>	<b>10,297,041</b>	<b>+4.3</b>

<sup>1</sup> Deliveries for 2016 have been updated to reflect subsequent statistical trends. The figures include the Chinese joint ventures.

#### PASSENGER CAR DELIVERIES WORLDWIDE

With its passenger car brands, the Volkswagen Group is present in all relevant automotive markets around the world. The Group's key sales markets currently include Western Europe, China, the USA, Brazil and Mexico. The Group recorded encouraging growth in many key markets.

During the reporting period, deliveries of passenger cars to Volkswagen Group customers worldwide rose to 10,038,650 units amid partly difficult conditions in some relevant markets such as the United Kingdom and the USA. This was an increase of 403,164 vehicles or 4.2% on the previous year. Since the passenger car market as a whole expanded by 2.9% in the same period, the Volkswagen Group's share of the global market rose slightly to 12.1 (11.9%). The Group recorded the highest absolute growth in China. Sales figures in Germany and Mexico, among others, were down on the previous year. All Volkswagen Group brands lifted delivery volumes year-on-year. The Volkswagen Passenger Cars brand recorded the strongest growth in absolute terms, setting new records, as did Audi, ŠKODA, Porsche, Bentley and Lamborghini.

The table on page 104 gives an overview of passenger car deliveries to customers of the Volkswagen Group in the regions and the key individual markets. The demand trends for Group models in these markets and regions are described in the following sections.

#### Deliveries in Europe/Other markets

In 2017, the passenger car market as a whole expanded by 2.5% in Western Europe. Deliveries to customers of the Volkswagen Group there rose less pronouncedly, by 1.4% to 3,157,107 vehicles. Among other factors, this trend was due to the Golf and Polo model change, the fact that customer confidence has not yet been fully restored following the diesel issue and to customer uncertainty generated by the public discussion on driving bans for diesel vehicles. However, demand for Group models was up year-on-year in virtually all major markets in this region, with the Tiguan, Audi Q2 and SEAT Ateca models seeing the highest increases. The Audi A5 Sportback and Porsche Macan models were also very popular. The new Polo, T-Roc, Tiguan Allspace and Arteon models from the Volkswagen Passenger Cars brand, the ŠKODA Karoq and Kodiaq, and the SEAT Arona and Ibiza were very well received by the market. The Group's share of the passenger car market in Western Europe was 22.0 (22.3)%.

**VOLKSWAGEN GROUP DELIVERIES BY MONTH***Vehicles in thousands*

In the Central and Eastern Europe regions, where passenger car markets have grown considerably, the Volkswagen Group delivered 12.9% more vehicles to customers in the reporting period than in the previous year. The Czech Republic and Poland continued to see strong growth in demand for Group models, and in Russia we also registered a marked upsurge in unit sales. Demand for the Golf, Tiguan, Audi Q2, ŠKODA Fabia, ŠKODA Rapid and ŠKODA Octavia models was very encouraging. In addition, the new ŠKODA Karoq and Kodiaq models and the SEAT Ateca models were exceedingly popular. The Volkswagen Group's share of the passenger car market in Central and Eastern Europe improved slightly to 22.1 (22.0)%.

In South Africa, demand for Volkswagen Group vehicles in 2017 increased by 1.4% compared with the previous year. The passenger car market as a whole grew by 2.4% in the same period. The best-selling Group model in South Africa was the Polo.

In the markets of the Middle East region, which are seeing a modest decline, we sold 6.6% fewer vehicles in the past fiscal year than in the year before. The Polo, Golf, Passat and ŠKODA Octavia models saw the highest demand.

**Deliveries in Germany**

The German passenger car market continued its growth in fiscal year 2017, expanding by 2.7%. The Volkswagen Group delivered 1,131,414 passenger cars to customers in its home market, a slight decrease on the prior-year level (-0.5%). This was due in particular to the fact that customer confidence has not yet been fully restored following the diesel issue as well as to customer uncertainty generated by the public discussion

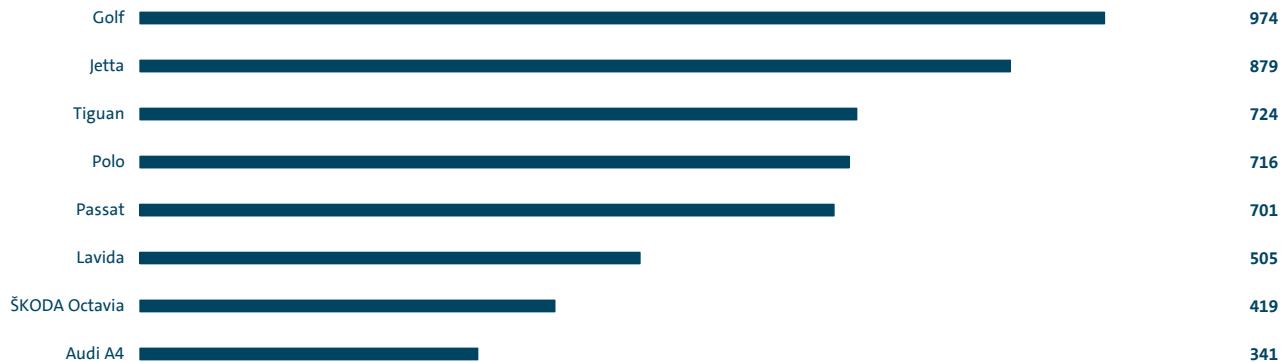
on driving bans for diesel vehicles. The Tiguan, Audi Q2, Audi A4 Avant, Audi A5 Sportback and SEAT Ateca models saw the strongest growth in demand. The new T-Roc, Tiguan Allspace and Arteon models from the Volkswagen Passenger Cars brand, the new ŠKODA Karoq and Kodiaq models, the new SEAT Arona and Ibiza models and the Porsche Macan were also very popular. In the registration statistics of the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority), seven Group models led their respective segments at the end of 2017: the up!, Polo, Golf, Tiguan, Touran, Passat, and Porsche 911. The Golf continued to top the list of the most popular passenger cars in Germany in terms of registrations.

**Deliveries in North America**

The Volkswagen Group handed over 962,980 vehicles to customers in North America during the reporting period in a slightly declining overall market for passenger cars and light commercial vehicles. This was 3.8% more than in the previous year. The Group's market share was 4.7 (4.4)%. The Jetta remained the Group's best-selling model in North America.

In the US market, demand for Volkswagen Group models rose by 5.8% compared with the previous year. The market as a whole declined by 1.8% in this period. Models in the SUV and pickup segments remained particularly popular. The Golf Estate, Audi A5, Audi Q5, Audi Q7 and Porsche Macan models enjoyed an encouraging rise in demand. The new SUV Atlas, the Tiguan Allspace from the Volkswagen Passenger Cars brand and the Audi A5 Sportback were well received by the market.

**WORLDWIDE DELIVERIES OF THE GROUP'S MOST SUCCESSFUL GROUP MODEL RANGE IN 2017**  
*Vehicles in thousands*



In Canada, we delivered 16.6% more vehicles to customers in the reporting period than in the previous year in a growing overall market. Demand for the Golf Estate, Audi A4, Audi Q5 and Porsche Macan models developed particularly encouragingly. The new SUV Atlas and Tiguan with extended wheelbase were also very popular.

In the Mexican market, which is declining on the whole, the Group's sales fell by 6.4% compared with the previous year. The Vento, Jetta, Gol and SEAT Ibiza models were particularly popular.

#### **Deliveries in South America**

The markets for passenger cars and light commercial vehicles in South America witnessed a clear surge in demand in 2017 (+12.6%). In this region, the Volkswagen Group handed over 445,636 vehicles to customers, an increase of 23.0% on the weak previous year. The Volkswagen Group's share of the passenger car market in this region rose to 11.5 (10.5)%.

The Brazilian market also recovered in the reporting period. We delivered 17.7% more vehicles to customers there than in the previous year. The Gol, Voyage and Saveiro models saw the highest increases. Demand was also strong for the new Polo.

Group sales were up 35.7% year-on-year in Argentina. The market as a whole grew at a somewhat weaker pace at 26.2%. The Gol was the best-selling vehicle in Argentina. The Suran and Amarok models were also very popular.

#### **Deliveries in the Asia-Pacific region**

The passenger car markets in the Asia-Pacific region experienced the largest growth in absolute terms of any world

region again in 2017. Demand for Volkswagen Group models rose in this region by 4.2% year-on-year to 4,462,387 units. The market share in this region was unchanged at 12.1 (12.1)%.

China, the world's largest single market, was again the main growth driver of the Asia-Pacific region in the reporting year, recording the highest absolute increase. Above all, there was continued strong demand for attractively priced entry-level models in the SUV segment. Deliveries to customers of the Volkswagen Group in China exceeded the prior-year figure by 5.0%. The successfully concluded negotiations by the Audi brand for the strategic further development of its business in China contributed to this positive result in the second half of the year. The Bora, Magotan and Passat models recorded encouraging growth rates. Demand was likewise high for the new Phideon, the Audi A4 and the Porsche Cayenne. The new C-Trek, the new version of the Tiguan with extended wheelbase, and the new ŠKODA Octavia Combi were successfully launched on the market, as were new SUV Teramont and the ŠKODA Kodiaq.

The Indian passenger car market grew further during the reporting year. The Volkswagen Group delivered 9.7% more vehicles to customers there in this period than in the previous year. The most popular Group model in India was the Polo; the new Ameo from the Volkswagen Passenger Cars brand and the ŠKODA Rapid were also very popular.

Passenger car deliveries to the Group's customers in Japan in the past fiscal year exceeded the prior-year figure by 2.1%. The total market volume grew at a somewhat stronger pace in the same period. The Polo, Golf and Audi A3 were the most sought-after Group models.

PASSENGER CAR DELIVERIES TO CUSTOMERS BY MARKET<sup>1</sup>

	DELIVERIES (UNITS)		CHANGE (%)
	2017	2016	
<b>Europe/Other markets</b>	<b>4,167,647</b>	<b>4,062,454</b>	<b>+2.6</b>
<b>Western Europe</b>	<b>3,157,107</b>	<b>3,114,032</b>	<b>+1.4</b>
of which: Germany	1,131,414	1,136,971	-0.5
United Kingdom	531,592	523,111	+1.6
Spain	270,645	244,990	+10.5
Italy	259,920	238,537	+9.0
France	256,712	249,146	+3.0
<b>Central and Eastern Europe</b>	<b>668,522</b>	<b>592,275</b>	<b>+12.9</b>
of which: Russia	173,384	155,672	+11.4
Poland	145,024	122,622	+18.3
Czech Republic	142,842	134,926	+5.9
<b>Other markets</b>	<b>342,018</b>	<b>356,147</b>	<b>-4.0</b>
of which: Turkey	158,523	173,965	-8.9
South Africa	79,968	78,897	+1.4
<b>North America</b>	<b>962,980</b>	<b>928,033</b>	<b>+3.8</b>
of which: USA	625,128	591,063	+5.8
Mexico	223,548	238,946	-6.4
Canada	114,304	98,024	+16.6
<b>South America</b>	<b>445,636</b>	<b>362,343</b>	<b>+23.0</b>
of which: Brazil	272,231	231,196	+17.7
Argentina	125,153	92,257	+35.7
<b>Asia-Pacific</b>	<b>4,462,387</b>	<b>4,282,656</b>	<b>+4.2</b>
of which: China	4,173,834	3,975,071	+5.0
Japan	84,827	83,109	+2.1
India	72,467	66,046	+9.7
<b>Worldwide</b>	<b>10,038,650</b>	<b>9,635,486</b>	<b>+4.2</b>
Volkswagen Passenger Cars	6,230,229	5,980,309	+4.2
Audi	1,878,105	1,867,738	+0.6
ŠKODA	1,200,535	1,126,477	+6.6
SEAT	468,431	408,703	+14.6
Bentley	11,089	11,023	+0.6
Lamborghini	3,815	3,457	+10.4
Porsche	246,375	237,778	+3.6
Bugatti	71	1	x

<sup>1</sup> Deliveries for 2016 have been updated to reflect subsequent statistical trends. The figures include the Chinese joint ventures.

### COMMERCIAL VEHICLE DELIVERIES

The Volkswagen Group delivered a total of 702,805 commercial vehicles to customers worldwide in 2017 (+6.2%). Trucks accounted for 183,481 units (+10.7%) and buses for 19,218 units (+8.1%). Sales of light commercial vehicles increased by 4.6% year-on-year to 500,106 units.

In Western Europe, deliveries were up by 1.9% on the previous year at 426,774 vehicles as a result of the sustained economic recovery; of this total, 334,087 were light commercial vehicles, 87,258 were trucks and 5,429 were buses. The Transporter and Caddy were the most sought-after Group models in the Western European markets.

We handed over 76,054 vehicles to customers in the markets in Central and Eastern Europe in the period from January to December 2017 (+16.3%); of this figure, 41,291 were light commercial vehicles, 33,613 were trucks and 1,150 were buses. The Transporter and the Caddy were the Group models experiencing the highest demand. In Russia, the region's largest market, sales climbed 61.9% year-on-year to 18,291 units on the back of the incipient economic recovery, demand for replacement vehicles and falling inflation rates.

In the Other markets, deliveries of Volkswagen Group commercial vehicles fell by 5.3% to a total of 67,155 units:

46,678 light commercial vehicles, 17,050 trucks and 3,427 buses.

Deliveries in North America amounted to 13,416 vehicles (+20.4%), which were handed over almost exclusively to customers in Mexico. In this region, we handed over 10,432 light commercial vehicles, 1,042 trucks and 1,942 buses to customers.

The Volkswagen Group sold a total of 75,949 units (+28.3%) in South America. Of the units delivered, 41,331 were light commercial vehicles, 29,589 were trucks and 5,029 were buses. The Transporter and the Amarok were particularly popular. In Brazil, deliveries rose by 34.9% once the difficult economic climate improved; here, 12,633 light commercial vehicles, 20,363 trucks and 2,785 buses were handed over to customers.

In the Asia-Pacific region, the Volkswagen Group delivered 43,457 vehicles to customers in the reporting period; 26,287 light commercial vehicles, 14,929 trucks and 2,241 buses. This was 20.8% more than in the previous year. The Transporter and the Amarok were the most popular Group models. In China, sales were up 47.2% on the previous year at 10,408 vehicles. Of this total, 5,566 were light commercial vehicles, 4,532 were trucks and 310 were buses.

### COMMERCIAL VEHICLE DELIVERIES TO CUSTOMERS BY MARKET<sup>1</sup>

	DELIVERIES (UNITS)		CHANGE (%)
	2017	2016	
<b>Europe/Other markets</b>			
Western Europe	569,983	555,255	+2.7
Central and Eastern Europe	426,774	418,931	+1.9
Other markets	76,054	65,396	+16.3
North America	67,155	70,928	-5.3
South America	13,416	11,140	+20.4
of which: Brazil	75,949	59,196	+28.3
Asia-Pacific	35,781	26,532	+34.9
of which: China	43,457	35,964	+20.8
Worldwide	10,408	7,071	+47.2
Volkswagen Commercial Vehicles	702,805	661,555	+6.2
Scania	497,894	477,974	+4.2
MAN	90,777	81,346	+11.6
	114,134	102,235	+11.6

<sup>1</sup> Deliveries for 2016 have been updated to reflect subsequent statistical trends.

#### **DELIVERIES IN THE POWER ENGINEERING SEGMENT**

Orders in the Power Engineering segment are usually part of major investment projects. Lead times typically range from just under one year to several years, and partial deliveries as construction progresses are common. Accordingly, there is a time lag between incoming orders and sales revenue from the new construction business.

Sales revenue in the Power Engineering segment was largely driven by Engines & Marine Systems and Turbomachinery, which together generated well over two-thirds of overall sales revenue.

#### **ORDERS RECEIVED IN THE PASSENGER CARS SEGMENT IN WESTERN EUROPE**

Due to the positive development of the Western European markets, demand for passenger cars increased in fiscal year 2017 compared with the previous year. Incoming orders in the reporting period were 6.0% higher than in 2016. At the same time, incoming orders rose in Germany (+6.7%), just as in other significant markets throughout the region.

#### **ORDERS RECEIVED FOR COMMERCIAL VEHICLES**

Orders received for light commercial vehicles of the Volkswagen Group in Western Europe were 2.7% higher than in the previous year at 347,964 units.

New orders for mid-sized and heavy trucks and buses witnessed a positive trend in 2017, with orders received for 225,813 vehicles (+18.5%). In Western Europe, our main sales market, ongoing positive economic stimulus gave a boost to incoming orders. The order intake in South America rose after the difficult economic climate improved, especially in Brazil.

#### **ORDERS RECEIVED IN THE POWER ENGINEERING SEGMENT**

The long-term performance of the Power Engineering business is determined by the macroeconomic environment. Individual major orders lead to fluctuations in incoming orders during the year that do not correlate with these long-term trends.

Orders received in the Power Engineering segment in 2017 amounted to €3.7 (3.3) billion. Engines & Marine Systems and Turbomachinery generated around two-thirds of the

order volume in a persistently difficult market environment. The power plant business performed positively. For example, a Turkish energy company ordered 38 engines with a combined output of 754 MW for its floating power plants, which provide a flexible solution to pressing energy shortages. The Company was also successful in the Indonesian market, securing orders for 25 engines with an aggregate output of 314 MW.

#### **VOLKSWAGEN GROUP FINANCIAL SERVICES**

The Financial Services Division combines the Volkswagen Group's dealer and customer financing, leasing, banking and insurance activities, fleet management and mobility offerings. The division comprises Volkswagen Financial Services and the financial services activities of Scania, Porsche and Porsche Holding Salzburg.

Demand for the Financial Services Division's products and services remained strong in fiscal year 2017. At 7.3 (7.1) million, the number of new financing, leasing, service and insurance contracts signed worldwide was above the previous year's level. The ratio of leased or financed vehicles to Group deliveries (penetration rate) in the Financial Services Division's markets rose to 33.4 (33.3)% in the reporting period. As of December 31, 2017, the total number of contracts was 18.4 million, up 5.7% as against the end of 2016. The number of contracts in the Customer financing/Leasing area rose by 6.3% to 10.1 million, while it increased by 5.0% to 8.4 million in the Service/Insurance area.

In the Europe/Other markets region, the number of new contracts signed in the past fiscal year climbed 3.7% to 5.4 million. At the end of the reporting period, the total number of contracts was 13.4 million, up 8.0% year-on-year. Of this figure, 6.4 million contracts were attributable to the Customer financing/Leasing area (+8.6%). The penetration rate improved to 47.6 (46.8)%.

The number of contracts in North America as of December 31, 2017 declined to 2.7 million, 4.7% fewer than in the previous year. The Customer financing/Leasing area accounted for 1.8 million contracts (-3.4%). The number of new contracts signed amounted to 874 thousand, a decrease of 11.6% versus the previous year. The ratio of leased or financed vehicles to Group deliveries in North America fell to 60.5 (63.3)%.

In South America, 205 (197) thousand new contracts were signed in 2017. The total number of contracts at the end of the reporting period was 538 thousand, down 16.9% compared to the end of the previous year. The contracts mainly related to the Customer financing/Leasing area. At 26.6 (30.4)%, the penetration rate was lower than in 2016.

In the Asia-Pacific region, the number of new contracts signed rose by 12.7% to 834 thousand units. At the end of 2017, the total number of contracts was 1.8 million, up 15.9% year-on-year. The Customer financing/Leasing area accounted for 1.5 million contracts (+20.8%). The ratio of leased or financed vehicles to Group deliveries in this region was 16.1 (15.1)%.

#### **SALES TO THE DEALER ORGANIZATION**

The Volkswagen Group's sales to the dealer organization increased by 3.7% to 10,777,048 units (including the Chinese joint ventures) in the reporting year. This was due to higher demand in Asia-Pacific, especially China, in South America and North America, and in Europe. Outside Germany, the unit sales volume rose by 4.1%. In Germany, we increased unit sales by 0.6%. At 11.7%, the proportion of the Group's sales accounted for by Germany was lower than in 2016 (-12.1%).

The Golf, Polo, Jetta, Lavida and Tiguan were our biggest sellers last year. The largest increases in demand were recorded by the Tiguan, Gol and Atlas/Teramont models from the Volkswagen Passenger Cars brand, the Audi Q2 and the A5 family, and the ŠKODA Kodiaq and SEAT Ateca. The Porsche Panamera achieved a strong growth rate.

#### **PRODUCTION**

The Volkswagen Group produced 10,875,000 vehicles worldwide in fiscal year 2017, 4.5% more than in the previous year. In total, our Chinese joint ventures manufactured 3.7% more units than in the year before. The percentage of the Group's total production accounted for by Germany was lower than in 2016, at 23.7 (25.8)%. Our plants worldwide produced an average of 44,170 vehicles per working day, an increase of 2.3% on the prior-year level. Starting in 2017, the Crafter is included in the Volkswagen Group's production figures.

#### **INVENTORIES**

Global inventories at Group companies and in the dealer organization were higher at the end of the reporting period than at year-end 2016, mainly due to demand-induced stock building.

#### **EMPLOYEES**

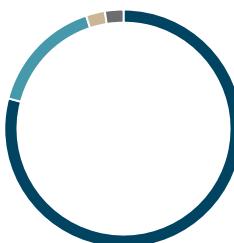
Including the Chinese joint ventures, the Volkswagen Group employed an average of 634,396 people (excluding trainees) in fiscal year 2017, an increase of 2.4% year-on-year. Our companies in Germany employed 284,734 people on average in 2017; at 44.9 (45.2)%, their share of the headcount was slightly below the level of the previous year.

The Volkswagen Group had 615,081 active employees (+2.3%) as of December 31, 2017. In addition, 8,004 employees were in the passive phase of their partial retirement and 19,207 young people were in vocational traineeships. The Volkswagen Group's headcount was 642,292 employees (+2.5%) at the end of the reporting period. The production-related expansion, the recruitment of specialists within and outside Germany and the expansion of the workforce in the new plants in Mexico, China and Poland were offset by the reduction of around 9,800 employees as a result of the disposal of part of the PGA Group SAS. A total of 287,480 people were employed in Germany (+2.1%), while 354,812 were employed abroad (+2.8%).

#### **EMPLOYEES BY DIVISION/BUSINESS AREA**

*as of December 31, 2017*

Passenger Cars	507,917
Commercial Vehicles	101,673
Power Engineering	16,553
Financial Services	16,149



# Shares and Bonds

Volkswagen AG's ordinary and preferred shares outperformed the market as a whole in 2017 in a volatile environment. The Volkswagen Group successfully returned to the European bond market.

## EQUITY MARKETS AND PERFORMANCE OF THE PRICE OF VOLKSWAGEN'S SHARES

In the period from January to December 2017, prices on the international equity markets rose amid volatile trading.

The DAX also recorded an increase compared with the end of 2016. The promising economic performance of important industrialized nations, the improved situation in the US labor market, and the outcome of the elections in some EU member states had a positive impact, as did the adopted US tax reform, which among other factors contributed to financial relief for companies. Uncertainty as regards to the economic policy of the new US government, the election results in Europe, the monetary policy of the US Federal Reserve as well as the European Central Bank, the strong euro and international crises also had a negative impact on share listings at times.

In 2017, Volkswagen AG's preferred and ordinary shares surpassed the rising market trend amid high volatility. Positive stimulus was generated by settlement agreements in the USA in connection with the diesel issue, strong corporate earnings, sizeable cash flow and the successful performance of the Volkswagen Passenger Cars brand. Share prices were

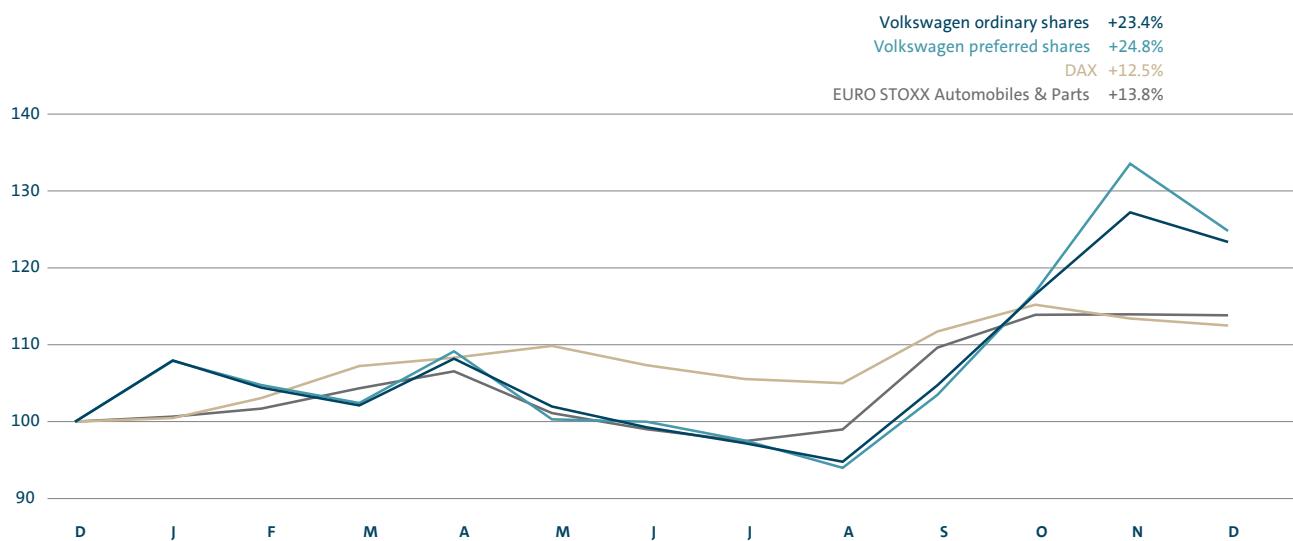
negatively impacted by the provisions required in connection with the diesel issue as well as uncertainty about further legal risks arising from the diesel issue, suspected antitrust behavior by German automotive companies and the future regulatory framework for diesel and electric vehicles.

## VOLKSWAGEN KEY SHARE FIGURES AND MARKET INDICES FROM JANUARY 1 TO DECEMBER 31, 2017

		High	Low	Closing
Ordinary share	Price (€)	173.95	128.70	168.70
	Date	Nov. 30	Aug. 10	Dec. 29
Preferred share	Price (€)	178.10	125.35	166.45
	Date	Nov. 30	Aug. 31	Dec. 29
DAX	Price	13,479	11,510	12,918
	Date	Nov. 3	Feb. 6	Dec. 29
ESTX Auto & Parts	Price	610	508	593
	Date	Nov. 3	July 31	Dec. 29

**PRICE DEVELOPMENT FROM DECEMBER 2016 TO DECEMBER 2017**

Index based on month-end prices: December 31, 2016 = 100

**DIVIDEND POLICY**

Our dividend policy matches our financial strategy. In the interests of all stakeholders, we aim for continuous dividend growth so that our shareholders can participate appropriately in our business success. The proposed dividend amount therefore reflects our financial management objectives – in particular, ensuring a solid financial foundation as part of the implementation of our strategy.

The Board of Management and Supervisory Board of Volkswagen AG are proposing a dividend of €3.90 per ordinary share and €3.96 per preferred share. On this basis, the total dividend for fiscal year 2017 amounts to €2.0 (1.0) billion. The payout ratio is based on the Group's earnings after tax attributable to Volkswagen AG shareholders. This amounts to 17.3% for the reporting period and stood at 19.7% in the previous year. In our new Group strategy, we aim to achieve a payout ratio of 30%.

**DIVIDEND YIELD**

Based on the dividend proposal for the reporting period, the dividend yield on Volkswagen ordinary shares is 2.3 (1.5)%, measured by the closing price on the last trading day in 2017. The dividend yield on preferred shares is 2.4 (1.5)%.

The current dividend proposal can be found in the chapter entitled "Volkswagen AG (condensed, according to the German Commercial Code)", on page 131 of this annual report.

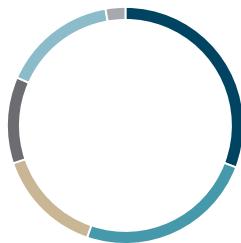
**EARNINGS PER SHARE**

Basic earnings per ordinary share were €22.63 (10.24) in fiscal year 2017. Basic earnings per preferred share were €22.69 (10.30). In accordance with IAS 33, the calculation is based on the weighted average number of ordinary and preferred shares outstanding in the reporting period. Since the number of basic and diluted shares is identical, basic earnings per share correspond to diluted earnings per share.

See also note 11 to the Volkswagen consolidated financial statements for the calculation of earnings per share.

**i FURTHER INFORMATION ON VOLKSWAGEN SHARES**  
[www.volkswagenag.com/ir](http://www.volkswagenag.com/ir)

**SHAREHOLDER STRUCTURE AT DECEMBER 31, 2017**  
as a percentage of subscribed capital



Porsche Automobil Holding SE	30.8
Foreign institutional investors	24.5
Qatar Holding LLC	14.6
State of Lower Saxony	11.8
Private shareholders/Others	15.7
German institutional investors	2.7

**SHAREHOLDER STRUCTURE AT DECEMBER 31, 2017**

Volkswagen AG's subscribed capital amounted to €1,283,315,873.28 at the end of the reporting period. The shareholder structure of Volkswagen AG as of December 31, 2017 is shown in the chart on this page.

The distribution of voting rights for the 295,089,818 ordinary shares was as follows at the reporting date: Porsche Automobil Holding SE, Stuttgart, held 52.2% of the voting rights. The second-largest shareholder was the State of Lower Saxony, which held 20.0% of the voting rights. Qatar Holding LLC was the third-largest shareholder, with 17.0%. The remaining 10.8% of ordinary shares were attributable to other shareholders.

Notifications of changes in voting rights in accordance with the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act) are published on our website at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir).

**i OUR INVESTOR RELATIONS TEAM IS AVAILABLE FOR QUERIES AND COMMENTS AT ALL TIMES:**

**WOLFSBURG OFFICE (VOLKSWAGEN AG)**

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**VOLKSWAGEN SHARE DATA**

	Ordinary shares	Preferred shares
ISIN	DE0007664005	DE0007664039
WKN	766400	766403
Deutsche Börse/Bloomberg	VOW	VOW3
Reuters	VOWG.DE	VOWG_p.DE
	DAX, CDAX, EURO STOXX,	Automobiles & Parts, Prime All Share, MSCI Euro
Primary market indices	CDAX, Prime All Share, MSCI Euro, S&P Global 100 Index	Berlin, Düsseldorf, Frankfurt, Hamburg, Hanover, Munich, Stuttgart, Xetra, Luxembourg, New York <sup>1</sup> , SIX Swiss Exchange
Exchanges		

<sup>1</sup> Traded in the form of "sponsored unlisted American Depository Receipts" (ADRs). Five ADRs correspond to one underlying Volkswagen ordinary or preferred share.

**INVESTOR RELATIONS ACTIVITIES**

Investor relations activities in fiscal year 2017 were dominated mainly by communications related to the Volkswagen Group's future program TOGETHER – Strategy 2025 as well as the relevant initiatives and programs launched by the Group brands and regions. One of the central activities was a Capital Markets Day held as part of the annual press and investor conference on March 14, 2017 at which detailed information on Volkswagen's strategy and financial targets was provided. The targets were firmed up at the annual planning session and communicated in November at a conference call.

In fiscal year 2017, the Investor Relations team once again provided extensive information to investors and analysts in all key financial markets worldwide about the strategic focus, current business performance and future prospects of the Volkswagen Group. At roughly 700 one-on-one discussions, road shows and conferences, we maintained close contact with capital market participants. Many of these discussions involved an exchange of ideas between investors and analysts and members of the Board of Management and Group senior executives, in addition to some discussions with the Chairman of the Supervisory Board.

Additional Volkswagen share data, as well as corporate news, reports and presentations can be downloaded from our website at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir).

## VOLKSWAGEN SHARE KEY FIGURES

DIVIDEND DEVELOPMENT		2017	2016	2015	2014	2013
Number of no-par value shares at Dec. 31						
Ordinary shares	thousands	295,090	295,090	295,090	295,090	295,090
Preferred shares	thousands	206,205	206,205	206,205	180,641	170,148
Dividend <sup>1</sup>						
per ordinary share	€	3.90	2.00	0.11	4.80	4.00
per preferred share	€	3.96	2.06	0.17	4.86	4.06
Dividend paid <sup>1</sup>	€ million	1,967	1,015	68	2,294	1,871
on ordinary shares	€ million	1,151	590	32	1,416	1,180
on preferred shares	€ million	817	425	35	878	691
SHARE PRICE DEVELOPMENT <sup>2</sup>		2017	2016	2015	2014	2013
Ordinary share						
Closing	€	168.70	136.75	142.30	180.10	196.90
Price performance	%	+23.4	-3.9	-21.0	-8.5	+21.0
Annual high	€	173.95	144.20	247.55	197.35	196.90
Annual low	€	128.70	108.95	101.15	150.70	132.60
Preferred share						
Closing	€	166.45	133.35	133.75	184.65	204.15
Price performance	%	+24.8	-0.3	-27.6	-9.6	+18.6
Annual high	€	178.10	138.80	255.20	203.35	204.15
Annual low	€	125.35	94.00	92.36	150.25	138.50
Beta factor <sup>3</sup>	factor	1.12	1.22	1.28	1.38	1.32
Market capitalization at Dec. 31	€ billion	84.1	67.9	69.6	86.5	92.8
Equity attributable to Volkswagen AG shareholders and hybrid capital investors at Dec. 31	€ billion	108.8	92.7	88.1	90.0	87.7
Ratio of market capitalization to equity	factor	0.77	0.73	0.79	0.96	1.06
KEY FIGURES PER SHARE		2017	2016	2015	2014	2013
Earnings per ordinary share <sup>4</sup>						
basic	€	22.63	10.24	-3.20	21.82	18.61
diluted	€	22.63	10.24	-3.20	21.82	18.61
Equity <sup>5</sup>	€	217.13	184.90	175.67	189.16	188.58
Price/earnings ratio <sup>6</sup>						
Ordinary share	factor	7.5	13.4	x	8.2	10.6
Preferred share	factor	7.3	13.0	x	8.4	10.9
Dividend yield <sup>7</sup>						
Ordinary share	%	2.3	1.5	0.1	2.7	2.0
Preferred share	%	2.4	1.5	0.1	2.6	2.0
STOCK EXCHANGE TURNOVER <sup>8</sup>		2017	2016	2015	2014	2013
Turnover of Volkswagen ordinary shares	€ billion	3.5	3.3	6.9	3.2	3.5
	million shares	23.6	25.4	45.4	17.8	21.4
Turnover of Volkswagen preferred shares	€ billion	45.1	41.1	72.4	45.1	43.0
	million shares	312.3	347.0	444.4	248.3	252.8
Volkswagen share of total DAX turnover	%	5.4	5.0	7.1	5.4	5.7

1 Figures for the years 2013 to 2016 relate to dividends paid in the following year. For 2017, the figures relate to the proposed dividend.

2 Xetra prices.

3 See page 127 for the calculation.

4 See note 11 to the consolidated financial statements (Earnings per share) for the calculation.

5 Based on the total number of ordinary and preferred shares on December 31 (excluding potential shares from the mandatory convertible note).

6 Ratio of year-end-closing price to earnings per share.

7 Dividend per share based on the year-end-closing price.

8 Order book turnover on the Xetra electronic trading platform (Deutsche Börse).

**REFINANCING STRUCTURE OF THE VOLKSWAGEN GROUP**  
as of December 31, 2017



### REFINANCING

In the course of 2017, the Volkswagen Group was able to increase the number of bonds issued on various money and capital markets compared with the prior year. In particular, senior and unsecured bonds were issued again in Europe, where we successfully placed a benchmark bond for the Automotive Division for the first time since 2015. This had a volume of €8.0 billion. We were also active for the Financial Services Division in this market, issuing three benchmark bonds totaling €7.75 billion. In addition to this, we issued private placements.

In June 2017, we boosted net liquidity by placing unsecured, subordinated hybrid notes with an aggregate principal amount of €3.5 billion. The perpetual notes were issued in two tranches and can only be called by the issuer. One tranche with a volume of €1.5 billion can only be called after five and a half years, while the other tranche of €2.0 billion can only be called after ten years.

A further focus of refinancing was the issue of commercial paper, especially in Europe and in euros.

Asset-backed security (ABS) transactions were another important element of our refinancing activities, amounting to over €4.1 billion in Europe.

Bonds and ABS transactions were also issued in local capital markets, including Australia, Brazil, China, India and Mexico.

In addition, the Financial Services Division issued a public promissory note with a value of €0.9 billion.

The proportion of fixed-rate instruments in the past year was roughly twice as high as the proportion of variable-rate instruments.

In all refinancing arrangements, we pursue the goal of excluding risks related to interest rates and currency by entering into derivatives contracts at the same time.

The table below shows how our money and capital market programs were utilized as of December 31, 2017, and illustrates the financial flexibility of the Volkswagen Group:

PROGRAMS	Authorized volume € billion	Amount utilized on Dec. 31, 2017 € billion
Commercial Paper	36.3	15.0
Bonds	127.6	58.1
of which hybrid issues	–	11.0
Asset-backed securities	71.2	34.9

## RATINGS

	VOLKSWAGEN AG			VOLKSWAGEN FINANCIAL SERVICES AG			VOLKSWAGEN BANK GMBH		
	2017	2016	2015	2017	2016	2015	2017	2016	2015
<b>Standard &amp; Poor's</b>									
short-term	A-2	A-2	A-2	A-2	A-2	A-2	A-2	A-2	A-2
long-term	BBB+	BBB+	BBB+	BBB+	BBB+	BBB+	A-	A-	A-
outlook	stable	negative	negative	stable	negative	negative	negative	negative	negative
<b>Moody's Investors Service</b>									
short-term	P-2	P-2	P-2	P-2	P-1	P-1	P-1	P-1	P-1
long-term	A3	A3	A3	A3	A2	A1	A3	Aa3	A1
outlook	negative	negative	negative	negative	negative	negative	negative	negative	negative

The €20.0 billion syndicated credit line for Volkswagen AG that was agreed with a banking syndicate in December 2015 was terminated in June 2017 as contractually agreed. After exercising an extension option in 2015, the syndicated credit line of €5.0 billion agreed in July 2011 was extended to April 2020. This credit facility remained unused as of the end of 2017.

Syndicated credit lines worth a total of €6.4 billion at other Group companies have also not been drawn down. In addition, Group companies had arranged bilateral, confirmed credit lines with national and international banks in various other countries for a total of €8.5 billion, of which €3.4 billion was drawn down.

respectively. In September 2017, the long-term rating for Volkswagen Financial Services AG was lowered by one notch from A2 to A3. The rating for Volkswagen Bank GmbH was downgraded by three notches from Aa3 to A3. The short-term rating of Volkswagen Financial Services AG was lowered by one notch from P-1 to P-2, while that of Volkswagen Bank GmbH remained unchanged at P-1. These changes were due to the completion of the reorganization at Financial Services AG: Volkswagen Bank GmbH is now a subsidiary of Volkswagen AG. This means that the financing structures of Volkswagen Bank GmbH and Volkswagen Financial Services AG are examined separately. The outlook for all three companies is still classed as negative.

## RATINGS

In 2017, the rating agencies Standard & Poor's and Moody's Investors Service conducted the regular update of their credit ratings for Volkswagen AG, Volkswagen Financial Services AG and Volkswagen Bank GmbH.

In November 2017, Standard & Poor's confirmed its short-term and long-term ratings of A-2 and BBB+ for Volkswagen AG and Volkswagen Financial Services AG, and of A-2 and A- for Volkswagen Bank GmbH. The outlook for Volkswagen AG and Volkswagen Financial Services AG improved from "negative" to "stable" due to the better than expected operating performance. The outlook for Volkswagen Bank GmbH was left unchanged at "negative".

Moody's Investors Service left the short-term and long-term ratings of Volkswagen AG unchanged at P-2 and A3

## VOLKSWAGEN IN SUSTAINABILITY RANKINGS AND INDICES

Analysts and investors are basing their recommendations and decisions increasingly on companies' sustainability profiles. They draw primarily on sustainability ratings to evaluate a company's environmental, social and governance performance.

In sustainability rankings and indices such as the Dow Jones Sustainability Indices, FTSE4 Good Indices, Sustainalytics and oekom research, where we held top positions before the emissions issue, Volkswagen's ratings have been downgraded or removed. Volkswagen had a score of A- in the CDP (formerly Carbon Disclosure Project) and an A rating in the Water Disclosure Project (WDP).

# Results of Operations, Financial Position and Net Assets

The Volkswagen Group generated significantly higher sales revenue in fiscal year 2017 than in 2016. Despite further charges and high cash outflows in connection with the diesel issue, operating profit exceeded the prior-year figure and net liquidity in the Automotive Division continued at a robust level.

The Volkswagen Group's segment reporting comprises the four reportable segments Passenger Cars, Commercial Vehicles, Power Engineering and Financial Services, in compliance with IFRS 8 and in line with the Group's internal management and reporting.

At Volkswagen, segment result is measured on the basis of the operating result.

The reconciliation column contains activities and other operations that do not by definition constitute segments. These include the unallocated Group financing activities. The reconciliation also contains consolidation adjustments between the segments (including the holding company functions). Purchase price allocation for Porsche Holding Salzburg and Porsche, Scania and MAN reflects their accounting treatment in the segments.

The Automotive Division comprises the passenger cars, commercial vehicles and power engineering segments, as well as the figures from the reconciliation. The passenger cars

segment and the reconciliation are combined to form the Passenger Cars Business Area; for commercial vehicles and power engineering, the segment is the same as the business area. The Financial Services Division corresponds to the financial services segment.

## SALE OF THIRD-PARTY-BRAND DEALERSHIPS OF PORSCHE HOLDING SALZBURG

The sale of part of the PGA Group SAS to the Emil Frey Group was executed on June 1, 2017. The sale was made in connection with the strategic development of Porsche Holding Salzburg's dealer network and the corresponding focus on dealerships exclusively selling Volkswagen Group brand vehicles. This had a positive effect of €0.8 billion on the Group's net liquidity and, taking into account the disposal of the assets and liabilities, resulted in immaterial income for the Group, which was reported in other operating income.

## KEY FIGURES FOR 2017 BY SEGMENT

€ million	Passenger Cars	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue	188,405	35,200	3,283	33,733	260,621	-29,939	230,682
Segment result (operating result)	12,644	1,892	-55	2,673	17,153	-3,335	13,818
as a percentage of sales revenue	6.7	5.4	-1.7	7.9			6.0
Capex, including capitalized development costs	15,713	1,915	159	421	18,208	104	18,313

**SPECIAL ITEMS**

Special items consist of certain items in the financial statements whose separate disclosure the Board of Management believes can enable a better assessment of our economic performance.

In fiscal year 2017, negative special items recognized in the operating profit amounted to €-3.2 (-7.5) billion. In the reporting period, these related exclusively to charges in the Passenger Cars Business Area in connection with the diesel issue, primarily due to higher expenses attributable to the buyback/retrofit programs for 2.0l and 3.0l TDI vehicles in North America and to higher legal risks. In fiscal year 2016, these items amounted to €-6.4 billion.

The prior-year period also contained additional special items in the Passenger Cars Business Area for potentially faulty airbags manufactured and supplied by Takata (€-0.3 billion), as well as for restructuring measures in the Passenger Cars (€-0.2 billion), Commercial Vehicles (€-0.1 billion) and Power Engineering (€-0.2 billion) business areas. In 2016, provisions recognized in connection with the commercial vehicles antitrust proceedings launched by the European Commission also led to special items (€-0.4 billion) in the Commercial Vehicles Business Area.

**RESULTS OF OPERATIONS****Results of operations of the Group**

In 2017, the Volkswagen Group's sales revenue increased by 6.2% year-on-year to €230.7 billion. In particular, higher volumes and the healthy business performance in the Financial Services Division had a positive effect, while exchange rates had a negative impact. At 80.8 (79.9)% the major share of sales revenue was recorded outside Germany.

Gross profit improved by €1.5 billion to €42.5 billion. Adjusted for special items recorded under this item in both periods, gross profit increased to €44.8 (42.5) billion. The gross margin amounted to 18.4 (18.9)%; excluding special items it was 19.4 (19.6)%.

In the reporting period, the Volkswagen Group generated an operating profit before special items of €17.0 (14.6) billion; the operating return on sales before special items rose to 7.4 (6.7)%. The increase was mainly the result of positive volume-, mix- and margin-related factors, as well as improvements in product costs, while higher fixed costs as a result of expansion and higher depreciation and amortization charges due to the large volume of capital expenditure had an offsetting effect. Negative special items weighed on operating

**INCOME STATEMENT BY DIVISION**

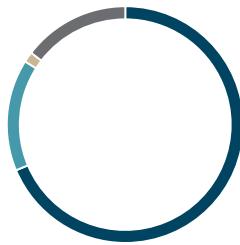
€ million	VOLKSWAGEN GROUP		AUTOMOTIVE <sup>1</sup>		FINANCIAL SERVICES	
	2017	2016	2017	2016	2017	2016
<b>Sales revenue</b>	<b>230,682</b>	<b>217,267</b>	<b>196,949</b>	<b>186,016</b>	<b>33,733</b>	<b>31,251</b>
Cost of sales	-188,140	-176,270	-160,614	-150,860	-27,526	-25,410
<b>Gross profit</b>	<b>42,542</b>	<b>40,997</b>	<b>36,335</b>	<b>35,156</b>	<b>6,207</b>	<b>5,841</b>
Distribution expenses	-22,710	-22,700	-21,353	-21,453	-1,357	-1,248
Administrative expenses	-8,254	-7,336	-6,554	-5,730	-1,700	-1,606
Net other operating result	2,240	-3,858	2,717	-3,306	-477	-552
<b>Operating result</b>	<b>13,818</b>	<b>7,103</b>	<b>11,146</b>	<b>4,668</b>	<b>2,673</b>	<b>2,435</b>
<b>Operating return on sales (%)</b>	<b>6.0</b>	<b>3.3</b>	<b>5.7</b>	<b>2.5</b>	<b>7.9</b>	<b>7.8</b>
Share of the result of equity-accounted investments	3,482	3,497	3,473	3,433	9	64
Interest result and Other financial result	-3,388	-3,308	-3,209	-3,217	-180	-91
<b>Financial result</b>	<b>94</b>	<b>189</b>	<b>265</b>	<b>216</b>	<b>-171</b>	<b>-27</b>
<b>Earnings before tax</b>	<b>13,913</b>	<b>7,292</b>	<b>11,411</b>	<b>4,884</b>	<b>2,502</b>	<b>2,408</b>
Income tax expense	-2,275	-1,912	-3,295	-1,149	1,020	-763
<b>Earnings after tax</b>	<b>11,638</b>	<b>5,379</b>	<b>8,116</b>	<b>3,735</b>	<b>3,522</b>	<b>1,645</b>
Noncontrolling interests	10	10	-257	-81	267	91
Earnings attributable to Volkswagen AG hybrid capital investors	274	225	274	225	-	-
<b>Earnings attributable to Volkswagen AG shareholders</b>	<b>11,354</b>	<b>5,144</b>	<b>8,099</b>	<b>3,591</b>	<b>3,255</b>	<b>1,553</b>

<sup>1</sup> Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

**SHARE OF SALES REVENUE BY MARKET 2017**  
in percent



**SHARE OF SALES REVENUE BY DIVISION/BUSINESS AREA 2017**  
in percent



profit, reducing this item by a total of €-3.2 (-7.5) billion. At €13.8 billion, the Volkswagen Group's operating profit was up €6.7 billion on the previous year. The operating return on sales rose to 6.0 (3.3)%.

The financial result declined to €0.1 (0.2) billion. Lower interest expenses and lower expenses from the measurement of derivative financial instruments at the reporting date had a positive effect, while foreign currency measurement had a negative impact. The share of the result of equity-accounted investments was at the prior-year level. This includes the gain on the remeasurement of the investment in HERE following the acquisition of shares by additional investors. In the prior-year period, the income from the sale of the LeasePlan shares had a positive effect.

The Volkswagen Group's profit before tax rose to €13.9 billion in the reporting period, up €6.6 billion on the prior-year figure. The return on sales before tax improved from 3.4% to 6.0%. Profit after tax amounted to €11.6 (5.4) billion. Although income taxes increased, the tax rate of 16.3 (26.2)% was considerably lower in the reporting period. This decline was due to the tax reform in the USA passed at the end of the year, which led to a non-recurring positive non-cash measurement effect on deferred taxes of €1.0 billion.

#### Results of operations in the Automotive Division

The Automotive Division's sales revenue amounted to €196.9 billion in fiscal year 2017, thus exceeding the prior-year figure by €10.9 billion. The improvement resulted primarily from higher vehicles sales, which were offset by negative exchange rate effects. As our Chinese joint ventures are accounted for using the equity method, the Group's business performance in the Chinese passenger car market is

reflected in consolidated sales revenue primarily by deliveries of vehicles and vehicle parts.

Cost of sales increased due to larger volumes; in addition, a rise in special items and higher depreciation and amortization charges had a negative impact, while improvements in product costs had a positive effect. Total research and development costs as a percentage of the Automotive Division's sales revenue (research and development ratio or R&D ratio) declined to 6.7 (7.3)% in the reporting period as a result of higher sales revenues and lower expenses. In addition to new models, our activities focused above all on the electrification of our vehicle portfolio, a more efficient range of engines, and digitalization. Expressed as a percentage of sales revenue, cost of sales rose slightly year-on-year.

The gross profit of the Automotive Division improved to €36.3 (35.2) billion.

Distribution expenses were on a level with the previous year, which had been impacted by negative special items. Exchange rate effects weighed on the 2017 figure. The ratio of distribution expenses to sales revenue declined. Administrative expenses as well as their ratio to sales revenue increased compared with the previous year. At €2.7 billion in fiscal year 2017, the net other operating result exceeded the prior year by €6.0 billion, driven in particular by much lower negative special items in connection with the diesel issue and by exchange rate effects.

The operating profit of the Automotive Division improved by €6.5 billion to €11.1 billion. The operating return on sales stood at 5.7 (2.5)%. Negative special items contained in operating profit totaled €-3.2 (-7.5) billion. These items were exclusively attributable to the Passenger Cars Business Area in the reporting period, reflecting charges in connection with the diesel issue. Excluding the special items, the Automotive

Division's operating profit rose to €14.4 (12.2) billion. The operating return on sales before special items increased to 7.3 (6.6)%. The main contributors were improvements in volumes, the mix and margins, as well as product cost optimization; these factors were offset by higher fixed costs as a result of expansion and higher depreciation and amortization charges. Operating profit benefited from the business performance of our Chinese joint ventures primarily in the form of deliveries of vehicles and vehicle parts and of license income, as the joint ventures are accounted for using the equity method and therefore included in the financial result.

#### RESULTS OF OPERATIONS IN THE PASSENGER CARS BUSINESS AREA

€ million	2017	2016
Sales revenue	158,466	150,343
Operating result	9,309	4,167
Operating return on sales (%)	5.9	2.8

The Passenger Cars Business Area generated sales revenue of €158.5 billion in fiscal year 2017, thus exceeding the prior-year figure by 5.4%, mainly because of volume-related factors. Exchange rates had a negative effect. The operating profit of €9.3 billion generated in the Passenger Cars Business Area was up €5.1 billion on the previous year. Special items included in this item decreased significantly year-on-year to €-3.2 (-6.9) billion. Improvements in volumes, the mix and margins, and product cost optimization had a positive influence, while a rise in fixed costs and higher depreciation and amortization charges had a negative impact. The operating return on sales rose to 5.9 (2.8)%.

#### RESULTS OF OPERATIONS IN THE COMMERCIAL VEHICLES BUSINESS AREA

€ million	2017	2016
Sales revenue	35,200	32,080
Operating result	1,892	718
Operating return on sales (%)	5.4	2.2

The Commercial Vehicles Business Area recorded sales revenue of €35.2 billion in the reporting period, €3.1 billion more than in the previous year; this increase was driven mainly by larger volumes. The operating profit of the Com-

mercial Vehicles Business Area improved by €1.2 billion to €1.9 billion; the operating return on sales climbed to 5.4 (2.2)%. The increase versus the previous year, which had been negatively impacted by special items, was mainly the result of positive volume- and margin-related factors and the expansion of the service business.

#### RESULTS OF OPERATIONS IN THE POWER ENGINEERING BUSINESS AREA

€ million	2017	2016
Sales revenue	3,283	3,593
Operating result	-55	-217
Operating return on sales (%)	-1.7	-6.0

The Power Engineering Business Area's sales revenue of €3.3 billion in fiscal year 2017 was 8.6% lower than in the previous year. The operating loss declined by €0.2 billion to €-0.1 billion. Lower volumes were offset by positive mix effects. Special items had a negative impact in the previous year. The operating return on sales improved from -6.0% to -1.7%.

#### Results of operations in the Financial Services Division

In the Financial Services Division, sales revenue increased by 7.9% year-on-year to €33.7 billion in fiscal year 2017, due mainly to the growth in business volumes.

As a result, gross profit went up by €0.4 billion to €6.2 billion.

Both distribution and administrative expenses increased year-on-year; in addition to higher volumes, the rise in expenses was attributable in particular to digitalization. The ratio of distribution and administrative expenses to sales revenue was unchanged. The net other operating result amounted to €-0.5 (-0.6) billion.

The 9.8% year-on-year increase in operating profit to €2.7 billion reflects the Financial Services Division's sustained contribution to the Group's success. The operating return on sales improved to 7.9 (7.8)%. The return on equity before tax was 9.8%, compared with 10.8% in the previous year.

## PRINCIPLES AND GOALS OF FINANCIAL MANAGEMENT

Financial management at the Volkswagen Group covers liquidity management, currency, interest rate and commodity risk management, as well as credit and country risk management. It is performed centrally for all Group companies by Group Treasury, based on internal directives and risk parameters. The main areas of the MAN and Porsche Holding Salzburg subgroups are integrated into the financial management of the Group, while Scania is covered to a limited extent. Additionally, these subgroups have their own financial management structures.

The goal of liquidity management is to ensure that the Volkswagen Group remains solvent at all times and at the same time to generate an adequate return from the investment of surplus funds. We use cash pooling to optimize the use of existing liquidity between the significant companies in Europe. To do this, the balances, either positive or negative, accumulating in the cash pooling accounts are swept daily into a target account at Group Treasury and thus pooled. Currency, interest rate and commodity risk management is designed to hedge the prices on which investment, production and sales plans are based using derivative financial instruments. Credit and country risk management aims to limit the Volkswagen Group's exposure to the risk of loss or default by means of diversification. To achieve this, internal limits are defined on the basis of various credit risks for the volume of business per counterparty when entering into financial transactions. These primarily focus on the capital resources of potential counterparties, as well as the ratings awarded by independent agencies. The relevant risk limits and the authorized financial instruments, hedging methods and hedging horizons are approved by the Group Board of Management Committee for Risk Management, which replaced the Group Board of Management Committee for Liquidity and Foreign Currency in the reporting period.

For additional information on the principles and goals of financial management, please refer to page 187 and to the notes to the 2017 consolidated financial statements on pages 282 to 291.

## FINANCIAL POSITION

### Financial position of the Group

The Volkswagen Group's gross cash flow amounted to €32.7 billion in fiscal year 2017, 25.5% more than in the previous year. At €-33.8 (-16.6) billion, the change in working capital was significantly negative. As expected, there were high cash outflows in connection with the diesel issue in the reporting period, primarily resulting from vehicle recalls and legal risks. As a result, cash flows from operating activities decreased by €10.6 billion to €-1.2 billion. The new special items recognized in the reporting period had a negative impact on gross cash flow and a positive effect on the change in working capital.

The Volkswagen Group's investing activities attributable to operating activities rose to €18.2 billion, 8.5% more than in the previous year. In the reporting period, the "Acquisition and disposal of equity investments" item particularly includes the acquisition of shares in Navistar as well as the sale of part of the PGA Group. The figure for the previous year had mainly been influenced by the cash inflow from the sale of the shares in LeasePlan.

Cash inflows from financing activities amounted to €17.6 (9.7) billion. These primarily include the issuance and redemption of bonds and other financial liabilities. The dual-tranche hybrid notes (€3.5 billion), successfully placed in June 2017, increased net liquidity; this was offset by the dividend paid to the shareholders of Volkswagen AG (€1.0 billion).

At the end of the reporting period, the Volkswagen Group's cash and cash equivalents as reported in the cash flow statement amounted to €18.0 (18.8) billion and were thus down on the prior-year reporting date.

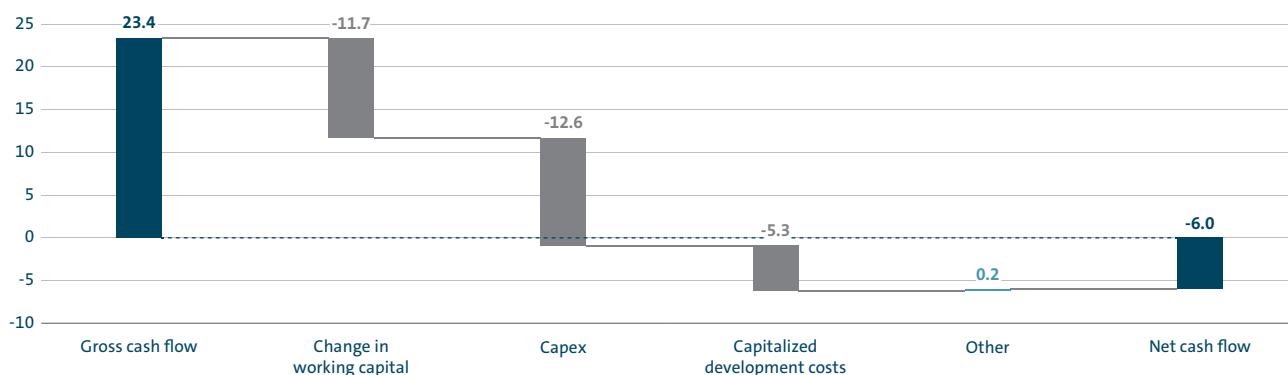
The Volkswagen Group's net liquidity as of December 31, 2017 was €-119.1 (-107.9) billion.

## CASH FLOW STATEMENT BY DIVISION

€ million	VOLKSWAGEN GROUP		AUTOMOTIVE <sup>1</sup>		FINANCIAL SERVICES	
	2017	2016	2017	2016	2017	2016
<b>Cash and cash equivalents at beginning of period</b>	<b>18,833</b>	<b>20,462</b>	<b>14,125</b>	<b>15,294</b>	<b>4,709</b>	<b>5,168</b>
Earnings before tax	13,913	7,292	11,411	4,884	2,502	2,408
Income taxes paid	-3,664	-3,315	-3,514	-3,526	-149	211
Depreciation and amortization expense <sup>2</sup>	22,165	20,924	14,948	14,331	7,218	6,593
Change in pension provisions	468	235	452	224	15	11
Other noncash income/expense and reclassifications <sup>3</sup>	-231	871	121	556	-352	316
<b>Gross cash flow</b>	<b>32,651</b>	<b>26,007</b>	<b>23,418</b>	<b>16,468</b>	<b>9,233</b>	<b>9,539</b>
<b>Change in working capital</b>	<b>-33,836</b>	<b>-16,576</b>	<b>-11,732</b>	<b>3,803</b>	<b>-22,104</b>	<b>-20,379</b>
Change in inventories	-4,198	-3,637	-3,784	-3,313	-414	-324
Change in receivables	-1,660	-2,155	-937	-1,876	-724	-280
Change in liabilities	5,302	5,048	4,168	4,474	1,134	574
Change in other provisions	-9,910	5,732	-10,079	5,616	169	116
Change in lease assets (excluding depreciation)	-11,478	-12,074	-1,115	-1,157	-10,363	-10,917
Change in financial services receivables	-11,891	-9,490	15	58	-11,906	-9,547
<b>Cash flows from operating activities</b>	<b>-1,185</b>	<b>9,430</b>	<b>11,686</b>	<b>20,271</b>	<b>-12,871</b>	<b>-10,840</b>
<b>Cash flows from investing activities attributable to operating activities</b>	<b>-18,218</b>	<b>-16,797</b>	<b>-17,636</b>	<b>-15,941</b>	<b>-583</b>	<b>-856</b>
of which: investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs	-13,052	-13,152	-12,631	-12,795	-421	-357
capitalized development costs	-5,260	-5,750	-5,260	-5,750	-	-
acquisition and disposal of equity investments	-317	1,754	-124	2,283	-193	-528
<b>Net cash flow<sup>4</sup></b>	<b>-19,404</b>	<b>-7,367</b>	<b>-5,950</b>	<b>4,330</b>	<b>-13,454</b>	<b>-11,696</b>
Change in investments in securities, loans and time deposits	1,710	-3,882	2,333	-3,125	-622	-757
<b>Cash flows from investing activities</b>	<b>-16,508</b>	<b>-20,679</b>	<b>-15,303</b>	<b>-19,066</b>	<b>-1,205</b>	<b>-1,613</b>
<b>Cash flows from financing activities</b>	<b>17,625</b>	<b>9,712</b>	<b>3,562</b>	<b>-2,298</b>	<b>14,063</b>	<b>12,009</b>
of which: capital transactions with noncontrolling interests	-	-3	-	-3	-	-
Capital contributions/capital redemptions	3,473	-	2,400	-1,454	1,073	1,454
Effect of exchange rate changes on cash and cash equivalents	-727	-91	-641	-76	-86	-15
<b>Net change in cash and cash equivalents</b>	<b>-796</b>	<b>-1,628</b>	<b>-696</b>	<b>-1,169</b>	<b>-99</b>	<b>-460</b>
<b>Cash and cash equivalents at Dec. 31<sup>5</sup></b>	<b>18,038</b>	<b>18,833</b>	<b>13,428</b>	<b>14,125</b>	<b>4,609</b>	<b>4,709</b>
Securities, loans and time deposits	26,291	28,036	15,201	17,911	11,090	10,125
<b>Gross liquidity</b>	<b>44,329</b>	<b>46,869</b>	<b>28,630</b>	<b>32,036</b>	<b>15,699</b>	<b>14,833</b>
Total third-party borrowings	-163,472	-154,819	-6,251	-4,856	-157,221	-149,963
<b>Net liquidity<sup>6</sup></b>	<b>-119,143</b>	<b>-107,950</b>	<b>22,378</b>	<b>27,180</b>	<b>-141,522</b>	<b>-135,130</b>

<sup>1</sup> Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.<sup>2</sup> Net of impairment reversals.<sup>3</sup> These relate mainly to the fair value measurement of financial instruments, application of the equity method and the reclassification of gains/losses on disposal of noncurrent assets and equity investments to investing activities.<sup>4</sup> Net cash flow: cash flows from operating activities, net of cash flows from investing activities attributable to operating activities (investing activities excluding change in investments in securities, loans and time deposits).<sup>5</sup> Cash and cash equivalents comprise cash at banks, checks, cash-in-hand and call deposits.<sup>6</sup> The total of cash, cash equivalents, securities, loan receivables from related parties and time deposits net of third-party borrowings (noncurrent and current financial liabilities).

**AUTOMOTIVE DIVISION NET CASH FLOW 2017**  
in € billion



**Financial position of the Automotive Division**

The Automotive Division's gross cash flow was €23.4 billion in fiscal year 2017, thus exceeding the prior-year figure by €6.9 billion. The increase in operating profit before special items and the year-on-year decline in special items had a positive effect. At €-11.7 (3.8) billion, the change in working capital was significantly negative. As expected, there were high cash outflows in the reporting period related to the diesel issue, primarily for vehicle recalls and legal risks. As a result, cash flows from operating activities amounted to €11.7 billion, €8.6 billion less than in 2016. The new special items recognized in fiscal year 2017 had a negative impact on gross cash flow and a positive effect on the change in working capital.

Investing activities attributable to operating activities increased by €1.7 billion to €17.6 billion. At €12.6 (12.8) billion, investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs (capex) were on a level with the previous year. The ratio of capex to sales revenue declined to 6.4 (6.9)% due primarily to the rise in sales revenue. We invested mainly in our production facilities and in models that we launched in the reporting period or are planning to launch next year. These are primarily vehicles in the Polo, Tiguan, Audi A6, Audi A8 and Audi e-tron series, as well as the Audi A4, Porsche Cayenne, Porsche 911 and the Bentley Continental family. Other investment priorities included the ecological focus of our model range, drivetrain electrification and our modular

toolkits. At €5.3 (5.8) billion, capitalized development costs were lower than in the previous year. In the reporting period, the "Acquisition and disposal of equity investments" item mainly includes the acquisition of shares in Navistar and the sale of part of the PGA Group. In the prior-year period, the sale of the shares in LeasePlan had a significantly positive effect on this item.

The Automotive Division's net cash flow reflects the division's strong operating performance, although it declined by €10.3 billion to €-6.0 billion driven, as expected, by high cash outflows attributable to the diesel issue.

A capital increase carried out by Volkswagen AG at Volkswagen Financial Services AG at the beginning of 2017 in order to finance the growth in business volumes and comply with regulatory capital requirements resulted in outflows of €1.0 billion in the Automotive Division's financing activities. In May 2017, a dividend totaling €1.0 billion was distributed to the shareholders of Volkswagen AG, €0.9 billion more than in the previous year. The successful placement of dual-tranche hybrid notes with an aggregate principal amount of €3.5 billion via Volkswagen International Finance N.V. in June 2017 resulted in a cash inflow. The notes consist of a €1.5 billion note that carries a coupon of 2.7% and has a first call date after five and a half years, and a €2.0 billion note that carries a coupon of 3.875% and has a first call date after ten years. Both tranches are perpetual and increase equity, net of transaction costs, among other factors. The cash inflows from the hybrid notes were classified as a capital contribution,

which increased net liquidity. In addition, financing activities include the issuance and redemption of bonds and other financial liabilities. They amounted to €3.6 billion in 2017, €5.9 billion more than in the prior-year period.

On December 31, 2017, the Automotive Division's net liquidity was again at a robust level of €22.4 billion, compared with €27.2 billion at the end of 2016. The Automotive Division's net liquidity represents 9.7 (12.5)% of consolidated sales revenue in the reporting period.

#### FINANCIAL POSITION IN THE PASSENGER CARS BUSINESS AREA

€ million	2017	2016
Gross cash flow	19,410	13,920
Change in working capital	-10,122	3,454
Cash flows from operating activities	9,289	17,374
Cash flows from investing activities attributable to operating activities	-15,337	-13,353
Net cash flow	-6,048	4,021

In the reporting period, the Passenger Cars Business Area recorded gross cash flow of €19.4 billion, up €5.5 billion on the prior-year figure, mainly due to earnings-related factors; a significant year-on-year decline in negative special items also had a positive effect. The change in working capital was significantly negative, decreasing by €13.6 billion year-on-year to €-10.1 billion. As expected, there were high cash outflows related to the diesel issue in fiscal year 2017, primarily for vehicle recalls and legal risks. Consequently, cash flows from operating activities decreased by 46.5% to €9.3 billion. The new special items recognized in the reporting period had a negative impact on gross cash flow and a positive effect on the change in working capital. Investing activities attributable to operating activities resulted in cash outflows of €15.3 (13.4) billion in the reporting period. The year-on-year increase in capex of €0.3 billion to €11.2 billion was more than offset by the €0.4 billion decline in capitalized development costs to €4.6 billion. The item included the sale of part of the PGA Group in the reporting period; in the prior-year period, the sale of the LeasePlan shares had a significantly positive impact. Net cash flow amounted to €-6.0 (4.0) billion.

#### FINANCIAL POSITION IN THE COMMERCIAL VEHICLES BUSINESS AREA

€ million	2017	2016
Gross cash flow	3,739	2,496
Change in working capital	-1,320	238
Cash flows from operating activities	2,419	2,734
Cash flows from investing activities attributable to operating activities	-2,122	-2,407
Net cash flow	297	327

The Commercial Vehicles Business Area generated gross cash flow of €3.7 billion in the reporting period, €1.2 billion above the prior-year figure due to earnings-related factors. At €-1.3 (0.2) billion, the change in working capital was significantly negative. In the prior-year period, the special items recognized had a negative impact on gross cash flow and a positive effect on the change in working capital. Cash flows from operating activities were slightly down on the 2016 figure, declining to €2.4 (2.7) billion. Despite the acquisition of shares in Navistar and investments in a new cab generation at Scania, investing activities attributable to operating activities were down year-on-year, amounting to €2.1 (2.4) billion; the previous year had been affected by investments in the new plant for light commercial vehicles in Wrzesnia in Poland. At €0.3 (0.3) billion, net cash flow was on a level with the previous year.

#### FINANCIAL POSITION IN THE POWER ENGINEERING BUSINESS AREA

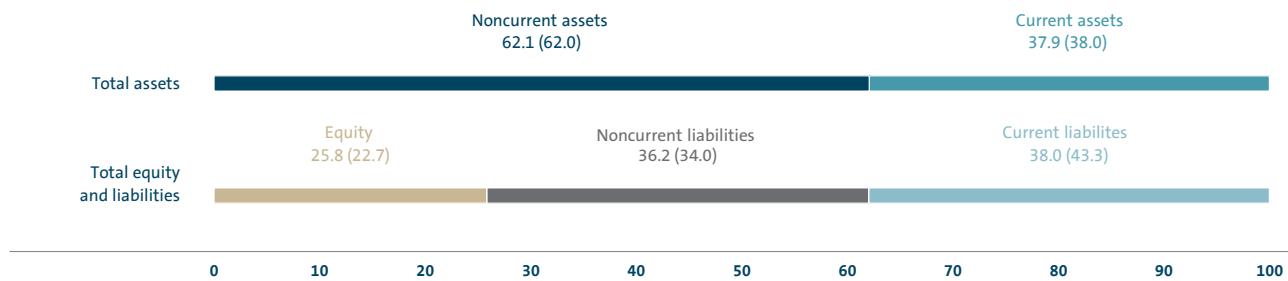
€ million	2017	2016
Gross cash flow	268	52
Change in working capital	-290	111
Cash flows from operating activities	-22	163
Cash flows from investing activities attributable to operating activities	-177	-182
Net cash flow	-199	-19

In fiscal year 2017, the Power Engineering Business Area's gross cash flow improved to €0.3 (0.1) billion. Funds tied up in working capital increased by €0.4 billion to €-0.3 billion. The comparison with the prior-year period has to take special items into account. Cash flows from operating activities were down on the previous year, breaking even in the reporting period. At €0.2 (0.2) billion, investing activities attributable to operating activities were on a level with the previous year. Net cash flow declined to €-0.2 (0.0) billion.

## CONSOLIDATED BALANCE SHEET BY DIVISION AS OF DECEMBER 31

€ million	VOLKSWAGEN GROUP		AUTOMOTIVE <sup>1</sup>		FINANCIAL SERVICES	
	2017	2016	2017	2016	2017	2016
<b>Assets</b>						
Noncurrent assets	262,081	254,010	140,912	139,003	121,169	115,007
Intangible assets	63,419	62,599	63,211	62,372	208	227
Property, plant and equipment	55,243	54,033	52,503	51,415	2,739	2,619
Lease assets	39,254	38,439	3,140	3,385	36,114	35,054
Financial services receivables	73,249	68,402	-7	9	73,256	68,393
Investments, equity-accounted investments and other equity investments, other receivables and financial assets	30,916	30,537	22,065	21,822	8,851	8,715
Current assets	160,112	155,722	80,210	81,083	79,902	74,640
Inventories	40,415	38,978	36,113	34,947	4,302	4,031
Financial services receivables	53,145	49,673	-686	-660	53,832	50,333
Other receivables and financial assets	32,040	30,286	17,354	17,561	14,686	12,726
Marketable securities	15,939	17,520	13,512	14,703	2,427	2,817
Cash, cash equivalents and time deposits	18,457	19,265	13,826	14,532	4,632	4,733
Assets held for sale	115	-	90	-	24	-
<b>Total assets</b>	<b>422,193</b>	<b>409,732</b>	<b>221,121</b>	<b>220,085</b>	<b>201,071</b>	<b>189,647</b>
<b>Equity and liabilities</b>						
<b>Equity</b>	<b>109,077</b>	<b>92,910</b>	<b>81,605</b>	<b>69,130</b>	<b>27,472</b>	<b>23,780</b>
Equity attributable to Volkswagen AG shareholders	97,761	85,122	70,857	61,714	26,904	23,408
Equity attributable to Volkswagen AG hybrid capital investors	11,088	7,567	11,088	7,567	-	-
Equity attributable to Volkswagen AG shareholders and hybrid capital investors	108,849	92,689	81,945	69,281	26,904	23,408
Noncontrolling interests	229	221	-339	-151	568	373
<b>Noncurrent liabilities</b>	<b>152,726</b>	<b>139,306</b>	<b>69,805</b>	<b>69,982</b>	<b>82,921</b>	<b>69,324</b>
Financial liabilities	81,628	66,358	6,709	5,876	74,919	60,483
Provisions for pensions	32,730	33,012	32,189	32,464	540	549
Other liabilities	38,368	39,936	30,906	31,643	7,462	8,293
<b>Current liabilities</b>	<b>160,389</b>	<b>177,515</b>	<b>69,711</b>	<b>80,973</b>	<b>90,678</b>	<b>96,542</b>
Put options and compensation rights granted to noncontrolling interest shareholders	3,795	3,849	3,795	3,849	-	-
Financial liabilities	81,844	88,461	-458	-1,019	82,302	89,481
Trade payables	23,046	22,794	20,497	20,753	2,548	2,041
Other liabilities	51,705	62,411	45,877	57,391	5,828	5,021
<b>Total equity and liabilities</b>	<b>422,193</b>	<b>409,732</b>	<b>221,121</b>	<b>220,085</b>	<b>201,071</b>	<b>189,647</b>

<sup>1</sup> Including allocation of consolidation adjustments between the Automotive and Financial Services divisions, primarily intragroup loans.

**CONSOLIDATED BALANCE SHEET STRUCTURE 2017**  
*in percent*

**Financial position in the Financial Services Division**

The Financial Services Division's gross cash flow declined to €9.2 billion in the reporting period, €0.3 billion lower than in the previous year. Due to larger volumes, funds tied up in working capital increased by €1.7 billion to €22.1 billion. Cash flows from operating activities amounted to €-12.9 (–10.8) billion.

At €0.6 (0.9) billion, investing activities attributable to operating activities were down on the previous year, which had included the acquisition of shares in the ride-hailing service Gett.

The Financial Services Division's financing activities resulted in cash inflows of €14.1 (12.0) billion in 2017. This included a capital increase of €1.0 billion implemented by Volkswagen AG to finance expected business growth and to comply with stricter regulatory requirements.

At the end of 2017, the Financial Services Division's negative net liquidity, which is common in the industry, stood at €-141.5 billion, compared with €-135.1 billion at the end of December 2016.

**NET ASSETS**
**Consolidated balance sheet structure**

At the end of the reporting period, the Volkswagen Group's total assets amounted to €422.2 billion, 3.0% more than as of December 31, 2016. The increase, which was partially offset by exchange rate effects, was primarily due to a rise in business volumes in the Financial Services Division. The structure of the consolidated balance sheet as of the reporting date is shown in the chart on this page. The Volkswagen Group's equity increased to €109.1 billion, €16.2 billion more than at the end of the previous reporting period. The equity ratio rose to 25.8 (22.7)%.

The "assets held for sale" item contains primarily the anticipated carrying amount of some of the shares in There

Holding, which are expected to be disposed of (€0.1 billion). The negotiations are still ongoing, and the disposals are expected to be finalized in the first half of 2018.

As of the end of fiscal year 2017, the Group had off-balance-sheet commitments in the form of contingent liabilities in the amount of €8.4 (6.8) billion, financial guarantees in the amount of €0.3 (0.2) billion and other financial obligations in the amount of €24.5 (25.9) billion. Contingent liabilities relate primarily to legal risks in connection with the diesel issue as well as potential liabilities from tax risks in the Commercial Vehicles Business Area in Brazil. The other financial obligations primarily result from purchase commitments for property, plant and equipment, obligations under long-term leasing and rental contracts and irrevocable credit commitments to customers. In addition, they include investments to which the Group has committed itself, in the infrastructure for zero-emission vehicles and in initiatives to promote access to and awareness of this technology. These commitments were made as part of the settlement agreements in the USA in connection with the diesel issue. Other financial obligations include an amount of €1.3 billion for this purpose.

**Automotive Division balance sheet structure**

At the end of the reporting period, the Automotive Division's intangible assets and property, plant and equipment both increased slightly year-on-year. Lease assets were down compared with the end of December 2016 as a result of the sale of part of the PGA Group. Equity-accounted investments declined slightly. The positive business results of the Chinese joint ventures, the purchase of the shares in Navistar and the remeasurement of the interest in HERE were offset by dividend payments resolved by the Chinese joint ventures, the remeasurement of investments, as well as the reclassification of some of the shares in There Holding, which are

now held for sale. At €140.9 (139.0) billion, total noncurrent assets were on a level with the previous year.

Current assets amounted to €80.2 (81.1) billion and were virtually unchanged year-on-year; the inventories included in this figure increased by 3.3% for production-related reasons. Total securities stood at €13.5 (14.7) billion and total cash and cash equivalents at €13.8 (14.5) billion, both showing a decline compared with December 31, 2016.

At the end of 2017, the Automotive Division's equity rose by 18.0% year-on-year to €81.6 billion. It was positively impacted by healthy earnings growth despite special items, as well as by effects from the measurement of derivatives recognized outside profit or loss, the hybrid notes issued in June 2017 and lower actuarial losses from the measurement of pension provisions. Currency translation effects and the dividend paid to the shareholders of Volkswagen AG led to a decline in the Automotive Division's equity. The capital increase implemented in the Financial Services Division also reduced equity in the Automotive Division, where the deduction was recognized. The noncontrolling interests are mainly attributable to RENK AG and AUDI AG. As these were lower overall than the noncontrolling interests attributable to the Financial Services Division, the figure for the Automotive Division, where the deduction was recognized, was negative. The equity ratio increased to 36.9 (31.4)%.

Noncurrent liabilities of €69.8 (70.0) billion were on a level with December 31, 2016. Noncurrent other liabilities were down, primarily as a result of the positive effects from the measurement of derivatives. The tax reform in the USA passed at the end of the year led to a decline in deferred tax liabilities of €1.0 billion.

As of December 31, 2017, current liabilities amounted to €69.7 billion, a decline of 13.9% compared with the end of 2016. Among other things, reclassifications from noncurrent to current liabilities due to shorter remaining maturities led to an increase in current financial liabilities to €-0.5 (-1.0) billion. The figures for the Automotive Division also contain the elimination of intragroup transactions between the Automotive and Financial Services divisions. As the current financial liabilities for the primary Automotive Division were lower than the loans granted to the Financial Services Division, a negative amount was disclosed. The item "Put options and compensation rights granted to noncontrolling interest shareholders" primarily comprises the liability for the obligation to acquire the shares held by the remaining free float

shareholders of MAN. Current other liabilities were down as a result of the positive effects from the measurement of derivatives. Current other provisions declined significantly due to their use in connection with the diesel issue.

At the end of 2017, the Automotive Division's total assets amounted to €221.1 (220.1) billion and were thus on a level with the previous year.

#### PASSENGER CARS BUSINESS AREA BALANCE SHEET STRUCTURE

€ million	Dec. 31, 2017	Dec. 31, 2016
Noncurrent assets	111,277	109,918
Current assets	60,052	61,600
<b>Total assets</b>	<b>171,329</b>	<b>171,518</b>
Equity	66,449	54,789
Noncurrent liabilities	55,118	56,703
Current liabilities	49,762	60,026

As of December 31, 2017, noncurrent assets in the Passenger Cars Business Area increased by €1.4 billion to €111.3 billion. While intangible assets and property, plant and equipment were higher, equity-accounted investments declined. Lease assets decreased, primarily due to the partial sale of the PGA Group. Current assets were at the prior-year level, amounting to €60.1 (61.6) billion; the inventories included in this figure increased for production-related reasons. Total securities and cash and cash equivalents were down in the reporting period. On December 31, 2017, total assets were virtually unchanged compared with the previous year, at €171.3 (171.5) billion.

At €66.4 billion, the Passenger Cars Business Area's equity was 21.3% higher than the prior-year figure, mainly due to earnings-related factors and the hybrid note issued in the reporting period.

Noncurrent liabilities decreased by 2.8%. The financial liabilities and other liabilities included in this item were down significantly. Deferred tax liabilities include the positive effect of the tax reform in the USA.

Current liabilities were down 17.1% year-on-year. Current other provisions declined significantly due to their use in connection with the diesel issue.

**COMMERCIAL VEHICLES BUSINESS AREA**  
**BALANCE SHEET STRUCTURE**

€ million	Dec. 31, 2017	Dec. 31, 2016
Noncurrent assets	27,005	26,206
Current assets	16,908	16,197
<b>Total assets</b>	<b>43,913</b>	<b>42,403</b>
Equity	12,194	11,185
Noncurrent liabilities	13,975	12,531
Current liabilities	17,744	18,687

In the Commercial Vehicles Business Area, intangible assets were lower and property, plant and equipment higher at the end of December 2017 than at the end of the previous reporting period. Equity-accounted investments increased because of the acquisition of the shares in Navistar. Overall, noncurrent assets grew by €0.8 billion to €27.0 billion. Higher inventories and receivables led to a 4.4% rise in current assets to €16.9 billion. At €43.9 billion, total assets exceeded the prior-year figure by 3.6%.

The 9.0% rise in equity to €12.2 billion in the reporting period was mainly attributable to improved earnings. Noncurrent liabilities increased by 11.5%; the noncurrent financial liabilities contained in this item were up significantly. Driven mainly by a marked decrease in current financial liabilities, current liabilities declined by 5.0%.

**POWER ENGINEERING BUSINESS AREA**  
**BALANCE SHEET STRUCTURE**

€ million	Dec. 31, 2017	Dec. 31, 2016
Noncurrent assets	2,629	2,879
Current assets	3,250	3,285
<b>Total assets</b>	<b>5,879</b>	<b>6,165</b>
Equity	2,963	3,157
Noncurrent liabilities	711	748
Current liabilities	2,205	2,260

At the end of the reporting period, noncurrent assets in the Power Engineering Business Area were lower than the year-end 2016 figure, driven primarily by a decrease in intangible assets. Current assets were on a level with the previous year. On December 31, 2017, the Power Engineering Business Area

reported total assets of €5.9 billion, down 4.6% on the previous year.

At the end of fiscal year 2017, equity amounted to €3.0 billion, an earnings-related decline of 6.1% compared with the end of the previous year. Both noncurrent and current liabilities were slightly down year-on-year at the end of the reporting period.

**Financial Services Division balance sheet structure**

On December 31, 2017, total assets in the Financial Services Division of €201.1 billion exceeded the prior-year figure by 6.0%.

Noncurrent assets increased by a total of 5.4% compared with the end of 2016. Within this item, lease assets and noncurrent financial services receivables rose in line with the growth in business.

Higher volumes led to a 7.1% rise in current assets. Current financial services receivables were up €3.5 billion, at €53.8 billion. As of the balance sheet date, the Financial Services Division accounted for around 47.6 (46.3)% of the Volkswagen Group's assets.

Equity in the Financial Services Division amounted to €27.5 billion at the end of 2017, 15.5% more than on the previous year's balance sheet date. Equity was pushed up by earnings growth and by the capital increase implemented by Volkswagen AG at the beginning of the year to finance the growth in business and to meet regulatory capital requirements. The equity ratio rose to 13.7 (12.5)%.

Higher noncurrent financial liabilities to fund business growth led to an overall increase of 19.6% in noncurrent liabilities compared with December 31, 2016.

Current liabilities declined by 6.1%; the current financial liabilities contained in this item fell significantly. At €31.4 (33.3) billion, deposits from direct banking business were lower than at the end of the previous year.

**VALUE ADDED STATEMENT**

The value added statement indicates the added value generated by a company in the past fiscal year as its contribution to the gross domestic product of its home country, and how it is appropriated. Due to the improved operating profit before special items and lower negative special items,

the value added generated by the Volkswagen Group in the reporting period was up 16.8% year-on-year. Added value per employee increased to €107.7 thousand (+13.9%) in 2017. Employees in the passive phase of their partial retirement as well as vocational trainees are not included in the calculation.

**VALUE ADDED GENERATED BY THE VOLKSWAGEN GROUP**

Source of funds in € million	2017	2016
Sales revenue	230,682	217,267
Other income	18,912	17,907
Cost of materials	-151,449	-140,307
Depreciation and amortization	-22,165	-20,924
Other upfront expenditures	-17,615	-23,990
<b>Value added</b>	<b>58,364</b>	<b>49,953</b>

Appropriation of funds in € million	2017	%	2016	%
to Volkswagen AG shareholders (dividend, 2017 dividend proposal)	1,967	3.4	1,015	2.0
to employees (wages, salaries, benefits)	38,950	66.7	37,017	74.1
to the state (taxes, duties)	3,433	5.9	3,486	7.0
to creditors (interest expense)	4,344	7.4	4,070	8.1
to the Company (reserves)	9,671	16.6	4,365	8.7
<b>Value added</b>	<b>58,364</b>	<b>100.0</b>	<b>49,953</b>	<b>100.0</b>

### RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION

The Volkswagen Group's financial target system centers on continuously and sustainably increasing the value of the Company. In order to ensure the efficient use of resources in the Automotive Division and to measure the success of this, we have been using a value-based management system for a number of years, with return on investment (ROI) as a relative indicator and value contribution<sup>1</sup>, a key performance indicator linked to the cost of capital, as an absolute performance measure.

The return on investment serves as a consistent target in strategic and operational management. If the return on investment exceeds the market cost of capital, there is an increase in the value of the invested capital and a positive value contribution. The concept of value-based management allows the success of the Automotive Division and individual business units to be evaluated. It also enables the earnings power of our products, product lines and projects – such as new plants – to be measured.

#### Components of value contribution

Value contribution is calculated on the basis of the operating result after tax and the opportunity cost of invested capital. The operating result shows the economic performance of the Automotive Division and is initially a pre-tax figure.

Using the various international income tax rates of the relevant companies, we assume an overall average tax rate of 30% when calculating the operating result after tax.

The cost of capital is multiplied by the average invested capital to give the opportunity cost of capital. Invested capital is calculated as total operating assets reported in the balance sheet (property, plant and equipment, intangible assets, lease assets, inventories and receivables) less non-interest-bearing liabilities (trade payables and payments on account received). Average invested capital is derived from the balance at the beginning and the end of the reporting period.

As the concept of value-based management only comprises our operating activities, assets relating to investments in subsidiaries and associates and the investment of cash funds are not included when calculating invested capital. Interest charged on these assets is reported in the financial result.

<sup>1</sup> The value contribution corresponds to the Economic Value Added (EVA®). EVA® is a registered trademark of Stern Stewart & Co.

### Determining the current cost of capital

The cost of capital is the weighted average of the required rates of return on equity and debt. The cost of equity is determined using the Capital Asset Pricing Model (CAPM).

This model uses the yield on long-term risk-free Bonds, increased by the risk premium attaching to investments in the equity market. The risk premium comprises a general market risk and a specific business risk.

The general risk premium of 6.5% reflects the general risk of a capital investment in the equity market and is oriented on the Morgan Stanley Capital International (MSCI) World Index.

The specific business risk – price fluctuations in Volkswagen preferred shares – has been modeled in comparison to the MSCI World Index when calculating the beta factor. The MSCI World Index is a global capital market benchmark for investors.

The analysis period for the beta factor calculation spans five years with annual beta figures on a daily basis and an average subsequently being calculated. A beta factor of 1.12 (1.22) was determined for 2017.

### COST OF CAPITAL AFTER TAX AUTOMOTIVE DIVISION

%	2017	2016
Risk-free rate	1.0	0.7
MSCI World Index market risk premium	6.5	6.5
Volkswagen-specific risk premium	0.8	1.5
(Volkswagen beta factor)	(1.12)	(1.22)
<b>Cost of equity after tax</b>	<b>8.3</b>	<b>8.7</b>
Cost of debt	1.8	1.7
Tax	-0.6	-0.5
<b>Cost of debt after tax</b>	<b>1.3</b>	<b>1.2</b>
Proportion of equity	66.7	66.7
Proportion of debt	33.3	33.3
<b>Cost of capital after tax</b>	<b>6.0</b>	<b>6.2</b>

The cost of debt is based on the average yield for long-term debt. As borrowing costs are tax-deductible, the cost of debt is adjusted to account for the tax rate of 30%.

A weighting on the basis of a fixed ratio for the fair values of equity and debt gives an effective cost of capital for the Automotive Division of 6.0 (6.2)% for 2017.

### RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION IN THE REPORTING PERIOD

The operating result after tax of the Automotive Division, including the proportionate operating result of the Chinese joint ventures, was €11,756 (7,419) million in fiscal year 2017. The increase was due primarily to the year-on-year decline in special items, as well as to improvements in volumes and in the mix and to optimized product costs. Profit was negatively impacted by higher fixed costs as a result of expansion and by higher depreciation and amortization charges due to the large volume of capital expenditure. Effects on earnings and assets from purchase price allocation are not taken into account as they cannot be influenced operationally by management.

Invested capital rose to €97,021 (91,020) million, primarily due to higher inventories as well as to additions to investments in property, plant and equipment and capitalized development costs.

The return on investment (ROI) is the return on invested capital for a particular period based on the operating result after tax. The ROI improved year-on-year on the back of the higher operating profit and, at 12.1 (8.2)%, exceeded our minimum rate of return on invested capital of 9% in spite of the adverse effects of the special items on earnings.

At €5,821 (5,643) million, the opportunity cost of capital (invested capital multiplied by cost of capital) was up on the prior-year level due to the increase in the invested capital. Operating result after tax was negatively impacted by special items and led to a positive value contribution of €5,935 (1,775) million after the opportunity cost of invested capital.

More information on value-based management is contained in our publication entitled "Financial Control System of the Volkswagen Group", which can be downloaded from our Investor Relations website: [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir).

### RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION IN THE AUTOMOTIVE DIVISION<sup>1</sup>

€ million	2017	2016
<b>Operating result after tax</b>	<b>11,756</b>	<b>7,419</b>
Invested capital (average)	97,021	91,020
<b>Return on investment (ROI) in %</b>	<b>12.1</b>	<b>8.2</b>
Cost of capital in %	6.0	6.2
<b>Cost of invested capital</b>	<b>5,821</b>	<b>5,643</b>
<b>Value contribution</b>	<b>5,935</b>	<b>1,775</b>

<sup>1</sup> Including proportionate inclusion of the Chinese joint ventures (including the relevant sales and component companies) and allocation of consolidation adjustments between the Automotive and Financial Services divisions.

## SUMMARY OF BUSINESS DEVELOPMENT AND ECONOMIC POSITION

The Board of Management of Volkswagen AG considers business development and the economic position to have been positive overall. In spite of the diesel issue, which continues to keep us very busy, and the persistently challenging market conditions, we increased our deliveries to customers in 2017 as forecast. At 10.7 million vehicles we lifted deliveries to customers by 4.3%, achieving a new record. We saw growth in Europe, North and South America and the Asia-Pacific region. The higher volume was a significant factor in the 6.2% increase in the Group's sales revenue and thus confirmed the current forecast. As a consequence, operating profit before special items rose to €17.0 billion and the operating return on sales before special items, at 7.4%, was moderately higher than the range forecast at the beginning of the year of 6.0–7.0%. After deducting special items resulting exclusively

from the diesel issue, the operating return on sales of 6.0% was at the lower end of this scale, as recently projected.

Research and development costs underscore the efforts made to ensure the Company's future viability; at 6.7%, the R&D ratio in the Automotive Division was inside the expected range.

The Automotive Division's ratio of capex to sales revenue was reduced to 6.4%, which put it within the forecast range as well. Owing to high cash outflows attributable to the diesel issue, the Automotive Division's net cash flow was negative, as anticipated. The Automotive Division's net liquidity fell as a result, but was still a robust €22.4 billion at the end of the reporting period.

On the back of the increase in earnings, the return on investment (ROI) in the Automotive Division improved markedly to 12.1%, thus exceeding the minimum required rate of return on invested capital.

## FORECAST VERSUS ACTUAL FIGURES

	Actual 2016	Original forecast for 2017	Adjusted forecast for 2017	Actual 2017
Deliveries to customers	10.3 million	moderate increase	moderate increase	10.7 million
Volkswagen Group				
Sales revenue	€217.3 billion	increase of up to 4%	> 4%	€230.7 billion
Operating return on sales before special items	6.7%	6.0–7.0%	moderately above 7.0%	7.4%
Operating return on sales	3.3%	6.0–7.0%	~6.0%	6.0%
Operating result before special items	€14.6 billion	within the forecast range	within the forecast range	€17.0 billion
Operating result	€7.1 billion	within the forecast range	within the forecast range	€13.8 billion
Passenger Cars Business Area				
Sales revenue	€150.3 billion	increase of up to 4%	> 4%	€158.5 billion
Operating return on sales before special items	7.4%	6.5–7.5%	moderately above 7.5%	7.9%
Operating return on sales	2.8%	6.5–7.5%	slightly below 6.5%	5.9%
Operating result before special items	€11.1 billion	within the forecast range	within the forecast range	€12.5 billion
Operating result	€4.2 billion	within the forecast range	within the forecast range	€9.3 billion
Commercial Vehicles Business Area				
Sales revenue	€32.1 billion	increase of up to 4%	> 4%	€35.2 billion
Operating return on sales	2.2%	3.0–5.0%	moderately above 5.0%	5.4%
Operating result	€0.7 billion	within the forecast range	within the forecast range	€1.9 billion
Power Engineering Business Area				
Sales revenue	€3.6 billion	significant decline	significant decline	€3.3 billion
Operating result	€-0.2 billion	lower loss	lower loss	€-0.1 billion
Financial Services Division				
Sales revenue	€31.3 billion	at prior-year level	noticeable increase	€33.7 billion
Operating result	€2.4 billion	at prior-year level	noticeable increase	€2.7 billion
R&D ratio in the Automotive Division	7.3%	6.0–7.0%	6.0–7.0%	6.7%
Capex/sales revenue in the Automotive Division	6.9%	6.0–7.0%	6.0–7.0%	6.4%
Net cash flow in the Automotive Division	€4.3 billion	significant decline, negative	significant decline, negative	€-6.0 billion
Net liquidity in the Automotive Division	€27.2 billion	significant decline	significant decline	€22.4 billion
Return on investment (ROI) in the Automotive Division	8.2%	noticeable increase, > 9%	noticeable increase, > 9%	12.1%

# Volkswagen AG

(Condensed, in accordance with the German Commercial Code)

Production and unit sales stable at 2016 level,  
sales revenue and earnings up on prior-year figures.

## ANNUAL RESULT

Special items recognized in fiscal year 2017 were exclusively attributable to the diesel issue, mainly due to higher expenses for the buyback/retrofit programs for 2.0 l TDI vehicles in North America and higher legal risks. These special items had an impact of €-2.0 (-0.8) billion on cost of sales and of €-0.9 (-4.5) billion on other operating income. Moreover, special items of €-0.4 billion had affected distribution expenses in the previous year.

In fiscal year 2017, sales were 1.9% higher than in the previous year, at €76.7 billion. Sales generated abroad accounted

for a share of 62.5 (61.2%). The cost of sales increased by 4.5% to €73.4 billion.

Gross profit fell to €3.4 (5.1) billion.

At €7.1 billion, selling, general and administrative expenses were down €1.2 billion on the prior-year figure.

The net other operating result improved by €1.9 billion to €-0.2 (-2.0) billion.

At €8.6 (8.7) billion, the financial result stood at the prior-year level.

Including the income tax expense of €-0.4 (-0.7) billion, net income for the year amounted to €4.4 billion in the year under review, compared with €2.8 billion in the previous year.

## INCOME STATEMENT OF VOLKSWAGEN AG

€ million	2017	2016
Sales	76,729	75,310
Cost of sales	-73,355	-70,180
<b>Gross profit on sales</b>	<b>3,375</b>	<b>5,131</b>
Selling, general and administrative expenses	-7,104	-8,352
Net other operating result	-154	-2,035
Financial result <sup>1</sup>	8,644	8,725
Taxes on income	-409	-670
<b>Earnings after tax</b>	<b>4,353</b>	<b>2,799</b>
<b>Net income for the fiscal year</b>	<b>4,353</b>	<b>2,799</b>
Retained profits brought forward	2	2
Appropriations to revenue reserves	-2,174	-1,399
<b>Net retained profits</b>	<b>2,181</b>	<b>1,402</b>

<sup>1</sup> Including write-downs of financial assets.

## BALANCE SHEET OF VOLKSWAGEN AG AS OF DECEMBER 31

€ million	2017	2016
Fixed assets	113,703	101,973
Inventories	4,889	4,387
Receivables <sup>1</sup>	32,303	26,386
Cash-in-hand and bank balances	5,798	9,117
<b>Total assets</b>	<b>156,693</b>	<b>141,863</b>
Equity	30,438	27,100
Special tax-allowable reserves	21	23
Long-term debt	33,060	26,457
Medium-term debt	33,415	30,082
Short-term debt	59,759	58,200

<sup>1</sup> Including prepaid expenses.

### NET ASSETS AND FINANCIAL POSITION

Total assets amounted to €156.7 billion at December 31, 2017, up €14.8 billion on the prior-year figure. Investments in tangible and intangible fixed assets declined to €1.7 (2.0) billion. Additions to financial assets rose by €11.4 billion to €33.8 billion. This was offset by depreciation and amortization charges and write-downs as well as by asset disposals totaling to €23.8 (17.3) billion. Fixed assets accounted for a share of 72.6 (71.9)% of total assets.

Current assets (including prepaid expenses) amounted to €43.0 (39.9) billion in 2017.

At €30.4 billion, equity increased due in particular to the improved net income for the year at the end of the reporting period. The equity ratio was 19.4 (19.1)%.

Other provisions decreased by €8.7 billion to €22.1 (30.8) billion, due primarily to the utilization of provisions in connection with the diesel issue. Provisions for pensions and similar obligations rose by €0.7 billion to €14.4 billion, primarily as a result of a change in the interest rate, while provisions for taxes decreased by €0.5 billion to €3.5 billion.

The €20.0 billion rise in total liabilities (including deferred income) to €86.3 billion is, above all, attributable to higher liabilities to affiliated companies.

Volkswagen AG's cash funds, comprising cash instruments with a maturity of less than three months, less bank and cash pooling liabilities repayable on demand, declined year-on-year from €-6.2 billion to €-8.5 billion. The interest-bearing portion of debt amounted to €74.0 (55.1) billion. In our assessment, the economic position of Volkswagen AG is just as positive overall as that of the Volkswagen Group.

### DIVIDEND PROPOSAL

In fiscal year 2017, net retained profits amounted to €2.2 billion. The Board of Management and Supervisory Board are proposing to pay a total dividend of €2.0 billion, i.e. €3.90 per ordinary share and €3.96 per preferred share.

### PROPOSAL ON THE APPROPRIATION OF NET PROFIT

€	2017
Dividend distribution on subscribed capital (€1,283 million)	1,967,423,852.40
of which on: ordinary shares	1,150,850,290.20
preferred shares	816,573,562.20
Appropriation to other revenue reserves	210,000,000.00
Balance (carried forward to new account)	3,299,970.81
<b>Net retained profits</b>	<b>2,180,723,823.21</b>

### EMPLOYEE PAY AND BENEFITS AT VOLKSWAGEN AG

€ million	2017	%	2016	%
Direct pay including cash benefits	7,637	70.7	7,138	71.2
Social security contributions	1,361	12.6	1,337	13.3
Compensated absence	1,161	10.7	1,099	11.0
Retirement benefits	640	5.9	456	4.6
<b>Total expense</b>	<b>10,799</b>	<b>100.0</b>	<b>10,030</b>	<b>100.0</b>

#### VEHICLE SALES

Volkswagen AG sold a total of 2,584,375 (2,632,144) vehicles in fiscal year 2017. Vehicles sold abroad accounted for a share of 70.0 (69.7)%.

#### PRODUCTION

Volkswagen AG produced a total of 1,224,609 vehicles at its vehicle production plants in Wolfsburg, Hanover and Emden in the reporting period (-1.3%). Volkswagen AG's average daily production was 5,370 (5,423) units.

#### EMPLOYEES

As of December 31, 2017, a total of 117,420 (113,928) people were employed at the sites of Volkswagen AG, excluding staff employed at subsidiaries. Of this figure, 4,953 (4,999) were vocational trainees. 4,380 (2,936) employees were in the passive phase of their partial retirement.

Female employees accounted for 17.1 (17.0)% of the workforce. Volkswagen AG employed 5,069 (4,721) part-time workers. The percentage of foreign employees was 6.1 (6.1)%. 83.4 (83.5)% of the employees in Volkswagen AG's production area had completed vocational or additional training in the reporting period. The proportion of graduates was 18.9 (18.8)% in the same period. The average age of employees in fiscal year 2017 was 43.6 (43.2) years.

#### RESEARCH AND DEVELOPMENT

Research and development costs for Volkswagen AG under the German Commercial Code increased to €4.8 (4.7) billion in the reporting period. 12,332 (12,380) people were employed in this area at the end of the reporting period.

#### EXPENDITURE ON ENVIRONMENTAL PROTECTION

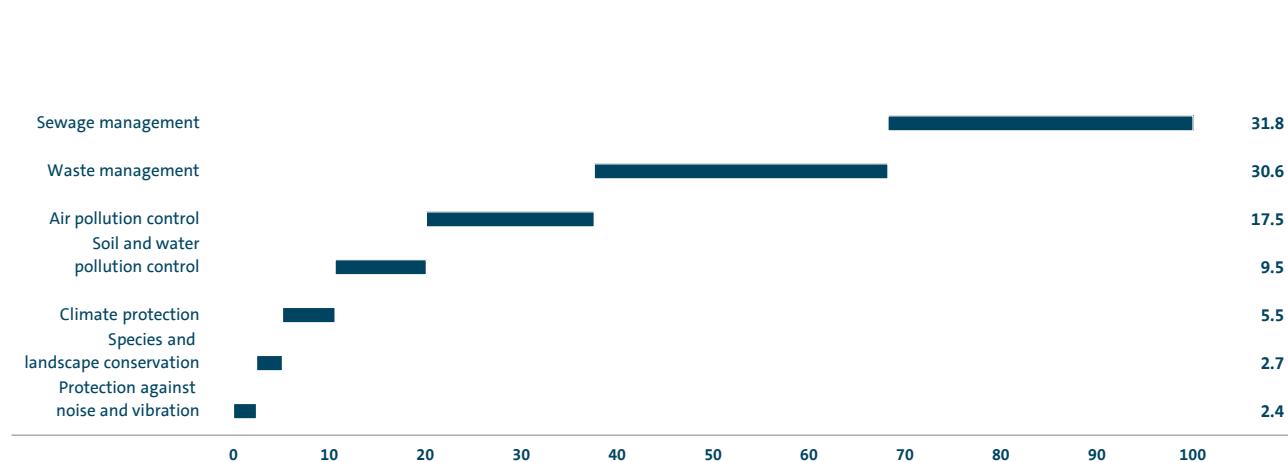
When measuring expenditure on environmental protection, a distinction is made between investments and operating costs for production-related environmental protection measures. Of our total investments, only those that are spent exclusively or primarily on environmental protection are included in environmental protection investments. We distinguish here between additive and integrated investments. Additive environmental protection measures are separate and independent of other measures relating to the production process. They can be upstream or downstream of the production process. In contrast to additive environmental protection measures, integrated measures reduce the environmental impact already during the production process. In 2017 we invested primarily in soil and water pollution control.

The operating costs recognized for environmental protection relate exclusively to production-related measures that protect the environment against harmful factors by avoiding, reducing, or eliminating emissions by the Company. Resources are also conserved. For example, these include expenditures incurred to operate equipment that protects the environment as well as expenditures for measures not relating to such equipment. As in the previous year, the emphasis in 2017 was on sewage and waste management.

#### VOLKSWAGEN AG EXPENDITURE ON ENVIRONMENTAL PROTECTION

€ million	2017	2016	2015	2014	2013
Investments	17	11	21	19	14
Operating costs	227	223	244	226	224

**OPERATING COSTS FOR ENVIRONMENTAL PROTECTION AT VOLKSWAGEN AG 2017**  
*Share of environmental protection areas in percent*



**BUSINESS DEVELOPMENT RISKS AND OPPORTUNITIES AT VOLKSWAGEN AG**

The business development of Volkswagen AG is exposed to essentially the same risks and opportunities as the Volkswagen Group. These risks and opportunities are explained in the Report on Risks and Opportunities on pages 164 to 189 of this annual report.

**RISKS ARISING FROM FINANCIAL INSTRUMENTS**

Risks for Volkswagen AG arising from the use of financial instruments are the same as those to which the Volkswagen Group is exposed. An explanation of these risks can be found on pages 187 to 188 of this annual report.

**DEPENDENT COMPANY REPORT**

The Board of Management of Volkswagen AG has submitted to the Supervisory Board the report required by section 312 of the AktG and issued the following concluding declaration:

"We declare that, based on the circumstances known to us at the time when the transactions with affiliated companies within the meaning of section 312 of the German Stock Corporation Act (AktG) were entered into, our Company received appropriate consideration for each transaction. No transactions with third parties or measures were either undertaken or omitted on the instructions of or in the interests of Porsche or other affiliated companies in the reporting period."

# Sustainable Value Enhancement

Our goal is to run our business responsibly along the entire value chain. Everyone should benefit from this – our customers, our employees, the environment and society. Our future program TOGETHER – Strategy 2025 represents the biggest change process in the Company's history. The starting point is our vision of being one of the world's leading providers of sustainable mobility.

The main financial key performance indicators for the Volkswagen Group are described in the "Results of Operations, Financial Position and Net Assets" chapter. Nonfinancial key performance indicators also attest to the efficiency of our Company's value drivers. These include the processes in the areas of research and development, procurement, production, marketing and sales, information technology and quality assurance. In all of these processes, we are aware of our responsibility towards our customers, our employees, the environment and society. In this chapter we provide examples of how we are increasing the value of our Company in a sustainable way.

## SUSTAINABILITY

The Volkswagen Group is committed to sustainable, transparent and responsible corporate governance. The biggest challenge we face in implementing this at all levels and at every step in the value chain is the complexity of our Company, with its twelve brands, more than 642 thousand employees and 120 production locations. In order to tackle this challenge in the best way possible, we follow the Sustainable Development Goals (SDGs) formulated by the United Nations and the recommendations of the German Corporate Governance Code. In addition, we coordinate our sustainability activities across the entire Group. We have also put in place a forward-looking system of risk management and a clear framework for dealing with environmental issues in a future-oriented manner, for employee responsibility and for social commitment across our brands and in the regions in which we operate.

For us, sustainability means simultaneously striving for economic, social and environmental goals in a way that gives them equal priority. The future program TOGETHER – Strategy 2025 places sustainable growth at the heart of our strategic

target dimensions: we want to be an excellent employer and a role model for the environment, safety and integrity, to excite customers and to ensure that we achieve competitive profitability. By 2025, we aim to make the Volkswagen Group the world's number one in e-mobility. We will therefore set new priorities with Roadmap E. We also want to ensure that we recognize opportunities and risks in the areas of environment, society and governance at an early stage at every step along the value chain. Our corporate social responsibility (CSR) activities will contribute toward enhancing our Company's reputation and value in the long term.

## Management and Coordination

The Volkswagen Group has created a clear management structure to coordinate the Group's activities as regards sustainability and CSR. Its highest committee is the Group Board of Management, which acts as the Sustainability Board at the same time. It is regularly briefed by the Group Sustainability steering group on issues related to the topics of sustainability and corporate responsibility. The members of the Group Sustainability steering group include executives from central Board of Management business areas and representatives of the Group Works Council and the brands. The steering group's tasks include identifying the key action areas, making decisions on the strategic sustainability goals, monitoring by means of indicators the extent to which these goals are being met and approving the sustainability report.

The sustainability office supports the steering group. Its duties include coordinating all sustainability activities within the Group and the brands. It is also responsible for stakeholder dialog at Group level, for example with sustainability-driven analysts and investors. In addition, CSR project teams work across business areas on topics such as reporting, stakeholder management and sustainability in supplier

## VOLKSWAGEN GROUP'S KEY ACTION AREAS



relationships. This coordination and working structure is also largely established across the brands and is constantly expanding. Since 2009, the Sustainability & CSR coordinators for all brands and regions have come together once a year to promote communication across the Group, create uniform structures and learn from one another. This Group CSR meeting has proven its worth as an integral part of the Group-wide coordination structure.

### Sustainability Council

As part of its efforts to continuously improve and expand its sustainability management, the Volkswagen Group appointed an international Sustainability Council in 2016 made up of renowned experts from the academic world, politics and society. The members of the council establish their own working methods and areas of focus independently and consult with the Board of Management, senior managers and the employee representatives regularly for the purposes of consultation, exchanging information and initiating action.

The key issues in 2017 were the challenges created by global CO<sub>2</sub> emissions and the regulatory requirements to be met post-2025, as well as the Company's transformation process. The Volkswagen Group is initially providing €20 million in funding for projects proposed and promoted by the Sustainability Council for the years 2017 and 2018. The first projects relate to innovation and cultural change in the area of sustainable mobility, an international crisis prevention initia-

tive as a result of climate change and an academic study on the future shape of the transport and climate policy framework.

### Materiality analysis

Two developments in 2017 continued to influence the detailed analysis as to which issues are material to the Volkswagen Group: the realignment of the Group via the future program TOGETHER – Strategy 2025, and dealing with the consequences of the diesel issue.

After analyzing and identifying topics that are material to the Company, we derived 18 key action areas that we will use to achieve our goal of being one of the world's leading providers of sustainable mobility. The analysis was based on external studies, industry analyses and stakeholder surveys carried out by our brands, internal guidelines such as our corporate strategy and Group environmental strategy, and key factors identified by the Volkswagen Group's strategy committee.

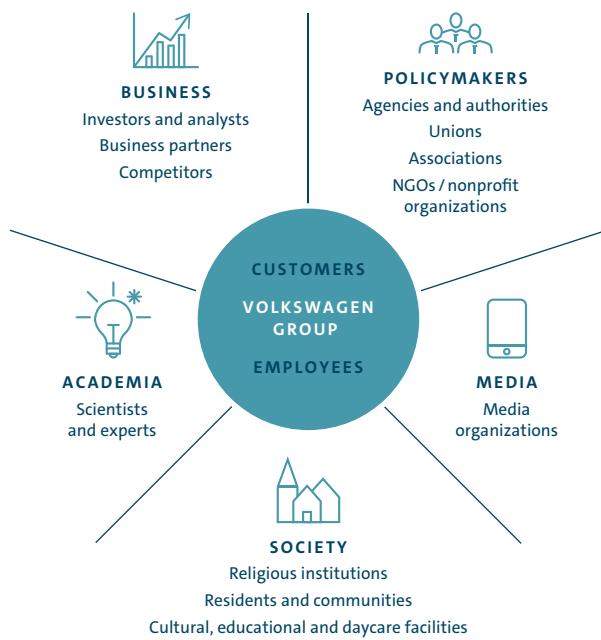
As the details of the new Group strategy have not yet been finalized, we are still in the process of specifying the content of the key action areas and defining corresponding values, targets and indicators. As an enterprise with global operations, we also take account of the options available to us for influencing and implementing the SDGs formulated by the United Nations.

### Principles and guidelines

Voluntary commitments and principles that apply throughout the Group form the basis and backbone of our strategic sustainability goals. In addition, our sustainability model provides the framework for sustainable and responsible action. The Volkswagen Group's revised Code of Conduct published in 2017 applies to the entire Group and helps managers and employees alike to deal with legal and ethical challenges in their day-to-day work.

We expressly support the United Nations Global Compact, an agreement between the UN and the business world aimed at enhancing the social and ecological aspects of globalization. As long ago as 2002, the Volkswagen Group made a commitment to promoting human rights, labor standards, environmental protection and combating corruption. In 2013, this commitment was extended to include the so-called CEO Water Mandate, the aim of which is to ensure the careful management of water resources. Since the emergence of the diesel issue, we have agreed on a temporary suspension of our membership. Our objective is to ensure that our actions are in line with the declarations of the International Labor Organization (ILO), the principles and conventions of the Organisation for Economic Co-operation and Development (OECD) and the international covenants of the United Nations on basic rights and freedom.

## STAKEHOLDERS OF THE VOLKSWAGEN GROUP



We have also established our own internal guidelines in the shape of the Volkswagen Social Charter, the Charter on Labor Relations, the Charter on Vocational Education and Training, and the Charter on Temporary Work, all of which apply to the Group as a whole. Environmental protection activities are shaped both by the environmental policy and by the principles for products and production, which apply throughout the Group.

### Strategic stakeholder management

Our stakeholders are individuals, groups, or organizations who materially influence or are influenced by the way in which the Group reaches its corporate decisions and the implications of those decisions. The role of stakeholder management is to manage the many demands placed upon us

such that the Group can integrate them into its decision-making processes. This includes sharing knowledge, jointly developing solutions for the problems we face and using transparent criteria to make decisions.

Our customers and our employees are our key stakeholders. Around this core, we have defined twelve types of stakeholders in five clusters. This classification is the product of a stakeholder assessment in which we regularly identify the Group's key stakeholder groups.

The aim is to open up decision-making processes and systematically enhance the Group's sustainability management through constructive criticism. In this context, we take a holistic approach to stakeholder management.

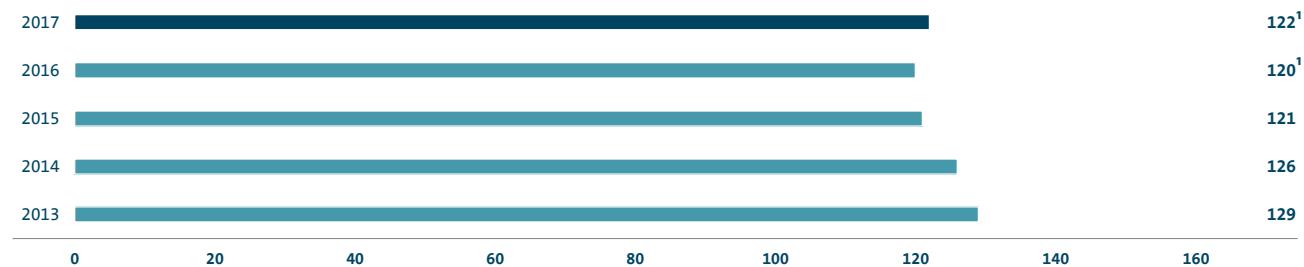
### RESEARCH AND DEVELOPMENT

Forward-looking mobility solutions with brand-defining products and services would be unthinkable without technological innovations. This makes our research and development work essential for sustainably increasing the value of the Company.

Together with our Group brands, we have formulated a strategy for networking development activities across the Group and launched numerous initiatives based on our future program TOGETHER – Strategy 2025. At the heart of this is an efficient, cross-brand development alliance characterized by a close network of experts, collaboration on an equal footing, an innovative working environment and the pooling of development activities. With this alliance, we aim to make use of synergy effects across the Group and act as a role model for the environment, safety and integrity. The alliance is playing a major part in the Volkswagen Group's transformation into a leading provider of sustainable mobility and helping to make the Group fit for the future.

Based on this strategic focus, we concentrated in the reporting year on continuing to develop promising mobility solutions, establishing technological expertise to strengthen our competitiveness, expanding our range of products and services and improving the functionality, quality, safety and environmental compatibility of our products and services.

**CO<sub>2</sub> EMISSIONS OF THE VOLKSWAGEN GROUP'S EUROPEAN (EU28) NEW PASSENGER CAR FLEET**  
*in grams per kilometer*



<sup>1</sup> Subject to official publication by the European Commission in the annual CO<sub>2</sub> fleet monitoring report.

#### Fuel and drivetrain strategy

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<sup>1</sup> in the reporting period and was thus well below the 2017 European limit of 130 g CO<sub>2</sub>/km. The small year-on-year increase is mainly attributable to the new measurement techniques to be applied and the decline in the proportion of diesel vehicles included in 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.

As part of a Group-wide initiative – and with a view to the legal regulations on emissions – we are currently developing a forward-looking vehicle and drivetrain portfolio: to achieve our goal of sustainable mobility, we have set ourselves the objective of increasing drive system efficiency with each new model generation – irrespective of whether the means of propulsion is a combustion engine, a hybrid, a plug-in hybrid, a purely electric drive, or a fuel cell drive system.

We anticipate that by as early as 2025, one in four new Volkswagen Group vehicles worldwide will have a purely electric drive; depending on the market development, this could be up to three million electric vehicles a year. The Volkswagen Group has launched a comprehensive electrification offensive in the form of Roadmap E. By 2025, we plan to offer our customers around the world more than 80 new electric models, including some 50 purely battery-driven vehicles and 30 plug-in hybrids. By 2030, the Volkswagen Group aims to electrify its entire model portfolio – from high-volume models to premium vehicles. This will mean

offering at least one electric version of each of our approximately 300 models across all Group brands. We are therefore planning to invest more than €20 billion in industrializing e-mobility by 2030, involving, amongst other things, the development of two new electric platforms for vehicles with a range of up to 600 km. Examples include the Volkswagen I.D. family of concept vehicles, the Audi e-tron and Porsche's Mission E.

To enable sustainable, affordable mobility for as many people as possible, we will continue to offer the full range of drivetrains – from conventional combustion engines to pure electric drive. From today's perspective, the combustion engine looks set to serve as the broad basis for drive technology in the coming years. In the interest of using resources responsibly, it is therefore essential for combustion engines to be further optimized. We use clean technologies to purify exhaust gases. All our new diesel vehicles are now fitted with an SCR catalyst as standard. From 2018, all our petrol engine cars will have particulate filters.

In addition to electric drives and more efficient combustion engines, renewable, reduced-CO<sub>2</sub> fuels (in gas or liquid form) will also play an ever-greater role. We are committed to expanding the natural gas (CNG) infrastructure and are extending our model range accordingly. We are also intensively researching options for producing fuels from renewable electricity, enabling carbon-neutral operation of combustion engines. Projects such as Audi e-gas (power-to-gas) and SEAT's SMART Green Gas (waste-to-gas) are examples of our commitment in this area.

Last but not least, we are working under Audi's leadership to make fuel cell technology ready for market.

It is more important to us than ever to rigorously pursue our modular approach. We are reducing the number of individual modules so that we can make a large product portfolio economically viable. Over the long term, we will reduce the number of versions of conventional combustion engines in the Group by more than a third, for example.

This will create capacity for developing and producing new hybrid and electric drives.

#### **Life cycle engineering and recycling**

Innovations and new technologies for reducing fuel consumption are not enough on their own to minimize the effect of vehicles on the environment. That is why we examine the entire product life cycle of our vehicles – from the extraction of raw materials to the production of components and the provision of fuel and energy during vehicle use to their final disposal. We identify the stages of the life cycle at which improvements will have the greatest effect and develop appropriate solutions. We call this life cycle engineering. Recycling, for example, is an important means of reducing environmental impact and conserving resources. When developing new vehicles, we therefore pay attention to the recyclability of the required materials, use high-quality recycled material and avoid pollutants. At the end of their lives, our vehicles are 85% recyclable and 95% recoverable. In implementing the Aluminum Closed Loop project in 2017, we created a closed circuit for aluminum beyond our Company boundaries for the first time. Aluminum scrap was returned directly from our press shops to the supplier for reuse in vehicles.

#### **Leveraging synergies increases efficiency**

When developing vehicles, we cooperate closely with our brands to leverage synergies. The strategy formulated by our development alliance aims, for example, to make the Group more competitive in the long term by deploying resources more effectively and efficiently in the research and development of new mobility-related technologies, products and services. In our Group-wide development alliance, the brands not only work with each other, but also for each other on key technologies, forming broad networks of expertise to address the topics of the future. In the reporting year, we consolidated the Group's activities and responsibility for the development, procurement and quality assurance of all battery cells in the Center of Excellence under the umbrella of the Volkswagen Passenger Cars brand. Pilot production will also start here, with the aim of building up manufacturing expertise for our Group.

Our modules are also managed centrally to reduce costs, capital expenditure and complexity. With the aid of a Group

initiative, we are seeking to reduce expenditure in the toolkits while at the same time implementing a wide-reaching electrification offensive and focusing on autonomous systems. We will achieve this through a considerable reduction in complexity using streamlined, non-overlapping yet synergistic platforms. The individual Group brands are using the modular toolkits, thus creating synergies between the various models of a model line and across model lines. The streamlined toolkits are creating the financial leeway for development work on the future trends of digitalization and autonomous driving. As part of the TOGETHER – Strategy 2025 program, the high-volume passenger car brands have introduced model line organization through a Group initiative, consequently strengthening the brands' responsibility for the success of vehicle projects, improving project work across different business areas, accelerating decision-making and improving the result-orientation of projects.

Under the umbrella of Volkswagen Truck & Bus, MAN and Scania are continuing to work together on core drivetrain components based on the lead engineering principle. They have expanded their development work in the fields of electrification and autonomous driving.

We are also creating synergy effects by continuing to closely share best practices, for instance in virtual development and testing. Finally, the centralized development and consolidation of IT systems is helping to promote cooperation across brands, make development activities more comparable and reduce the Group's IT costs.

#### **Sustainable mobility, connectivity and automated driving**

Mobility is a prerequisite for economic growth. But while the need for constant mobility is rising, natural resources are dwindling. This calls for holistic mobility concepts to minimize environmental impact. Such solutions need to be efficient, sustainable, customer-oriented and accessible anytime and anywhere.

We are researching and developing such pioneering concepts and solutions in our Group-wide alliance. In shaping the future of mobility, we are looking not only at the automobile but at all modes of transport and transport infrastructures, at people's mobility habits and at other relevant factors. Innovative technologies such as connectivity and automated driving are enabling us to take completely new problem-solving approaches. We want to take advantage of these to contribute to a comprehensive mobility system of the future and to help shape our industry's digital transformation.

Another initiative of our future program TOGETHER – Strategy 2025 is the establishment of a cross-brand mobility solutions business. Our mobility business MOIA, which we founded in 2016, is to become one of the leading providers of innovative transport services and will develop profitable, globally applicable business models over the next few years. Strategic investments and partnerships are also being sought. In the reporting year, MOIA conducted service tests for its ride-pooling concept – an organized ride-sharing system with a driver – among other products in Hanover over several months with selected participants, gathering valuable experience. These and other activities will help to make Volkswagen one of the world's leading providers of efficient and convenient smart mobility services by 2025, with a portfolio encompassing all brands and both "mobility-on-demand" and "vehicle-on-demand" services.

In December 2017, Volkswagen Truck & Bus launched the digital brand RIO. This cloud-based, multi-vendor platform serves the entire transport and logistics ecosystem. For the first time, everyone in the supply chain – shippers, forwarders, carriers, loaders, dispatchers, drivers and recipients – will be connected. RIO will offer digital solutions for all the players involved in the transport system. It will work closely with customers to tailor solutions to the needs and demands of the market and continuously enhance them.

On the road to autonomous driving, the Volkswagen Group has further improved its assistance systems and automated driving functions in 2017 and fitted them in vehicles. The strategic objective is to market highly automated driving functions for private vehicles, shared mobility systems and commercial mobility providers as a core competency of the Group from 2021. With the presentation of the Sedric concept vehicle and a look ahead at the Sedric family – from fully autonomous city vehicles to luxurious long-distance mobility, spectacular sports cars, self-driving urban delivery vehicles and heavy trucks – the Volkswagen Group has introduced

its vision of an autonomous mobility system. Particularly in cities, these vehicles will enable completely new forms of individual mobility – even for user groups that have so far been excluded. A balanced combination of different vehicle sizes will also reduce the space required for parking and optimize urban transport as a whole.

Autonomous driving in the complex urban environment places heavy demands on technology. We are dedicated to meeting these challenges. Led by Audi, the Volkswagen Group founded Autonomous Intelligent Driving GmbH in 2017. This new company will develop a Group-wide system for self-driving vehicles. The reporting year also saw the presentation of the Audi A8 – an innovation highlight with up to 41 driver assistance systems. The AI Traffic Jam Pilot – the first automated driving function in a production vehicle – deserves special mention. In traffic jam situations on multi-lane highways it enables Level 3 automated driving as defined by international standards at speeds of up to 60 km/h. This means that drivers no longer need to continuously monitor the system. Depending on national legislation, the driver may also perform other permitted tasks while the vehicle is in motion. This results in a high degree of convenience and safety. Audi will gradually introduce the AI Traffic Jam Pilot into series production in various countries: its introduction requires clarification of the respective national legal framework and adjustment and testing of the system accordingly; different national approval processes and deadlines must also be complied with.

Using the new AI functions, Porsche is working on improving active driving safety as well as the acceptance of assistance systems and automated driving functions among car drivers. Its current focus is on Grip Prediction, a technical solution to predict how much grip the road surface will offer and adjust driving speed for longitudinal and lateral movement. Vehicle data from prototypes, combined with local weather data, is the basis for this.

### Pooling strengths with strategic alliances

The future program TOGETHER – Strategy 2025 plans to transform our core business and to establish a new mobility solutions business area at the same time. It is decisive to the success of this plan that we place our great innovative strength on even broader foundations.

Growth in the mobility sector is currently a global phenomenon, above all in the economy segment. As part of a Group initiative, Volkswagen is therefore increasingly entering local partnerships to develop and offer economy products in line with the market. This is helping us to identify regional customer needs more precisely, to adjust our product range accordingly and to establish competitive cost structures. In future, we will therefore concentrate to a greater extent on partnerships, acquisitions and venture capital investments, and will manage investment selection centrally so as to generate maximum value for the Group and its brands.

Developing battery technology as a core competency has also been defined as a strategic initiative of the Volkswagen Group. The battery accounts for 20 to 30% of the cost of materials in electric vehicles; in future, it will be one of the most important components for differentiating between products. We have already pooled our in-house expertise in battery cells in a Center of Excellence and also plan to accelerate the development of expertise and technological change through intelligent partnerships. We anticipate that our own electric fleet with lithium-ion batteries will require a battery capacity of more than 150 GWh a year in the period to 2025. To cover this enormous demand, we are inviting tenders for long-term strategic partnerships in China, Europe and the USA with a global order volume of more than €50 billion in the period to 2025. Looking ahead, we are already preparing for the next generation: together with partners, we aim to develop solid-state batteries to market maturity with ranges of more than 1,000 km.

In 2017, MAN and the Austrian Council for Sustainable Logistics consortium signed an agreement to jointly develop

and test fully electric-powered trucks. The results will feed into the series development of electric trucks for urban delivery traffic.

Our mobility business MOIA is currently working with Hamburger Hochbahn AG to develop a new, environmentally friendly mobility service for Hamburg: a shuttle-on-demand service with environmentally friendly electric vehicles is due to launch in 2018 to complement public transport and as an alternative to the private car.

We are actively involved in public projects to help shape the framework conditions for the approval and introduction of our own self-driving system. The experience we are gathering here will benefit the Group brands and thus also our customers.

As part of the joint involvement of our Group brands Volkswagen Passenger Cars, Audi and Porsche in the pan-European High-Power Charging (HPC) joint venture IONITY, a comprehensive charging infrastructure is being built to safeguard long-distance mobility: by 2020, it is planned to jointly build and operate fast-charging stations at 400 locations along major transport arteries in Europe.

Volkswagen Commercial Vehicles launched the Urban Logistics project initiative in the reporting year together with universities and businesses. The project partners are bringing together a wealth of promising ideas – such as intelligent connectivity, smart mobility solutions, digital communication and control technologies and the use of electric-powered delivery vehicles – to create practical solutions for districts or whole cities.

Our Material Research team plays a major role in the Open Hybrid LabFactory, a public-private partnership in which various industry and research partners work together to develop lightweight construction solutions for mass production. Given the growing importance of e-mobility, automotive lightweight construction is a key technology for future competitiveness. Less vehicle weight increases the range of electric vehicles.

### Key R&D figures

In fiscal year 2017, we filed 6,566 (6,465) patent applications worldwide for employee inventions, around half of them in Germany. The fact that an increasing share of these patents is for cutting-edge fields impressively underscores our Company's innovative power. These fields include driver assistance systems and automation, connectivity, alternative drive systems and lightweight construction.

The Automotive Division's total research and development costs in the reporting year were 3.9% lower than in the previous year; their percentage of the Automotive Division's

sales revenue – the R&D ratio – came to 6.7 (7.3)%. Along with new models, the main focus was on the electrification of our vehicle portfolio, a more efficient range of engines and digitization. The capitalization ratio was 40.0 (42.1)%. Research and development expenditure recognized in profit or loss in accordance with IFRSs increased to €11.6 (11.5) billion.

As of December 31, 2017, our Research and Development departments – including the equity-accounted Chinese joint ventures – employed 49,316 people (+2.6%) Group-wide or 7.7% of the total headcount.

### RESEARCH AND DEVELOPMENT COSTS IN THE AUTOMOTIVE DIVISION

€ million	2017	2016
Total research and development costs	13,135	13,672
of which capitalized development costs	5,260	5,750
Capitalization ratio in %	40.0	42.1
Amortization of capitalized development costs	3,734	3,587
Research and development costs recognized in profit or loss	11,609	11,509
 Sales revenue	196,949	186,016
Total research and development costs	13,135	13,672
R&D ratio	6.7	7.3

## PROCUREMENT

In fiscal year 2017, the main task for Procurement was once again to safeguard the necessary supplies and to help create competitive, innovative products and optimize cost structures. We also continued to digitalize procurement processes and expand cooperation with suppliers under the Volkswagen FAST (Future Automotive Supply Tracks) initiative.

### Procurement strategy

The Group-wide procurement strategy with the vision, TOGETHER – best in customer value and cost, was put into operation in 2017. Six goals were agreed in consultation with the brands and regions:

- › Access to supplier innovations
- › Active cost structures
- › Forward-looking structures
- › People, expertise and attractiveness
- › Supply chain excellence
- › Group-wide synergies

To achieve these goals, more than 100 measures had already been drawn up by the end of 2017 as part of the following initiatives and are now being implemented:

- › “Value sourcing” aims to systematically integrate suppliers into the development process from an early stage.
- › “Greenfield costs” refers to commercial and technical activities to optimize component costs.
- › “Innovation & partnerships” ensures that procurement is an integral part of the processes and decisions related to both topics.
- › “Software” is driving the necessary changes to processes, structures and competencies resulting from the purchase of software and its increasing importance to the Group’s added value.
- › “Digital supply chain” encompasses an IT system integrating all core procurement processes into a single solution and forming the basis for a digital network including all procurement partners.
- › “Sustainability” supports the Group’s objective of leading the automotive industry in this area, including the supply chain.
- › “Employees, strong team, organization” directs attention inward and lays the foundation for the strategy’s success with flat hierarchies, freedom for employees and a culture of respect and trust.

The first successes of these initiatives are already apparent. Integrating suppliers into several vehicle projects at an early stage, for example, has enabled faster achievement of material cost targets whilst also improving quality from the market and customer perspective. We have also ordered implementation of specific innovations for our products from

several suppliers to enable customers to take advantage of them at an early stage. In addition, it was decided to separate hardware and software in the procurement processes and establish a new organizational division, Connectivity Procurement. The first pilot projects with new IT solutions were launched in 2017 as part of the “Digital supply chain” initiative. These are gradually being rolled out throughout the Group. Pilot projects to factor sustainability aspects into the contract award process have also already been initiated.

### Volkswagen FAST – Supplier network as the basis for success

FAST is the central initiative of Group procurement, introduced in 2015 with the aim of making the Volkswagen Group and its supply network future-proof. The goal of FAST is to successfully implement the key topics of innovation and globalization by involving suppliers at an earlier stage and more intensively. The FAST initiative enhances the quality and speed of collaboration with our key partners, and thus enables us to coordinate global strategies and points of technological focus even more closely. The common goal is to make impressive technologies available to our customers more quickly and to implement worldwide vehicle projects more effectively and efficiently.

From 55 FAST suppliers in 2016, the network grew to 64 suppliers over the past fiscal year. We presented the Group’s key topics and projects at the FAST Summit, which took place in the reporting year for the third time. In addition, at the FAST Forum, relevant decision makers discussed how FAST can be made even more effective for Volkswagen and suppliers.

### Digitalization of supply

We are working systematically to implement a completely digitalized supply chain. This will help us to ensure supply, leverage synergies throughout the Group and become a leader in cost and innovation. We are therefore creating a shared database and using innovative technologies to enable efficient, networked collaboration in real time – both within the Group and with our partners. Since the successful launch of our new Group business platform ONE KBP in April 2017, we have been working together with our suppliers on one platform. A cloud-based, Group-wide data strategy was also agreed in 2017. This will enable us to identify supply risks in the supply chain even faster in future.

### Structure of key procurement markets

Our procurement is organized at global level, with a presence in the key markets around the world. This ensures that production materials, investments in property, plant and equipment, and services can be procured worldwide to the quality required on the best possible terms. Networking of

the brands' procurement organizations enables us to leverage synergies across the Group in the various procurement markets.

In addition to the brands' procurement units, the Volkswagen Group operates eight regional offices. In emerging markets, we identify and train local suppliers to generate cost advantages for all the Group's production sites. In familiar and established markets, the regional offices support access to the latest technologies and innovations.

#### **Supply situation for purchase parts and upstream materials**

Systematic avoidance of bottlenecks was a constant focus of procurement. Natural disasters such as earthquakes and tornadoes impacted the availability of upstream materials. We were able to avoid adverse impacts on the Group's production thanks to Group-wide management of capacity and demand.

#### **Management of purchase parts and suppliers**

Purchase parts management is a core component of the global procurement organization. With our experts in tools and industrialization, along with standardized processes and approaches, purchase parts management makes a substantial contribution to ensuring successful production start-ups for vehicles and powertrains all around the world. Against the backdrop of increased complexity in the automotive industry, we also help to safeguard supplies for series production. As part of the pre-production process, we simulate series production at suppliers to identify any gaps in production or quality at an early stage and take countermeasures. Purchase Parts Management works closely with Quality Assurance at the production sites and conducts multi-stage performance testing.

#### **Sustainability in supplier relationships**

Global compliance with sustainability standards in human rights, occupational safety, health and environmental protection and combating corruption is our basic requirement for successful collaboration with our suppliers. It is also a contractual stipulation of the underlying business relationship. We continuously enhanced the concept of sustainability in our supplier relationships in 2017. We have added detail to our Volkswagen Group requirements for sustainability in relations with business partners (Code of Conduct for Business Partners) concerning human rights and occupational safety and extended the reporting options for infringements by suppliers.

Another focus in 2017 was to raise awareness of sustainability risks among Procurement staff and our suppliers and to inform them on options for averting risk. By the end of the reporting period, around 29,000 supplier locations had completed our online training program. In the Asia-Pacific, South America and European regions, among others, we also trained more than 700 employees at 356 suppliers in face-to-face events on the topic of sustainability and informed them about region-specific challenges. In addition, we raised awareness of sustainability risks in the supply chain with face-to-face events for over 2,000 Procurement employees.

We also substantially intensified our supplier checks in the reporting year with regard to sustainability. We commissioned sustainability audits from an external service provider at 321 suppliers. In 60 cases, the findings resulted in an action plan to improve the suppliers' sustainability performance. In addition to these local audits, more than 25,000 supplier locations submitted a self-declaration on the topic of sustainability. In around 1,500 cases, their sustainability performance was improved through specific measures.

#### **Setting the course for the future**

In 2017, procurement was defined by vehicle connectivity and e-mobility, which have led to new groups of materials. The amount of software in our purchase parts is constantly increasing. Procurement is taking on an important role here with cost-effective structuring of licensing agreements and the standardization of software modules. We reacted early by pooling competencies to make our structure even more effective.

#### **PRODUCTION**

Our global, cross-brand production network safeguards the processes from the supplier to the factory and assembly line, and from the factory to dealers and customers. Enduring efficiency is a prerequisite for our competitiveness. We meet challenges of the future with holistic optimizations, pioneering innovations, flexible supply streams and structures, and an agile team. In fiscal year 2017, the global vehicle production volume surpassed the previous year's level and reached 10.9 million units. Productivity increased by around 5.9% year-on-year, despite the continuing difficult conditions in many markets.

### "Intelligently networked" production strategy

Production is supporting the future program TOGETHER – Strategy 2025 with their "intelligently networked" functional area strategy. By intelligently connecting people, brands and machines, we aim to pool the strengths and potential of our global production and logistics and take advantage of the resulting synergy effects. We are guided in this by four goals:

- › Versatile production network
- › Efficient production
- › Intelligent production processes
- › Future-ready production

We have used nine initiatives to create content clusters in which expert teams work on the strategic topics relevant for production in the Group. Examples include the competitive design of our global production network, the reduction and offsetting of environmental impact throughout the production process, and digitalization with its implications for production and working processes and for collaboration. The overarching aim is to increase productivity and profitability.

With the production strategy, we have laid the foundations for the successful and sustainable enhancement of our production. We use regular reviews to ensure that we constantly adapt our activities to the current challenges.

### Global production network

With twelve brands and 120 production locations, aspects such as consistent standards for product concepts, plants, operational equipment and production processes are key to forward-looking production. These standards enable us to achieve synergy effects, respond flexibly to market challenges, make optimal use of a flexible production network and realize multi-brand locations. Currently, almost half of the 40 passenger car locations are already multibrand locations. One example is the Bratislava site, which produces vehicles for the Volkswagen Passenger Cars, Audi, Porsche, SEAT and ŠKODA brands. We will add other multi-brand locations in future, for example, in Tianjin, China.

The Volkswagen Group has set itself the goal of becoming one of the world's leading providers of battery-powered vehicles (BEV) by 2025. The basis for this is the introduction of the Modular Electric Toolkit (MEB), which we will use to expand our range with a new BEV family.

In order to design multibrand projects and for e-mobility to be cost-effective in conjunction with existing concepts, it is important to make production highly flexible and efficient. Making maximum use of potential synergy effects is also a decisive factor for the success of future vehicle projects. Using common parts and concepts as well as identical production processes will enable reduced capital expenditure and provide the opportunity to better utilize existing capacities. The future will also see electric vehicle projects at multi-brand locations such as Anting, China.

We are constantly enhancing our production concepts and aligning them with new technologies. The targeting process anchored in our strategy serves to realize ambitious targets in individual projects as part of a cross-divisional approach.

The "components" business is also helping to safeguard the Group's future with its own initiatives. With around 80,000 employees worldwide, it is an integral part of the Group and plays a central role particularly in the core competency of engines and transmissions. The "components" business has been reorganized within the Group as part of a Group initiative. The aim is to boost our competitiveness, optimize investment, raise our efficiency, make a major contribution to the trends of the future, enable a coordinated entry into e-mobility and develop new business areas.

### Production locations

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.

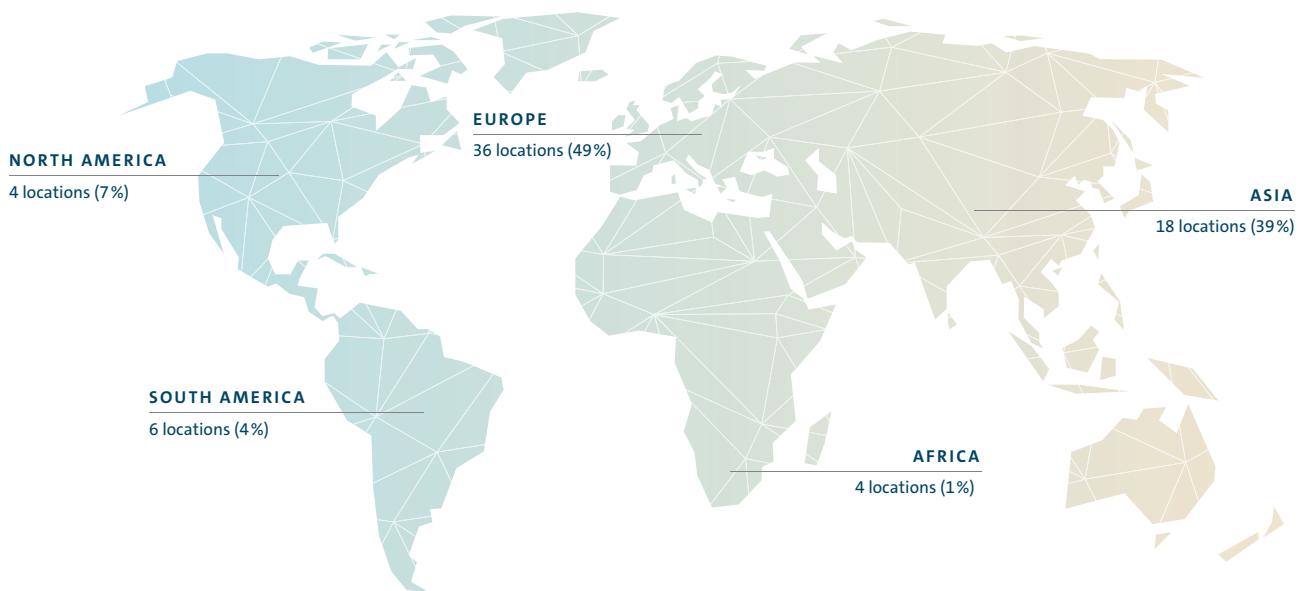
With 71 locations, Europe remains our most important production region for vehicles and components. There are 28 sites in Germany alone. The Asia-Pacific region has 31 locations. We have five locations in North America and nine in South America. The Group operates four locations in Africa.

2017 saw 62 production start-ups: 26 for new products and 36 for product upgrades and derivatives.

Capacity utilization of the locations in the Volkswagen Group's production network is further enhanced by supplying them with complete knock-down (CKD) kits for local assembly.

### VEHICLE PRODUCTION LOCATIONS OF THE VOLKSWAGEN GROUP

*Share of total production 2017 in percent*



#### The Group's production system

With our global Group production system, we aim to continuously and sustainably improve our production workflow at all the brands' and regions' locations. Our goal is to ensure the excellence of processes in production and production-related environments.

We are increasing the amount of attention we give to further strengthening the Group's production system and increasing its presence. Leadership and individual responsibility are the foremost topics, embedded in a culture of appreciation and collaboration.

A factory must work at optimal capacity so as to continue manufacturing high-quality products that give customers maximum benefits at competitive prices. This is made possible by the standardization of production processes and operating equipment at an early stage, based on the principle of so-called "concept consistency". This ensures that common design principles, joining techniques and joining sequences, but also installation and connection concepts are applied in the brands' development and production areas. The principle of "concept consistency" is fundamental for creating efficient logistics and manufacturing processes.

#### New technologies and product innovations

With our manufacturing technologies, we create Group products that fulfill the highest standards of functionality, quality and design. In recent years, for example, vehicles with multicolored paintwork have become popular, particularly those with color-contrasting roofs. Until now, this two-tone paintwork has required the vehicles to pass through the paint shop twice during production. Volkswagen is working with process partners in a joint project to develop a new technology that can significantly reduce the workload for multicolored designs. This technology was implemented for the first time in 2017 at the Pamplona site, initially for the new Polo. Other vehicles and locations are set to follow.

In the foreseeable future, the Volkswagen Group will also be able to offer more individually customized paintwork than previously possible thanks to the availability of digital printing.

Where the design and introduction of new production technologies are concerned, affected staff are involved in the redesign of workplaces and processes from the outset. This is an important prerequisite if new technologies and solutions are to find the necessary acceptance.

**KEY ENVIRONMENTAL INDICATORS FOR PRODUCTION IN THE VOLKSWAGEN GROUP<sup>1</sup>**
**ENERGY CONSUMPTION**  
*in kilowatt hours per vehicle*

2017	2,069
2016	2,089
2010	2,519


**-17.9%<sup>2</sup>**
**VOC EMISSIONS<sup>3</sup>**  
*in kilograms per vehicle*

2017	2.09
2016	2.47
2010	4.13


**-49.4%<sup>2</sup>**
**FRESH WATER CONSUMPTION**  
*in cubic meters per vehicle*

2017	3.76
2016	3.89
2010	4.54


**-17.1%<sup>2</sup>**
**CO<sub>2</sub> EMISSIONS**  
*in kilograms per vehicle*

2017	810
2016	883
2010	1,096


**-26.1%<sup>2</sup>**
**DISPOSABLE WASTE**  
*in kilograms per vehicle*

2017	13.2
2016	15.2
2010	23.3


**-43.3%<sup>2</sup>**

<sup>1</sup> Production of passenger cars and light commercial vehicles. Prior-year figures adjusted.

<sup>2</sup> Change 2017 as against 2010.

<sup>3</sup> Volatile organic compounds (VOCs).

**Environmentally efficient production**

One element of the production strategy is the environmentally exemplary production initiative. This involves us working on four key issues in the period leading up to 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
- Strengthening employees' environmental awareness and integrating relevant environmental aspects into processes
- Achieving top positions in renowned environmental rankings

In this context, the Volkswagen Group has set itself the goal of reducing the five key environmental indicators of energy and water consumption, waste for disposal, and CO<sub>2</sub> and VOC emissions in production by 45% for each vehicle produced by 2025 – starting from 2010 levels. This objective applies to all of the Group's production locations and is derived from our environmental requirements for production processes, which are anchored in the Group's environmental principles. The charts above show the development of these indicators.

We are encouraging networking and communication between the brands worldwide in order to leverage synergies. Our environmental experts meet regularly in working groups; in addition, we train our employees on the topic of environmental protection.

To identify and implement savings at the locations, the Environmental Task Force – a team from Group Research Environment – analyzes manufacturing processes, site infrastructure and resource and energy flows in production and evaluates their impact on the environment. With experience from more than 30 analyses, the team can systematically reinforce and spur on the transfer of measures.

We record and catalog environmental measures in an IT system and make these available for a Group-wide exchange of best practices. In the reporting period, around 1,600 implemented measures in the area of environment and energy were documented in this system. They serve to improve infrastructure and production processes for passenger cars and light commercial vehicles. These activities are beneficial from an environmental and economic perspective.

With a series of effective, innovative measures, we once again promoted the reduction of environmental indicators in the reporting period while at the same time improving production processes. The following examples show the extent to which the measures have contributed to strengthening production processes and achieving targets:

One important lever for reducing energy consumption is tailoring the operation of all facilities according to demand. Improving ventilation in the halls at the Bratislava site has resulted in savings of 15,000 MWh and 200 tonnes of CO<sub>2</sub>.

Measures have also been implemented in energy generation and consumption. For example, five German locations switched to 100% CO<sub>2</sub>-free power in the reporting period. This is saving 165,000 tonnes of CO<sub>2</sub> per year at the Volkswagen Passenger Cars and Porsche brands.

As part of an upgrade to the paint shop at Volkswagen de México, new electrostatic painting robots were installed. These have reduced paint consumption on the production lines by up to 19%, resulting in a VOC reduction of up to 152 tonnes per year.

#### **Green logistics**

Logistics is contributing to the Volkswagen Group's focus on the environment by analyzing the emissions of the entire transport chain. The Green Logistics initiative promotes alternative means of transport and sustainable, energy-efficient transport systems, thereby reducing greenhouse gas emissions.

Universal environmental principles were defined during the reporting period and used to create strategic guidelines and rules. These are designed to ensure that our environmental standards in logistics processes are implemented globally.

In logistics, this means, for instance, avoiding transports, shifting goods to more environmentally friendly means of transport, or improving the implementation and use of modern technology and alternative drive systems.

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 Group logistics will put two charter ships powered by liquefied natural gas (LNG) into service in 2019.

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 for-

warders, 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.

In mid-2017, Volkswagen Sachsen GmbH's Zwickau plant and the Porsche factory in Leipzig presented fully electric, 40-tonne trucks suitable for highway driving. With automated driving functions, the vehicles are intended for short-cycle, on-time transport. Two trucks were fitted with electric drive systems and batteries in the ejit (electric-powered just-in-time mobility) research project. The e-trucks reach a speed of 85 km/h and have a range of 70 km.

#### **SALES AND MARKETING**

As part of our future program, we have developed a sales and marketing strategy aimed at exciting 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 concepts together with our sales partners. In the focus area of the customer ecosystem, we are implementing platforms for a seamless and safe 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. Starting in 2018, the new methodology will be applied in the Volkswagen Group's product processes; other markets will also be included.

#### **Customer satisfaction and customer loyalty**

The Volkswagen Group aims its sales activities at exciting its customers. This is our top priority, as excited 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, the Porsche and ŠKODA brands 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 in terms of loyalty, 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 achieved by the Volkswagen Passenger Cars brand.

In the core European markets, 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 business 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 currently impressive proof of customers' trust in our financial services. Ambitious targets underscore the focus on customers and on fulfilling their needs at Volkswagen Financial Services.

#### **E-mobility and digitalization in Group Sales**

By 2025, as part of our Roadmap E, we aim to offer our customers around the world more than 80 new electric models, including around 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 impresses 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 opening up new business models and opportunities in every aspect of the connected vehicle – in particular with regard to 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)%. Overall, 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 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 a high level of 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.

#### GROUP QUALITY MANAGEMENT

The quality of our products and services plays a key role in maintaining customer satisfaction. Customers are particularly satisfied and remain loyal when their expectations of a product or service are met or even exceeded. Appeal, reliability and service determine quality as it is perceived by the customer throughout the entire product experience. Our objective is to positively surprise and excite our customers in all areas and thus win them over with our outstanding quality.

#### Strategy of Group Quality Management

We embody outstanding quality and ensure dependable mobility for our customers worldwide – this is the strategic goal that guides the work of Group Quality Management. Along with the brands' quality organizations, Group Quality Management plays an active role at all stages of product creation and testing. Through this work, we make an important contribution to successful product start-ups, high customer satisfaction and low warranty and goodwill costs.

We have further enhanced the Group Quality Management strategy as part of our future program TOGETHER – Strategy 2025. Focal areas include digitalization, new technologies and business areas as well as uniform processes, methods and standards at all brands.

Increasing progress in digitalization is also a major challenge for the Volkswagen Group: an increasing number of digital products and services are being developed and brought to market. To continue to ensure the familiar level of quality and safety amid this diversity, we must adapt our quality measures accordingly. The increase in functional diversity and complexity of driver assistance systems, extending all the way to autonomous vehicles, means that software is growing in scope. Here we need to enhance the methods we use to support selected critical features of software development and safeguard quality requirements. We are also taking advantage of the progress in digital technology to further optimize our own processes and structures. For example, we use virtual measurement technologies or big data analyses when vehicles on the market encounter quality problems.

In this context, Group Quality Management has further developed its strategy in consultation with the Group brands. This comprises the following four goals:

- › We will excite our customers with outstanding quality by understanding the features of the quality that resonates with them and implementing these in our products.
- › We will contribute to competitive products with optimal quality costs by ensuring robust processes, thereby reducing the expense involved in testing each vehicle.
- › In critical business processes, we will reinforce the principle of multiple-party verification and monitor achievement of milestones even more closely.
- › We will become an excellent employer by promoting every single employee's personal development even more intensively.

To achieve our goals, we have been working on a total of 15 quality initiatives since mid-2016. All are focused on the topics that will be decisive to the future success of the quality organizations at the Volkswagen Group.

#### **Contributing to the Group's strategic indicators**

We use a strategic indicator to measure the contribution of Quality Management at the major passenger car-producing brands.

- › Tow-in 12 MIS. This figure shows the number of vehicles that need to be towed to a dealer per 1,000 vehicles after 12 months in service. It includes all Group vehicles categorized as tow-in by dealers in the German market. In the 2016 production year, the Volkswagen Group's tow-in statistics in the German market improved slightly compared with 2014 and 2015. Of the six brands featured, Volkswagen Passenger Cars, Audi and ŠKODA saw their performance improve, while the SEAT, Porsche and Volkswagen Commercial Vehicles brands recorded a slight downward trend.

We also use a strategic indicator to measure our success for trucks and buses:

- › Claims per vehicle 12 MIS Truck. This figure incorporates the number of claims related to liability for material defects per 1,000 vehicles after 12 months in service. MAN and Scania each collect this data for their products from across the globe. Through systematic quality management, both brands continued to exhibit a downward trend in the reporting period.

#### **Legal and regulatory compliance**

The diesel issue showed that we must check the compliance of our products more intensively. We have therefore reinforced application of the principle of multiple-party verification – which involves mutual support and control

between the divisions – and introduced important additional processes, including in software security. At the Volkswagen Passenger Cars brand, for example, the development of software will be accompanied by quality milestones from 2017: The principle of multiple-party verification safeguards the systems and components or parts that directly influence a vehicle's safety, type approval and functioning and therefore require increased vigilance. At the series production stage, we are working even harder to carry out conformity checks on our products with the participation of all business units involved and to perform assessments on this basis. This applies particularly to emissions and fuel consumption.

We are also placing greater emphasis on our quality management system than before, reinforcing the process-driven approach Group-wide across all business areas. Quality management in the Volkswagen Group is based on the ISO 9001 standard: the requirements of this standard must be met to obtain the type approval for producing and selling our vehicles. We conducted numerous system audits in the reporting period to verify that our locations and brands comply with the requirements of the standard, which was revised in 2015. The major focus was on the risk assessment for non-compliance with agreed processes. To ensure that these and other new requirements as well as official regulations are implemented and complied with, Group Quality Management is available to support the quality management consultants.

With these and other measures, Group Quality Management is helping to ensure that we not only meet all legal requirements imposed on us as a manufacturer, but that our products do as well.

#### **Observing regional requirements**

Our customers in the different regions of the world have very diverse needs as far as new vehicle models are concerned. Another important task of Group Quality Management is to identify and prioritize these regional factors so that they can be reflected in the development of new products and the production of established vehicle models – together with other important criteria such as the quality of locally available fuel, road conditions, traffic density, country-specific usage patterns and, last but not least, local legislation. We mainly use market studies and customer surveys to determine region-specific customer requirements.

The perceived quality of our vehicles must be at a level commensurate with that of our competitors. We therefore redesigned the vehicle audit during the reporting period and tailored it more closely to regional customer needs. Every brand works together with the individual regions to decide

the responsibility of the brands and enables us to invest less in features that do not resonate with customers. To make the results comparable, consistent quality benchmarks apply across all markets and regions. For more than 40 years now, auditors have therefore been deployed around the world to ensure compliance with these benchmarks by carrying out an assessment from the customer's perspective of the vehicles that are ready for delivery. We continually revise the quality benchmarks on which such audits are based to adapt them to the changing requirements.

#### EMPLOYEES

The Volkswagen Group is one of the world's largest employers in the private sector. As of December 31, 2017, the Group, including the Chinese joint ventures, employed 642,292 people, 2.5% more than at the end of 2016. The ratio of Group employees in Germany to those abroad remained largely stable over the past year. At the end of 2017, 44.8 (44.9)% of employees worked in Germany.

#### **Human resources strategy and principles of the human resources policy**

With the new human resources strategy "Empower to transform", the Group is continuing with key and successful approaches of its human resource management. These include the pronounced stakeholder focus in corporate governance, comprehensive participation rights for employees, outstanding training opportunities, the principle of long-term service through systematic employee retention and the aspiration to appropriately balance performance and remuneration. At the same time, the new human resources strategy is setting innovative trends. Hierarchies are being dismantled and modern forms of working such as agile working – whereby most responsibility for the work organization is transferred to the teams – are set to be expanded. In the future, cooperating robots will ease heavy physical work in factories and digital processes will simplify administration. The Company's human resources strategy is based on five overarching objectives:

- › The Volkswagen Group aims to be an excellent employer with all of its brands and companies worldwide.
- › Highly competent and dedicated employees strive for excellence in terms of innovation, added value and customer focus.
- › A sustainable work organization ensures optimal working conditions in factories and offices.
- › An exemplary corporate culture creates an open work climate that is characterized by mutual trust and collaboration.
- › The Company's human resources work is highly employee-oriented while also aiming for operational excellence and providing strategic value-added contributions.

**EMPLOYEES BY CONTINENT**  
*in percent, as of December 31, 2017*



To implement its human resources strategy, the Volkswagen Group will roll out a Group-wide diversity management system, among other programs, in the course of 2018. Varying cultural conditions in the global markets and growing economic momentum demand from Volkswagen an ever-broader range of experience, world views, problem solutions and product ideas. The diversity of our staff offers great potential for innovation in this area, which we aim to make better use of in future. Mandatory rules on the percentage of women in management, combined with targets for the internationalization of senior management, are at the heart of diversity management at Volkswagen.

In line with its corporate strategy, the Volkswagen Group is also driving the transformation in other fields. For example, various cultural change initiatives are concerned with reinforcing flatter hierarchies, a more open form of collaboration and a greater focus on the big picture within the Company's divisions.

The human resources development system was completely revised in 2017 and now offers more transparent paths into management based on greater individual responsibility. The Company's management principles were also revised and new criteria for appointments defined.

TOGETHER – Strategy 2025 is also accompanied by new strategic indicators.

For the passenger car-producing brands, we compile and analyze the following information:

- › Internal employer attractiveness. The indicator is determined by asking respondents, as part of the Group-wide opinion survey, whether they perceive the respective company as an attractive employer. The target for 2025 is 89.1 out of a possible total of 100 index points. A score of 85.2 index points was achieved throughout the Group in the reporting period.

- External employer attractiveness. The ability to recruit top talent is of decisive importance, particularly in view of the Company's transformation into a world-leading provider of sustainable mobility solutions and the associated development of new business units. Once a year, we check the positioning of the major passenger car-producing brands on the labor markets for graduates and young professionals using of this strategic indicator. Rankings in surveys by renowned institutions, in which we aim to achieve top scores for all Group brands, serve as the basis for this.
- Diversity index. As we establish diversity management across the Group, this strategic indicator for the active workforce is used worldwide to report the development of the proportion of women in management and the internationalization of senior management. In particular, it underpins the objective of the human resources strategy, which is aimed at contributing to an exemplary leadership and corporate culture. In 2017, the Group-wide percentage of women in management was 13.8%. We aim to achieve a target of 20.2% by 2025. We aim to increase the level of internationalization in senior management, the uppermost of our three management tiers, from 18.7% in the past fiscal year to 25.0% in 2025.

In the truck and bus business, we look at the opinion survey and cross-brand exchange of employees to identify how well strategic targets are being achieved:

- Opinion survey. The sentiment rating is used to determine the level of employee satisfaction and identification with the company. The sentiment rating is calculated as the average score from of all responses regularly submitted as part of the opinion survey. The result in 2017 was in line with the previous year's level.
- Cross-brand exchange and rotation. The aim is to continuously intensify collaboration between the commercial vehicle brands. It is also designed to enable the creation of specialist and international networks. We use this indicator to analyze how many employees have worked at another brand through such rotation. An increasing number of staff took advantage of this personnel development opportunity in 2017.

One strategic indicator has been defined for the financial services business:

- External employer ranking. This involves taking part in an external benchmarking exercised every two to three years. The aim is to enhance working conditions and identify measures to become a top-20 employer by 2025, not just in Europe, but globally. Volkswagen Financial Services AG was most recently represented in various national and international best-employer rankings in 2016. In 12<sup>th</sup> place, it was among the top European employers in the "Great Place to Work" employer competition.

#### **Training and professional development**

At Volkswagen, our capacity for innovation and competitiveness depends to a large extent on the commitment and knowledge of our staff. Training at Volkswagen is organized very systematically on the basis of the so-called vocational groups. A vocational group includes all employees whose tasks are based on similar technical skills and who require related expertise in order to perform their jobs. The skills profiles lay down the functional and interdisciplinary skills for each job and serve as an orientation for training measures.

Volkswagen Group employees have access to a wide range of training measures – from advanced training on general Company-related issues, to specific training within the individual vocational groups, to personal development programs. The educational opportunities and development programs at the Volkswagen Group enable staff to continue to develop throughout their working lives and constantly deepen their knowledge. In this process, they also learn from more experienced colleagues, who act as experts in the vocational group academies – the learning centers of the vocational groups – and pass on their knowledge to others. All training is based on the dual training principle, which combines learning theoretical content with practical experience on the job and by means of specific tasks.

New technologies can usefully complement learning and the transfer of expertise. As the central training organization in the Group, the Volkswagen Group Academy incorporates this idea into different projects. One example of this is the

Education Lab, where the Volkswagen Group Academy conducts training research and analyzes training trends, tests technologies at Volkswagen together with start-ups, thereby introducing new forms of skills development at the Company.

Within the Volkswagen Group Academy, the AutoUni provides the Group with knowledge that is relevant for the future by integrating internal senior experts and collaborating with universities. Its events are offered as programs and as cooperative study modules in a blended learning format, which combines classroom training with online content, and are supplemented by lectures and conferences.

#### Vocational training and cooperative education

The core component of training at Volkswagen is vocational training or for young people eligible to enter university, cooperative education (dual study programs combining university studies with on-the-job training). As of the end of 2017, the Volkswagen Group had trained 19,207 young people in approximately 50 trades. Volkswagen has introduced the principle of dual vocational training at many of the Group's international locations over the past few years and is continuously working on improvements. Over three-quarters of all the Group's vocational trainees now learn their trade through dual vocational training. Once a year, Volkswagen honors its highest-achieving vocational trainees in the Group with the Best Apprentice Award.

Volkswagen continues to assist in the professional development of young people at the start of their careers even after their vocational training has been completed. Talent groups, for example, are used to promote particularly talented young specialists. These two-year development and training programs accept the highest-achieving 10% of fully qualified vocational trainees at Volkswagen AG and the Zwickau site each year. Fully qualified vocational trainees also have the option to move to a Group company outside Germany for twelve months as part of the "Wanderjahre" (Year Abroad) program. In the reporting period, 31 Volkswagen Group locations in 17 countries took part in this development program. The AGEBI+ program was designed to promote fully qualified vocational trainees who are eligible for university, thus offering students the opportunity to combine practical experience with a degree program in subjects that are critical for Volkswagen's future.

By joining the European Alliance for Apprenticeships in 2017, Volkswagen is also working to promote vocational training outside the Group. The European Alliance for Apprenticeships is a platform that brings together government departments from various countries with other key stakeholders such as businesses, social partners, professional bodies, vocational training providers and youth organizations. The common goal is to strengthen the quality, supply, image and mobility of apprenticeships in Europe.

#### Development of university graduates

Volkswagen offers two structured entry and development programs for university graduates and young professionals. In the StartUp Direct trainee program, graduate trainees gain an overview of the Company over a two-year period while working in their own department, and take part in supplementary training measures. University graduates interested in working internationally can participate in the 18-month StartUp Cross program. The aim of the program is to get to know the Company in all of its diversity and to build up a broad network. During the term of this program, young professionals become familiarized with several Volkswagen Passenger Cars locations in Germany and other countries by working in various functional areas. Both programs are supplemented by several weeks' experience working in production. In 2017, Volkswagen AG hired a total of 89 graduate trainees as part of these programs, 30.3% of whom were women.

Graduate trainee programs are also available at the Group's international locations such as ŠKODA in the Czech Republic or Scania in Sweden. In addition, the Volkswagen Group has been offering young engineers from Southern Europe, where unemployment especially among young academics remains a major problem, the opportunity to gain international work experience through the StartUp Europe trainee program since 2012. Volkswagen has designed this program for university graduates, who work for three months at a Group company in their home country followed by 21 months at a German Group company.

#### PROPORTION OF WOMEN

*as of December 31*

%	2017	2016
Female employees	16.3	16.0
Female vocational trainees <sup>1</sup>	28.8	29.5
Female graduate recruits <sup>2</sup>	30.3	26.0
Total management <sup>1</sup>	11.4	11.0
Management <sup>1</sup>	13.2	12.8
Senior management <sup>1</sup>	9.2	8.7
Top-Management <sup>1</sup>	6.5	4.7

<sup>1</sup> Germany, excluding Scania, MAN and Porsche.

<sup>2</sup> Volkswagen AG

### **Increasing attractiveness as an employer and target-group-specific development programs**

A family-friendly human resources policy is a major component of Volkswagen's appeal as an employer and makes an important contribution to achieving greater gender equality. We are therefore working continuously to develop family-friendly working-hour models and to further increase the proportion of women in management positions. In line with German law on the equal participation of women and men in leadership positions, Volkswagen AG is aiming to have a 13.0% proportion of women at the first management level and 16.9% at the second management level by the end of 2021. As of December 31, 2017, the proportion of women in the active workforce at the first level of management was 10.4 (9.8)% and at the second level of management it was 14.0 (13.5)%.

Targets have been set for every board-level division in the company to encourage women with high potential in their decision to aim for a career in management in the Company. This approach is supported by many different measures including the cross-brand mentoring programs "Mentoring Program Management", "Compass" and the "Career with Children" project.

A large number of company regulations have come into effect at the Volkswagen Group in recent years to improve balancing the demands of work and home life and to allow for individual arrangements. These include flexible working hours, variable part-time work and shift models, leave of absence programs enabling employees to care for close family members, as well as childcare facilities that are close by and/or company-owned, and mobile working.

At Volkswagen AG, which had entered into its works agreement for mobile working in 2016, more than 11,800 employees made use of this flexible working arrangement as of the end of the reporting period.

### **Preventive healthcare and occupational safety**

Volkswagen's holistic healthcare management system extends beyond traditional preventive healthcare and occupational safety. It also covers work organization, workstation design, behavioral ergonomics, psychosocial aspects, rehabilitation and reintegration into working life as well as programs for preventing widespread diseases.

To maintain and improve employees' health, performance and fitness levels, a free and comprehensive voluntary screening, the Check-up, is provided for all employees at almost all production sites.

Another important area for action at the Volkswagen Group is the ergonomic quality of the workstations. The Company is thus highly committed to continuously improving ergonomics along the entire production chain and in all work

**AGE STRUCTURE IN YEARS OF VOLKSWAGEN GROUP EMPLOYEES  
as of December 31, 2017; in percent**



processes. To this end, we collaborate with scientific partners to combine state-of-the-art ergonomic workstations with innovative work processes.

### **Employee participation**

Codetermination and employee participation are important pillars of our human resources strategy. Volkswagen aims to promote high levels of expertise and a strong sense of team spirit. This includes employees' opinions, assessments and constructive criticism being heard.

With the opinion survey, a uniform, Group-wide poll, the Company regularly gathers information regarding employee satisfaction. Based on the results, we then implement follow-up processes in which proposals for improvement are developed and monitored until implementation is complete. Over 570,000 employees from 156 locations and companies in 48 countries were invited to take part in the survey. The participation rate was 79%. The average result based on all responses that are regularly received through the opinion survey – the sentiment rating – is an important parameter in the opinion survey; in 2017 it stood at 78.3 out of a possible total of 100 index points. The score achieved was thus on a par with the previous year.

Idea management is another important means of boosting employee engagement. Using their creativity, knowledge and initiative, our employees contribute their ideas for improvements to streamline workflows, further enhance ergonomics in the workplace, reduce costs and continuously increase efficiency. Idea management enables employees to participate actively in the planning and organizing of their work and is also underpinned by prizes with monetary incentives.

## INFORMATION TECHNOLOGY (IT)

With digitalization and networking on the rise, all of our business processes must also be comprehensively provided with digital support. At the same time, the establishment of new locations is placing high demands on networking and coordination. A modern, tailor-made infrastructure and an efficient application landscape are needed to meet these requirements.

Our Group-wide Production, Information and Control System (FIS) enables us to produce vehicles efficiently all around the world – at the right time and with the right equipment. FIS is a key success factor for flexible, cross-brand manufacturing in the global production network.

The growing convergence of different business areas and IT is opening up new opportunities. In production, for example, big data processes help us to analyze faulty machinery and take action at an early stage. Virtual concept vehicles make the product development process even faster and more efficient. Applied research in the field of intelligent human-robot collaboration, and IT systems to control mobile assistive robotics and networked infrastructure (Internet of Things) are also important elements of the digitalization of production at the Volkswagen Group.

The Company's internal network Group Connect helps to network all employees. The platform encourages the transfer of expertise and puts experts in touch with one another.

The newly established IT City serves as the central location for the Group's own IT and digitalization expertise in Wolfsburg. The campus-style office complex has been systematically designed for agile working. In software development centers, we develop applications for a wealth of different uses, thereby maintaining comprehensive in-house expertise in the rapid, demand-oriented development of IT solutions.

Safeguarding data and systems at the Volkswagen Group is another focus of our IT. Over the past fiscal year, we have continued to set up the Information Security Management Systems (ISMS). The Group offers documents, templates and tools to all Group companies and brands in the form of an ISMS toolbox to help them implement their own ISMS. The ISO 27001 standard is one component of this. The key information security processes have been audited and successfully certified within the ISO 27001 framework. This is the most important standard for information security and extends beyond IT to cover issues such as personal security, compliance, physical security and legal requirements.

In 2015, Volkswagen AG co-founded the Deutsche Cyber-Sicherheitsorganisation GmbH – (DCSO). DCSO aims to accu-

mulate specialist knowledge on cybersecurity and become the preferred service provider to German businesses in this field. It conducts security audits and certifies key suppliers and technologies in order to help German companies (especially small and medium-sized enterprises) detect and defend themselves against cyber-attacks and predict them in future. This work also makes our supply chain more secure.

Volkswagen is also capitalizing on digitalization at its in-house IT labs in Wolfsburg, Munich, Berlin, San Francisco and Barcelona. Specialist departments of Group IT, research institutions and technology partners are working closely together at these innovation centers on future trends in information technology, such as artificial intelligence and machine learning, quantum computing, digital ecosystems, intelligent human-robot collaboration and smart mobility. These labs act as test laboratories for the Group, as centers of expertise for these future trends and as liaison offices for start-ups. They enable Volkswagen to experiment with new technologies outside the line organization. Here, the experience and strategic expertise of a large company like Volkswagen is combined with the pragmatism and speed of young start-ups.

## ENVIRONMENTAL STRATEGY

Protecting the environment is one of four goals firmly anchored in our future program TOGETHER – Strategy 2025. As a world-leading provider of sustainable mobility, we want to be a role model on environmental issues. We are working towards this goal, taking responsibility for the environment every single day. To this end, we have defined the following target areas:

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

We use the decarbonization index (DCI) as a strategic indicator to document our progress. This measures the products' CO<sub>2</sub> emissions along the entire value chain. The DCI is calculated from the ratio of the carbon footprint to the number of vehicles produced. It encompasses both direct and indirect CO<sub>2</sub> emissions at the individual production sites (Scope 1 and 2) as well as all further CO<sub>2</sub> emissions over the life cycle of the vehicles sold – from the extraction of raw materials, to vehicle use and final disposal (Scope 3). The DCI thus enables transparent, comprehensive tracking of progress toward climate-friendly mobility. We are currently defining the DCI target figures for 2025 together with the Volkswagen Group brands. These targets should then contribute to the achievement of the two-degree target in the

Paris Agreement adopted at the United Nations Climate Change Conference in late 2015.

We are also calculating the environmental impact reduction production indicator. We have set a target for the Group and brands to reduce the environmental impact of production by 45% per vehicle compared with 2010 levels. This key figure includes energy and water consumption, CO<sub>2</sub> and VOC emissions and the volume of waste; the charts on page 146 show the development of these indicators.

In striving to achieve our goal of becoming a role model, we consider the environmental impact throughout the entire product life cycle: from manufacturing (including the supply chain) to use and disposal. In addition to the global challenges of climate change, our approach looks at other important environmental resources, particularly water, soil, air, energy and raw materials. We use major sustainability ratings as our benchmark and aim to achieve top rankings in these.

#### **Organization of Environmental Protection**

The Group Board of Management is the highest internal decision-making authority on environmental matters. Since 2012, it has simultaneously functioned as the Group's Sustainability Board. The Group-wide management of environmental protection is the responsibility of the Group Steering Committee for the Environment and Energy, which is supported by numerous specialist bodies.

The brands and companies are responsible for their own environmental organization. They base their own environmental policies on the targets, guidelines and principles that apply throughout the Group. The Group Steering Committee for the Environment and Energy coordinates the brands and companies. It reports on progress to the Board of Management.

Environmental officers from throughout the Group meet regularly for the Group Environmental Conference in order to optimize the environmental focus along the entire value chain.

Our production sites, including the central development areas, are certified in accordance with ISO 14001 or EMAS (100 of 120 production sites in 2017). Many production locations have also certified their energy management systems in accordance with ISO 50001. Since 2009, the "integration of environmental aspects into the product development at the Volkswagen brand" has also been certified in accordance with ISO TR 14062 in Development at the Volkswagen Passenger Cars brand.

#### **Biodiversity**

Biodiversity means the variety of life on our planet, and covers the variety of species, the 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. Due to the global decline in biodiversity, the United Nations has declared the current decade to be the "UN Decade on Biodiversity".

Volkswagen has been committed to protecting biodiversity since 2007 and is a founding member of the Biodiversity in Good Company e.V. initiative. In our mission statement, we have committed to supporting the protection of species at all of our locations. For this, we are collaborating with local suppliers. Our membership in Biodiversity in Good Company e.V. has been temporarily suspended as a result of the diesel issue.

Protecting biodiversity is an integral part of our environmental management. We contribute to achieving the targets of the UN Convention on Biological Diversity (CBD) by reducing greenhouse gas emissions and utilizing resources as efficiently as possible. Volkswagen supports networking between the various players in the fields of business, politics, society and academia with a view to increasing public awareness of biodiversity conservation and to increase knowledge of the issue.

#### **SEPARATE NONFINANCIAL GROUP REPORT**

The combined separate nonfinancial report of Volkswagen AG and the Volkswagen Group in accordance with sections 289b and 315b Handelsgesetzbuch (HGB – German Commercial Code) for fiscal year 2017 will be available on the website [https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2017/Nichtfinanzierter\\_Bericht\\_2017\\_d.pdf](https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2017/Nichtfinanzierter_Bericht_2017_d.pdf) in German and at [https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2017/Nonfinancial\\_Report\\_2017\\_e.pdf](https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2017/Nonfinancial_Report_2017_e.pdf) in English by no later than April 30, 2018.

#### **REPORT ON POST-BALANCE SHEET DATE EVENTS**

There were no significant events after the end of fiscal year 2017.

# Report on Expected Developments

The global economy is expected to grow somewhat less strongly in 2018 than in the previous year. We assume that trends in global demand for vehicles will be mixed and that demand will increase at a slightly slower rate than in the reporting period. With its brand diversity, broad product range and pioneering technologies and services, the Volkswagen Group is well prepared for the future challenges in the mobility business and the mixed conditions in regional markets.

In the following, we describe the expected development of the Volkswagen Group and the general framework for its business activities. Risks and opportunities that could represent a departure from the forecast trends are presented in the Report on Risks and Opportunities.

Our assumptions are based on current estimates by third-party institutions. These include economic research institutes, banks, multinational organizations and consulting firms.

## DEVELOPMENT OF THE GLOBAL ECONOMY

In our forecasts, we assume that global economic growth will weaken slightly in 2018. We believe risks will arise from protectionist tendencies, turbulence in the financial markets and structural deficits in individual countries. In addition, growth prospects will continue to be hurt by geopolitical tensions and conflicts. We therefore expect somewhat weaker momentum than in 2017 in both the advanced economies and the emerging markets. We expect the strongest rates of expansion in Asia's emerging economies.

Furthermore, we anticipate that the global economy will also continue to grow in the period from 2019 to 2022.

## Europe/Other Markets

In Western Europe, economic growth is expected to slow down in 2018 compared with the reporting period. Resolving structural problems poses a major challenge, as do the uncertain results and impacts of the Brexit negotiations between the EU and the United Kingdom.

For Central Europe, we estimate that growth rates in 2018 will be lower than those of the past fiscal year. In Eastern Europe, the economic situation should stabilize further, providing that the smoldering conflict between Russia and Ukraine does not worsen. Following the increase in the past fiscal year, Russia's economic output is likely to grow further.

Political uncertainty and social tensions resulting primarily from high unemployment levels will probably weigh on the South African economy in 2018 and are expected to keep growth down.

## Germany

In Germany, gross domestic product (GDP) is likely to increase less strongly in 2018 than in the reporting period. However, the situation in the labor market is expected to remain stable and bolster consumer spending.

## North America

We expect the economic situation in the USA to further improve in 2018. The US Federal Reserve is likely to implement additional interest rate hikes throughout the course of the year. At the same time, fiscal policy measures are intended to provide support. Growth in Canada is likely to weaken, while remaining nearly unchanged in Mexico.

## South America

The economy in Brazil is very likely to stabilize further in 2018 and record somewhat higher growth than in the reporting period. Despite sustained high inflation, Argentina should achieve a similar increase in GDP to that recorded in the reporting period.

### **Asia-Pacific**

In 2018, the Chinese economy is expected to continue growing at a relatively high level, but year-on-year this growth will lose momentum. For India, we anticipate an expansion rate at around the 2017 level. The economic situation in Japan is likely to deteriorate compared with the reporting period.

#### **TRENDS IN THE PASSENGER CAR MARKETS**

We expect trends in the passenger car markets in the individual regions to be mixed in 2018. Overall, growth in global demand for new vehicles will probably be slower than in the reporting period.

The Volkswagen Group is well prepared for the future challenges in the mobility business and the mixed developments in regional automotive markets. Our unique brand portfolio, our presence in all major world markets, broad and selectively expanded product range, and pioneering technologies and services place us in a good competitive position worldwide. Our goal is to offer all customers mobility and innovations suited to their needs and thus ensuring long-term success.

We expect that the growth in demand for passenger cars worldwide will continue in the years 2019 to 2022.

#### **Europe/Other Markets**

For 2018, we anticipate that unit sales volumes in Western Europe will fall slightly short of those seen in the reporting period. The level recorded before the financial and debt crisis is unlikely to be achieved again in the medium term. The uncertain outcome of the exit negotiations between the EU and United Kingdom is likely to further exacerbate the continuing uncertainty among consumers precipitated by the financial and debt crisis, putting a damper on demand. In Italy and Spain, the recovery will probably continue in 2018 but at a considerably slower pace; in the French market, we expect growth to be only slightly positive. In the United Kingdom, we expect the market volume to fall moderately short of the previous year's high level.

Passenger car demand in 2018 is expected to significantly exceed the prior-year figures in markets in Central and Eastern Europe. In Russia, the volume of demand will probably rise somewhat more strongly after the considerable recovery over the past fiscal year. We also expect to see further growth in demand in the other markets in this region.

We are projecting that the volume of demand in the South African passenger car market in 2018 will be up slightly year-on-year.

#### **Germany**

Following the positive trend of recent years, we forecast that the market volume of the German passenger car market will remain on a level with the previous year in 2018.

### **North America**

The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America as a whole and in the USA is likely to be slightly lower in 2018 than in the prior year. Demand will probably remain highest for models in the SUV and pickup segments. In Canada, the number of new registrations is projected to be slightly below the previous year's high level as well. In Mexico, we anticipate that demand will be unchanged year-on-year.

#### **South America**

Owing to their dependence on demand for raw materials, the South American markets for passenger cars and light commercial vehicles are heavily influenced by developments in the global economy. In addition, protectionist tendencies are adversely affecting the performance of the region's vehicle markets, especially in Brazil and Argentina, which have imposed restrictions on vehicle imports. Nevertheless, we expect demand in the South American markets as a whole to distinctly increase in 2018 compared with the previous year. In Brazil, South America's largest market, volume is likely to rise markedly again in 2018 after the strong increase in the past fiscal year. We anticipate that demand in the Argentinian market in 2018 will be perceptibly higher year-on-year.

### **Asia-Pacific**

We believe that the passenger car markets in the Asia-Pacific region will continue their growth in 2018, albeit at a slower pace. In China, the increase in individual mobility requirements will push up demand, though the rate of growth is likely to be slightly slower than in the previous year. Strong demand is still forecast for attractively priced entry-level models in the SUV segment in particular. In India, we expect demand for passenger cars to moderately exceed the previous year's level. We anticipate that demand in the Japanese passenger car market will fall slightly in 2018.

#### **TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES**

We expect trends in the markets for light commercial vehicles in the individual regions to be mixed again in 2018. Overall, we expect a slight fall in demand in 2018, and a return to the growth trajectory for the years 2019 to 2022.

Due to the uncertainty caused by the United Kingdom's European Union membership referendum in June 2016, we estimate that demand for light commercial vehicles in Western Europe in 2018 will be slightly below the previous year's level. The United Kingdom and Italy are expected to record a decline. We anticipate that registrations in Germany will be around the previous year's level.

In the Central and Eastern European markets, registrations of light commercial vehicles in 2018 will probably be perceptibly higher than in the previous year. In Russia, too, we expect the market volume to rise compared with 2017.

In North and South America, the light vehicle market is reported as part of the passenger car market, which includes both passenger cars and light commercial vehicles.

The market volume in the Asia-Pacific region in 2018 will probably record a slight year-on-year decline. We are also expecting demand in the Chinese market to fall short of the prior-year level. For India, we are forecasting a considerably higher volume in 2018 than in the reporting period. In the Japanese market, the downward trend is likely to continue at a slower pace.

In the markets for mid-sized and heavy trucks that are relevant for the Volkswagen Group, new registrations in 2018 are set to be slightly up on the level seen in 2017. We anticipate a slightly positive trend for the period from 2019 to 2022.

We assume that demand in Western Europe will taper off slightly year-on-year in 2018. In Germany, we expect the market to remain on a level with the previous year.

Central and Eastern European markets should record a moderate increase in demand. In Russia, we anticipate a further recovery in demand in 2018, though the growth rate seen in 2017 will not be repeated.

We believe that demand in the Brazilian market in 2018 will grow perceptibly from the low level of the previous year. This is due to the continuing economic recovery.

In the bus markets that are relevant for the Volkswagen Group, we expect to see a slight increase in demand in 2018. We anticipate that demand in Western Europe over the same period will be on a level with that seen in 2017. For Central and Eastern Europe, we are forecasting higher demand than in the previous year. In Brazil, new registrations will probably be slightly higher than the prior-year level.

For the period 2019 to 2022, we expect slight growth overall in the demand for buses in the markets that are relevant for the Volkswagen Group.

#### TRENDS IN THE MARKETS FOR POWER ENGINEERING

In 2018, we expect the market environment in power engineering to remain difficult, with undiminished competitive and price pressures.

In 2018, the market volume for two-stroke engines used in merchant shipping is likely to slightly exceed the level seen in the reporting period. Calls for greater energy efficiency and

low pollutant emissions will continue to have a significant influence on ship designs in the future. We also expect sustained high demand in the market for four-stroke engines used in cruise ships, ferries, dredgers and government vessels. In the offshore segment, new order volumes look set to be very low due to existing overcapacity, despite the recent slight rise in the oil price. Overall, we expect the marine market to be slightly up on the reporting period. The competitive pressure will continue unabated.

Demand for energy correlates strongly with macroeconomic and demographic trends, especially in emerging markets. The global trend toward decentralized power stations and gas-based applications shows no sign of losing momentum. For 2018, we expect demand to be virtually steady but remain at a low level overall.

In turbomachinery, we anticipate undiminished high price and competitive pressures in 2018 due to the continuing difficult market environment. This is due to expectations that unfavorable economic and political conditions will persist in some relevant markets. We believe that the trend has already bottomed out, however, and therefore expect the market for turbomachinery to return to slight growth in 2018.

We anticipate a positive trend in the marine and power plant after-sales business for diesel engines in 2018. In turbomachinery, we expect a slight upward trend.

For the period 2019 to 2022, we expect to see growing demand in the power engineering markets. The extent and timing of this growth will vary in the individual business fields, however.

#### TRENDS IN THE MARKETS FOR FINANCIAL SERVICES

We believe that automotive financial services will be very important for vehicle sales worldwide in 2018. We expect demand to continue rising in emerging markets where market penetration has so far been low, such as China. Regions with already developed automotive financial services markets will see a continuation of the trend towards enabling mobility at the lowest possible total costs. Integrated end-to-end solutions, comprising mobility-related service modules such as insurance and innovative packages of services, will become increasingly important to this. Additionally, we expect demand to increase for new forms of mobility, such as carsharing, and for integrated mobility services including parking, refueling and charging. We anticipate that this trend will also continue in the period from 2019 to 2022.

In the mid-sized and heavy commercial vehicles category, we expect rising demand for financial services products in

emerging markets. There in particular, financing solutions support vehicle sales and are thus an essential component of the sales process. In the mature markets, we foresee increased demand for telematics services and services aimed at reducing total operating costs in 2018. This trend is also expected to continue in the period 2019 to 2022.

#### EXCHANGE RATE TRENDS

The global economy grew at an increased pace in 2017. Average energy and commodity prices were up year-on-year but remained at a relatively low level. The euro appreciated against the US dollar over the course of the year. Sterling lost further value against the European single currency due to uncertainty surrounding the exit negotiations began between the United Kingdom and the EU and the shape of future relations. The currencies of major emerging markets lost some further ground against the euro from the start of the reporting period. For 2018, we are forecasting that the euro will remain stable against the US dollar, sterling, Chinese renminbi and other key currencies. The expectation is that the Russian ruble, Brazilian real and Indian rupee will remain relatively weak. We currently assume that these trends will continue in the period 2019 to 2022. There is still a general event risk – defined as the risk arising from unforeseen market developments.

#### INTEREST RATE TRENDS

Interest rates remained extremely low in fiscal year 2017 due to the continuation of expansionary monetary policy and the challenging overall economic environment. In the major Western industrialized nations, key interest rates persisted at a historic low level. While it became apparent in the USA that the extremely loose monetary policy was gradually drawing to an end, the European Central Bank continued to pursue this course. In light of further expansionary monetary policy measures in the eurozone, we therefore expect no more than a slight rise in interest rates in 2018. In the USA, however, we can expect to see a moderate increase in interest rates. For the period 2019 to 2022, we anticipate a gradual rise in interest rates, though the pace will vary from region to region.

#### COMMODITY PRICE TRENDS

Political and economic uncertainty in different forms caused the prices for many raw and input materials, such as crude oil, steel, cobalt and rare earths, to move sideways or upwards in 2017, amid high volatility in some cases. In light of these individual factors, we expect mixed developments in the commodity markets in 2018 with an increase in most

commodity prices. We anticipate continued volatility in the commodity markets for the period from 2019 to 2022. Forward-looking, system-based and individual procurement methods enable us to limit risks arising from this volatility in commodity prices. Long-term supply agreements ensure that the Group's needs are satisfied and thus ensure a high degree of supply reliability.

#### NEW MODELS IN 2018

In the course of transforming our core business, we will define the positioning of our Group brands more clearly and optimize the vehicle and drive portfolio with a view to the most attractive and fastest-growing market segments. We will unveil additional SUV models, integrate digitalization into our products even more systematically and provide important stimuli for the future with e-mobility offerings.

The Volkswagen Passenger Cars brand will continue its global product initiative in 2018. The SUV range will be expanded further with the third generation of the Touareg among other models. The GTI family is also growing: with the new Polo GTI and the up! GTI, two models are coming on the market which will set new standards in their segment in terms of driving dynamics and sportiness. One of the focal points of the product offensive in 2018 will be China, where four new SUV models will be launched, including the compact, sporty T-Roc. With the Lavida and the Bora, important high-volume models will be revamped. These will stand alongside a series of new plug-in hybrid models and all-electric vehicles to meet the growing demand for new energy vehicles in China. In the USA, the new Jetta will come on the market. The latest generation of the US bestseller, which is now also based on the Modular Transverse Toolkit, is quite different from its predecessor, both visually and from a technological perspective. The Arteon, a saloon, will also follow in the course of the year. South America will see the rollout of the Virtus, a notchback saloon based on the Polo; the further rejuvenation and expansion of the product range is an important element of the brand's realignment in the region.

Audi will set standards in the premium segment in 2018 with the new, progressive A7 Sportback. The four-door coupé reinvents the Gran Turismo with dynamic lines, systematic digitalization, a sporty driving experience and flexible use of space. The A4 family will gain a sporty spearhead: the new Audi RS 4 Avant combines high performance with enormous everyday practicality. The versatile Audi A6 featuring a sporty design will also come on the market. Boasting the same qualities as the A7, it has a much bigger interior than its predecessor. A new segment in the premium class will be

carved out with the latest member of the Q family, the Q8. The Audi e-tron will be Audi's first SUV with an all-electric drive to go into series production.

ŠKODA will bring its updated compact car, the Fabia, to market.

The SEAT brand will continue its product offensive with a large, seven-seater SUV. The model fits perfectly into SEAT's SUV model range alongside the smaller Arona and Ateca. In addition, SEAT is establishing the new sporty line CUPRA and will launch the dynamic CUPRA Ateca at the end of the year.

Porsche is enhancing its 911 product range with the 911 Carrera T and will unveil the new 911 GT3 RS.

Bentley will begin delivery in 2018 of the third generation of the Continental GT, which sets new standards for luxury grand touring. Bentley will also present two new derivatives of the successful Bentayga: the Bentayga V8 and Bentayga Hybrid.

Lamborghini will launch a third series on the market with the Urus, a super-SUV. The Huracán Performante Spyder will also be gradually made available. The Aventador S Roadster will receive an upgrade.

Bugatti will provide additional options for its super sports car, the Chiron.

Volkswagen Commercial Vehicles will debut the Amarok V6 TDI with the new top-of-the-range engine and the battery-powered e-Crafter in 2018.

In 2018, Scania will unveil further products from its new generation of trucks along with new services.

MAN will present a new version of its Adaptive Cruise Control (ACC) for its range of trucks, featuring a stop-and-go function.

Ducati will launch five new models on the market in 2018, including the Ducati Panigale V4 and the Multistrada 1260.

#### STRATEGIC SALES FOCUS

The multibrand structure, comprising largely independent, differentiated brands that nevertheless achieve maximum synergies, is one of the defining features of the Volkswagen Group.

To enable Group brands to enter into new markets, we will further refine our brand positioning, particularly in the growth regions. We will also significantly enhance our customer focus. We will improve collaboration with our authorized dealers, train our staff – including with respect to the digital transformation – and invest in innovative processes and systems for seamless customer interaction in an increasingly digital environment.

Our sales strategy is especially focussed on further developing the new and used vehicle businesses, on financial services and on business with original parts and accessories. We are also adding to our range of mobility services.

#### TECHNICAL EXPERTISE AND MOTIVATION IN THE TRANSFORMATION PROCESS

Our staff's dedication and high level of expertise provide important prerequisites to successfully shape the transformation process to becoming one of the world's leading providers of sustainable mobility, while ensuring our professional excellence in the field of traditional automobile manufacturing.

The dual vocational training and dual study programs form the basis for professional development in the vocational groups at Volkswagen. Employees then obtain further qualifications throughout their working lives. To always meet current requirements, the broad range of training courses is continuously being enhanced. For example, employees are prepared for the changes associated with the advancing digitalization and the use of new technologies under Industry 4.0. An important principle in these efforts is the transfer of knowledge and experience from internal experts to other staff. Training is provided in the form of dual vocational training that closely integrates theoretical and practical forms of learning.

#### INVESTMENT AND FINANCIAL PLANNING

To continue to build on our pronounced strengths in innovation and technology, we will vigorously invest in e-mobility, autonomous driving, new mobility services and digitalization in the coming years. The largest share of the investments will be in the development of vehicles with hybrid or all-electric drives.

In our current planning for 2018, the majority of capex (investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs) will be spent on new products and the continued rollout and further development of the modular toolkit. The focus is on the electrification and digitalization of our vehicles, in particular through the development of the Modular Electric Toolkit (MEB). At the same time, primarily the SUV range will be further expanded. We expect the Automotive Division's ratio of capex to sales revenue to be in the range of 6.5–7.0%.

Besides capex, investing activities will include additions to capitalized development costs. Among other things, these reflect upfront expenditures in connection with the fulfillment of environmental standards and the electrification and updating of our model range.

The investments in our facilities and models, as well as in the development of alternative drives and modular toolkits, are laying the foundations for profitable, sustainable growth at Volkswagen. These investments also include commitments arising from decisions taken in previous fiscal years.

We aim to finance the investments in our Automotive Division from our own capital resources and expect cash flows from operating activities to exceed the Automotive Division's investment requirements. Cash outflows resulting from the diesel issue will impact on the cash flow again in 2018, but will be substantially lower than in the reporting period. Consequently, we anticipate a positive net cash flow for 2018 that will be up significantly on the prior-year figure.

These plans are based on the Volkswagen Group's current structures. They do not take into account the possible settlement payable to other shareholders associated with the control and profit and loss transfer agreement with MAN SE. Our joint ventures in China are included using the equity method and are therefore not included in the above figures. In 2018, these joint ventures plan higher investments in capex than in 2017, which will be financed from the companies' own funds.

In the Financial Services Division, we are planning slightly higher investments in 2018 than in the previous year. We expect the growth in lease assets and in receivables from leasing, customer and dealer financing to lead to funds tied up in working capital, of which around 45% will be financed from the gross cash flow. As is common in the sector, the remaining funds needed will be met primarily through unsecured bonds on the money and capital markets, asset-backed securities, customer deposits from direct banking business, as well as through the use of international credit lines.

#### TARGETS FOR VALUE-BASED MANAGEMENT

Based on long-term interest rates derived from the capital market and the target capital structure (fair value of equity to debt = 2:1), the minimum required rate of return on invested capital defined for the Automotive Division remains unchanged at 9%.

In spite of the adverse effects of the special items on earnings, we exceeded the minimum rate of return on invested capital in the reporting period, with a return on investment (ROI) of 12.1(8.2)% (see also page 128). Invested capital will increase in 2018 as a result of investments in new models, in the development of alternative drives and modular toolkits and in future technologies. The return on investment will probably exceed our minimum required rate of return on invested capital and be up slightly year-on-year.

#### FUTURE ORGANIZATIONAL STRUCTURE OF THE GROUP

As part of our future program TOGETHER – Strategy 2025, we are establishing a new mobility solutions business with which we will drive our transformation into one of the world's leading providers of sustainable mobility. Development of mobility services is closely tied to the cutting-edge

fields of digitalization, e-mobility, networked vehicle concepts and autonomous driving, which are being driven forward by our brands independently or in partnership with others. Starting in fiscal year 2018, we will report the mobility solutions business in the Automotive Division.

#### SUMMARY OF EXPECTED DEVELOPMENTS

The Volkswagen Group's Board of Management expects the global economy to record slightly weaker growth in 2018. We believe risks will arise from protectionist tendencies, turbulence in the financial markets and structural deficits in individual countries. In addition, growth prospects will continue to be hurt by geopolitical tensions and conflicts. We therefore expect somewhat weaker momentum than in 2017 in both the advanced economies and the emerging markets. We expect the strongest rates of expansion in Asia's emerging economies.

The trend in the automotive industry closely follows global economic developments. We assume that competition in the international automotive markets will intensify further.

We expect trends in the passenger car markets in the individual regions to be mixed in 2018. Overall, growth in global demand for new vehicles will probably be slower than in the reporting period. We anticipate that unit sales volumes in Western Europe will fall slightly short of those seen in the reporting period. In the German passenger car market, we estimate that the market volume will be on a level with the previous year. Passenger car demand is expected to substantially exceed the prior-year figures in markets in Central and Eastern Europe. The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America is likely to be slightly lower than in the prior year. We expect demand in the South American markets for passenger cars and light commercial vehicles to grow perceptibly as a whole compared with the previous year. The passenger car markets in the Asia-Pacific region look set to continue their growth trajectory in 2018, albeit at a weaker pace.

We expect trends in the markets for light commercial vehicles in the individual regions to be mixed again in 2018. Overall, we envisage a slight dip in demand.

In the markets for mid-sized and heavy trucks that are relevant for the Volkswagen Group and in the relevant markets for buses, new registrations in 2018 are set to rise slightly above the prior-year level.

We believe that automotive financial services will continue to be very important for vehicle sales worldwide in 2018.

The Volkswagen Group is well prepared for the future challenges in the mobility business and the mixed developments in regional automotive markets. Our unique brand portfolio, our presence in all major world markets, our broad,

selectively expanded product range and pioneering technologies and services place us in a good competitive position worldwide. In the course of transforming our core business, we will define the positioning of our Group brands more clearly and optimize the vehicle and drive portfolio with a view to the most attractive and fastest-growing market segments. In addition, we are working to make even more focused use of the advantages of our multibrand group by continuously developing new technologies and our toolkits. The Group's new structure with more decentralized responsibility will strengthen our brands and regions and increase our proximity to customers. Our goal is to offer all customers mobility and innovations that are suited to their needs, ensuring long-term success. We will unveil additional SUV models, integrate digitalization into our products even more systematically and provide important stimuli for the future with e-mobility offerings.

We expect that deliveries to customers of the Volkswagen Group in 2018 will moderately exceed the prior-year figure amid continuously challenging market conditions.

Challenges will arise particularly from the economic situation, the increasing intensity of competition, exchange rate volatility and the diesel issue. In the EU, there is also a new, more time-consuming test procedure for determining pollutant and CO<sub>2</sub> emissions as well as fuel consumption in passenger cars and light commercial vehicles known as the Worldwide Harmonized Light-Duty Vehicles Test Procedure (WLTP).

We expect the sales revenues of the Volkswagen Group and its business areas to grow by as much as 5% year-on-year. In terms of the operating profit for the Group and the Passenger Cars Business Area, we forecast an operating return on sales in the range of 6.5–7.5% in 2018. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of between 5.0 and 6.0%. In the Power Engineering Business Area, we expect a lower operating loss than in the previous year. For the Financial Services Division, we are forecasting an operating profit at the prior-year level.

In the Automotive Division, the R&D ratio and the ratio of capex to sales revenue will fluctuate in the range of 6.5–7.0% in 2018. Cash outflows resulting from the diesel issue will negatively impact the cash flow again in 2018, but will be substantially lower than in the reporting period. Consequently, we anticipate a positive net cash flow for 2018 that will be up significantly on the prior-year figure. Net liquidity will also increase moderately as a result. The return on investment (ROI) will be slightly higher than in the previous year. Our unchanged stated goal is to continue our solid liquidity policy.

The commitment and considerable technical expertise of our staff are key prerequisites to successfully shaping the transformation into the world's leading provider of sustainable mobility. With our future program, TOGETHER – Strategy 2025, we are attaching even greater importance to our responsibility in relation to the environment, safety and society. We are also aiming for operational excellence in all business processes and intensifying our focus on profitable growth.

# Report on Risks and Opportunities

(CONTAINS THE REPORT IN ACCORDANCE WITH SECTION 289(5) OF THE HGB)

Promptly identifying the risks and opportunities arising from our operating activities and taking a forward-looking approach to managing them is crucial to our Company's long-term success. A comprehensive risk management and internal control system help the Volkswagen Group deal with risks in a responsible manner.

In this section, we first explain the objective and structure of the Volkswagen Group's risk management system (RMS) and internal control system (ICS) and describe these systems with regard to the financial reporting process. We then outline the main risks and opportunities arising in our business activities.

## OBJECTIVE OF THE RISK MANAGEMENT SYSTEM AND INTERNAL CONTROL SYSTEM AT VOLKSWAGEN

Only by promptly identifying, accurately assessing and effectively and efficiently managing the risks and opportunities arising from our business activities can we ensure the Volkswagen Group's sustainable success. The aim of the RMS/ICS is to identify potential risks at an early stage so that suitable countermeasures can be taken to avert the threat of loss to the Company, and any risks that might jeopardize its continued existence can be ruled out.

Assessing the probability and extent of future events and 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 acts.

## STRUCTURE OF THE RISK MANAGEMENT SYSTEM AND INTERNAL CONTROL SYSTEM AT VOLKSWAGEN

The organizational design of the Volkswagen Group's RMS/ICS is based on the internationally recognized COSO framework for enterprise risk management (COSO: Committee of Sponsoring Organizations of the Treadway Commission). Structuring the RMS/ICS in accordance with the COSO frame-

work for enterprise risk management ensures that potential risk areas are covered in full. In the reporting period, Volkswagen again took an approach to risk management that combines aspects of the ICS and the compliance management system (CMS). Uniform Group principles are used as the basis for managing risks in a standardised manner. Opportunities are not recorded.

With this approach, we not only fulfil legal requirements, particularly with regard to the financial reporting process, but are also able to manage significant risks to the Group holistically, i.e. by incorporating both tangible and intangible criteria.

The open approach to dealing with risks in the Company and the quarterly reporting on the current risk situation were focal points in the reporting period in addition to the ad hoc and annual risk assessment. We continued to reinforce the internal control system in the area of product compliance in 2017. This includes the implementation of what are known as the Golden Rules in the areas of control unit software development, emission classification and escalation management. These rules represent minimum requirements in the organization, processes and tools & systems categories. They serve to shore up governance and compliance.

Another key element of the RMS/ICS at Volkswagen is the three lines of defense model, a basic element required, among other bodies, by the European Confederation of Institutes of Internal Auditing (ECIIA). In line with this model, the Volkswagen Group's RMS/ICS has three lines of defense that are designed to protect the Company from significant risks occurring.

## THE THREE LINES OF DEFENSE MODEL



### First line of defense: operational risk management

The primary line of defense comprises the operational risk management and internal control systems at the individual Group companies and business units. The RMS/ICS is an integral part of the Volkswagen Group's structure and workflows. Events that may give rise to risk are identified and assessed locally in the divisions and at the investees. Countermeasures are introduced immediately, their effects are assessed and the information is incorporated into the planning in a timely manner. The results of the operational risk management process are incorporated into budget planning and financial control on an ongoing basis. The targets agreed in the budget planning rounds are continually reviewed in revolving planning updates.

At the same time, the results of risk mitigation measures that have already been taken are incorporated into the monthly forecasts on further business development without delay. This means that the Board of Management also has access to an overall picture of the current risk situation via the documented reporting channels during the year.

The minimum requirements for the operational risk management and internal control system are set out for the entire Group in uniform guidelines. These also include a process for the timely reporting of material risks.

### Second line of defense: identifying and reporting systemic and current risks using Group-wide processes

In addition to the ongoing operational risk management, the Group Risk Management department each year sends standardized surveys on the risk situation and the effectiveness of the RMS/ICS to the significant Group companies and units worldwide (regular Governance, Risk & Compliance (GRC) process). The feedback is used to update the overall picture of the potential risk situation and assess the effectiveness of the system.

Each systemic risk reported is assessed using the expected likelihood of occurrence and various risk criteria (financial and nonfinancial). In addition, the measures taken to manage and control risk are documented at management level. This means that risks are assessed in the context of any risk management measures initiated, i.e. in a net analysis. In addition to strategic, operational and reporting risks, risks arising from potential compliance violations are also integrated into this process. Moreover, the effectiveness of key risk management and control measures is tested and any weaknesses identified in the process are reported and rectified.

All Group companies and units selected from among the entities in the consolidated Group on the basis of materiality and risk criteria were subject to the regular GRC process in fiscal year 2017.

In addition to the ad hoc and annual risk assessment, the Board of Management also receives quarterly risk reports. Similar to the annual standard GRC process, the assessment takes risk-minimizing control measures into account (net assessment). All Group brands are included in this process along with Volkswagen Financial Services AG and Volkswagen Bank GmbH.

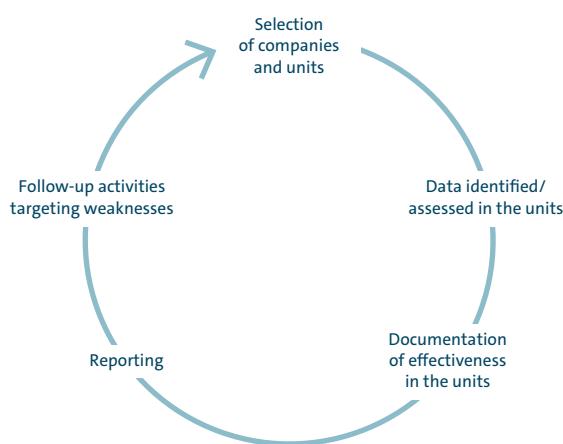
Information on relevant systemic and current risks is regularly reported to the Group Board of Management and the Audit Committee of the Supervisory Board of Volkswagen AG.

The Group Board of Management Committee for Risk Management was set up in the reporting period. The new committee has the following tasks, among others:

- to further increase transparency in relation to significant risks to the Group and their management,
- to explain specific issues where these constitute a significant risk to the Group,
- to make recommendations on the further development of the RMS/ICS,
- to support the open approach to dealing with risks and promote an open risk culture.

In the past, the Scania brand was not yet included in the Volkswagen Group's risk management system due to various provisions of Swedish company law. Scania has been integrated into quarterly risk reporting since 2016. From 2018, it will also be gradually included in the standard GRC process. Risk management and risk assessment are integral parts of Scania's corporate management. Risk areas at Scania are evaluated by the brand's Controlling department and reflected in the financial reporting.

#### ANNUAL STANDARD GOVERNANCE, RISK AND COMPLIANCE PROCESS



#### Third line of defense: checks by Group Internal Audit

Group Internal Audit helps the Board of Management to monitor the various divisions and corporate units within the Group. It regularly checks the risk early warning system and the structure and implementation of the RMS/ICS and the CMS as part of its independent audit procedures.

#### RISK EARLY WARNING SYSTEM IN LINE WITH THE KONTRAG

The Company's risk situation is ascertained, assessed and documented in accordance with the requirements of the Gesetz zur Kontrolle und Transparenz im Unternehmensbereich (KonTraG – German Act on Control and Transparency in Business). The requirements for a risk early warning system are met through the elements of the RMS/ICS described above (first and second lines of defense). Independently of this, the external auditors check both the processes and procedures implemented in this respect and the adequacy of the documentation on an annual basis. The plausibility and adequacy of the risk reports are examined on a random basis in detailed interviews with the divisions and companies concerned that also involve the external auditors. The latter assessed our risk early warning system based on this volume of data and ascertained that the risks identified were presented and communicated accurately. The risk early warning system meets the requirements of the KonTraG.

In addition, scheduled examinations as part of the audit of the annual financial statements are conducted at companies in the Financial Services Division. As a credit institution, Volkswagen Bank GmbH, including its subsidiaries, is subject to supervision by the European Central Bank, while Volkswagen Leasing GmbH as a financial services institution

and Volkswagen Versicherung AG as an insurance company are subject to supervision by the relevant division of the Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin – the German Federal Financial Supervisory Authority). As part of the scheduled supervisory process and unscheduled audits, the competent supervisory authority assesses whether the requirements, strategies, processes and mechanisms ensure solid risk management and solid risk cover. Furthermore, the Prüfungsverband deutscher Banken (Auditing Association of German Banks) audits Volkswagen Bank GmbH from time to time.

#### Monitoring the effectiveness of the risk management system and the internal control system

To ensure its effectiveness, the RMS/ICS is regularly optimized as part of our continuous monitoring and improvement processes. In the process, equal consideration is given to both internal and external requirements. External experts assist in the continuous enhancement of our RMS/ICS on a case-by-case basis. The results culminate in both regular and event-driven reporting to the Board of Management and Supervisory Board of Volkswagen AG.

#### THE RISK MANAGEMENT AND INTEGRATED INTERNAL CONTROL SYSTEM IN THE CONTEXT OF THE FINANCIAL REPORTING PROCESS

The accounting-related part of the RMS/ICS that is relevant for the financial statements of Volkswagen AG and the Volkswagen Group as well as its subsidiaries comprises measures that are intended to ensure the complete, accurate and timely transmission of the information required for the preparation of the financial statements of Volkswagen AG, the consolidated financial statements and the combined Group management report. These measures are designed to minimize the risk of material misstatement in the accounts and in the external reporting.

#### Main features of the risk management and integrated internal control system relevant for the financial reporting process

The Volkswagen Group's accounting is essentially organized along decentralized lines. For the most part, accounting duties are performed by the consolidated companies themselves or entrusted to the Group's shared service centers. In principle, the audited financial statements of Volkswagen AG and its subsidiaries prepared in accordance with IFRSs and the Volkswagen IFRS accounting manual are transmitted to the Group in encrypted form. A standard market product is used for encryption.

The Volkswagen IFRS accounting manual, which has been prepared using external expert opinions in certain cases, ensures the application of uniform accounting policies based on the requirements applicable to the parent. In particular, it

includes more detailed guidance on the application of legal requirements and industry-specific issues. Components of the reporting packages required to be prepared by the Group companies are also set out in detail there and requirements established for the presentation and settlement of intragroup transactions and the balance reconciliation process that builds on this.

Control activities at Group level include analyzing and, if necessary, adjusting the data reported in the financial statements presented by the subsidiaries, taking into account the reports submitted by the auditors and the outcome of the meetings on the financial statements with representatives of the individual companies. These discussions address both the reasonableness of the single-entity financial statements and specific significant issues at the subsidiaries. Alongside reasonableness reviews, other control mechanisms applied during the preparation of the single-entity and consolidated financial statements of Volkswagen AG include the clear delineation of areas of responsibility and the application of the dual control principle.

The Group management report is prepared – in accordance with the applicable requirements and regulations – centrally but with the involvement of and in consultation with the Group units and companies.

In addition, the accounting-related internal control system is independently reviewed by Group Internal Audit in Germany and abroad.

#### Integrated consolidation and planning system

The Volkswagen consolidation and corporate management system (VoKUs) enables the Volkswagen Group to consolidate and analyze both Financial Reporting's backward-looking data and Controlling's budget data. VoKUs offers centralized master data management, uniform reporting, an authorization concept and maximum flexibility with regard to changes to the legal environment, providing a future-proof technical platform that benefits Group Financial Reporting and Group Controlling in equal measure. To verify data consistency, VoKUs has a multi-level validation system that primarily checks content plausibility between the balance sheet, the income statement and the notes.

#### RISKS AND OPPORTUNITIES

In this section, we outline the significant risks and opportunities that arise in the course of our business activities. We have grouped them into categories. Unless explicitly mentioned, there were no material changes to the specific risks and opportunities compared with the previous year.

The increasing number of partnerships generates both opportunities as well as risks.

The diesel issue gives rise to its own risks for the Volkswagen Group and also has an impact on existing risks. These are described under the respective risk category.

We use competitive and environmental analyses and market studies to identify not only risks but also opportunities with a positive impact on the design of our products, the efficiency with which they are produced, their success in the market and our cost structure. Where they can be assessed, risks and opportunities that we expect to occur are already reflected in our medium-term planning and our forecast. The following therefore reports on internal and external developments as risks and opportunities that may result in a negative or positive deviation from our forecast.

#### Risks from the diesel issue

The Volkswagen Group has recognized provisions arising from the diesel issue, in particular for the service measures, recalls and customer-related measures as well as for legal risks, but also for residual value risks.

Further significant financial liabilities may emerge due to existing estimation risks particularly from legal risks, such as criminal, administrative and civil proceedings, technical solutions, lower market prices, repurchase obligations and customer-related measures.

Demand may decrease – possibly exacerbated by a loss of reputation or insufficient communication. Other potential consequences include lower margins in the new and used car businesses and a temporary increase in funds tied up in working capital.

The funding needed to cover the risks may lead to assets having to be sold due to the situation and equivalent proceeds for them not being achieved as a result.

As a result of the diesel issue, the ability to use refinancing instruments may possibly be restricted or precluded for the Volkswagen Group. A downgrade of the Company's rating could adversely affect the terms associated with the Volkswagen Group's borrowings.

We are cooperating with all the responsible authorities to clarify these matters completely and transparently.

Additional information about the litigation can be found on pages 93 and 178 to 185 of this annual report.

#### Macroeconomic risks and opportunities

We believe that the risks to continued global economic growth arise primarily from turbulence in the financial markets, protectionist tendencies and structural deficits, which

pose a threat to the performance of individual advanced economies and emerging markets. The worldwide transition from an expansionary monetary policy into a more restrictive one also presents risks for the macroeconomic environment. Moreover, uncertainty is associated with the effects of the UK's planned withdrawal from the EU. Persistently high private- and public-sector debt in many places is also clouding the outlook for growth and may cause markets to respond negatively. Declines in growth in key countries and regions often have an immediate impact on the state of the global economy and therefore pose a central risk.

The economic development of some emerging economies is being hampered primarily by dependence on energy and commodity prices, capital inflows and socio-political tensions. Corruption, inadequate government structures and a lack of legal certainty also pose risks.

Geopolitical tensions and conflicts are a further major risk to the performance of individual economies and regions. As the global economy becomes increasingly interconnected, it is also vulnerable to local developments. Any escalation of the conflicts in Eastern Europe, the Middle East, or Africa, for example, could cause upheaval on the global energy and commodity markets and exacerbate migration trends. An aggravation of the situation in East Asia could put further strain on the global economy. The same applies to armed conflicts, terrorist activities and the spread of infectious diseases, which may prompt unexpected, short-term responses from the markets.

On the whole, we do not anticipate a global recession next year. Due to the risk factors mentioned, however, a decline in global economic growth or a period of below-average growth rates is possible.

The macroeconomic environment may also give rise to opportunities for the Volkswagen Group if actual developments differ in a positive way from expected developments.

#### **Sector-specific risks and market opportunities**

The growth markets of Asia, South America, and Central and Eastern Europe are particularly important to the Volkswagen Group in terms of the global trend in demand for passenger cars and commercial vehicles. These markets harbor considerable potential; however, the underlying conditions in some countries in these regions make it difficult to increase unit sales figures there. Some have high customs barriers or minimum local content requirements for production, for example. The political crisis and its economic consequences again inhibited market development in Russia in fiscal year

2017. In South America, structural deficits continued to have a negative impact. Restrictions on vehicle registrations could enter into force in further Chinese metropolitan areas in the future. In Europe, there is a risk that some municipalities and cities will impose a driving ban on diesel vehicles in order to comply with emission limits. Also, a global economic slowdown could negatively impact consumer confidence. Furthermore, we cannot entirely rule out the possibility of freight deliveries being shifted from trucks to other means of transport, and of demand for the Group's commercial vehicles falling as a result.

At the same time, wherever the economic and regulatory situation permits, there are opportunities above and beyond current projections. These arise from faster growth in the emerging markets where vehicle densities are currently still low. The demand that built up in individual established markets during the crisis could also bring a more marked recovery in these markets if the economic environment eases more quickly than expected. Price pressure in established automotive markets due to high market saturation is a particular challenge for the Volkswagen Group as a supplier of volume and premium models. Competitive pressures are likely to remain high in the future. Individual manufacturers may respond by offering incentives in order to meet their sales targets, putting the entire sector under additional pressure, particularly in Western Europe, the USA and China.

Western Europe is one of our main sales markets. A drop in prices due to the economic climate triggered by falling demand in this region would have a particularly strong impact on the Company's earnings. We counter this risk with a clear, customer-oriented and innovative product and pricing policy. Outside Western Europe, delivery volumes are spread widely around the world, with the Chinese market accounting for a large share. In numerous existing and developing markets, we either already have a strong presence or are working hard to build one. Moreover, strategic partnerships are helping us to increase our presence in these countries and regions and cater to requirements there.

Economic performance varied from region to region in fiscal year 2017. The resulting challenges for our trading and sales companies, such as efficient inventory management and a profitable dealer network, are considerable and are being met by appropriate measures on their part. However, financing business activities through bank loans remains difficult. Our financial services companies offer dealers financing on attractive terms with the aim of strengthening their business models and reducing operational risk. We have

installed a comprehensive liquidity risk management system so that we can promptly counteract any liquidity bottlenecks at the dealers' end that could hinder smooth business operations.

We continue to approve loans for vehicle finance on the basis of the same cautious principles applied in the past, taking into account the regulatory requirements of section 25a(1) of the Kreditwesengesetz (KWG – German Banking Act).

Volkswagen may be exposed to increased competition in aftermarkets for two reasons in particular: firstly, because of the provisions of the block exemption regulations, which have applied to after-sales services since June 2010, and, secondly, because of the amendments included in EU Regulation 566/2011 of June 8, 2011 regarding access by independent market participants to technical information.

In addition, the European Commission is currently evaluating the market with regard to existing design protection. If the proposed abolition of design protection for visible replacement parts were to be approved, this could adversely affect the Volkswagen Group's genuine parts business.

The automotive industry faces a process of transformation with far-reaching changes. Electric drives, connected vehicles and autonomous driving are associated with both opportunities and risks for our sales. In particular, more rapidly evolving customer requirements, swift implementation of legislative initiatives and the market entry of new competitors from outside the industry will require changed products, a faster pace of innovation and adjustments to business models.

Below, we outline the greatest potential for growth and market opportunities for the Volkswagen Group.

#### China

China, the largest market in the Asia-Pacific region, continued to grow in the reporting period. The Chinese demand for vehicles will continue to rise in the coming years due to the need for individual mobility, albeit at a slower pace than in the past. Demand will also shift from the large coastal cities to the interior of the country. In order to leverage the considerable opportunities offered by the Chinese market – also with regard to e-mobility – and to defend our strong market position in China over the long term, we are continuously expanding our product range to include models that have been specially developed for this market. We are further extending our production capacity in this growing market through additional production facilities.

#### India

The political and economic situation in India further stabilized in 2017. The vehicle markets continued their recovery. We expect this trend to continue. Against this

backdrop, the Group is currently consolidating its activities, as India remains an important strategic future market for the Group.

#### USA

The volume of the US vehicle market in 2017 fell short of the strong previous year. In 2018, the market volume will probably again be lower than in the reporting period. In the USA, Volkswagen Group of America is systematically pursuing our strategy of becoming a full-fledged volume supplier. An engine plant and the further development of production capacity will allow the Group to better serve the market in the North America region. We are also pressing forward with additional products tailored specifically to the US market.

#### Brazil

The economic environment eased in the reporting period and the volume of demand in the vehicle market recovered perceptibly compared with the weak previous year. We anticipate a continued upturn in demand in 2018. The growing number of automobile manufacturers with local production has resulted in a sharp increase in price pressure and competition. The Brazilian market plays a key role for the Volkswagen Group. To strengthen our competitive position here, we offer vehicles that have been specially developed for this market and are locally produced, such as the Gol and the Virtus.

#### Russia

Russia has the potential to grow into one of the largest automotive markets in the world. Volumes in the Russian vehicle market in 2017 were up on the previous year and we are forecasting a further recovery in 2018. However, the heavy reliance on the currently low oil and gas income, a substantial fall in real incomes, high vehicle prices as a result of the weak currency, the political crisis and the related sanctions imposed by the EU and the USA continue to impact the development of demand. The market remains strategically important to the Volkswagen Group, which is why we are working intensively there.

#### The Middle East

Despite economic and political instability, the Middle East region offers growth opportunities. We are leveraging the potential for growth with a range of vehicles that has been specifically tailored to this market, but do not have our own production facilities.

#### Power Engineering

The underlying trends in the global economy, such as sustained growth and a greater international division of labor,

are set to continue, as are the resulting increase in global transport routes and volumes, the higher demand for touristic offers such as cruises, and the growing energy needs and the required forces for innovation in relation to global climate policy.

We are working systematically to leverage these market opportunities across the world. In the medium term, significant potential can be leveraged by enhancing the after-sales business through the introduction of new products and the expansion of our service network. Going forward, stricter requirements with respect to reliability, the availability of the plants that are already in operation, the increase in environmental compatibility and efficient operation, together with the large number of engines and plants, will provide the basis for growth.

As part of the capital goods industry, the Power Engineering Business Area is affected by fluctuations in the investment climate. Even minor changes in growth rates or growth forecasts, resulting from geopolitical uncertainties or volatile commodities and foreign exchange markets, for example, can lead to significant changes in demand or the cancellation of already existing orders. The measures we use to counter the considerable economic risks include flexible production concepts and cost flexibility by means of temporary employment, working time accounts and short-time work, and – if necessary – structural adjustments. In the Turbomachinery Business Area, for example, as a consequence of weak demand, industry-wide overcapacity and price pressure in 2017, we implemented sweeping structural adjustments at all major production facilities in Europe to make the business area more competitive.

#### **Research and development risk**

The automotive industry is undergoing a radical transformation process. Multinational corporations like Volkswagen are facing major challenges in the areas of customer/market, technological advances and legislation. Key aspects are the implementation of increasingly stringent emission and consumption regulations, taking new test procedures and test cycles (e.g. WLTP) into account, as well as compliance with approval processes (homologation), which are becoming increasingly more complex and time-consuming and may vary by country.

The economic success and competitiveness of the Volkswagen Group depend on how successful we are in promptly tailoring our portfolio of products and services to the changing conditions in time. Due to the intensity of the competition and the speed of technological development, identifying relevant trends at an early stage and reacting accordingly is crucial.

We therefore conduct trend analyses, customer surveys and scouting activities among other things and examine the relevance of the results for our customers. We counter the risk that it may not be possible to develop modules, vehicles or services within the specified timeframe, to the required quality standards, or in line with cost specifications by continuously and systematically monitoring the progress of all projects and analyzing third-party industrial property rights, increasingly including in relation to communication technologies. We regularly compare this progress with the project's original targets; in the event of variances, we introduce appropriate countermeasures in good time. Our end-to-end project organization supports effective cooperation among all areas involved in the process, ensuring that specific requirements are incorporated into the development process as early as possible and that their implementation is planned in good time.

#### **Modular toolkit strategy**

We are continuously expanding our successful modular toolkits, focusing on future customer requirements, legal requirements and infrastructural requirements.

The Modular Transverse Toolkit (MQB) has created an extremely flexible vehicle architecture that permits dimensions determined by the concept – such as the wheelbase, track width, wheel size and seat position – to be harmonized throughout the Group and utilized flexibly. Other dimensions, for example the distance between the pedals and the middle of the front wheels, are always the same, ensuring a uniform system in the front of the car. Based on the synergies achieved, we are able to cut both development costs and the necessary one-time expenses and manufacturing times. The toolkits also allow us to produce different models from different brands in various quantities, using the same system in a single plant. This means that our capacities can be used with greater flexibility throughout the entire Group, enabling us to achieve efficiency gains.

We are currently transferring this principle of standardization with maximum flexibility to the Modular Electrification Toolkit (MEB), a concept developed for all-electric drives. The synergy effects and efficiency gains achieved from the modular toolkit strategy will give us the opportunity to bring e-mobility into mass production manufacturing worldwide from 2020 with the use of the first MEB-based vehicle.

#### **Opportunities and risks from partnerships**

As part of our future program TOGETHER – Strategy 2025, we are stepping up our efforts to forge collaborations, both for the transformation of our core business and for the establish-

ment of the new mobility solutions business. By entering into partnerships at a local level, we aim to identify regional customer needs more precisely, establish competitive cost structures and develop and offer market-driven products. Going forward, we will concentrate to a greater extent than previously on partnerships, acquisitions and venture capital investments. This will enable us to generate maximum value for the Group and its brands and to expand our expertise, particularly in new areas of business.

Volkswagen owns a large number of patents and other industrial property rights and copyrights. Partnerships can lead to patent and licensing infringements and thus to the unauthorized disclosure of company-specific expertise. Volkswagen monitors the sales markets and will also protect its expertise with legal action if necessary.

#### Procurement risks and opportunities

Current trends in the automotive industry such as e-mobility and automated driving are resulting in an increased need for financing among suppliers. The Volkswagen Group's procurement risk management system assesses suppliers before they are commissioned to perform projects. Among other things, the procurement function considers the risk of insufficient competition if it concentrates on a few financially strong suppliers when awarding contracts.

The procurement risk management system continuously and globally monitors the financial situation of our suppliers and takes targeted measures to avoid supply bottlenecks.

The ongoing positive economic trend in Europe, North America and China strengthened our supplier base at an overall good level of capacity utilization and good margin situation. Consistently good financing opportunities and the attractive interest rates provided suppliers with favorable conditions. In the Russian and South American markets, demand grew for the first time in years, providing the possibility of stabilization after several years of consolidation of the supplier base.

In spite of this, the number of crises and insolvencies among suppliers worldwide increased in 2017. Specialists in restructuring and supply reliability are coordinating the measures to be taken on a Group-wide basis to safeguard production in a timely and sustainable manner.

The current trends in the automotive industry will also affect the availability of special raw materials, which are principally used in electrified vehicles. The raw material and demand trend was assessed last year to enable steps to be taken in a timely manner whenever bottlenecks arise.

Rising material prices, especially for steel, and shifts in the product mix towards petrol engines present challenges that must be overcome in conjunction with suppliers.

Quality problems may necessitate technical intervention involving a considerable financial outlay where costs cannot be passed on to the supplier or can only be passed on to a limited extent. It is not possible at the present time to rule out a potential further increase in recalls of a range of models produced by various manufacturers in which certain airbags manufactured by Takata were installed. This could also affect Volkswagen Group models.

In addition to financial difficulties, supply risks may, for example, arise as a result of fires or accidents at suppliers. Supply risks are identified without delay in the procurement function through early warning systems and mitigated immediately by applying appropriate measures.

Additional measures were taken to safeguard supply and avert future assembly line stoppages caused by suspensions of deliveries.

Monitoring of the antitrust investigations into suppliers by Risk Management on grounds of price-fixing agreements was expanded further in 2017. The effects on Volkswagen are being systematically reviewed.

#### Production risk

Volatile developments in the global automotive markets, accidents at suppliers, storms and earthquakes caused production volumes of some vehicle models to fluctuate at some plants. In specific markets, we also recorded a change in incoming orders: the number of orders for diesel vehicles fell, while orders for petrol engines rose. We address such fluctuations using tried-and-tested tools, such as flexible working time models. The design of the production network enables us to respond dynamically to varying changes in demand at the sites. "Turntable concepts" even out capacity utilization between production facilities. At multibrand sites, volatile demand can also be smoothed across brands.

Short-term changes in customer demand for specific equipment features in our products, and the decreasing predictability of demand, may lead to supply bottlenecks. We minimize this risk by, among other measures, continuously comparing our available resources against future demand scenarios. If we identify bottlenecks in the supply of materials, we can introduce countermeasures far enough in advance.

Production capacity is planned several years in advance for each vehicle project on the basis of expected sales trends. These are subject to market changes and generally entail a

degree of uncertainty. If forecasts are too optimistic, there is a risk that capacity will not be fully utilized. However, forecasts that are too pessimistic pose a risk of undercapacity, as a result of which it may not be possible to meet customer demand.

Particular events beyond our control such as natural disasters or other events such as fires, explosions or the leakage of substances hazardous to health and/or the environment, may adversely affect production to a significant extent. As a consequence, bottlenecks or even outages may occur, thus preventing the planned volume of production from being achieved. We address such risks with, among other things, fire protection measures and hazardous goods management, and, where financially viable, ensure that they are covered by insurance policies.

The range of our models is growing, while at the same time product life cycles are becoming shorter; the number of new vehicle start-ups at our sites worldwide is therefore increasing. The processes and technical systems we use for this are complex and there is thus a risk that vehicle deliveries may be delayed. We address this risk by drawing on experience of past start-ups and identifying weaknesses at an early stage so as to ensure that production volumes and quality standards are met during our new vehicle start-ups throughout the Group.

In order to prevent downtime in general, lost output, rejects and reworking, we use the TPM (Total Productive Maintenance) method at our production facilities. TPM is a continuous process, that involves the entire workforce. Round-the-clock maintenance of the technical facilities means that they are always operational and guaranteed to function reliably.

#### Risks arising from long-term production

In the case of large projects, risks may arise that are often only identified in the course of the project. They may result in particular from contract drafting errors, miscosting, post-contract changes in economic and technical conditions, weaknesses in project management, or poor performance by subcontractors. In particular, omissions or errors made at the start of a project are usually difficult to compensate for or correct, and often entail substantial additional expenses.

We endeavor to identify these risks at an even earlier stage and to take appropriate measures to eliminate or minimize them before they occur by constantly optimizing the project control process across all project phases and by using a lessons-learned process and regular project reviews. We can thus further reduce risk, particularly during the bidding and planning phase for large upcoming projects.

#### Risks arising from changes in demand

As a result of the diesel issue, the Volkswagen Group may experience decreases in demand, possibly exacerbated by media reports. When dealing with the issue, our highest priority is to provide customers with technical solutions. In addition, we are pressing ahead with the systematic clarification of misconduct in the Company.

Consumer demand is shaped not only by real factors such as disposable income, but also by psychological factors that cannot be planned for. Unexpected buyer reluctance, possibly further exacerbated by press reports, could stem from households' worries about the future economic situation, for example. This is particularly the case in saturated automotive markets such as Western Europe, where demand could drop as a result of owners holding on to their vehicles for longer. In the reporting period, it became evident that the effects of the eurozone debt crisis have not yet been overcome. Some automotive markets, particularly in Southern Europe, were able to further recover from their historical lows, however, and exhibited positive growth rates. We are countering the buyer reluctance with our attractive range of models and systematic customer orientation.

A combination of buyer reluctance as a result of the crisis and increases in some vehicle taxes based on CO<sub>2</sub> emissions – as already exist in some European countries – is driving a shift in demand towards smaller segments and engines in individual markets. We counter the risk that such a shift will negatively impact the Volkswagen Group's earnings by constantly developing new, fuel-efficient vehicles and alternative drive technologies, based on our drivetrain and fuel strategy.

Automotive markets around the world are exposed to risks from government intervention such as tax increases, which curb private consumption, or from protectionist tendencies.

Commercial vehicles are capital goods: even minor changes in growth rates or growth forecasts can significantly affect transport requirements and thus demand. The production fluctuations arising as a result require a high degree of flexibility from manufacturers. Although production volumes are significantly lower, the complexity of the trucks and buses range in fact significantly exceeds the already very high complexity of the passenger cars range. Key factors for commercial vehicle customers are total cost of ownership, vehicle reliability and the service provided. In addition, customers are increasingly interested in additional services such as freight optimization and fleet utilization, which we offer in the commercial vehicle segment through the newly established digital brand RIO, for example.

MAN Power Engineering's two-stroke engines are produced exclusively by licensees, particularly in South Korea, China and Japan. On account of volatile demand in new ship construction, there is excess capacity in the market for marine engines, which may result in a decline in license revenues and bad debt losses. Due to changes in the competitive environment, especially in China, there is also the risk of losing market share. We address these risks by constantly monitoring the markets, working closely with all licensees and introducing new technologies.

#### Dependence on fleet customer business

The fleet customer business is generally more stable than the business with retail customers; in 2017, it continued to be characterized by increasing concentration and internationalization.

The Volkswagen Group is well positioned with its broad portfolio of products and drive systems, as well as its target-group-focused customer care. There is no concentration of default risks at individual fleet customers or markets. The fact that the market share in Europe remained constant shows that fleet customers still have confidence in the Group.

#### Quality risk

Right from the product development stage, we aim to identify and rectify quality problems at the earliest possible point, so as to avoid delays to the start of production. As we are using an increasing number of modular components as part of our modular toolkit strategy, it is particularly important when malfunctions do occur to identify the cause and eliminate the malfunctions as quickly as possible. We further optimized the processes with which we can prevent these defects at our brands and improved our organizational processes during the reporting period so that we are able to counter the associated risks more effectively.

Increasing technical complexity and the use of the toolkit system in the Group mean that the need for high-grade supplier components of impeccable quality is rising. To ensure the continuity of production, it is also extremely important that our own plants and our suppliers deliver components on time. We ensure long-term quality and supply capability from the very start of the supply chain using a risk management system that we first tested internally and then introduced among suppliers. In this way, Group Quality Management contributes to fulfilling customer expectations and consequently to boosting our Company's reputation, sales figures and earnings.

Assuring quality is of fundamental importance especially in the Brazilian, Russian, Indian and Chinese markets, for

which we develop dedicated vehicles and where local manufacturers and suppliers have been established, particularly as it may be very difficult to predict the impact of regulations or official measures. We continuously analyze the conditions specific to each market and adapt quality requirements to them. We counter the local risks we identify by continuously developing measures and implementing them locally, thereby effectively preventing quality defects from arising.

Vehicle registration and operation criteria are defined and monitored by national and, in some cases, international authorities. Some countries also have special – and in some cases new – rules aimed at protecting customers in their dealings with vehicle manufacturers. With our established and revised quality assurance processes, we ensure that the Volkswagen Group brands and their products fulfill all applicable requirements and that local authorities receive timely notification of all issues requiring reporting. By doing so, we reduce the risk of customer complaints or other negative consequences.

#### Personnel risk

We counter economic risks as well as changes in the market and competitive situation with a range of instruments that help the Volkswagen Group to remain flexible, even with a fluctuating order situation – whether orders decline or demand for our products increases. These include time accounts which are filled when overtime is necessary and reduced through time off in quiet periods, enabling our factories to adjust their capacity to the production volume with measures such as extra shifts, closure days and flexible shift models. The use of temporary workers also allows us to plan more flexibly. All of these measures help the Volkswagen Group to generally maintain a stable permanent workforce even when orders fluctuate.

The technical expertise and individual commitment of employees are indispensable prerequisites for the success of the Volkswagen Group. Our end-to-end human resources development strategy gives all employees attractive training and development opportunities, with particular emphasis being placed on strengthening professional skills in the Company's different vocational groups. By boosting our training programs, particularly at our international locations, we are able to adequately address the challenges of technological change.

We are continuously expanding our recruitment tools. Our systematic talent relationship management, for example, enables us to make contact with talented candidates from strategically relevant target groups at an early stage and to build a long-term relationship between them and the Group.

In addition to the standard dual vocational training, programs such as our StIP integrated degree and traineeship scheme ensure a pipeline of highly qualified and motivated employees. We counter the risk that knowledge will be lost as a result of employee fluctuation and retirement with intensive, department-specific training. By systematically increasing our attractiveness as an employer, we gain talented people in the future-critical areas of IT, design and social media. We have also established a base of senior experts in the Group. With this instrument, we use the valuable knowledge of our experienced specialists who have retired from Volkswagen. Organizing efficient knowledge hubs – for example the academies dedicated to the various vocational groups under the umbrella of the Volkswagen Group Academy – is becoming increasingly important, particularly where departing staff are not directly replaced by specialists. Volkswagen is working on knowledge relays to ensure experience is passed on even when the chain of succession is broken.

#### IT Risk

At Volkswagen, a global company geared towards further growth, the information technology (IT) used in all divisions Group-wide is assuming an increasingly important role. IT risks exist in relation to the three protection goals of confidentiality, integrity and availability, and comprise in particular unauthorized access to, modification of and extraction of sensitive electronic corporate data as well as limited systems availability as a consequence of downtime and disasters.

We address the risk of unauthorized access to, modification of, or extraction of corporate data with IT security technologies (e.g. firewall and intrusion prevention systems) and a multiple-authentication procedure. Additionally, we increase protection by restricting the allocation of access rights to systems and information and by keeping backup copies of critical data resources. We use technical resources that have been tried and tested in the market, adhering to standards applicable throughout the Company. Redundant IT infrastructures protect us against risks that occur in the event of a systems failure or natural or other disaster.

One of our focuses is on continuously enhancing our security measures. The current IT security program, for example, is built on structured rights management, optimization of IT infrastructure, application security and the IT security command center. The role of the latter is to detect cyber-attacks at an early stage and thus help to successfully defeat them using the latest tools. The command center is staffed around the clock in three regions (Europe, America, Asia). Volkswagen complements these technical measures with consistent awareness raising and training for all employees.

The high standards we set for the quality of our products also apply to the way in which we handle our customers' and employees' data. In particular, the digital services for mobility services must be secured. Our guiding principles are data security, transparency and informational self-determination.

#### Environmental protection regulations

The specific emission limits for all new passenger car and light commercial vehicle fleets for brands and groups in the EU for the period up to 2019 are set out in Regulation (EC) No 443/2009 on CO<sub>2</sub> emissions from passenger cars and Regulation (EU) No 510/2011 on light commercial vehicles of up to 3.5 tonnes, which came into effect in April 2009 and June 2011, respectively. These regulations are important components of the European climate protection policy and therefore form the key regulatory framework for product design and marketing by all vehicle manufacturers selling in the European market.

The average CO<sub>2</sub> emissions of manufacturers' new European passenger car fleets have not been allowed to exceed 130 g CO<sub>2</sub>/km since 2012. Compliance with this requirement was introduced in phases; since 2015 the entire fleet has to meet this limit. Regulation (EU) No 333/2014, which was adopted in 2014, states that the average emissions of European passenger car fleets may be no higher than just 95 g CO<sub>2</sub>/km from 2021 onwards; in 2020, this emissions limit will already apply to 95% of the fleet.

The EU's CO<sub>2</sub> regulation for light commercial vehicles requires limits to be met from 2014 onwards, with targets being phased in over the period to 2017. Under this regulation, the average CO<sub>2</sub> emissions of new vehicle registrations in Europe may not exceed 175 g CO<sub>2</sub>/km. From 2020 onwards, the limit under Regulation (EU) No 253/2014, which was adopted in 2014, is 147 g CO<sub>2</sub>/km.

In the fourth quarter of 2017, the European Commission published a regulatory proposal for the CO<sub>2</sub> regime after 2020. A reduction for the European passenger car and light commercial vehicle fleets of 15% from 2025 and 30% from 2030 are the targets currently proposed. The starting point is the fleet value in 2021. The bill is expected to be voted on conclusively at the end of 2018. Policymakers are already discussing reduction targets for the transport sector for the period to 2050, such as the 60% reduction in greenhouse gas emissions compared to 1990 levels cited in the EU White Paper on transport published in March 2011. These long-term targets can only be achieved through a high proportion of electric vehicles.

At the same time, regulations governing fleet fuel consumption are also being developed or introduced outside the EU28, for example in Brazil, Canada, China, India, Japan,

Mexico, Saudi Arabia, South Korea, Switzerland, Taiwan and the USA. Brazil has introduced a fleet efficiency target as part of a voluntary program for granting a tax advantage. To achieve a 30% tax advantage in this country, vehicle manufacturers are required to achieve, among other things, average fleet efficiency of around 1.82 megajoules/km by 2017. The fuel consumption regulations in China, which set an average fleet target of 6.9 liters/100 km for the period 2012–2015 (Phase III), were continued into Phase IV for the period 2016–2020, with a target of 5.0 liters/100 km at the end of this period. Preparations for legislation up to 2025 (Phase V) have begun. In addition to this legislation on fleet consumption, China will impose a so called “new energy vehicle quota” in the future. This means that from 2019 onwards, battery-powered vehicles, plug-in hybrids and fuel cell vehicles will have to account for a certain proportion of a manufacturer’s new passenger car fleet. Due to the extension of greenhouse gas legislation in the USA (the law was signed in 2012), uniform fuel consumption and greenhouse gas standards will continue to apply in all federal states in the period from 2017 to 2025.

The increased regulation of fleet-based CO<sub>2</sub> emissions and fuel consumption makes it necessary to use the latest mobility technologies in all key markets worldwide. At the same time, electrified and purely electric drives will also become increasingly common. The Volkswagen Group closely coordinates technology and product planning with its brands so as to avoid breaches of fleet fuel consumption limits, since these would entail severe financial penalties. Volkswagen continues to regard diesel technology as an important element in the fulfillment of CO<sub>2</sub> emissions targets.

EU legislation allows excess emissions and emission shortfalls to be offset between vehicle models within a fleet of new vehicles. Furthermore, the EU permits some flexibility in fulfilling the emissions targets, for example:

- Emission pools may be formed
- Relief opportunities may be provided for additional innovative technologies contained in the vehicle that apply outside the test cycle (eco-innovations)
- Special rules are in place for small-series producers and niche manufacturers
- Particularly efficient vehicles qualify for super-credits

Whether the Group meets its fleet targets depends crucially on its technological and financial capabilities, which are reflected in, among other things, our drivetrain and fuel strategy (see page 137).

In the EU, a new, more time-consuming test procedure – the Worldwide Harmonized Light-Duty Vehicles Test Procedure (WLTP) – for determining pollutant and CO<sub>2</sub> emissions as well as fuel consumption in passenger cars and light

commercial vehicles has applied to new vehicle types since September 2017 and will apply to all new vehicles from September 2018.

The Real Driving Emissions (RDE) regulation for passenger cars and light commercial vehicles is also one of the main European regulations. The fourth package of legislation is currently being elaborated. New, uniform limits for nitrogen oxide and particulate emissions in real road traffic have applied to new vehicle types across the EU since September 2017. This makes the RDE test procedure fundamentally different from the Euro 6 standard still in force, which stipulates that the limits on the chassis dynamometer are authoritative. The RDE regulation is intended primarily to improve air quality in urban areas and areas close to traffic. It leads to stricter requirements for exhaust gas aftertreatment in passenger cars and light commercial vehicles.

The other main EU regulations affecting the automotive industry include:

- EU Directive 2007/46/EC establishing a framework for the approval of motor vehicles
- EU Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles (Green Procurement Directive)
- EU Directive 2006/40/EC relating to emissions from air-conditioning systems in motor vehicles
- The Car Labeling Directive 1999/94/EC
- The Fuel Quality Directive (FQD) 2009/30/EC updating the fuel quality specifications and introducing energy efficiency specifications for fuel production
- The Renewable Energy Directive (RED) 2009/28/EC introducing sustainability criteria; the proposal for follow-up regulation (REDII) contains higher quotas for advanced biofuels and is currently being discussed in the competent EU bodies
- The revised Energy Taxation Directive 2003/96/EC updating the minimum tax rates for all energy products and power

The implementation of the above-mentioned directives by the EU member states serves to support the CO<sub>2</sub> regulations in Europe. These are aimed not only at vehicle manufacturers, but also at other sectors such as the mineral oil industry. Vehicle taxes based on CO<sub>2</sub> emissions are having a similar steering effect; many EU member states have already incorporated CO<sub>2</sub> elements into their rules on vehicle taxation.

There is particular momentum in the debate on the introduction of driving bans for diesel vehicles in Germany. This was triggered by the failure of some municipalities and cities to comply with the limits for nitrogen dioxide (NO<sub>2</sub>) emissions. In many places, lawsuits have been filed arguing that only driving bans for diesel vehicles will bring about the

necessary short-term reduction in NO<sub>2</sub> emissions. The debates mentioned above have already caused sales of diesel vehicles to decline.

Local driving bans are already in place in a number of countries, though these mainly affect older vehicles. One such example are regulations in Belgium that successively bar older vehicles from larger cities. With a view to the future, large urban areas such as Paris and London are discussing banning vehicles with combustion engines.

Heavy commercial vehicles first put into operation from 2014 onwards are already subject to the stricter emission requirements of the Euro 6 standard in accordance with Regulation (EU) No 582/2011. Alongside the CO<sub>2</sub> legislation for passenger cars and light commercial vehicles, the EU is preparing more comprehensive regulation of CO<sub>2</sub> emissions in heavy commercial vehicles. Simply setting an overarching limit for these vehicles – such as that in place for passenger cars and light commercial vehicles – would require an extremely complex set of rules because of the wide range of variants. For this reason, the European Commission has worked with independent scientific institutions and the European Automobile Manufacturers' Association (ACEA) to prepare a simulation-based method called the Vehicle Energy Consumption Calculation Tool (VECTO). This can be used to determine the CO<sub>2</sub> emissions of heavy commercial vehicles of over 7.5 tonnes based on their typical use (short-haul, regional, distribution and long-haul trips, service on construction sites and as municipal vehicles, city buses, intercity buses and coaches). A legislative proposal for the CO<sub>2</sub> certification of heavy commercial vehicles and regulations on the reporting and monitoring of CO<sub>2</sub> figures was presented in May 2017; the legislation for the declaration of CO<sub>2</sub> figures for heavy commercial vehicles came into effect in January 2018. A CO<sub>2</sub> declaration will be compulsory for selected vehicle categories from 2019 (initially long-haul and regional distribution vehicles, later also buses and other segments), with the captured data first being used to enable the customer to compare information and for certification and monitoring purposes. Further vehicle categories are likely to be included as time progresses. As part of its strategy to decarbonize transport, the European Commission has also announced that it will be presenting a proposal regarding the introduction of CO<sub>2</sub> standards for heavy commercial vehicles by the end of its term of office in 2019. The European Commission is currently working on the specific embodiment of such standards and has collected data from manufacturers to define a starting point and mandatory reduction targets for the future. An initial legislative proposal on CO<sub>2</sub> standards for heavy commercial vehicles is expected in May 2018.

Manufacturers of heavy commercial vehicles are urging the adoption of a system for quantifying CO<sub>2</sub> figures that looks at the vehicle as a whole and not simply at the engine or the tractor, and thus also includes the trailers and bodywork. This transparency should increase competition for more fuel-

efficient and thus more CO<sub>2</sub>-efficient commercial vehicles and as a result decrease CO<sub>2</sub> emissions.

As part of its efforts to reduce the CO<sub>2</sub> emissions of heavy commercial vehicles, the European Commission has also amended the provisions regarding the maximum permissible dimensions and weights of trucks (Directive 1996/53/EC, the Weights and Dimensions Directive) and revised them through EU Directive 2015/719. According to these, cabs with a rounded shape and air conduction devices at the rear of the vehicle will make it possible to improve aerodynamics in future. At the same time, the driver's field of vision is to be extended by increasing the length of the cab in order to improve safety. In addition, the legislators increased the overall weight permitted for vehicles with alternative drive technologies by up to one tonne. The specific technical requirements for the development of aerodynamic and safe cabs are currently being examined.

The European commercial vehicles industry supports the goals of reducing CO<sub>2</sub> emissions and improving transport safety. However, it is not just the vehicles themselves that affect future CO<sub>2</sub> emissions; individual components also play an important role, such as reduced rolling resistance tires or the aerodynamic trim of the trailer, as do driving behavior, alternative fuels including the required filling stations, transport infrastructure and transport conditions. As part of a field trial that took place up to the end of 2016, longer and heavier vehicles that can decrease fuel consumption and thus CO<sub>2</sub> emissions by up to 25% according to scientific studies by the Federal Highway Research Institute, were also driving on German roads. Since the beginning of 2017, these longer vehicles have been used in regular operations on a certified road network.

Networking and digitalizing the transport system will also eliminate existing inefficiencies such as inadequate utilization of available load capacities, empty trips or unnetworked route planning: vehicles that move in networked, intermodal transport systems in which flows of traffic are optimized through the use of artificial intelligence save fuel and hence reduce CO<sub>2</sub> emissions. Automated driving also presents considerable potential for more sustainable organization of goods transport in road traffic, for example through platooning, in which the driver of the first truck in a convoy of networked, partially self-driving trucks specifies the direction and speed. Driving in the slipstream of other trucks on motorways allows fuel consumption to be reduced considerably. However, platooning requires changes in the legal framework and establishment of the necessary infrastructure.

In the Power Engineering segment, the International Maritime Organization (IMO) has introduced the International Convention for the Prevention of Pollution from Ships (MARine POLLution – MARPOL), with which limits on emissions from marine engines will be lowered in phases. A reduction of the sulfur content in marine fuel has been

confirmed with effect from January 1, 2020. In addition, the IMO has decided on a number of emission control areas in Europe and in the USA/Canada that will be subject to special environmental regulations. Expansion to further regions such as the Mediterranean or Japan is already being planned; other regions such as the Black Sea, Alaska, Australia or South Korea are also in discussion. In addition, emission limits also apply, for example, under Regulation (EU) 2016/1628 and in accordance with the regulations of the US Environmental Protection Agency (EPA). As regards stationary equipment, there are a number of national rules in place worldwide that limit permitted emissions. On December 18, 2008, the World Bank Group set limits for gas and diesel engines in its "Environmental, Health, and Safety Guidelines for Thermal Power Plants", which are required to be applied if individual countries have adopted no national requirements of their own, or ones that are less strict than those of the World Bank Group. These are currently being revised. In addition, the United Nations adopted the Convention on Long-range Transboundary Air Pollution back in 1979, setting limits on total emissions as well as nitrogen oxide for the signatory states (including all EU states, other countries in Eastern Europe, the USA and Canada). Enhancements to the product portfolio in the Power Engineering segment focus on improving the efficiency of the equipment and systems.

The allocation method for emissions certificates changed fundamentally when the third emissions trading period (2013–2020) began. As a general rule, all emission allowances for power generators have been sold at auction since 2013. For the manufacturing industry and certain power generation installations (e.g. combined heat and power installations), a portion of the certificates are allocated free of charge on the basis of benchmarks applicable throughout the EU. The portion of certificates allocated free of charge will gradually decrease as the trading period progresses: the remaining quantities required will have to be bought at auction. Furthermore, installation operators can partly fulfill their obligation to hold emission allowances using certificates from climate change projects (Joint Implementation and Clean Development Mechanism projects).

In certain (sub-)sectors of industry, there is a risk that production will be transferred to countries outside Europe due to the amended provisions governing emissions trading, a phenomenon referred to as "carbon leakage". A consistent quantity of certificates will be allocated to these sectors free of charge for the period from 2013 to 2020 on the basis of the pan-EU benchmarks. The automotive industry was included in the new carbon leakage list that came into effect in 2015. As a result, individual plants at European locations of the Volkswagen Group will receive additional certificates free of charge by the end of the third trading period.

Already back in 2013, the European Commission decided to initially withhold a portion of the certificates to be auctioned and not to release them for auction until a later date during the third trading period (backloading). The certificates will be directed into a market stability reserve, to be established in 2018.

The reserve will serve to correct any imbalance between the supply of and demand for certificates in emissions trading in the fourth trading period. Furthermore, the European Commission is planning further modifications in emissions trading when the fourth trading period begins (from 2021) that may lead to a tightening 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.

#### Litigation

In the course of their operating activities, Volkswagen AG and the companies in which it is directly or indirectly invested become involved in a great number of legal disputes and governmental proceedings in Germany and abroad. In particular, such legal disputes and other proceedings may occur in relation to suppliers, dealers, customers, employees, or investors. For the companies involved, these may result in payment or other obligations. Above all, in cases where US customers assert claims for vehicle defects individually or by way of a class action, highly cost-intensive measures may have to be taken and substantial compensation or punitive damages paid. Corresponding risks also result from US patent infringement proceedings.

Risks may also emerge in connection with the adherence to regulatory requirements. This particularly applies in the case of regulatory vagueness that may be interpreted differently by Volkswagen and the authorities responsible for the respective regulations. In addition, legal risks can arise from the criminal activities of individual persons, which even the best compliance management system can never completely prevent.

Where transparent and economically viable, adequate insurance coverage was taken out for these risks. For the identifiable and measurable risks, provisions considered appropriate were recognized and information about contingent liabilities disclosed. As some risks cannot be assessed or can only be assessed to a limited extent, the possibility of loss

or damage not being covered by the insured amounts and provisions cannot be ruled out. This particularly applies to legal risk assessment regarding the diesel issue.

#### Diesel issue

On September 18, 2015, the US Environmental Protection Agency (EPA) publicly announced in a "Notice of Violation" that irregularities in relation to nitrogen oxide ( $\text{NO}_x$ ) emissions had been discovered in emissions tests on certain vehicles of Volkswagen Group with type 2.0 l diesel engines in the USA. It was alleged that Volkswagen had installed undisclosed engine management software installed in 2009 to 2015 model year 2.0 l diesel engines to circumvent  $\text{NO}_x$  emissions testing regulations in the USA in order to comply with certification requirements. The California Air Resources Board (CARB), a unit of the US environmental authority of California, announced its own enforcement investigation into this matter.

In this context, Volkswagen AG announced that noticeable discrepancies between the figures achieved in testing and in actual road use had been identified in around eleven million vehicles worldwide with type EA 189 diesel engines. The vast majority of these engines were type EA 189 Euro 5 engines.

On November 2, 2015, the EPA issued a "Notice of Violation" alleging that irregularities had also been discovered in the software installed in US vehicles with type V6 3.0 l diesel engines. CARB also issued a letter announcing its own enforcement investigation into this matter. AUDI AG has confirmed that at least three auxiliary emission control devices were inadequately disclosed in the course of the US approval documentation. Around 113 thousand vehicles from the 2009 to 2016 model years with certain six-cylinder diesel engines were affected in the USA and Canada, where regulations governing  $\text{NO}_x$  emissions limits for vehicles are stricter than those in other parts of the world.

Numerous court and governmental proceedings were subsequently initiated in the USA and the rest of the world. During the reporting period, we succeeded in ending most significant court and governmental proceedings in the USA by concluding settlement agreements. This includes, in particular, settlements with the US Department of Justice (DOJ). Outside the USA, we also reached agreements with regard to the implementation of the technical measures with numerous authorities.

The Supervisory Board of Volkswagen AG formed a special committee that coordinates the activities relating to the diesel issue for the Supervisory Board.

The global law firm Jones Day was instructed by Volkswagen AG to carry out an extensive investigation of the diesel issue in light of the DOJ's and the Braunschweig public prosecutor's criminal investigations as well as other investigations and proceedings which were expected. Jones Day was instructed by Volkswagen AG to present factual evidence to the DOJ. To resolve US criminal law charges, Volkswagen AG and the DOJ entered into a Plea Agreement, which includes a Statement of Facts containing a summary of the factual allegations which the DOJ considered relevant to the settlement with Volkswagen AG. The Statement of Facts is based in part on Jones Day's factual findings as well as the evidence identified by the DOJ itself.

Jones Day has completed the work required to assist Volkswagen AG in assessing the criminal charges in the USA with respect to the diesel issue. However, work in respect of the legal proceedings which are still pending in the USA and the rest of the world is ongoing and will require considerable efforts and a considerable period of time. In connection with this work, Volkswagen AG is being advised by a number of external law firms.

Furthermore, in September 2015, Volkswagen AG filed a criminal complaint in Germany against unknown persons as did AUDI AG. Volkswagen AG and AUDI AG are cooperating with all responsible authorities in the scope of reviewing the incidents.

Potential consequences for Volkswagen's results of operations, financial position and net assets could emerge primarily in the following legal areas:

1. Coordination with the authorities on technical measures  
Based on decisions dated October 15, 2015, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) ordered the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles and SEAT brands to recall all the diesel vehicles that had been issued with vehicle type approval by the KBA from among the eleven million vehicles affected with type EA 189 engines. The recall concerns the member states of the European Union (EU28). On December 10, 2015 a similar decision was issued regarding Audi vehicles with the EA 189 engine. The timetable and action plan forming the basis for the recall order corresponded to the proposals presented in advance by Volkswagen. Depending on the technical complexity of the concerned remedial actions, this means that the Volkswagen Group has been recalling the affected vehicles, of which there are around 8.5 million in total in the EU28 countries, to the service workshops since

January 2016. The remedial actions differ in scope depending on the engine variant. The technical measures cover software and in some cases hardware modifications, depending on the series and model year. The technical measures for all vehicles in the European Union have since been approved without exception. The KBA ascertained for all clusters (groups of vehicles) that implementation of the technical measures would not bring about any adverse changes in fuel consumption figures, CO<sub>2</sub> emissions figures, engine power, maximum torque and noise emissions. Once the modifications have been made, the vehicles will thus also continue to comply with the legal requirements and the emission standards applicable in each case. The technical measures for all affected vehicles with type EA 189 engines in the European Union were approved without exception, and implemented in most cases.

In some countries outside the EU – among others South Korea, Taiwan and Turkey – national type approval is based on prior recognition of the EC/ECE type approval; the technical measures must therefore be approved by the national authorities. With the exception of South Korea and Chile, we were able to conclude this approval process in all countries. There, the majority of approvals were likewise granted; in relation to the pending approvals, Volkswagen is in close contact with the authorities.

In addition, there is an intensive exchange of information with the authorities in the USA and Canada, where Volkswagen's proposed modifications in relation to the four-cylinder and the six-cylinder diesel engines also have to be approved. Due to NO<sub>x</sub> limits that are considerably stricter than in the EU and the rest of the world, it is a greater technical challenge here to refit the vehicles so that the emission standards defined in the settlement agreements for these vehicles can be achieved.

For many months, AUDI AG has been intensively checking all diesel concepts for possible discrepancies and retrofit potentials. A systematic review process for all engine and gear variants has been underway since 2016.

On June 14, 2017, based on a technical error in the parameterization of the transmission software for a limited number of specific Audi A7/A8 models that AUDI AG itself discovered and reported to the KBA, the KBA issued an order under which a correction proposed by AUDI AG will be submitted. The technical error lies in the fact that, in the cases concerned, by way of exception a specific function that is standard in all other vehicle concepts is not implemented in actual road use. In Europe, this affects around 24,800 units of certain Audi A7/A8 models. The KBA has not categorized this error as an unlawful defeat device.

On July 21, 2017, AUDI AG offered a software-based retrofit program for up to 850,000 vehicles with V6 and V8 TDI engines meeting the Euro 5 and Euro 6 emission standards in Europe and other markets except the USA and Canada. The measure will mainly serve to further improve the vehicles' emissions in real driving conditions in inner city areas beyond the legal requirements. This was done in close cooperation with the authorities, which were provided with detailed reports, especially the German Federal Ministry of Transport and the KBA. The retrofit package comprises voluntary measures and, to a small extent, measures directed by the authorities; these are measures taken within the scope of a recall, which were proposed by AUDI AG itself, reported to the KBA and taken up and ordered by the latter. The voluntary tests have already reached an advanced stage, but have not yet been completed. The measures adopted and mandated by the KBA involved the recall of different diesel vehicles with a V6 or V8 engine meeting the Euro 6 emission standard, for which the KBA categorized certain emission strategies as an unlawful defeat device. From July 2017 to January 2018, the measures proposed by AUDI AG were adopted and mandated in various decisions by the KBA on vehicle models with V6 and V8 TDI engines.

Currently, AUDI AG assumes that the total costs of the software-based retrofit program including the amount based on recalls will be manageable and has recognized corresponding balance-sheet risk provisions. Should additional measures become necessary as a result of the investigations by AUDI AG and the consultations with the KBA, AUDI AG will quickly implement these as part of the retrofit program in the interest of customers.

## 2. Criminal and administrative proceedings worldwide (excluding the USA/Canada)

In addition to the described approval processes with the responsible registration authorities, in some countries criminal investigations/misdemeanor proceedings (for example, by the public prosecutor's office in Braunschweig and Munich, Germany) and/or administrative proceedings (for example, by the Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin – the German Federal Financial Supervisory Authority) have been opened. The public prosecutor's offices in Braunschweig and Munich are investigating the core issue of the criminal investigations. Whether this will result in fines for the Company, and if so what their amount might be, is currently subject to estimation risks. According to Volkswagen's estimates so far, the likelihood of a sanction in the majority of these proceedings is less than 50%. Contingent liabilities have therefore been disclosed in cases where they can be assessed and for which the likelihood of a sanction was deemed not lower than 10%.

### 3. Product-related lawsuits worldwide (excluding the USA/Canada)

In principle, it is possible that customers in the affected markets will file civil lawsuits against Volkswagen AG and other Volkswagen Group companies. In addition, it is possible that importers and dealers could assert claims against Volkswagen AG and other Volkswagen Group companies, e.g. through recourse claims. As well as individual lawsuits, class action lawsuits are possible in various jurisdictions (albeit not in Germany). Furthermore, in a number of markets it is possible that consumer and/or environmental organizations will apply for an injunction or assert claims for a declaratory judgment or for damages.

In the context of the diesel issue, various lawsuits are currently pending against Volkswagen AG and other Volkswagen Group companies at present.

There are pending class action proceedings and lawsuits brought by consumer and/or environmental associations against Volkswagen AG and other companies of the Volkswagen Group in various countries such as Argentina, Australia, Belgium, Brazil, China, the Czech Republic, Israel, Italy, Mexico, the Netherlands, Poland, Portugal, Switzerland, Taiwan and the United Kingdom. The class action proceedings are lawsuits aimed among other things at asserting damages or, as is the case in the Netherlands, at a declaratory judgment that customers are entitled to damages. With the exception of Brazil, where there has already been a non-binding judgment in the first instance, the amount of these damages cannot yet be quantified more precisely due to the early stage of the proceedings. Volkswagen does not estimate the litigants' prospect of success to be more than 50% in any of the class action proceedings.

In South Korea, various mass proceedings are pending (in some of these individual lawsuits several hundred litigants have been aggregated). These lawsuits have been filed to assert damages and to rescind the purchase contract including repayment of the purchase price. Due to special circumstances in the market and specific characteristics of the South Korean legal system, Volkswagen estimates the litigants' prospects of success in the South Korean mass proceedings mentioned above to be inherently higher than in other jurisdictions outside the USA and Canada. On May 12, 2017, one first-instance judgment was delivered in these proceedings in South Korea during the fiscal year, in which the court completely dismissed an action filed to assert criminal damages over pollution. The judgment has since become binding.

Contingent liabilities have been disclosed for pending class action and mass proceedings that can be assessed and

for which the chance of success was deemed not implausible. Provisions were recognized to a small extent.

Furthermore, individual lawsuits and similar proceedings are pending against Volkswagen AG and other Volkswagen Group companies in numerous countries. In Germany, there are around 9,500 individual lawsuits. In Italy, Austria and Spain, lawsuits numbering in the low three-digit range and in France and Ireland individual lawsuits in the two-digit range are pending against Volkswagen AG and other companies of the Volkswagen Group, most of which are aimed at asserting damages or rescinding the purchase contract.

In addition, on November 29, 2017, Volkswagen AG was served with an action brought by financialright GmbH asserting the rights assigned to it by a total of approximately 15,000 customers in Germany. This action seeks the payment of around €350 million in return for restitution of the vehicles.

In Switzerland, a claim for damages was brought against Volkswagen AG in December 2017 from the assigned rights of some 6,000 customers; the stated amount in dispute is approximately 30 million Swiss francs.

According to Volkswagen's estimates so far, the litigants' prospect of success is below 50% in the vast majority of the individual lawsuits. Contingent liabilities have therefore been disclosed for those lawsuits that can be assessed and for which the chance of success was deemed not implausible.

It is too early to estimate how many customers will take advantage of the option to file lawsuits in the future, beyond the existing lawsuits, or what their prospects of success will be.

### 4. Lawsuits filed by investors worldwide (excluding the USA/Canada)

Investors from Germany and abroad have filed claims for damages against Volkswagen AG – in some cases along with Porsche Automobil Holding SE (Porsche SE) as joint and several debtors – based on purported losses due to alleged misconduct in capital market communications in connection with the diesel issue.

The vast majority of these investor lawsuits are currently pending at the District Court (Landgericht) in Braunschweig. On August 5, 2016, the District Court in Braunschweig ordered that common questions of law and fact relevant to the lawsuits pending at the District Court in Braunschweig be referred to the Higher Regional Court (Oberlandesgericht) in Braunschweig for a binding declaratory decision pursuant to the German Act on Model Case Proceedings in Disputes Regarding Capital Market Information (Kapitalanleger-Musterverfahrensgesetz – KapMuG). In this proceeding, common

questions of law and fact relevant to these actions shall be adjudicated in a consolidated manner by the Higher Regional Court in Braunschweig (model case proceedings). All lawsuits at the District Court in Braunschweig will be stayed pending up until resolution of the common issues, unless they can be dismissed for reasons independent of the common issues that are adjudicated in the model case proceedings. The resolution of the common questions of law and fact in the model case proceedings will be binding for all pending cases in the stayed lawsuits.

At the District Court in Stuttgart, further investor lawsuits have been filed against Volkswagen AG, in some cases along with Porsche SE as joint and several debtors. On December 6, 2017, the District Court in Stuttgart issued an order for reference to the Higher Regional Court in Stuttgart in relation to procedural issues, particularly for clarification of jurisdiction. On account of the diesel issue, model case proceedings against Porsche SE are also pending before the Higher Regional Court in Stuttgart.

Further investor lawsuits have been filed at various courts in Germany as well as in Austria and the Netherlands. In Austria, the Supreme Court ruled on July 7, 2017 that the investor lawsuits against Volkswagen AG do not fall within the jurisdiction of the Austrian courts. Consequently, all but one of the investor lawsuits that were formerly pending in Austria have been dismissed or withdrawn. The last pending lawsuit has been dismissed at first instance.

Worldwide (excluding USA and Canada), investor lawsuits, judicial applications for dunning procedures and conciliation proceedings, and claims under the KapMuG are currently pending against Volkswagen in connection with the diesel issue, with the claims totaling approximately €9 billion. Volkswagen remains of the opinion that it duly complied with its capital market obligations. Therefore, no provisions have been recognized for these investor lawsuits. Insofar as the chance of success was estimated at not lower than 10%, contingent liabilities have been disclosed.

## 5. Proceedings in the USA/Canada

Following the publication of the EPA's "Notices of Violation", Volkswagen AG and other Volkswagen Group companies have been the subject of intense scrutiny, ongoing investigations (civil and criminal) and civil litigation. Volkswagen AG and other Volkswagen Group companies have received subpoenas and inquiries from state attorneys general and other governmental authorities and are responding to such investigations and inquiries.

In addition, Volkswagen AG and other Volkswagen Group companies in the USA/Canada are facing litigation on a num-

ber of different fronts relating to the matters described in the EPA's "Notices of Violation".

A large number of putative class action lawsuits by customers and dealers have been filed in US federal courts and consolidated for pretrial coordination purposes in the federal multidistrict litigation proceeding in the State of California.

On January 4, 2016, the DOJ, Civil Division, on behalf of the EPA, initiated a civil complaint against Volkswagen AG, AUDI AG and certain other Volkswagen Group companies. The action sought statutory penalties under the US Clean Air Act, as well as certain injunctive relief, and was consolidated for pretrial coordination purposes in the California multidistrict litigation.

On January 12, 2016, CARB announced that it intended to seek civil fines for alleged violations of the California Health & Safety Code and various CARB regulations.

In June 2016, Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates reached settlement agreements with the DOJ on behalf of the EPA, CARB and the California Attorney General, private plaintiffs represented by a Plaintiffs' Steering Committee (PSC) in the multidistrict litigation pending in California, and the U.S. Federal Trade Commission (FTC). These settlement agreements resolved certain civil claims made in relation to affected diesel vehicles with 2.0l TDI engines from the Volkswagen Passenger Cars and Audi brands in the USA. Volkswagen AG and certain affiliates also entered into a First Partial Consent Decree with the DOJ, EPA, CARB and the California Attorney General, which was lodged with the court on June 28, 2016. On October 18, 2016, a fairness hearing on whether final approval should be granted was held, and on October 25, 2016, the court granted final approval of the settlement agreements and the partial consent order. A number of class members have filed appeals to an US appellate court from the order approving the settlements.

The settlements include buyback or, for leased vehicles, early lease termination, or a free emissions modification of the vehicles, provided that the EPA and CARB approve the modification. Volkswagen will also make additional cash payments to affected current owners or lessees as well as certain former owners or lessees.

Volkswagen also agreed to support environmental programs. The company will pay USD 2.7 billion over three years into an environmental trust, managed by a trustee appointed by the court, to offset excess nitrogen oxide (NO<sub>x</sub>) emissions. Volkswagen will also invest a total of USD 2.0 billion over ten

years in zero emissions vehicle infrastructure as well as corresponding access and awareness initiatives.

Volkswagen AG and certain affiliates also entered into a separate Partial Consent Decree with CARB and the California Attorney General resolving certain claims under California unfair competition, false advertising, and consumer protection laws related to both the 2.0l and 3.0l TDI vehicles, which was lodged with the court on July 7, 2016. Under the terms of the agreement, Volkswagen agreed to pay California USD 86 million. The court entered judgment on the Partial Consent Decree on September 1, 2016 and the USD 86 million payment was made on September 28, 2016.

On December 20, 2016, Volkswagen entered into a Second Partial Consent Decree, subject to court approval, with the DOJ, EPA, CARB and the California Attorney General that resolved claims for injunctive relief under the Clean Air Act and California environmental, consumer protection and false advertising laws related to the 3.0l TDI vehicles. Under the terms of this Consent Decree, Volkswagen agreed to implement a buyback and lease termination program for Generation 1 3.0l TDI vehicles and a free emissions recall and modification program for Generation 2 3.0l TDI vehicles, and to pay USD 225 million into the environmental mitigation trust that has been established pursuant to the First Partial Consent Decree. The Second Partial Consent Decree was lodged with the court on December 20, 2016 and approved on May 17, 2017.

In addition, on December 20, 2016, Volkswagen entered into an additional, concurrent California Second Partial Consent Decree, subject to court approval, with CARB and the California Attorney General that resolved claims for injunctive relief under California environmental, consumer protection and false advertising laws related to the 3.0l TDI vehicles. Under the terms of this Consent Decree, Volkswagen agreed to provide additional injunctive relief to California, including the implementation of a "Green City" initiative and the introduction of three new Battery Electric Vehicle (BEV) models in California by 2020, as well as a USD 25 million payment to CARB to support the availability of BEVs in California.

On January 11, 2017, Volkswagen entered into a Third Partial Consent Decree with the DOJ and EPA that resolved claims for civil penalties and injunctive relief under the Clean Air Act related to the 2.0l and 3.0l TDI vehicles. Volkswagen agreed to pay USD 1.45 billion (plus any accrued interest) to resolve

the civil penalty and injunctive relief claims under the Clean Air Act, as well as the customs claims of the US Customs and Border Protection. Under the Third Partial Consent Decree, the injunctive relief includes monitoring, auditing and compliance obligations. This Consent Decree, which was subject to public comment, was lodged with the court on January 11, 2017 and approved on April 13, 2017. Also on January 11, 2017, Volkswagen entered into a settlement agreement with the DOJ to resolve any claims under the Financial Institutions Reform, Recovery and Enforcement Act of 1989 and agreed to pay USD 50 million (plus any accrued interest), specifically denying any liability and expressly disputing any claims.

On July 21, 2017, the federal court in the multidistrict litigation in California approved the Third California Partial Consent Decree, in which Volkswagen AG and certain affiliates agreed with the California Attorney General and CARB to pay USD 153.8 million in civil penalties and cost reimbursements. These penalties covered California environmental penalties for both the 2.0l and 3.0l TDI vehicles. An agreement in principle had been reached on January 11, 2017.

The DOJ also opened a criminal investigation focusing on allegations that various federal law criminal offenses were committed. On January 11, 2017, Volkswagen AG agreed to plead guilty to three federal criminal felony counts, and to pay a USD 2.8 billion criminal penalty. Pursuant to the terms of this agreement, Volkswagen will be on probation for three years and will work with an independent monitor for three years. The independent monitor will assess and oversee the company's compliance with the terms of the resolution. This includes overseeing the implementation of measures to further strengthen compliance, reporting and monitoring systems, and an enhanced ethics program. Volkswagen will also continue to cooperate with the DOJ's ongoing investigation of individual employees or former employees who may be responsible for criminal violations.

Moreover, investigations by various US regulatory and government authorities are ongoing, including in areas relating to securities, financing and tax.

On January 31, 2017, Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates entered into a settlement agreement with private plaintiffs represented by the

PSC in the multidistrict litigation pending in California, and a consent order with the FTC. These agreements resolved certain civil claims made in relation to affected diesel vehicles with 3.0 l TDI engines from the Volkswagen, Audi and Porsche brands in the USA. On February 14, 2017, the court preliminarily approved the settlement agreement with private plaintiffs. On May 11, 2017, the court held a fairness hearing on whether approval should be granted and on May 17, 2017, the court granted final approval of the settlement agreement and the partial stipulated consent order.

Under the settlements, consumers' options and compensation will depend on whether their vehicles are classified as Generation 1 or Generation 2. Generation 1 (model years 2009-2012) consumers will have the option of a buyback, early lease termination, trade-in, or a free emissions modification, provided that EPA and CARB approve the modification. Additionally, Generation 1 owners and lessees, as well as certain former owners and lessees, will be eligible to receive cash payments.

Generation 2 (model years 2013-2016) consumers will receive a free emissions-compliant repair to bring the vehicles into compliance with the emissions standards to which they were originally certified, as well as cash payments. Volkswagen has received approval from the EPA and CARB for emissions-compliant repairs within the time limits set out in the settlement agreement. Volkswagen will also make cash payments to certain former Generation 2 owners or lessees.

In September 2016, Volkswagen announced that it had finalized an agreement to resolve the claims of Volkswagen branded franchise dealers in the USA relating to TDI vehicles and other matters asserted concerning the value of the franchise. The settlement agreement includes a cash payment of up to USD 1.208 billion, and additional benefits to resolve alleged past, current, and future claims of losses in franchise value. On January 18, 2017, a fairness hearing on whether final approval should be granted was held, and on January 23, 2017, the court granted final approval of the settlement agreement.

Additionally, in the USA, some putative class actions, some individual customers' lawsuits and some state or municipal claims have been filed in state courts.

Volkswagen reached separate agreements with the attorneys general of 45 US states, the District of Columbia and Puerto Rico, to resolve their existing or potential consumer protection and unfair trade practices claims – in connection with both 2.0 l TDI and 3.0 l TDI vehicles in the USA – for a settlement amount of USD 622 million. Five states did not join these settlements and still have consumer claims outstanding: Arizona, New Mexico, Oklahoma, Vermont and West Virginia. Volkswagen has also reached separate agreements with the attorneys general of eleven US states (Connecticut, Delaware, Maine, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington) to resolve their existing or potential future claims for civil penalties and injunctive relief for alleged violations of environmental laws for a settlement amount of 207 million. The attorneys general of ten other US states (Illinois, Maryland, Minnesota, Missouri, Montana, New Hampshire, New Mexico, Ohio, Tennessee and Texas) and some municipalities have also filed suits in state and federal courts against Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates, seeking civil penalties and injunctive relief for alleged violations of environmental laws. Illinois, Maryland, Minnesota, Missouri, Montana, New Hampshire, Ohio, Tennessee and Texas participated in the state settlements described above with respect to consumer protection and unfair trade practices claims, but those settlements did not include claims for environmental penalties. The environmental claims of two other states – Alabama and Wyoming – have been dismissed as preempted by federal law. Alabama has appealed this dismissal.

In addition to the lawsuits described above, for which provisions have been recognized, a putative class action has been filed on behalf of purchasers of Volkswagen AG American Depository Receipts, alleging a drop in price purportedly resulting from the matters described in the EPA's "Notices of Violation". A putative class action has also been filed on behalf of purchasers of certain USD-denominated Volkswagen bonds, alleging that these bonds were trading at artificially inflated prices due to Volkswagen's alleged misstatements and that the value of these bonds declined after the EPA issued its "Notices of Violation".

These lawsuits have also been consolidated in the federal multidistrict litigation proceeding in the State of California described above. Volkswagen is of the opinion that it duly complied with its capital market obligations. Therefore, no provisions have been recognized. In addition, contingent liabilities have not been disclosed as they currently cannot be measured.

In Canada, civil consumer claims and regulatory investigations have been initiated for vehicles with 2.0 l and 3.0 l TDI engines. On December 19, 2016, Volkswagen AG and other Canadian and US Volkswagen Group companies reached a class action settlement in Canada with consumers relating to 2.0 l diesel vehicles. Also on December 19, 2016, Volkswagen Group Canada agreed with the Commissioner of Competition in Canada to a civil resolution regarding its regulatory inquiry into consumer protection issues as to those vehicles. On December 21, 2017, Volkswagen announced an agreement in principle on a proposed consumer settlement in Canada involving 3.0 l diesel vehicles. The court preliminarily approved the settlement agreement on January 12, 2018, and the notice and opt out period began on January 17, 2018. Final approval hearings are scheduled in Quebec and Ontario for April 3 and 5, 2018, respectively. On January 12, 2018, Volkswagen and the Canadian Commissioner of Competition reached a resolution related to civil consumer protection issues relating to 3.0 l diesel vehicles. Also, criminal enforcement-related investigations by the federal environmental regulator and quasi-criminal enforcement-related investigations by a provincial environmental regulator are ongoing in Canada related to 2.0 l and 3.0 l diesel vehicles. On September 15, 2017, a provincial regulator in Canada, the Ontario Ministry of the Environment and Climate Change, charged Volkswagen AG under the province's environmental statute with one count alleging that it caused or permitted the operation of model year 2010–2014 Volkswagen and Audi brand 2.0 l diesel vehicles that did not comply with prescribed emission standards. Following initial court appearances on November 15, 2017 and February 7, 2018, the matter was put over to April 4, 2018 pending ongoing evidence disclosure. No trial date has been set. Provisions have been recognized for possible obligations stemming from pending lawsuits in Canada.

Moreover, in Canada, two securities class actions by investors in Volkswagen AG American Depository Receipts and shares are pending against Volkswagen AG in the Quebec and Ontario provincial courts. These actions allege misrep-

resentations and omissions in financial reporting issued from 2009–2015 stemming from the diesel issue. The proposed class periods are for residents in the provinces who purchased the relevant securities between March 12, 2009 and September 18, 2015, and held all or some of the acquired securities until after the alleged first corrective disclosures. Discovery has not begun. In both actions, motions for certification were filed. In the Quebec matter, the motion was heard on February 5 and 6, 2018 and the court's decision is on reserve. In the Ontario matter, the motion is scheduled for hearing on July 10 and 11, 2018.

In addition, putative class action and joinder lawsuits by customers, and a certified environmental class action on behalf of residents, remain pending in certain provincial courts in Canada.

An assessment of the underlying situation is not possible at this early stage of those proceedings.

## 6. Additional proceedings

With its ruling from November 8, 2017, the Higher Regional Court of Celle ordered, upon the request of three US funds, the appointment of a special auditor for Volkswagen AG. The special auditor should examine whether there was a breach of duties on behalf of the members of the Board of Management and Supervisory Board of Volkswagen AG in connection with the diesel issue starting from June 22, 2006 and if this resulted in damages for Volkswagen AG. The ruling from the Higher Regional Court of Celle is formally legally binding. However, Volkswagen AG lodged a constitutional complaint toward the German Federal Constitutional Court regarding the infringement of its constitutionally guaranteed rights. It is currently unclear when the Federal Constitutional Court will reach a decision on this matter.

In addition, the District Court of Hanover has filed a second motion for the appointment of a special auditor for Volkswagen AG, which is also aimed at the examination of transactions in connection with the diesel issue. This proceeding will be suspended until the ruling has been announced by the Federal Constitutional Court.

## 7. Risk assessment regarding the diesel issue

To protect against the currently known legal risks related to the diesel issue, provisions of approximately €2.0 billion exist as of December 31, 2017 on the basis of existing information and current assessments. Beyond this, appropriate provisions have been recognized for defense and legal advice expenses.

Insofar as these can be adequately measured at this stage, total contingent liabilities in relation to the diesel issue to the aggregate amount of €4.3 billion (previous year: €3.2 billion), of which lawsuits filed by investors account for €3.4 billion (previous year: €3.1 billion), were disclosed in the notes. The provisions recognized for this matter and the contingent liabilities disclosed as well as the other latent legal risks are partially subject to substantial estimation risks given the complexity of the individual factors, the ongoing approval process with the authorities and the fact that the independent, comprehensive investigations have not yet been completed.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or about uncertainty regarding the amount or maturity of provisions and contingent liabilities in relation to the diesel issue. This is so as to not compromise the results of the proceedings or the interests of the Company.

#### **Additional important legal cases**

In 2011, ARFB Anlegerschutz UG (haftungsbeschränkt) brought an action against Volkswagen AG and Porsche Automobil Holding SE for claims for damages for allegedly violating disclosure requirements under capital market law in connection with the acquisition of ordinary shares in Volkswagen AG by Porsche in 2008. The damages currently being sought based on allegedly assigned rights amounted to approximately €2.26 billion plus interest. In April 2016, the District Court in Hanover had formulated numerous objects of declaratory judgment that the cartel senate of the Higher Regional Court in Celle will decide on in model case proceedings under the KapMuG. In the first hearing on October 12, 2017, the senate indicated that it currently does not see claims against Volkswagen AG as justified, both in view of a lack of substantiated evidence and for legal reasons. Some of the desired objects of declaratory judgment on the litigants' side may also be inadmissible, it said. Volkswagen AG sees the statements of the court's senate as confirmation that the claims made against the company have absolutely no basis.

At the time (2010/2011), other investors had also asserted claims – including claims against Volkswagen AG – arising out of the same circumstances in an approximate total amount of €4.6 billion and initiated conciliation proceedings. Volkswagen AG always refused to participate in these conciliation proceedings; since then, these claims have not been pursued further.

In 2011, the European Commission conducted searches at European truck manufacturers on suspicion of an unlawful

exchange of information during the period 1997–2011 and issued a statement of objections to MAN, Scania and the other truck manufacturers concerned in November 2014. With its settlement decision in July 2016, the European Commission fined five European truck manufacturers. MAN's fine was waived in full as the company had informed the European Commission about the irregularities as a key witness.

In September 2017, the European Commission then fined Scania €0.88 billion. Scania has appealed to the European Court in Luxembourg and will use all means at its disposal to defend itself. Scania had already recognized a provision of €0.4 billion in 2016.

Furthermore, antitrust lawsuits for damages from customers were received. As is the case in any antitrust proceedings, this may result in further lawsuits for damages. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

The Annual General Meeting of MAN SE approved the conclusion of a control and profit and loss transfer agreement between MAN SE and Volkswagen Truck & Bus GmbH (formerly Truck & Bus GmbH), a subsidiary of Volkswagen AG, in June 2013. In July 2013, award proceedings were instituted to review the appropriateness of the cash settlement set out in the agreement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) and the cash compensation in accordance with section 304 of the AktG. It is not uncommon for noncontrolling interest shareholders to institute such proceedings. In July 2015, the Munich Regional Court ruled in the first instance that the amount of the cash settlement payable to the noncontrolling interest shareholders of MAN should be increased from €80.89 to €90.29 per share; at the same time, the amount of the cash compensation was confirmed. The assessment of liability for put options and compensation rights granted to noncontrolling interest shareholders was adjusted in 2015. Both applicants and Volkswagen Truck & Bus GmbH have appealed to the Higher Regional Court in Munich. Volkswagen continues to maintain that the results of the valuation are correct. The appropriateness of the valuation was confirmed by the audit firms engaged by the parties and by the court-appointed auditor of the agreement.

Within the scope of the European Commission's ongoing antitrust investigations regarding German automakers, authorities examined documents in the offices of Volkswagen AG in Wolfsburg and AUDI AG in Ingolstadt as part of an announced review. The Volkswagen Group and the Group

brands concerned have been cooperating fully and for a long time with the European Commission and have submitted a corresponding application. It is currently unclear whether the European Commission will instigate formal proceedings.

In addition, a few national and international authorities have initiated antitrust investigations. Volkswagen is cooperating closely with the responsible authorities in these investigations. An assessment of the underlying situation is not possible at this early stage.

Since November 2016, Volkswagen has been responding to information requests from the EPA and CARB related to automatic transmissions in certain vehicles with petrol engines.

Additionally, fourteen putative class actions have been filed against Audi and certain affiliates alleging that defendants concealed the existence of "defeat devices" in Audi brand vehicles with automatic transmissions. All of these putative class actions have been transferred to the federal multidistrict litigation proceeding in the State of California, and plaintiffs filed a consolidated class action complaint on October 12, 2017, which Volkswagen AG and certain of its affiliates moved to dismiss on December 11, 2017. On January 16, 2018, plaintiffs filed an opposition to the motion to dismiss and the court has set a deadline of February 16, 2018 for defendants to file a reply. A hearing is scheduled for May 11, 2018. On December 22, 2017, a mass action on behalf of approximately 75 individual plaintiffs alleging similar claims was filed in a California state court, which was removed to the Northern District of California on January 25, 2018.

In Canada, two similar putative class actions, including a national class, have been filed in Ontario and Quebec provincial courts against AUDI AG, Volkswagen AG and US and Canadian affiliates regarding alleged CO<sub>2</sub> "defeat devices" in certain petrol Audi models with automatic transmissions. Both of the Canadian actions are in the pre-certification stage. Contingent liabilities have therefore been disclosed in cases where they can be assessed and for which the likelihood of a sanction was deemed not lower than 10%.

From July through November 2017, plaintiffs filed numerous complaints in various US jurisdictions on behalf of putative classes of purchasers of German luxury vehicles against several automobile manufacturers, including Volkswagen AG and other Group companies. These complaints assert claims

under the US Sherman Antitrust Act, the Racketeer Influenced and Corrupt Organizations Act, state unfair competition and consumer protection statutes, and common law unjust enrichment. The complaints allege that since the 1990s, defendants engaged in a conspiracy to unlawfully increase the prices of German luxury vehicles by agreeing to share commercially sensitive information and to reach unlawful agreements regarding technology, costs, and suppliers. Moreover, the plaintiffs allege that the defendants agreed to limit the size of AdBlue tanks to ensure that US emissions regulators did not scrutinize the emissions control systems in defendants' vehicles, and that such an agreement for Volkswagen was the impetus for the creation of the defeat device. On September 28, 2017, a hearing before the Judicial Panel on Multidistrict Litigation (JPML) was held, and on October 4, 2017 the JPML issued its decision consolidating and transferring these cases to Judge Breyer in the Northern District of California. On December 14, 2017, co-lead counsel were appointed representing the interests of a putative class of indirect purchasers and a putative class of direct purchasers, as well as Plaintiffs' Steering Committee. On December 20, 2017, deadlines were set for the filing of initial and responsive pleadings and an initial case status conference scheduled for April 5, 2018, and co-lead counsel were directed to file consolidated class action complaints on behalf of the two putative classes by March 15, 2018. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

From July through October 2017, plaintiffs filed claims in Ontario, Quebec and British Columbia on behalf of putative classes of purchasers of German luxury vehicles against several automobile manufacturers, including Volkswagen Canada Inc., Audi Canada Inc., and other Group companies. The claims assert causes of action under the Competition Act, common law, and Quebec's civil law and contain similar allegations to the US complaints described in the paragraph above. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

In the tax proceedings between MAN Latin America and the Brazilian tax authorities, the Brazilian tax authorities took a different view of the tax implications of the acquisition structure chosen for MAN Latin America in 2009. In December 2017, a second instance judgment was rendered in

administrative court proceedings, which was negative for MAN Latin America. MAN Latin America will initiate proceedings against this judgment before the regular court in 2018. Due to the difference in the penalties plus interest which could potentially apply under Brazilian law, the estimated size of the risk in the event that the tax authorities are able to prevail overall with their view is laden with uncertainty. However, a positive outcome continues to be expected for MAN Latin America. Should the opposite occur, this could result in a risk of about €0.7 billion for the contested period from 2009 onwards, which has been stated within the contingent liabilities in the notes.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or about uncertainty regarding the amount or maturity of provisions and contingent liabilities in relation to additional important legal cases. This is so as to not compromise the results of the proceedings or the interests of the Company.

#### Strategies for hedging financial risks

In the course of our business activities, financial risks may arise from changes in interest rates, exchange rates, raw material prices, or share and fund prices. Management of financial and liquidity risks is the responsibility of the central Group Treasury department, which minimizes these risks using nonderivative and derivative financial instruments. The Board of Management is informed of the current risk situation at regular intervals.

We hedge interest rate risk – where appropriate in combination with currency risk – and risks arising from fluctuations in the value of financial instruments by means of interest rate swaps, cross-currency interest rate swaps and other interest rate contracts with generally matching amounts and maturities. This also applies to financing arrangements within the Volkswagen Group.

Foreign currency risk is reduced in particular through natural hedging, i.e. by flexibly adapting our production capacity at our locations around the world, establishing new production facilities in the most important currency regions and also procuring a large percentage of components locally. We hedge the residual foreign currency risk using hedging instruments. These include currency forwards, currency options and cross-currency interest rate swaps. We use these transactions to limit the currency risk associated with forecasted cash flows from operating activities, intragroup financing and liquidity positions in currencies other than the respective functional currency, for example as a result of

restrictions on capital movements. The currency forwards and currency options can have a term of up to six years. We thus hedge our principal foreign currency risks, mostly against the euro and primarily in Argentine pesos, Australian dollars, Brazilian real, Canadian dollars, Chinese renminbi, Czech koruna, Hong Kong dollars, Hungarian forints, Indian rupees, Japanese yen, Mexican pesos, Norwegian kroner, Polish złoty, Russian rubles, Singapore dollars, South African rand, South Korean won, sterling, Swedish kronor, Swiss francs, Taiwan dollars and US dollars.

Raw materials purchasing entails risks relating to the availability of raw materials and price trends. Potential risks arising from changes in commodity and energy prices in the market are continuously analyzed so that immediate action can be taken whenever these arise. We limit these risks mainly by entering into forward transactions and swaps. We have used appropriate contracts to hedge some of our requirements for commodities such as aluminum, lead, coal, copper, platinum, palladium and rhodium over a period of up to seven years. Similar transactions have been entered into for the purpose of supplementing and improving allocations of CO<sub>2</sub> emission certificates.

Pages 282 to 291 of the notes to the consolidated financial statements explain our hedging policy, the hedging rules and the default and liquidity risks, and quantify the hedging transactions mentioned. Additionally, we disclose information on market risk within the meaning of IFRS 7.

#### Risks arising from financial instruments

Channeling excess liquidity into investments and entering into derivatives contracts gives rise to counterparty risk. Partial or complete failure by a counterparty to perform its obligation to pay interest and repay principal, for example, would have a negative impact on the Volkswagen Group's earnings and liquidity. We counter this risk through our counterparty risk management, which we describe in more detail in the section entitled "Principles and Goals of Financial Management" starting on page 118. In addition to counterparty risk, the financial instruments held for hedging purposes hedge balance sheet risks, which we limit by applying hedge accounting.

By diversifying when selecting business partners, we ensure that the impact of a default is limited and the Volkswagen Group remains solvent at all times, even in the event of a default by individual counterparties.

Risks arising from trade receivables and from financial services are explained in more detail in the notes to the consolidated financial statements, starting on page 282.

### Liquidity risk

We ensure that the Company remains solvent at all times by holding liquidity reserves, through confirmed credit lines and through our money market and capital market programs. We cover the capital requirements of the financial services business mainly by raising funds at matching maturities in the national and international financial markets as well as through customer deposits from the direct banking business.

Projects are financed by, among other things, loans provided by supranational or international development banks such as the European Investment Bank (EIB), the International Finance Corporation (IFC) and the European Bank for Reconstruction and Development (EBRD), or by national development banks such as Kreditanstalt für Wiederaufbau (KfW) and Banco Nacional de Desenvolvimento Econômico e Social (BNDES). Confirmed and unconfirmed lines of credit from banks supplement our broadly diversified refinancing structure.

As a result of the diesel issue, the ability to use refinancing instruments may possibly be restricted or precluded for the Volkswagen Group. A downgrade of the Company's rating could adversely affect the terms associated with the Volkswagen Group's borrowings.

Information on the ratings of Volkswagen AG, Volkswagen Financial Services AG and Volkswagen Bank GmbH can be found on page 113 of this report.

### Residual value risk in the financial services business

In the financial services business, we agree to buy back selected vehicles at a residual value that is fixed at inception of the contract. Residual values are set at a realistic amount so that we are able to leverage market opportunities. We evaluate the underlying lease and financing contracts at regular intervals and recognize any necessary provisions if we identify any potential risks.

Management of the residual value risk is based on a defined feedback loop ensuring the full assessment, monitoring, management and communication of risks. This process design ensures not only professional management of residual risks but also that we systematically improve and enhance our handling of residual value risks.

As part of our risk management, we use residual value forecasts to regularly assess the appropriateness of the provisions for risks and the potential for residual value risk – also with a view to the diesel issue and the current debate on the possible introduction of driving bans for diesel vehicles in major European cities at a future date. In the process, we compare the contractually agreed residual values with the fair values obtainable. These are determined utilizing data from external service providers and our own marketing data. We do not take account of the upside in residual market values when making provisions for risks.

More information on residual value risk and other risks in the financial services business, such as counterparty, market and liquidity risk, can be found in the 2017 Annual Report of Volkswagen Financial Services AG and Volkswagen Bank GmbH.

### Reputational risks

The reputation of the Volkswagen Group and its brands is one of the most important assets and forms the basis for long-term business success. Our policy on issues such as integrity, ethics and sustainability is in the public focus. One of the basic principles of running our business is therefore to pay particular attention to compliance with legal requirements and ethical principles. However, we are aware that misconduct or criminal acts of individuals and the resulting reputational damage can never be fully prevented. In addition, media reactions can have a negative effect on the reputation of the Volkswagen Group and its brands. This impact could be amplified through insufficient crisis communication.

Moreover, the above-described individual risks that may arise in the course of our operating activities may turn into a threat to the Volkswagen Group's reputation.

### Other factors

Going beyond the risks already outlined, there are other factors that cannot be predicted and whose repercussions are therefore difficult to control. Should these transpire, they could have an adverse effect on the further development of the Volkswagen Group. In particular, these factors include natural disasters, epidemics and terrorist attacks.

### OVERALL ASSESSMENT OF THE RISK AND OPPORTUNITY POSITION

The Volkswagen Group's overall risk and opportunity position results from the specific risks and opportunities shown above. We have put in place a comprehensive risk management system to ensure that these risks are controlled. The most significant risks to the Group may result from a negative trend in unit sales of, and markets for, vehicles and genuine parts, from the failure to develop and produce products in line with demand and from quality problems. Risks relating to the diesel issue still remain for the Volkswagen Group which, when aggregated, are among the most significant risks. Taking into account all the information known to us at present, no risks exist which could pose a threat to the continued existence of significant Group companies or the Volkswagen Group.

This annual report contains forward-looking statements on the business development of the Volkswagen Group. These statements are based on assumptions relating to the development of the economic and legal environment in individual countries and economic regions, and in particular for the automotive industry, which we have made on the basis of the information available to us and which we consider to be realistic at the time of going to press. The estimates given entail a degree of risk, and actual developments may differ from those forecast. Any changes in significant parameters relating to our key sales

markets, or any significant shifts in exchange rates relevant to the Volkswagen Group, will have a corresponding effect on the development of our business. In addition, there may be departures from our expected business development if the assessments of the factors influencing sustainable value enhancement, as well as risks and opportunities, presented in this annual report develop in a way other than we are currently expecting, or if additional risks and opportunities or other factors emerge that affect the development of our business.

# Prospects for 2018

The Volkswagen Group's Board of Management expects the global economy to record slightly weaker growth in 2018. We believe risks will arise from protectionist tendencies, turbulence in the financial markets and structural deficits in individual countries. In addition, growth prospects will continue to be hurt by geopolitical tensions and conflicts. We therefore expect somewhat weaker momentum than in 2017 in both the advanced economies and the emerging markets. We expect the strongest rates of expansion in Asia's emerging economies.

We expect trends in the passenger car markets in the individual regions to be mixed in 2018. Overall, growth in global demand for new vehicles will probably be slower than in the reporting period. We anticipate that unit sales volumes in Western Europe will fall slightly short of those seen in the reporting period. In the German passenger car market, we estimate that the market volume will be on a level with the previous year. Passenger car demand is expected to substantially exceed the prior-year figures in markets in Central and Eastern Europe. The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America is likely to be slightly lower than in the prior year. We expect demand in the South American markets for passenger cars and light commercial vehicles to grow perceptibly as a whole compared with the previous year. The passenger car markets in the Asia-Pacific region look set to continue their growth trajectory in 2018, albeit at a weaker pace.

We expect trends in the markets for light commercial vehicles in the individual regions to be mixed again in 2018. Overall, we envisage a slight dip in demand.

In the markets for mid-sized and heavy trucks that are relevant for the Volkswagen Group and in the relevant markets for buses, new registrations in 2018 are set to rise slightly above the prior-year level.

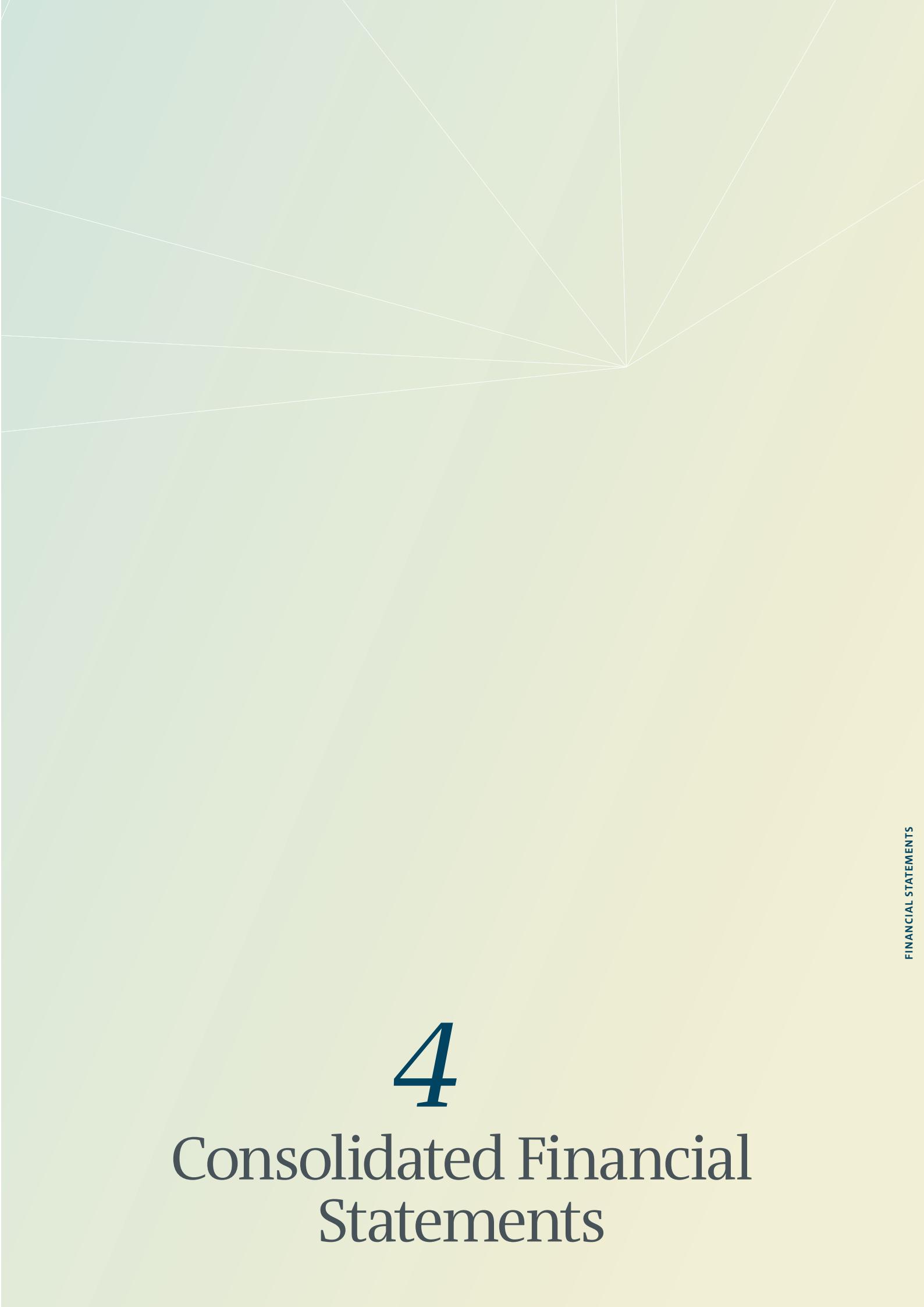
We believe that automotive financial services will continue to be very important for vehicle sales worldwide in 2018.

The Volkswagen Group is well prepared for the future challenges in the mobility business and the mixed developments in regional automotive markets. Our unique brand portfolio, our presence in all major world markets, our broad, selectively expanded product range and pioneering technologies and services place us in a good competitive position worldwide. In the course of transforming our core business, we will define the positioning of our Group brands more clearly and optimize the vehicle and drive portfolio with a view to the most attractive and fastest-growing market segments. In addition, we are working to make even more focused use of the advantages of our multibrand group by continuously developing new technologies and our toolkits.

We expect that deliveries to customers of the Volkswagen Group in 2018 will moderately exceed the prior-year figure amid continuously challenging market conditions.

Challenges will arise particularly from the economic situation, the increasing intensity of competition, exchange rate volatility and the diesel issue. In the EU, there is also a new, more time-consuming test procedure for determining pollutant and CO<sub>2</sub> emissions as well as fuel consumption in passenger cars and light commercial vehicles known as the Worldwide Harmonized Light-Duty Vehicles Test Procedure (WLTP).

We expect the sales revenues of the Volkswagen Group and its business areas to grow by as much as 5% year-on-year. In terms of the operating profit for the Group and the Passenger Cars Business Area, we forecast an operating return on sales in the range of 6.5–7.5% in 2018. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of between 5.0–6.0%. In the Power Engineering Business Area, we expect a lower operating loss than in the previous year. For the Financial Services Division, we are forecasting an operating profit at the prior-year level.



# 4

# Consolidated Financial Statements



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# Income Statement

of the Volkswagen Group for the period January 1 to December 31, 2017

€ million	Note	2017	2016
<b>Sales revenue</b>	1	<b>230,682</b>	<b>217,267</b>
Cost of sales	2	-188,140	-176,270
<b>Gross result</b>		<b>42,542</b>	<b>40,997</b>
Distribution expenses	3	-22,710	-22,700
Administrative expenses	4	-8,254	-7,336
Other operating income	5	14,500	13,049
Other operating expenses	6	-12,259	-16,907
<b>Operating result</b>		<b>13,818</b>	<b>7,103</b>
Share of the result of equity-accounted investments	7	3,482	3,497
Interest income <sup>1</sup>	8	951	1,285
Interest expenses <sup>1</sup>	8	-2,317	-2,955
Other financial result <sup>1</sup>	9	-2,022	-1,638
<b>Financial result</b>		<b>94</b>	<b>189</b>
<b>Earnings before tax</b>		<b>13,913</b>	<b>7,292</b>
Income tax income/expense	10	-2,275	-1,912
Current		-3,205	-3,273
Deferred		930	1,361
<b>Earnings after tax</b>		<b>11,638</b>	<b>5,379</b>
of which attributable to			
Noncontrolling interests		10	10
Volkswagen AG hybrid capital investors		274	225
Volkswagen AG shareholders		11,354	5,144
<b>Basic earnings per ordinary share in €</b>	11	<b>22.63</b>	<b>10.24</b>
<b>Diluted earnings per ordinary share in €</b>	11	<b>22.63</b>	<b>10.24</b>
<b>Basic earnings per preferred share in €</b>	11	<b>22.69</b>	<b>10.30</b>
<b>Diluted earnings per preferred share in €</b>	11	<b>22.69</b>	<b>10.30</b>

1 The structure within the financial result has been changed. The presentation of finance costs has been replaced with interest income and interest expenses. Prior year figures have been adjusted accordingly. Further disclosures can be found in the "Interest result" section.

# Statement of Comprehensive Income

Changes in comprehensive income for the period January 1 to December 31, 2016

€ million	Total	Equity attributable to Volkswagen AG shareholders	Equity attributable to Volkswagen AG hybrid capital investors	Equity attributable to noncontrolling interests
<b>Earnings after tax</b>	<b>5,379</b>	<b>5,144</b>	<b>225</b>	<b>10</b>
Pension plan remeasurements recognized in other comprehensive income				
Pension plan remeasurements recognized in other comprehensive income, before tax	-5,249	-5,248	-	-1
Deferred taxes relating to pension plan remeasurements recognized in other comprehensive income	1,591	1,591	-	1
Pension plan remeasurements recognized in other comprehensive income, net of tax	-3,658	-3,657	-	0
Share of other comprehensive income of equity-accounted investments that will not be reclassified to profit or loss, net of tax	-1	-1	-	-
<b>Items that will not be reclassified to profit or loss</b>	<b>-3,658</b>	<b>-3,658</b>	<b>-</b>	<b>0</b>
Exchange differences on translating foreign operations				
Unrealized currency translation gains/losses	-136	-135	-	-1
Transferred to profit or loss	3	3	-	-
Exchange differences on translating foreign operations, before tax	-133	-133	-	-1
Deferred taxes relating to exchange differences on translating foreign operations	3	3	-	-
Exchange differences on translating foreign operations, net of tax	-130	-129	-	-1
Cash flow hedges				
Fair value changes recognized in other comprehensive income	3,555	3,555	-	0
Transferred to profit or loss	1,322	1,322	-	0
Cash flow hedges, before tax	4,877	4,877	-	0
Deferred taxes relating to cash flow hedges	-1,422	-1,422	-	0
Cash flow hedges, net of tax	3,455	3,455	-	0
Available-for-sale financial assets				
Fair value changes recognized in other comprehensive income	155	155	-	-
Transferred to profit or loss	-135	-135	-	-
Available-for-sale financial assets, before tax	20	20	-	-
Deferred taxes relating to available-for-sale financial assets	-6	-6	-	-
Available-for-sale financial assets, net of tax	14	14	-	-
Share of other comprehensive income of equity-accounted investments that may be reclassified subsequently to profit or loss, net of tax	-130	-130	-	-
<b>Items that may be reclassified subsequently to profit or loss</b>	<b>3,209</b>	<b>3,210</b>	<b>-</b>	<b>-1</b>
Other comprehensive income, before tax	-616	-614	-	-2
Deferred taxes relating to other comprehensive income	167	166	-	1
<b>Other comprehensive income, net of tax</b>	<b>-449</b>	<b>-448</b>	<b>-</b>	<b>-1</b>
<b>Total comprehensive income</b>	<b>4,930</b>	<b>4,696</b>	<b>225</b>	<b>9</b>

## Changes in comprehensive income for the period January 1 to December 31, 2017

€ million	Total	Equity attributable to Volkswagen AG shareholders	Equity attributable to Volkswagen AG hybrid capital investors	Equity attributable to noncontrolling interests
<b>Earnings after tax</b>	<b>11,638</b>	<b>11,354</b>	<b>274</b>	<b>10</b>
Pension plan remeasurements recognized in other comprehensive income				
Pension plan remeasurements recognized in other comprehensive income, before tax	785	784	–	1
Deferred taxes relating to pension plan remeasurements recognized in other comprehensive income	–198	–198	–	0
Pension plan remeasurements recognized in other comprehensive income, net of tax	588	586	–	1
Share of other comprehensive income of equity-accounted investments that will not be reclassified to profit or loss, net of tax	96	96	–	–
<b>Items that will not be reclassified to profit or loss</b>	<b>683</b>	<b>682</b>	<b>–</b>	<b>1</b>
Exchange differences on translating foreign operations				
Unrealized currency translation gains/losses	–2,095	–2,094	–	–1
Transferred to profit or loss	–4	–4	–	–
Exchange differences on translating foreign operations, before tax	–2,099	–2,098	–	–1
Deferred taxes relating to exchange differences on translating foreign operations	–8	–8	–	–
Exchange differences on translating foreign operations, net of tax	–2,107	–2,106	–	–1
Cash flow hedges				
Fair value changes recognized in other comprehensive income	6,137	6,137	–	0
Transferred to profit or loss	–558	–558	–	0
Cash flow hedges, before tax	5,579	5,579	–	0
Deferred taxes relating to cash flow hedges	–1,597	–1,597	–	0
Cash flow hedges, net of tax	3,982	3,982	–	0
Available-for-sale financial assets				
Fair value changes recognized in other comprehensive income	56	56	–	–
Transferred to profit or loss	62	62	–	–
Available-for-sale financial assets, before tax	118	118	–	–
Deferred taxes relating to available-for-sale financial assets	–25	–25	–	–
Available-for-sale financial assets, net of tax	93	93	–	–
Share of other comprehensive income of equity-accounted investments that may be reclassified subsequently to profit or loss, net of tax	–346	–346	–	–
<b>Items that may be reclassified subsequently to profit or loss</b>	<b>1,622</b>	<b>1,622</b>	<b>–</b>	<b>–1</b>
Other comprehensive income, before tax	4,133	4,132	–	1
Deferred taxes relating to other comprehensive income	–1,828	–1,828	–	0
<b>Other comprehensive income, net of tax</b>	<b>2,305</b>	<b>2,304</b>	<b>–</b>	<b>1</b>
<b>Total comprehensive income</b>	<b>13,943</b>	<b>13,658</b>	<b>274</b>	<b>11</b>

# Balance Sheet

of the Volkswagen Group as of December 31, 2017

€ million	Note	Dec. 31, 2017	Dec. 31, 2016
<b>Assets</b>			
<b>Noncurrent assets</b>			
Intangible assets	12	63,419	62,599
Property, plant and equipment	13	55,243	54,033
Lease assets	14	39,254	38,439
Investment property	14	468	512
Equity-accounted investments	15	8,205	8,616
Other equity investments	15	1,318	996
Financial services receivables	16	73,249	68,402
Other financial assets	17	8,455	8,256
Other receivables	18	2,252	2,009
Tax receivables	19	407	392
Deferred tax assets	19	9,810	9,756
		<b>262,081</b>	<b>254,010</b>
<b>Current assets</b>			
Inventories	20	40,415	38,978
Trade receivables	21	13,357	12,187
Financial services receivables	16	53,145	49,673
Other financial assets	17	11,998	11,844
Other receivables	18	5,346	5,130
Tax receivables	19	1,339	1,126
Marketable securities	22	15,939	17,520
Cash, cash equivalents and time deposits	23	18,457	19,265
Assets held for sale	115	—	—
		<b>160,112</b>	<b>155,722</b>
<b>Total assets</b>		<b>422,193</b>	<b>409,732</b>

€ million	Note	Dec. 31, 2017	Dec. 31, 2016
<b>Equity and Liabilities</b>			
<b>Equity</b>			
Subscribed capital	24	1,283	1,283
Capital reserves		14,551	14,551
Retained earnings		81,367	70,446
Other reserves		560	-1,158
Equity attributable to Volkswagen AG hybrid capital investors		11,088	7,567
Equity attributable to Volkswagen AG shareholders and hybrid capital investors		108,849	92,689
Noncontrolling interests		229	221
		<b>109,077</b>	<b>92,910</b>
<b>Noncurrent liabilities</b>			
Financial liabilities	25	81,628	66,358
Other financial liabilities	26	2,665	4,488
Other liabilities	27	6,199	5,664
Deferred tax liabilities	28	5,636	4,745
Provisions for pensions	29	32,730	33,012
Provisions for taxes	28	3,030	3,556
Other provisions	30	20,839	21,482
		<b>152,726</b>	<b>139,306</b>
<b>Current liabilities</b>			
Put options and compensation rights granted to noncontrolling interest shareholders	31	3,795	3,849
Financial liabilities	25	81,844	88,461
Trade payables	32	23,046	22,794
Tax payables	28	430	500
Other financial liabilities	26	8,570	9,438
Other liabilities	27	15,961	15,461
Provisions for taxes	28	1,397	1,301
Other provisions	30	25,347	35,711
		<b>160,389</b>	<b>177,515</b>
<b>Total equity and liabilities</b>		<b>422,193</b>	<b>409,732</b>

# Statement of Changes in Equity

of the Volkswagen Group for the period January 1 to December 31, 2017

€ million	OTHER RESERVES			
	Subscribed capital	Capital reserves	Retained earnings	Currency translation reserve
<b>Balance at Jan. 1, 2016</b>	<b>1,283</b>	<b>14,551</b>	<b>69,039</b>	<b>-987</b>
Earnings after tax	—	—	5,144	—
Other comprehensive income, net of tax	—	—	-3,657	-129
<b>Total comprehensive income</b>	<b>—</b>	<b>—</b>	<b>1,487</b>	<b>-129</b>
Capital increases	—	—	—	—
Dividends payment	—	—	-68	—
Capital transactions involving a change in ownership interest	—	—	—	—
Other changes	—	—	-13	—
<b>Balance at Dec. 31, 2016</b>	<b>1,283</b>	<b>14,551</b>	<b>70,446</b>	<b>-1,117</b>
<b>Balance at Jan. 1, 2017</b>	<b>1,283</b>	<b>14,551</b>	<b>70,446</b>	<b>-1,117</b>
Earnings after tax	—	—	11,354	—
Other comprehensive income, net of tax	—	—	586	-2,106
<b>Total comprehensive income</b>	<b>—</b>	<b>—</b>	<b>11,940</b>	<b>-2,106</b>
Capital increases <sup>1</sup>	—	—	—	—
Dividends payment	—	—	-1,015	—
Capital transactions involving a change in ownership interest	—	—	—	—
Other changes	—	—	-4	—
<b>Balance at Dec. 31, 2017</b>	<b>1,283</b>	<b>14,551</b>	<b>81,367</b>	<b>-3,223</b>

1 Volkswagen AG recorded an inflow of cash funds amounting to €3,500 million, less a discount of €4 million and transaction costs of €23 million, from the hybrid capital issued in June 2017. Additionally, there were noncash effects from the deferral of taxes amounting to €8 million. The hybrid capital is required to be classified as equity instruments granted.

Explanatory notes on equity are presented in the note relating to equity.

Cash flow hedge reserve	Available-for-sale financial assets	Equity-accounted investments	Equity attributable to Volkswagen AG hybrid capital investors	Equity attributable to Volkswagen AG shareholders and hybrid capital investors	Noncontrolling interests	Total equity
<b>-3,912</b>	<b>-16</b>	<b>542</b>	<b>7,560</b>	<b>88,060</b>	<b>210</b>	<b>88,270</b>
-	-	-	225	5,369	10	5,379
3,455	14	-131	-	-448	-1	-449
<b>3,455</b>	<b>14</b>	<b>-131</b>	<b>225</b>	<b>4,921</b>	<b>9</b>	<b>4,930</b>
-	-	-	-	-	-	-
-	-	-	-291	-359	-6	-364
-	-	-	-	-	-	-
-	-	6	73	66	8	74
<b>-457</b>	<b>-2</b>	<b>417</b>	<b>7,567</b>	<b>92,689</b>	<b>221</b>	<b>92,910</b>
<b>-457</b>	<b>-2</b>	<b>417</b>	<b>7,567</b>	<b>92,689</b>	<b>221</b>	<b>92,910</b>
-	-	-	274	11,628	10	11,638
3,982	93	-251	-	2,304	1	2,305
<b>3,982</b>	<b>93</b>	<b>-251</b>	<b>274</b>	<b>13,932</b>	<b>11</b>	<b>13,943</b>
-	-	-	3,481	3,481	-	3,481
-	-	-	-311	-1,326	-5	-1,332
-	-	-	-	-	-	-
-	-	-	78	73	1	75
<b>3,525</b>	<b>91</b>	<b>166</b>	<b>11,088</b>	<b>108,849</b>	<b>229</b>	<b>109,077</b>

# Cash flow statement

of the Volkswagen Group for the period January 1 to December 31, 2017

€ million	2017	2016
<b>Cash and cash equivalents at beginning of period</b>	<b>18,833</b>	<b>20,462</b>
Earnings before tax	13,913	7,292
Income taxes paid	-3,664	-3,315
Depreciation and amortization of, and impairment losses on, intangible assets, property, plant and equipment, and investment property <sup>1</sup>	10,562	10,100
Amortization of and impairment losses on capitalized development costs <sup>1</sup>	3,734	3,586
Impairment losses on equity investments <sup>1</sup>	136	130
Depreciation of and impairment losses on lease assets <sup>1</sup>	7,734	7,107
Gain/loss on disposal of noncurrent assets and equity investments	-25	-222
Share of the result of equity-accounted investments	274	377
Other noncash expense/income	-480	716
Change in inventories	-4,198	-3,637
Change in receivables (excluding financial services)	-1,660	-2,155
Change in liabilities (excluding financial liabilities)	5,302	5,048
Change in provisions	-9,443	5,966
Change in lease assets	-11,478	-12,074
Change in financial services receivables	-11,891	-9,490
<b>Cash flows from operating activities</b>	<b>-1,185</b>	<b>9,430</b>
Investments in intangible assets (excluding development costs), property, plant and equipment, and investment property	-13,052	-13,152
Additions to capitalized development costs	-5,260	-5,750
Acquisition of subsidiaries	-277	-119
Acquisition of other equity investments	-561	-309
Disposal of subsidiaries	496	-7
Disposal of other equity investments	24	2,190
Proceeds from disposal of intangible assets, property, plant and equipment, and investment property	411	351
Change in investments in securities	1,376	-1,245
Change in loans and time deposits	335	-2,638
<b>Cash flows from investing activities</b>	<b>-16,508</b>	<b>-20,679</b>
Capital contributions	3,473	-
Dividends paid	-1,332	-364
Capital transactions with noncontrolling interest shareholders	-	-3
Proceeds from issuance of bonds	30,279	14,262
Repayments of bonds	-17,877	-23,601
Changes in other financial liabilities	3,109	19,455
Lease payments	-28	-36
<b>Cash flows from financing activities</b>	<b>17,625</b>	<b>9,712</b>
Effect of exchange rate changes on cash and cash equivalents	-727	-91
<b>Net change in cash and cash equivalents</b>	<b>-796</b>	<b>-1,628</b>
<b>Cash and cash equivalents at end of period</b>	<b>18,038</b>	<b>18,833</b>
Cash and cash equivalents at end of period	18,038	18,833
Securities, loans and time deposits	26,291	28,036
<b>Gross liquidity</b>	<b>44,329</b>	<b>46,869</b>
Total third-party borrowings	-163,472	-154,819
<b>Net liquidity</b>	<b>-119,143</b>	<b>-107,950</b>

1 Net of impairment reversals.

Explanatory notes on the cash flow statement are presented in the section relating to the cash flow statement.

# Notes to the Consolidated Financial Statements

of the Volkswagen Group as of December 31, 2017

## Basis of presentation

Volkswagen AG is domiciled in Wolfsburg, Germany, and entered in the commercial register at the Braunschweig Local Court under No. HRB100484. The fiscal year corresponds to the calendar year.

In accordance with Regulation No. 1606/2002 of the European Parliament and of the Council, Volkswagen AG prepared its consolidated financial statements for 2017 in compliance with the International Financial Reporting Standards (IFRSs), as adopted by the European Union. We have complied with all the IFRSs adopted by the EU and required to be applied.

The accounting policies applied in the previous year were retained, with the exception of the changes due to the new or amended standards.

In addition, we have complied with all the provisions of German commercial law that we are also required to apply, as well as with the German Corporate Governance Code. For information on notices and disclosures of changes regarding the ownership of voting rights in Volkswagen AG in accordance with the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act), please refer to the annual financial statements of Volkswagen AG.

The consolidated financial statements were prepared in euros. Unless otherwise stated, all amounts are given in millions of euros (€ million).

All figures shown are rounded, so minor discrepancies may arise from addition of these amounts.

The income statement was prepared using the internationally accepted cost of sales method.

Preparation of the consolidated financial statements in accordance with the above-mentioned standards requires management to make estimates that affect the reported amounts of certain items in the consolidated balance sheet and in the consolidated income statement, as well as the related disclosure of contingent assets and liabilities. The consolidated financial statements present fairly the net assets, financial position and results of operations as well as the cash flows of the Volkswagen Group.

The Board of Management completed preparation of the consolidated financial statements on February 23, 2018. On that date, the period ended in which adjusting events after the reporting period are recognized.

## Effects of new and amended IFRSs

Volkswagen AG has applied all accounting pronouncements adopted by the EU and effective for periods beginning in fiscal year 2017.

From January 1, 2017, IAS 7 (Statement of Cash Flows) requires entities to make additional disclosures on changes arising from cash flows and noncash changes in financial liabilities arising from financing activities as reported in the statement of cash flows.

Since January 1, 2017, the amendments to IAS 12 (Income Taxes) have clarified the recognition of deferred tax assets for unrealized losses in the case of assets carried at fair value.

The IASB amended IFRS 12 (Disclosures of Interests in Other Entities) as part of its 2016 annual improvements project, with effect from January 1, 2017. This clarifies that, as a matter of principle, disclosures in accordance with IFRS 12 must also be made for the entity's interests in subsidiaries, joint arrangements, associates and unconsolidated structured entities even if these are classified as held for sale, held for distribution to owners or as discontinued operations.

The amendments presented and other amendments do not materially affect the Volkswagen Group's net assets, financial position and results of operations.

## New and amended IFRSs not applied

In its 2017 consolidated financial statements, Volkswagen AG did not apply the following accounting pronouncements that have already been adopted by the IASB, but were not yet required to be applied for the fiscal year.

Standard/Interpretation	Published by the IASB	Application mandatory <sup>1</sup>	Adopted by the EU	Expected impact
IFRS 2 Classification and Measurement of Share-based Payment Transactions	June 20, 2016	January 1, 2018	No	None
IFRS 4 Insurance Contracts: Application of IFRS 9 for Insurers	September 12, 2016	January 1, 2018	Yes	None
IFRS 9 Financial Instruments	July 24, 2014	January 1, 2018	Yes	Detailed descriptions after the tabular overview
IFRS 9 Prepayment Features with Negative Compensation	October 12, 2017	January 1, 2019	No	None
Consolidated Financial Statements and Investments in Associates and Joint Ventures: Sales or Contributions of Assets between an Investor and its Associate/Joint Venture	September 11, 2014	Deferred <sup>2</sup>	-	None
IFRS 15 Revenue from Contracts with Customers	May 28, 2014	January 1, 2018 <sup>3</sup>	Yes	Detailed descriptions after the tabular overview
IFRS 15 Clarifications to IFRS 15 – Revenue from Contracts with Customers	April 12, 2016	January 1, 2018	Yes	Additional transitional expedients, otherwise no material impact
IFRS 16 Leases	January 13, 2016	January 1, 2019	Yes	Detailed descriptions after the tabular overview
IFRS 17 Insurance Contracts	May 18, 2017	January 1, 2021	No	No material impact
IAS 28 Investments in Associates: Long-term Interests in Associates and Joint Ventures	October 12, 2017	January 1, 2019	No	None
IAS 40 Transfers of Investment Property	December 8, 2016	January 1, 2018	No	No material impact
Annual Improvements to International Financial Reporting Standards 2016 <sup>4</sup>	December 8, 2016	January 1, 2018 <sup>5</sup>	Yes	No material impact
Annual Improvements to International Financial Reporting Standards 2017 <sup>6</sup>	December 12, 2017	January 1, 2019	No	No material impact Translation of advance payments denominated in foreign currency into the functional currency at the spot rate on the day of payment
IFRIC 22 Foreign Currency Transactions and Advance Consideration	December 8, 2016	January 1, 2018	No	
IFRIC 23 Uncertainty over Income Tax Treatments	June 7, 2017	January 1, 2019	No	No material impact

1 Effective date from Volkswagen AG's perspective.

2 The IASB decided on December 15, 2015 to defer the effective date indefinitely.

3 Deferred until January 1, 2018 (IASB decision of September 11, 2015).

4 Minor amendments to a number of IFRSs (IFRS 1 and IAS 28).

5 This relates to the effective date of the amendments to IFRS 1 and IAS 28.

6 Minor amendments to a number of IFRSs (IFRS 3, IFRS 11, IAS 12 and IAS 23).

### **IFRS 9 – FINANCIAL INSTRUMENTS**

IFRS 9 changes the accounting requirements for classifying and measuring financial assets, for impairment of financial assets, and for hedge accounting.

Financial assets are classified and measured on the basis of the entity's business model and the characteristics of the financial asset's cash flows. A financial asset is initially measured either "at amortized cost", "at fair value through other comprehensive income", or "at fair value through profit or loss". The change in method for classifying and measuring financial assets is expected to have a transition effect of €0.3 billion. The effect, net of deferred taxes, of the first-time application increases the retained earnings directly in equity. The classification and measurement of financial liabilities under IFRS 9 are largely unchanged compared with the current accounting requirements of IAS 39.

The basis for measuring impairment losses and recognizing loss allowances will switch from an incurred credit loss model to an expected credit loss model. The change in measurement method will lead to a €0.3 billion to €0.5 billion increase in the loss allowance on initial application. These amounts, net of deferred taxes, reduce the retained earnings directly in equity. The increase in the loss allowance results firstly from the requirement to recognize a loss allowance even for financial assets not classified as non-performing and whose credit risk has not increased significantly since initial recognition. Secondly, the increase results from the requirement to recognize loss allowances on the basis of the entire expected remaining life of the contractual asset for financial assets for which there has been a significant increase in credit risk since initial recognition.

In the case of hedge accounting, IFRS 9 contains both extended designation options and the need to implement more complex recognition and measurement methods. In addition, IFRS 9 also eliminates the quantitative limits for effectiveness testing.

IFRS 9 will have a particularly significant impact on the entity's reclassification practice. Depending on market trends, there is an expectation that operating profit or loss will be affected by hedging transactions to a greater extent. Due to the retrospective application of the guidance on designating option transactions, a transition effect of €0.1 billion is expected. The effect, net of deferred taxes, of the first-time application increases the retained earnings directly in equity. Since the new guidance for hedging with currency forwards will be applied prospectively, these hedges will not result in any initial application effect.

This will also result in far more extensive disclosures in the notes.

### **IFRS 15 – REVENUE FROM CONTRACTS WITH CUSTOMERS**

IFRS 15 specifies new accounting rules for revenue recognition. In the MAN subgroup, sales revenue is expected to be recognized at a later point in time than under the current accounting treatment for certain types of contract. Other provisions and other liabilities will be adjusted accordingly. The recognition of prepayments due but not yet transferred by the customer in the form of cash will additionally inflate the balance sheet by an amount in the three-digit million range.

In addition, from next year onward, the Volkswagen Group will no longer present the reversal of sales allowances under other operating income, but under sales revenue.

The Volkswagen Group will apply the modified retrospective transition method. This is not expected to result in material transition effects for the Volkswagen Group, because the existing approach used by the Volkswagen Group is already largely in line with the new guidance.

This will also result in far more extensive disclosures in the notes.

#### IFRS 16 – LEASES

IFRS 16 changes the accounting treatment for leases. The main objective of IFRS 16 is to recognize all leases. It establishes that lessees are no longer required to classify their leases as either finance leases or operating leases. In the future, they will instead be required to recognize a right-of-use asset and a lease liability for all leases in the statement of financial position. Exceptions will only be made for short-term leases and leases of low-value assets. During the lease term, the right-of-use asset must be depreciated and the lease liability adjusted using an effective interest method and taking the lease payments into account. The new lessee accounting model will therefore tend to increase noncurrent assets and noncurrent liabilities. In the income statement this change is expected to improve the operating result and reduce the financial result. Lessor accounting essentially follows the current guidance of IAS 17. In the future, lessors will continue to classify their leases as finance leases or operating leases on the basis of the risks and rewards incidental to ownership of the leased asset.

This will also result in far more extensive disclosures in the notes.

#### Key events

On September 18, 2015, the US Environmental Protection Agency (EPA) publicly announced in a “Notice of Violation” that irregularities in relation to nitrogen oxide ( $\text{NO}_x$ ) emissions had been discovered in emissions tests on certain vehicles of Volkswagen Group with type 2.0 l diesel engines in the USA. In this context, Volkswagen AG announced that noticeable discrepancies between the figures achieved in testing and in actual road use had been identified in around eleven million vehicles worldwide with type EA 189 diesel engines. On November 2, 2015, the EPA issued a “Notice of Violation” alleging that irregularities had also been discovered in the software installed in US vehicles with type V6 3.0 l diesel engines.

In the months after the International Council on Clean Transportation (ICCT) study was published in May 2014, the test set-ups on which the ICCT study was based were repeated in-house at Volkswagen AG and confirmed the unusually high  $\text{NO}_x$  emissions from certain type EA 189 2.0 l diesel engines in the USA. The California Air Resources Board (CARB) – a part of the environmental authority of California – was informed of this result, and, at the same time, an offer was made to recalibrate the type EA 189 diesel engines in the USA as part of a service measure that was already planned in the USA. This measure was evaluated and adopted by the Ausschuss für Produktsicherheit (APS – Product Safety Committee), which initiates necessary and appropriate measures to ensure the safety and conformity of Volkswagen AG’s products that are placed in the market. There are no findings that an unlawful “defeat device” under US law was disclosed to the APS as the cause of the discrepancies or to the persons responsible for preparing the 2014 annual and consolidated financial statements. Instead, at the time the 2014 annual and consolidated financial statements were being prepared, the persons responsible for preparing the 2014 annual and consolidated financial statements remained under the impression that the issue could be solved with comparatively little effort as part of a service measure.

In the course of the summer of 2015, however, it became successively apparent to individual members of Volkswagen AG’s Board of Management that the cause of the discrepancies in the USA was a modification of parts of the software of the engine control unit, which was later identified as an unlawful “defeat device” as defined by US law. This culminated in the disclosure of a “defeat device” to EPA and CARB on September 3, 2015. According to the assessment at that time of the responsible persons dealing with the matter, the scope of the costs expected by the Volkswagen Group (recall costs, retrofitting costs and financial penalties) was not fundamentally dissimilar to that of previous cases involving other vehicle manufacturers, and, therefore, appeared to be controllable overall with a view to the business activities of the Volkswagen Group.

This assessment by the Volkswagen Group was based, among other things, on the advice of a law firm engaged in the USA for approval issues, according to which similar cases in the past were resolved amicably with the US authorities. The publication of the “Notice of Violation” by the EPA on September 18, 2015, which, especially at that time came unexpectedly to the Board of Management, then presented the situation in an entirely different light.

Extensive inquiries were also conducted at AUDI AG in relation to the potential use of unlawful “defeat devices” under US law in type V6 3.0 l diesel engines. The investigation conducted by Jones Day for Volkswagen AG also comprehensively covered this issue.

The AUDI AG Board of Management members in office back at the relevant time have stated that they had no knowledge of the use of unlawful “defeat device” software under US law in V6 3.0 l TDI engines until they were informed by the EPA in November 2015.

Within the Volkswagen Group, Volkswagen AG has development responsibility for the four-cylinder diesel engines such as the type EA 189, and AUDI AG has development responsibility for the six-cylinder diesel engines such as the type V6 3.0 l diesel engines.

Nothing from the publications made up to the time this report was prepared or from the ongoing investigations and interviews on the diesel issue has presented the Volkswagen AG Board of Management with any conclusive findings or assessments of fact that would result in a different assessment of the associated risks (e.g. investor lawsuits).

Additional expenses of €3.2 billion were recognized in fiscal year 2017. This is due to an increase of €2.2 billion in expenses for warranties and of €1.0 billion in expenses for legal risks. The main reason for this rise in provisions is that the buyback/retrofit programs for 2.0 l TDI vehicles in North America, which have to be implemented under the settlement deal, are more complex. Continuous monitoring of the program has shown that the scheme is more comprehensive and technically more challenging than expected; this also entails an extension to the program period.

Further information on the litigation in connection with the diesel issue can be found in the “Litigation” section.

Further details can be found in the “Diesel Issue” section of the management report.

## Basis of consolidation

In addition to Volkswagen AG, the consolidated financial statements comprise all significant German and non-German subsidiaries, including structured entities that are controlled directly or indirectly by Volkswagen AG. This is the case if Volkswagen AG obtains power over the potential subsidiaries directly or indirectly from voting rights or similar rights, is exposed, or has rights to, positive or negative variable returns from its involvement with the subsidiaries, and is able to influence those returns. In the case of the structured entities consolidated in the Volkswagen Group, Volkswagen is able to direct the material relevant activities remaining after the change in the structure even if it is not invested in the structured entity concerned and is thus able to influence the variable returns from its involvement. The structured entities are used primarily to enter into asset-backed securities transactions to refinance the financial services business and to invest surplus liquidity in special securities funds. Consolidation of subsidiaries begins at the first date on which control exists, and ends when such control no longer exists.

Subsidiaries whose business is dormant or insignificant, both individually and in the aggregate, for the fair presentation of the net assets, financial position and results of operations as well as the cash flows of the Volkswagen Group are not consolidated. They were carried in the consolidated financial statements at cost net of any impairment losses and reversals of impairment losses required to be recognized.

Significant companies where Volkswagen AG is able, directly or indirectly, to significantly influence financial and operating policy decisions (associates), or that are directly or indirectly jointly controlled (joint ventures), are accounted for using the equity method. Joint ventures also include companies in which the Volkswagen Group holds the majority of voting rights, but whose articles of association or partnership agreements stipulate that important decisions may only be resolved unanimously. Insignificant associates and joint ventures are carried at cost net of any impairment losses and reversals of impairment losses required to be recognized.

The composition of the Volkswagen Group is shown in the following table:

	2017	2016
<b>Volkswagen AG and consolidated subsidiaries</b>		
Germany	156	149
Abroad	717	919
<b>Subsidiaries carried at cost</b>		
Germany	69	74
Abroad	238	251
<b>Associates, joint ventures and other equity investments</b>		
Germany	61	47
Abroad	88	70
	<b>1,329</b>	<b>1,510</b>

The list of all shareholdings that forms part of the annual financial statements of Volkswagen AG can be downloaded from the electronic companies register at [www.unternehmensregister.de](http://www.unternehmensregister.de) and from [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir).

The following consolidated German subsidiaries with the legal form of a corporation or partnership meet the criteria set out in section 264(3) or section 264b of the Handelsgesetzbuch (HGB – German Commercial Code) due to their inclusion in the consolidated financial statements and have as far as possible exercised the option not to publish annual financial statements:

- > Audi Berlin GmbH, Berlin
- > Audi Frankfurt GmbH, Frankfurt am Main
- > Audi Hamburg GmbH, Hamburg
- > Audi Hannover GmbH, Hanover
- > Audi Leipzig GmbH, Leipzig
- > Audi Stuttgart GmbH, Stuttgart
- > Autostadt GmbH, Wolfsburg
- > Bugatti Engineering GmbH, Wolfsburg
- > Dr. Ing. h.c. F. Porsche AG, Stuttgart
- > Haberl Beteiligungs-GmbH, Munich
- > Karosseriewerk Porsche GmbH & Co. KG, Stuttgart
- > MAHAG GmbH, Munich
- > MOIA GmbH, Berlin
- > Porsche Connect GmbH, Stuttgart
- > Porsche Consulting GmbH, Bietigheim-Bissingen
- > Porsche Deutschland GmbH, Bietigheim-Bissingen
- > Porsche Dienstleistungs GmbH, Stuttgart
- > Porsche Engineering Group GmbH, Weissach
- > Porsche Engineering Services GmbH, Bietigheim-Bissingen
- > Porsche Erste Beteiligungsgesellschaft mbH, Stuttgart
- > Porsche Financial Services GmbH & Co. KG, Bietigheim-Bissingen
- > Porsche Financial Services GmbH, Bietigheim-Bissingen
- > Porsche Holding Stuttgart GmbH, Stuttgart
- > Porsche Leipzig GmbH, Leipzig
- > Porsche Lizenz- und Handelsgesellschaft mbH & Co. KG, Ludwigsburg
- > Porsche Logistik GmbH, Stuttgart
- > Porsche Niederlassung Berlin GmbH, Berlin
- > Porsche Niederlassung Berlin-Potsdam GmbH, Kleinmachnow
- > Porsche Niederlassung Hamburg GmbH, Hamburg

- › Porsche Niederlassung Leipzig GmbH, Leipzig
- › Porsche Niederlassung Stuttgart GmbH, Stuttgart
- › Porsche Nordamerika Holding GmbH, Ludwigsburg
- › Porsche Siebte Vermögensverwaltung GmbH, Wolfsburg
- › Porsche Zentrum Hoppegarten GmbH, Stuttgart
- › Raffay Versicherungsdienst GmbH, Hamburg
- › SKODA AUTO Deutschland GmbH, Weiterstadt
- › VFL Wolfsburg-Fußball GmbH, Wolfsburg
- › VGRD GmbH, Wolfsburg
- › Volkswagen AirService GmbH, Braunschweig
- › Volkswagen Automobile Berlin GmbH, Berlin
- › Volkswagen Automobile Chemnitz GmbH, Chemnitz
- › Volkswagen Automobile Frankfurt GmbH, Frankfurt am Main
- › Volkswagen Automobile Hamburg GmbH, Hamburg
- › Volkswagen Automobile Hannover GmbH, Hanover
- › VOLKSWAGEN Automobile Leipzig GmbH, Leipzig
- › Volkswagen Automobile Region Hannover GmbH, Hanover
- › Volkswagen Automobile Rhein-Neckar GmbH, Mannheim
- › Volkswagen Automobile Stuttgart GmbH, Stuttgart
- › Volkswagen Beteiligungsverwaltung GmbH, Wolfsburg
- › Volkswagen Dritte Leasingobjekt GmbH, Braunschweig
- › Volkswagen Erste Leasingobjekt GmbH, Braunschweig
- › Volkswagen Fünfte Leasingobjekt GmbH, Braunschweig
- › Volkswagen Gebrauchtfahrzeughandels und Service GmbH, Langenhagen
- › Volkswagen Group IT Services GmbH, Wolfsburg
- › Volkswagen Group Real Estate GmbH & Co. KG, Wolfsburg
- › Volkswagen Group Services GmbH, Wolfsburg
- › Volkswagen Immobilien GmbH, Wolfsburg
- › Volkswagen Konzernlogistik GmbH & Co. OHG, Wolfsburg
- › Volkswagen Original Teile Logistik GmbH & Co. KG, Baunatal
- › Volkswagen Osnabrück GmbH, Osnabrück
- › Volkswagen R GmbH, Wolfsburg
- › Volkswagen Sachsen GmbH, Zwickau
- › Volkswagen Sechste Leasingobjekt GmbH, Braunschweig
- › Volkswagen Siebte Leasingobjekt GmbH, Braunschweig
- › Volkswagen Truck & Bus GmbH, Braunschweig
- › Volkswagen Vertriebsbetreuungsgesellschaft mbH, Chemnitz
- › Volkswagen Vierte Leasingobjekt GmbH, Braunschweig
- › Volkswagen Zubehör GmbH, Dreieich
- › Volkswagen Zweite Leasingobjekt GmbH, Braunschweig

### **CONSOLIDATED SUBSIDIARIES**

Part of the PGA Group SAS, Paris, France, was sold by POFIN Financial Services Verwaltungs GmbH, Freilassing, to the Emil Frey Group on June 1, 2017. The sale is in connection with the strategic development of Porsche Holding Salzburg's dealer network and the corresponding focus on dealerships exclusively selling Volkswagen Group brand vehicles.

The transaction encompasses dealerships in Poland, the Netherlands, Belgium and in some cases also in France. This had a positive effect of €0.8 billion on net liquidity and, taking into account the disposal of the assets and liabilities, resulted in an insignificant income amount for the Volkswagen Group, which is reported in other operating income.

Overall, the transaction led to the disposal of assets in the amount of €2.5 billion and liabilities in the amount of €2.1 billion. The assets mainly consist of noncurrent leased assets (€0.6 billion) and inventories (€1.0 billion). The liabilities principally comprise noncurrent and current other liabilities (€0.9 billion) and trade payables (€0.7 billion).

The other changes in the consolidated Group are shown in the following table:

Number	Germany	Abroad
<b>Initially consolidated</b>		
Subsidiaries previously carried at cost	10	10
Newly acquired subsidiaries	1	1
Newly formed subsidiaries	1	15
	<b>12</b>	<b>26</b>
<b>Deconsolidated</b>		
Mergers	1	6
Liquidations	4	11
Sales/other	0	211
	<b>5</b>	<b>228</b>

The initial inclusion of these subsidiaries, either individually or collectively, did not have a significant effect on the presentation of the net assets, financial position and results of operations. The unconsolidated structured entities are immaterial from a Group perspective. In particular, they do not give rise to any significant risks to the Group.

### **INVESTMENTS IN ASSOCIATES**

From a Group perspective, the associates Sinotruk (Hong Kong) Ltd., Hongkong, China (Sinotruk), Bertrandt AG, Ehningen (Bertrandt), There Holding B.V., Rijswijk, the Netherlands (There Holding), and Navistar International Corporation, Lisle, USA (Navistar), were material at the reporting date.

#### **Sinotruk**

Sinotruk is one of the largest truck manufacturers in the Chinese market. There is an agreement in place between Group companies and Sinotruk regarding a long-term strategic partnership, under which the Group participates in the local market. In addition to the partnership with Sinotruk in the volume segment, exports of MAN vehicles to China are also helping to expand access to the small, but fast-growing premium truck market. Sinotruk's principal place of business is in Hongkong, China.

As of December 31, 2017, the quoted market price of the shares in Sinotruk amounted to €648 million (previous year: €466 million).

**Bertrandt**

Bertrandt is an engineering partner to companies in the automotive and aviation industry. Its portfolio of services ranges from developing individual components through complex modules to end-to-end solutions. Bertrandt's principal place of business is in Ehningen.

As of December 31, 2017, the quoted market price of the shares in Bertrandt amounted to €299 million (previous year: €284 million).

**There Holding**

The Audi Subgroup, the BMW Group and Daimler AG each hold a 33.3% interest in There Holding B.V., Rijswijk, the Netherlands, which was established in 2015. In December 2016, There Holding B.V. signed a contract with Intel Holdings B.V., Schiphol-Rijk, the Netherlands, for the sale of 15% of the shares in HERE International B.V., Rijswijk, the Netherlands. The transaction with Intel Holdings B.V. was completed on January 31, 2017. This resulted in a loss of control within the meaning of IFRS 10 at the There Holding B.V. level. The deconsolidation gave rise to a proportionate effect for the Volkswagen Group of €183 million, which is shown in the share of the result of equity-accounted investments. Since a significant influence continues to exist, HERE International B.V. is included in the financial statement of There Holding B.V. as an associate using the equity method. There is no change in the Volkswagen Group's participating interest in There Holding B.V. as a result of the sale.

Moreover, in December 2016, an agreement for the sale of 10% of the shares in HERE International B.V. was signed with a consortium consisting of NavInfo Co. Ltd., Beijing, China, Tencent Holdings Ltd., Shenzhen, China, and GIC Private Ltd., Singapore, Singapore. The completion of the transaction with the consortium was dependent on the approval of the relevant authorities. In the third quarter of 2017, a decision was taken not to pursue the transaction any further, because it could no longer be envisaged during the official review process that the necessary approvals would be obtained.

In December 2017, agreements for the sale of shares in There Holding B.V. were signed with Robert Bosch Investment Nederland B.V., Boxtel, the Netherlands, and Continental Automotive Holding Netherlands B.V., Maastricht, the Netherlands. In this process, Robert Bosch Investment Nederland B.V. and Continental Automotive Holding Netherlands B.V. are acquiring an interest of 5.9% each in There Holding B.V. Audi, BMW and Daimler are selling their shareholdings in the same amount. The transactions are expected to be completed in the first quarter of 2018, subject to approvals by the authorities. The share attributable to Volkswagen is reported under assets held for sale. The transactions are not expected to have a material effect on the financial position and results of operations.

**Navistar**

At the beginning of September 2016, Volkswagen Truck & Bus GmbH, a wholly owned subsidiary of Volkswagen AG, and the US-based commercial vehicle manufacturer Navistar International Corporation, Lisle, USA (Navistar), announced that they had signed an agreement to forge a wide-ranging alliance. The cooperation primarily involves working together on technical components and in procurement. The transaction closed on February 28, 2017. Within the framework of a capital increase, Volkswagen Truck & Bus acquired 16.6% of the shares in Navistar, paying USD 15.76 per share. The purchase price came to €0.3 billion. Due to Volkswagen's representation on the Board of Directors of Navistar and the agreed cooperation, the investment in Navistar is reported as an equity-accounted investment in the consolidated financial statements. The interest held in Navistar was increased to 16.9% by the balance sheet date.

As of December 31, 2017, the quoted market price of the shares in Navistar amounted to €595 million.

**SUMMARIZED FINANCIAL INFORMATION ON MATERIAL ASSOCIATES ON A 100% BASIS:**

€ million	Sinotruk <sup>1</sup>	Bertrandt <sup>2</sup>	There Holding	Navistar <sup>3</sup>
<b>2017</b>				
Equity interest (%)	25	29	33	17
Noncurrent assets	2,086	600	1,906	1,648
Current assets	5,449	478	289	3,470
Noncurrent liabilities	55	338	–	5,893
Current liabilities	4,420	157	0	3,041
Net assets	3,060	583	2,195	–3,816
Sales revenue	5,961	992	71	5,507
Earnings after tax from continuing operations	260	21	–151	95
Earnings after tax from discontinued operations	–	–	513	1
Other comprehensive income	13	0	2	341
Total comprehensive income	272	21	364	437
Dividends received	6	7	–	–
<b>2016</b>				
Equity interest (%)	25	29	33	–
Noncurrent assets	2,075	603	2,802	–
Current assets	4,034	492	592	–
Noncurrent liabilities	123	340	1,044	–
Current liabilities	3,029	168	518	–
Net assets	2,956	587	1,832	–
Sales revenue	4,116	992	1,240	–
Earnings after tax from continuing operations	46	28	–167	–
Earnings after tax from discontinued operations	–	–	–	–
Other comprehensive income	11	–1	–4	–
Total comprehensive income	57	27	–171	–
Dividends received	2	7	–	–

1 Balance sheet amounts refer to the June 30 reporting date and income statement amounts refer to the period from July 1 to June 30.

2 Balance sheet amounts refer to the September 30 reporting date and income statement amounts refer to the period from October 1 to September 30.

3 Due to the first-time inclusion of Navistar and the fact that it has a different fiscal year, the income statement disclosures for the current fiscal year relate to the period from March 1, 2017 to October 31, 2017. Balance sheet disclosures relate to the balance sheet date as of October 31.

**RECONCILIATION OF THE FINANCIAL INFORMATION TO THE CARRYING AMOUNT OF THE EQUITY-ACCOUNTED INVESTMENTS:**

€ million	Sinotruk	Bertrandt	There Holding	Navistar <sup>1</sup>
<b>2017</b>				
Net assets at January 1	2,956	587	1,832	-4,270
Profit or loss	260	21	362	96
Other comprehensive income	13	0	2	341
Changes in reserves	1	-	-	11
Foreign exchange differences	-135	-	-	7
Dividends	-34	-25	-	-
Net assets at December 31	3,060	583	2,195	-3,816
Proportionate equity	765	168	646	-644
Consolidation/Goodwill/Others	-387	163	-	946
Carrying amount of equity-accounted investments	378	331	646	301
<b>2016</b>				
Net assets at January 1	3,083	585	2,003	-
Profit or loss	46	28	-167	-
Other comprehensive income	11	-1	-4	-
Changes in reserves	30	-	-	-
Foreign exchange differences	-198	-	-	-
Dividends	-17	-25	-	-
Net assets at December 31	2,956	587	1,832	-
Proportionate equity	739	170	611	-
Consolidation/Goodwill/Others	-411	163	-	-
Carrying amount of equity-accounted investments	328	333	611	-

1 Due to the first-time inclusion of Navistar, the reconciliation of the net carrying amount relates to the period from March 1, 2017 to December 31, 2017.

**SUMMARIZED FINANCIAL INFORMATION ON INDIVIDUALLY IMMATERIAL ASSOCIATES ON THE BASIS OF THE VOLKSWAGEN GROUP'S PROPORTIONATE INTEREST:**

€ million	2017	2016
Earnings after tax from continuing operations	-29	2
Earnings after tax from discontinued operations	-	-
Other comprehensive income	0	-1
Total comprehensive income	-29	0
Carrying amount of equity-accounted investments	90	277

Unrecognized losses relating to investments in associates totaled €– million (previous year: €5 million). There were no contingent liabilities or financial guarantees relating to associates.

#### **INTERESTS IN JOINT VENTURES**

From a Group perspective, the joint ventures FAW-Volkswagen Automotive Company Ltd., Changchun, China, SAIC-Volkswagen Automotive Company Ltd., Shanghai, China, SAIC-Volkswagen Sales Company Ltd., Shanghai, China (SAIC-Volkswagen Sales Company), and Global Mobility Holding B.V., Amsterdam, the Netherlands (Global Mobility Holding), were material at the reporting date or the prior-year reporting date due to their size.

##### **FAW-Volkswagen Automotive Company**

FAW-Volkswagen Automotive Company develops, produces and sells passenger cars. There is an agreement in place between Group companies and the joint venture partner China FAW Corporation Limited regarding a long-term strategic partnership. The principal place of business is in Changchun, China.

##### **SAIC-Volkswagen Automotive Company**

SAIC-Volkswagen Automotive Company develops and produces passenger cars. There is an agreement in place between Group companies and the joint venture partner Shanghai Automotive Industry Corporation regarding a long-term strategic partnership. The principal place of business is in Shanghai, China.

##### **SAIC-Volkswagen Sales Company**

SAIC-Volkswagen Sales Company sells passenger cars for SAIC-Volkswagen Automotive Company. There is an agreement in place between Group companies and the joint venture partner Shanghai Automotive Industry Corporation regarding a long-term strategic partnership. The principal place of business is in Shanghai, China.

##### **Global Mobility Holding**

Through its 50% interest in the joint venture Global Mobility Holding B.V., Amsterdam, the Netherlands (GMH), the Volkswagen Group held a 50% indirect stake in the joint venture's subsidiary, LeasePlan Corporation N.V., Amsterdam, the Netherlands (LeasePlan). GMH's business activity consisted of holding the interest in LeasePlan. LeasePlan is a Dutch financial services group whose core business is leasing and fleet management.

On July 23, 2015, GMH sold its 100% interest in LeasePlan to a consortium of international investors. The final approvals for the sale of LeasePlan to the consortium of investors were issued by the competent authorities in January 2016. Legal transfer of the LeasePlan shares was completed on March 21, 2016.

The total value of the transaction was approximately €3.7 billion plus interest in the amount of €31.5 million. In 2016, this had a positive effect of €2.2 billion on investing activities attributable to operating activities and net liquidity and, taking into account the disposal of equity-accounted investment in GMH, resulted in an income amount of €0.2 billion for the Volkswagen Group, which is reported in the financial result. On completion of the transaction, the existing credit line of €1.3 billion provided by the Volkswagen Group was canceled.

**SUMMARIZED FINANCIAL INFORMATION ON THE MATERIAL JOINT VENTURES ON A 100% BASIS:**

€ million	FAW-Volkswagen Automotive Company	SAIC-Volkswagen Automotive Company <sup>1</sup>	Global Mobility Holding <sup>2</sup>	SAIC-Volkswagen Sales Company
<b>2017</b>				
Equity interest (%)	40	50		30
Noncurrent assets	10,071	8,266		626
Current assets	13,018	9,304		4,383
of which: cash, cash equivalents and time deposits	7,385	6,198		214
Noncurrent liabilities	1,470	0		61
of which: financial liabilities	–	–		–
Current liabilities	14,768	12,157		4,402
of which: financial liabilities	–	6		–
Net assets	6,851	5,414		546
Sales revenue	40,828	28,767		33,398
Depreciation and amortization	1,212	1,279		6
Interest income	72	36		–
Interest expenses	–	35		–
Earnings before tax from continuing operations	4,907	4,555		669
Income tax expense	1,369	1,086		168
Earnings after tax from continuing operations	3,538	3,469		501
Earnings after tax from discontinued operations	–	10		–
Other comprehensive income	–49	–5		–
Total comprehensive income	3,489	3,473		501
Dividends received	1,502	1,702		137
<b>2016</b>				
Equity interest (%)	40	50		30
Noncurrent assets	9,341	7,254		517
Current assets	12,962	8,521		3,739
of which: cash, cash equivalents and time deposits	7,073	5,265		212
Noncurrent liabilities	1,774	1,437		22
of which: financial liabilities	–	–		–
Current liabilities	13,063	8,759		3,713
of which: financial liabilities	1	0		–
Net assets	7,466	5,579		520
Sales revenue	40,875	26,064	1,879	30,707
Depreciation and amortization	1,120	1,091	12	4
Interest income	82	40	168	–
Interest expenses	–	4	70	–
Earnings before tax from continuing operations	5,546	4,589	142	614
Income tax expense	1,576	1,127	38	154
Earnings after tax from continuing operations	3,970	3,462	105	460
Earnings after tax from discontinued operations	–	–	–	–
Other comprehensive income	37	21	–20	–
Total comprehensive income	4,007	3,483	85	460
Dividends received	1,634	1,661	–	127

<sup>1</sup> SAIC-Volkswagen Sales Company sells passenger cars for SAIC-Volkswagen Automotive Company. Therefore, the sales revenue reported for SAIC-Volkswagen Automotive Company was mostly generated from its business with SAIC-Volkswagen Sales Company.

<sup>2</sup> GMH transferred the LeasePlan shares to third parties on March 21, 2016 (see further disclosures in this section).

**RECONCILIATION OF THE FINANCIAL INFORMATION TO THE CARRYING AMOUNT OF THE EQUITY-ACCOUNTED INVESTMENTS:**

€ million	FAW-Volkswagen Automotive Company	SAIC-Volkswagen Automotive Company	Global Mobility Holding	SAIC-Volkswagen Sales Company
<b>2017</b>				
Net assets at January 1	7,466	5,579		520
Profit or loss	3,538	3,479		501
Other comprehensive income	-49	-5		-
Changes in share capital	-	-		-
Changes in reserves	-	-		-
Foreign exchange differences	-350	-236		-18
Dividends	-3,755	-3,403		-458
Net assets at December 31	6,851	5,414		546
Proportionate equity	2,740	2,707		164
Consolidation/Goodwill/Others	-456	-576		-
Carrying amount of equity-accounted investments	2,284	2,131		164
<b>2016</b>				
Net assets at January 1	7,825	5,618	3,927	506
Profit or loss	3,970	3,462	105	460
Other comprehensive income	37	21	-20	-
Changes in share capital	-	-	-	-
Changes in reserves	-	-	-	-
Foreign exchange differences	-281	-200	-20	-21
Dividends	-4,085	-3,321	-	-425
Net assets at December 31	7,466	5,579	3,991 <sup>1</sup>	520
Proportionate equity	2,987	2,790	1,996	156
Consolidation/Goodwill/Others	-339	-415	-1,996	-
Carrying amount of equity-accounted investments	2,647	2,375	-	156

1 As of March 21, 2016.

**SUMMARIZED FINANCIAL INFORMATION ON INDIVIDUALLY IMMATERIAL JOINT VENTURES ON THE BASIS OF THE VOLKSWAGEN GROUP'S PROPORTIONATE INTEREST:**

€ million	2017	2016
Earnings after tax from continuing operations	290	304
Earnings after tax from discontinued operations	10	-
Other comprehensive income	0	3
Total comprehensive income	299	307
Carrying amount of equity-accounted investments	1,881	1,890

There were no unrecognized losses relating to interests in joint ventures. Contingent liabilities to joint ventures amounted to €186 million (previous year: €183 million) and financial guarantees to joint ventures amounted to €82 million (previous year: €- million). Cash funds of €260 million (previous year: €173 million) are deposited as collateral for asset-backed securities transactions and are therefore not available to the Volkswagen Group.

**IFRS 5 – NON-CURRENT ASSETS HELD FOR SALE**

As of December 31, 2017, assets in a total amount of €115 million were classified as assets “held for sale” and reported in a separate line item of the balance sheet in accordance with IFRS 5. The assets “held for sale” were measured at the lower of carrying amount and fair value, less expected costs to sell. These assets are no longer depreciated. The amount reported is mainly attributable to the planned sale of property, plant and equipment (€24 million) and the planned sale of shares in There Holding B.V. (€86 million). The sales will not have any material impact on the Volkswagen Group’s results of operations or net liquidity. The sales are expected to be completed in the first half of fiscal year 2018.

**Consolidation methods**

The assets and liabilities of the German and foreign companies included in the consolidated financial statements are recognized in accordance with the uniform accounting policies used within the Volkswagen Group. In the case of companies accounted for using the equity method, the same accounting policies are applied to determine the proportionate equity, based on the most recent audited annual financial statements of each company.

In the case of subsidiaries consolidated for the first time, assets and liabilities are measured at their fair value at the date of acquisition. Their carrying amounts are adjusted in subsequent years. Goodwill arises when the purchase price of the investment exceeds the fair value of identifiable net assets. Goodwill is tested for impairment once a year to determine whether its carrying amount is recoverable. If the carrying amount of goodwill is higher than the recoverable amount, an impairment loss must be recognized. If this is not the case, there is no change in the carrying amount of goodwill compared with the previous year. If the purchase price of the investment is less than the identifiable net assets, the difference is recognized in the income statement in the year of acquisition. Goodwill is accounted for at the subsidiaries in the functional currency of those subsidiaries. Any difference that arises from the acquisition of additional shares of an already consolidated subsidiary is taken directly to equity. Unless otherwise stated, the proportionate equity directly attributable to noncontrolling interests is determined at the acquisition date as the share of the fair value of the assets (excluding goodwill) and liabilities attributable to them. Contingent consideration is measured at fair value at the acquisition date. Subsequent changes in the fair value of contingent consideration do not generally result in the adjustment of the acquisition-date measurement. Acquisition-related costs that are not equity transaction costs are not added to the purchase price, but instead recognized as expenses in the period in which they are incurred.

The consolidation process involves adjusting the items in the separate financial statements of the parent and its subsidiaries and presenting them as if they were those of a single economic entity. Intragroup assets, liabilities, equity, income, expenses and cash flows are eliminated in full. Intercompany profits or losses are eliminated in Group inventories and noncurrent assets. Deferred taxes are recognized for consolidation adjustments, and deferred tax assets and liabilities are offset where taxes are levied by the same tax authority and relate to the same tax period.

## Currency translation

Transactions in foreign currencies are translated in the single-entity financial statements of Volkswagen AG and its consolidated subsidiaries at the rates prevailing at the transaction date. Foreign currency monetary items are recorded in the balance sheet using the middle rate at the closing date. Foreign exchange gains and losses are recognized in the income statement. This does not apply to foreign exchange differences from loans receivable that represent part of a net investment in a foreign operation. The financial statements of foreign companies are translated into euros using the functional currency concept, under which asset and liability items are translated at the closing rate. With the exception of income and expenses recognized directly in equity, equity is translated at historical rates. The resulting foreign exchange differences are recognized in other comprehensive income until disposal of the subsidiary concerned, and are presented as a separate item in equity.

Income statement items are translated into euros at weighted average rates.

The rates applied are presented in the following table:

	€1 =	BALANCE SHEET MIDDLE RATE ON DECEMBER 31		INCOME STATEMENT AVERAGE RATE	
		2017	2016	2017	2016
Argentina	ARS	22.99203	16.80096	18.72636	16.33207
Australia	AUD	1.53285	1.46150	1.47300	1.48880
Brazil	BRL	3.97065	3.43720	3.60471	3.86217
Canada	CAD	1.50260	1.42280	1.46444	1.46659
Czech Republic	CZK	25.57900	27.02400	26.32920	27.03433
India	INR	76.56700	71.65500	73.50146	74.37058
Japan	JPY	134.87000	123.50000	126.66763	120.31663
Mexico	MXN	23.61420	21.84800	21.33175	20.66535
People's Republic of China	CNY	7.80085	7.33320	7.62688	7.35067
Poland	PLN	4.17490	4.41530	4.25727	4.36416
Republic of Korea	KRW	1,278.22000	1,269.11000	1,275.94974	1,284.79543
Russia	RUB	69.33520	64.67550	65.88875	74.23443
South Africa	ZAR	14.75715	14.48480	15.04543	16.28336
Sweden	SEK	9.83140	9.56720	9.63700	9.46712
United Kingdom	GBP	0.88730	0.85850	0.87626	0.81897
USA	USD	1.19875	1.05600	1.12933	1.10675

## Accounting policies

### MEASUREMENT PRINCIPLES

With certain exceptions such as financial instruments at fair value through profit or loss, available-for-sale financial assets and provisions for pensions and other post-employment benefits, items in the Volkswagen Group are accounted for under the historical cost convention. The methods used to measure the individual items are explained in more detail below.

### INTANGIBLE ASSETS

Purchased intangible assets are recognized at cost and amortized over their useful life using the straight-line method. This relates in particular to software, which is amortized over three years.

In accordance with IAS 38, research costs are recognized as expenses when incurred.

Development costs for future series products and other internally generated intangible assets are capitalized at cost, provided manufacture of the products is likely to bring the Volkswagen Group an economic benefit. If the criteria for recognition as assets are not met, the expenses are recognized in the income statement in the year in which they are incurred.

Capitalized development costs include all direct and indirect costs that are directly attributable to the development process. The costs are amortized using the straight-line method from the start of production over the expected life cycle of the models or powertrains developed – generally between two and ten years.

Amortization recognized during the year is allocated to the relevant functions in the income statement.

Brand names from business combinations usually have an indefinite useful life and are therefore not amortized. An indefinite useful life is usually the result of a brand's further use and maintenance.

Goodwill, intangible assets with indefinite useful lives and intangible assets that are not yet available for use are tested for impairment at least once a year. Assets in use and other intangible assets with finite useful lives are tested for impairment only if there are specific indications that they may be impaired. The Volkswagen Group generally applies the higher of value in use and fair value less costs to sell of the relevant cash-generating unit (brands or products) to determine the recoverable amount of goodwill and indefinite-lived intangible assets. Measurement of value in use is based on management's current planning. This planning is based on expectations regarding future global economic trends and on assumptions derived from those trends about the markets for passenger cars and commercial vehicles, market shares and the profitability of the products. The planning for the Financial Services segment is likewise prepared on the basis of these expectations, and also reflects the relevant market penetration rates and regulatory requirements. The planning for the Power Engineering segment reflects expectations about trends in the various individual markets. The planning includes reasonable assumptions about macroeconomic trends (exchange rate, interest rate and commodity price trends) and historical developments. The planning period generally covers five years. For information on the assumptions applied to the detailed planning period, please refer to the Report on Expected Developments, which is part of the Management Report. For subsequent years, plausible assumptions are made regarding future trends. The planning assumptions are adapted to reflect the current state of knowledge.

Estimation of cash flows is generally based on the expected growth trends for the markets concerned. The estimates for the cash flows following the end of the planning period are generally based on a growth rate of up to 1% p.a. (previous year: up to 1% p.a.) in the Passenger Cars segment, and on a growth rate of up to 1% p.a. (previous year: up to 1% p.a.) in the Power Engineering and Commercial Vehicles segments.

Value in use is determined for the purpose of impairment testing of goodwill, indefinite-lived intangible assets and finite-lived intangible assets – mainly capitalized development costs – using the following pretax weighted average cost of capital (WACC) rates, which are adjusted if necessary for country-specific discount factors:

WACC	2017	2016
Passenger Cars segment	5.8%	5.4%
Commercial Vehicles segment	6.8%	6.5%
Power Engineering segment	8.0%	7.7%

The WACC rates are calculated based on the risk-free rate of interest, a market risk premium and the cost of debt. Additionally, specific peer group information on beta factors and leverage are taken into account. The composition of the peer groups used to determine beta factors is continuously reviewed and adjusted if necessary.

#### PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment is carried at cost less depreciation and – where necessary – write-downs for impairment. Investment grants are generally deducted from cost. Cost is determined on the basis of the direct and indirect costs that are directly attributable. Special tools are reported under other equipment, operating and office equipment. Property, plant and equipment is depreciated using the straight-line method over its estimated useful life. The useful lives of items of property, plant and equipment are reviewed on a regular basis and adjusted if required.

Depreciation is based mainly on the following useful lives:

	Useful life
Buildings	20 to 50 years
Site improvements	10 to 20 years
Technical equipment and machinery	6 to 12 years
Other equipment, operating and office equipment, including special tools	3 to 15 years

Impairment losses on property, plant and equipment are recognized in accordance with IAS 36 where the recoverable amount of the asset concerned has fallen below the carrying amount. Recoverable amount is the higher of value in use and fair value less costs to sell. Value in use is determined using the principles described for intangible assets. The discount rates for product-specific tools and investments are the same as the discount rates for capitalized development costs given above for each segment. If the reasons for impairments recognized in previous years no longer apply, the impairment losses are reversed up to a maximum of the amount that would have been determined if no impairment loss had been recognized.

In accordance with the principle of substance over form, assets that have been formally transferred to third parties under a sale and leaseback transaction including a repurchase option also continue to be accounted for as separate assets.

Where leased items of property, plant and equipment are used, the criteria for classification as a finance lease as set out in IAS 17 are met if all material risks and rewards incidental to ownership have been transferred to the Group company concerned. In such cases, the assets concerned are recognized at fair value or at the present value of the minimum lease payments (if lower) and depreciated using the straight-line method over the asset's useful life, or over the term of the lease if this is shorter. The payment obligations arising from the future lease payments are discounted and recorded as a liability in the balance sheet.

Where Group companies are the lessees of assets under operating leases, i.e. if not all material risks and rewards are transferred, lease and rental payments are recorded directly as expenses in profit or loss.

#### **LEASE ASSETS**

Vehicles leased out under operating leases are recognized at cost and depreciated to their estimated residual value using the straight-line method over the term of the lease. Impairment losses identified as a result of an impairment test in accordance with IAS 36 are recognized and the future depreciation rate is adjusted. The forecast residual values are adjusted to include constantly updated internal and external information on residual values, depending on specific local factors and the experiences gained in the marketing of used cars. This requires management to make assumptions in particular about vehicle supply and demand in the future, as well as about vehicle price trends. Such assumptions are based either on qualified estimates or on data published by external experts. Qualified estimates are based on external data – if available – that reflects additional information that is available internally, such as historical experience and current sales data.

#### **INVESTMENT PROPERTY**

Real estate and buildings held in order to obtain rental income (investment property) are carried at amortized cost; the useful lives applied to depreciation generally correspond to those of the property, plant and equipment used by the Company itself. The fair value of investment property must be disclosed in the notes if it is carried at amortized cost. Fair value is generally estimated using an investment method based on internal calculations. This involves determining the income value for a specific building on the basis of gross income, taking into account additional factors such as land value, remaining useful life and a multiplier specific to property.

#### **CAPITALIZATION OF BORROWING COSTS**

Borrowing costs that are directly attributable to the acquisition of qualifying assets on or after January 1, 2009 are capitalized as part of the cost of these assets. A qualifying asset is an asset that necessarily takes at least a year to get ready for its intended use or sale.

#### **EQUITY-ACCOUNTED INVESTMENTS**

The cost of equity-accounted investments is adjusted to reflect the share of increases or reductions in equity at the associates and joint ventures after the acquisition that is attributable to the Volkswagen Group, as well as any effects from purchase price allocation. Additionally, the investment is tested for impairment if there are indications of impairment and written down to the lower recoverable amount if necessary. The recoverable amount is determined using the principles described for indefinite-lived intangible assets. If the reason for impairment ceases to apply at a later date, the impairment loss is reversed to the carrying amount that would have been determined had no impairment loss been recognized.

### FINANCIAL INSTRUMENTS

Financial instruments are contracts that give rise to a financial asset of one company and a financial liability or an equity instrument of another. Regular way purchases or sales of financial instruments are accounted for at the settlement date – that is, at the date on which the asset is delivered.

IAS 39 classifies financial assets into the following categories:

- financial assets at fair value through profit or loss;
- held-to-maturity financial assets;
- loans and receivables; and
- available-for-sale financial assets.

Financial liabilities are classified into the following categories:

- financial liabilities at fair value through profit or loss; and
- financial liabilities measured at amortized cost.

We recognize financial instruments at amortized cost or at fair value.

The amortized cost of a financial asset or liability is the amount:

- at which a financial asset or liability is measured at initial recognition;
- minus any principal repayments;
- minus any write-down for impairment or uncollectibility;
- plus or minus the cumulative amortization of any difference between the original amount and the amount repayable at maturity (premium, discount), amortized using the effective interest method over the term of the financial asset or liability.

In the case of current receivables and liabilities, amortized cost generally corresponds to the principal or repayment amount.

Fair value generally corresponds to the market or quoted market price. If no active market exists, fair value is determined using other observable inputs as far as possible. If no observable inputs are available, fair value is determined using valuation techniques, such as by discounting the future cash flows at the market interest rate, or by using recognized option pricing models, and, as far as possible, verified by confirmations from the banks that handle the transactions.

The fair value option for financial assets and financial liabilities is not used in the Volkswagen Group.

Financial assets and financial liabilities are generally presented at their gross amounts and only offset if the Volkswagen Group currently has a legally enforceable right to set off the amounts and intends to settle on a net basis.

Subsidiaries, associates and joint ventures that are not consolidated for reasons of materiality do not fall within the scope of IAS 39 and IFRS 7. Other equity investments that are required by IAS 39.46(c) to be measured at cost, net of any impairment losses to be recognized, are presented as “measured at fair value”.

### LOANS AND RECEIVABLES, FINANCIAL LIABILITIES AND HELD-TO-MATURITY FINANCIAL ASSETS

Loans, receivables and financial liabilities, as well as held-to-maturity financial assets, are measured at amortized cost, unless hedged. Specifically, these relate to:

- receivables from financing business;
- trade receivables and payables;
- other receivables and financial assets and liabilities;
- financial liabilities; and
- cash, cash equivalents and time deposits.

#### AVAILABLE-FOR-SALE FINANCIAL ASSETS

Available-for-sale financial assets are either allocated specifically to this category or are financial assets that cannot be assigned to any other category.

Available-for-sale financial assets (debt instruments) are carried at fair value. Changes in fair value are recognized directly in equity, net of deferred taxes. Prolonged changes in the fair value of debt instruments (impairment losses, foreign exchange gains and losses, interest calculated using the effective interest method) are recognized in profit or loss.

Other equity investments (shares representing an ownership interest of less than 20% as a rule) are also classified as available-for-sale financial assets. They are recognized at cost in the consolidated financial statements if there is no active market for those shares and fair values cannot be reliably ascertained without undue cost or effort. The lower present value of the estimated future cash flows is recognized if there are indications of impairment. There is currently no intention to sell these financial assets. Foreign exchange gains and losses attributable to equity instruments are recognized in other comprehensive income.

#### DERIVATIVES AND HEDGE ACCOUNTING

Volkswagen Group companies use derivatives to hedge balance sheet items and future cash flows (hedged items). Appropriate derivatives such as swaps, forward transactions and options are used as hedging instruments. The criteria for the application of hedge accounting are that the hedging relationship between the hedged item and the hedging instrument is clearly documented and that the hedge is highly effective.

The accounting treatment of changes in the fair value of hedging instruments depends on the nature of the hedging relationship. In the case of hedges against the risk of change in the carrying amount of balance sheet items (fair value hedges), both the hedging instrument and the hedged risk portion of the hedged item are measured at fair value. Several risk portions of hedged items are grouped into a portfolio if appropriate. In the case of a fair value portfolio hedge, the changes in fair value are accounted for in the same way as for a fair value hedge of an individual underlying. Gains or losses from the remeasurement of hedging instruments and hedged items are recognized in profit or loss. In the case of hedges of future cash flows (cash flow hedges), the hedging instruments are also measured at fair value. Gains or losses from remeasurement of the effective portion of the derivative are initially recognized in the reserve for cash flow hedges directly in equity, and are only recognized in the income statement when the hedged item is recognized in profit or loss; the ineffective portion of a cash flow hedge is recognized immediately in profit or loss.

Derivatives used by the Volkswagen Group for financial management purposes to hedge against interest rate, foreign currency, commodity, or price risks, but that do not meet the strict hedge accounting criteria of IAS 39, are classified as financial assets or liabilities at fair value through profit or loss (also referred to below as derivatives not included in hedging relationships). This also applies to options on shares. External hedging instruments of intragroup hedged items that are subsequently eliminated in the consolidated financial statements are also assigned to this category as a general rule. Assets and liabilities measured at fair value through profit or loss consist of derivatives or components of derivatives that are not included in hedge accounting.

These relate primarily to the interest component of currency forwards used to hedge sales revenue, commodity futures and currency forwards relating to commodity futures. Gains and losses from the remeasurement and settlement of financial instruments at fair value through profit or loss are reported in the financial result.

#### RECEIVABLES FROM FINANCE LEASES

Where a Group company is the lessor – generally of vehicles – a receivable in the amount of the net investment in the lease is recognized in the case of finance leases, in other words where substantially all the risks and rewards are transferred to the lessee.

#### OTHER RECEIVABLES AND FINANCIAL ASSETS

Other receivables and financial assets (except for derivatives) are recognized at amortized cost.

#### IMPAIRMENT LOSSES ON FINANCIAL INSTRUMENTS

Default risk on loans and receivables in the financial services business is accounted for by recognizing specific valuation allowances and portfolio-based valuation allowances.

More specifically, in the case of significant individual receivables (e.g. dealer finance receivables and fleet customer business receivables) specific valuation allowances are recognized in accordance with Group-wide standards in the amount of the incurred loss. A potential impairment is assumed in the case of a number of situations such as delayed payment over a certain period, the institution of enforcement measures, the threat of insolvency or overindebtedness, application for or the opening of bankruptcy proceedings, or the failure of reorganization measures.

Portfolio-based valuation allowances are recognized by grouping together insignificant receivables and significant individual receivables for which there is no indication of impairment into homogeneous portfolios on the basis of comparable credit risk features and allocating them by risk class. As long as no definite information is available as to which receivables are in default, average historical default probabilities for the portfolio concerned are used to calculate the amount of the valuation allowances.

As a matter of principle, specific valuation allowances are recognized on receivables outside the Financial Services segment.

Valuation allowances on receivables are regularly recognized in separate allowance accounts.

An impairment loss is recognized on available-for-sale financial assets if there is objective evidence of permanent impairment. In the case of equity instruments, evidence of impairment is taken to exist, among other things, if the fair value decreases below cost significantly (by more than 20%) or the decrease is prolonged (by more than 10% of the average market prices over one year). If impairment is identified, the cumulative loss is recognized in the reserve and charged to profit and loss. In the case of equity instruments, reversals of impairment losses are taken directly to equity. Impairment losses are recognized on debt instruments if a decrease in the future cash flows of the financial asset is expected. An increase in the risk-free interest rate or an increase in credit risk premiums is not in itself evidence of impairment.

#### DEFERRED TAXES

Deferred tax assets are generally recognized for tax-deductible temporary differences between the tax base of assets and liabilities and their carrying amounts in the consolidated balance sheet, as well as on tax loss carryforwards and tax credits provided it is probable that they can be used in future periods. Deferred tax liabilities are generally recognized for all taxable temporary differences between the tax base of assets and liabilities and their carrying amounts in the consolidated balance sheet.

Deferred tax liabilities and assets are recognized in the amount of the expected tax liability or tax benefit, as appropriate, in subsequent fiscal years, based on the expected enacted tax rate at the time of realization. The tax consequences of dividend payments are generally not taken into account until the resolution on appropriation of earnings available for distribution has been adopted.

Deferred tax assets that are unlikely to be realized within a clearly predictable period are reduced by valuation allowances.

Deferred tax assets for tax loss carryforwards are usually measured on the basis of future taxable income over a planning period of five fiscal years.

Deferred tax assets and deferred tax liabilities are offset where taxes are levied by the same taxation authority and relate to the same tax period.

## **INVENTORIES**

Raw materials, consumables and supplies, merchandise, work in progress and self-produced finished goods reported in inventories are carried at the lower of cost or net realizable value. Cost is determined on the basis of the direct and indirect costs that are directly attributable. Borrowing costs are not capitalized. The measurement of same or similar inventories is generally based on the weighted average cost method.

## **NONCURRENT ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS**

Under IFRS 5, noncurrent assets or groups of assets and liabilities (disposal groups) are classified as held for sale if their carrying amounts will be recovered principally through a sale transaction rather than through continuing use. Such assets are carried at the lower of their carrying amount and fair value less costs to sell, and are presented separately in current assets and liabilities in the balance sheet.

Discontinued operations are components of an entity that have either been disposed of or are classified as held for sale. The assets and liabilities of operations that are held for sale represent disposal groups that must be measured and reported using the same principles as noncurrent assets held for sale. The income and expenses from discontinued operations are presented in the income statement as profit or loss from discontinued operations below the profit or loss from continuing operations. Corresponding disposal gains or losses are contained in the profit or loss from discontinued operations. The prior-year figures in the income statement are adjusted accordingly.

## **PENSION PROVISIONS**

The actuarial valuation of pension provisions is based on the projected unit credit method stipulated by IAS 19 for defined benefit plans. The valuation is not only based on pension payments and vested entitlements known at the balance sheet date, but also reflects future salary and pension trends, as well as experience-based staff turnover rates. Remeasurements are recognized in retained earnings in other comprehensive income, net of deferred taxes.

## **PROVISIONS FOR INCOME TAXES**

Tax provisions contain obligations resulting from current income taxes. Deferred taxes are presented in separate items of the balance sheet and income statement. Provisions are recognized for potential tax risks on the basis of the best estimate of the liability.

## **SHARE-BASED PAYMENT**

The share-based payment consists of phantom shares and performance shares. The obligations arising from the share-based payment are accounted for as cash-settled plans in accordance with IFRS 2. The cash-settled share-based payments are measured at fair value until maturity. Fair value is determined using a recognized valuation technique. The compensation cost is allocated over the vesting period.

## **OTHER PROVISIONS**

In accordance with IAS 37, provisions are recognized where a present obligation exists to third parties as a result of a past event, where a future outflow of resources is probable and where a reliable estimate of that outflow can be made.

Provisions not resulting in an outflow of resources in the year immediately following are recognized at their settlement value discounted to the balance sheet date. Discounting is based on market interest rates. An average discount rate of 0.08% (previous year: 0.04%) was used in the Eurozone. The settlement value also reflects cost increases expected at the balance sheet date.

Provisions are not offset against claims for reimbursement.

We recognize insurance contracts that form part of the insurance business in accordance with IFRS 4. Reinsurance acceptances are accounted for without any time delay in the year in which they arise. Provisions are generally recognized based on the cedant's contractual duties. Estimation techniques based on assumptions about future changes in claims are used to calculate the claims provision. Other technical provisions relate to the provision for cancellations.

The share of the provisions attributable to reinsurers is calculated in accordance with the contractual agreements with the retrocessionaries and reported under other assets.

#### **CONTINGENT LIABILITIES**

If the criteria for recognizing a provision are not met, but the outflow of financial resources is not improbable, such obligations are disclosed in the notes to the consolidated financial statements (see the "Contingent liabilities" section). Contingent liabilities are only recognized if the obligations are more certain, i.e. the outflow of financial resources has become probable and their amount can be reliably estimated.

#### **LIABILITIES**

Noncurrent liabilities are recorded at amortized cost in the balance sheet. Differences between historical cost and the repayment amount are amortized using the effective interest method.

Liabilities to members of partnerships from puttable shares are recognized in the income statement at the present value of the redemption amount at the balance sheet date.

Liabilities under finance leases are carried at the present value of the lease payments.

Current liabilities are recognized at their repayment or settlement value.

#### **REVENUE AND EXPENSE RECOGNITION**

Sales revenue, interest and commission income from financial services and other operating income are recognized only when the relevant service has been rendered or the goods have been delivered, that is, when the risk has passed to the customer, the amount of sales revenue can be reliably determined and settlement of the amount can be assumed. Revenue is reported net of sales allowances (discounts, rebates, or customer bonuses). Sales revenue from financing and lease agreements is recognized using the effective interest method. If non-interest-bearing or low-interest vehicle financing arrangements are agreed, sales revenue is reduced by the interest benefits granted. Customer financing and finance lease income is determined using the effective interest method and recognized under sales revenue. Sales revenue from extended warranties or maintenance agreements is recognized when deliveries take place or services are rendered. In the case of prepayments, deferred income is recognized proportionately by reference to the costs expected to be incurred, based on experience. Revenue is recognized on a straight-line basis if there is insufficient experience. If the expected costs exceed the accrued sales revenue, a loss is recognized from these agreements.

If a contract comprises several separately identifiable components (multiple-element arrangements), these components are recognized separately in accordance with the principles outlined above.

Income from assets for which a Group company has a buy-back obligation is recognized only when the assets have definitively left the Group. If a fixed repurchase price was agreed when the contract was entered into, the difference between the selling price and the present value of the repurchase price is recognized as income ratably over the term of the contract. Prior to that time, the assets are carried as inventories in the case of short contract terms and as lease assets in the case of long contract terms.

Cost of sales includes the costs incurred to generate the sales revenue and the cost of goods purchased for resale. This item also includes the costs of additions to warranty provisions. Research and development costs not eligible for capitalization in the period and amortization of development costs are likewise carried under cost of sales. Reflecting the presentation of interest and commission income in sales revenue, the interest and commission expenses attributable to the financial services business are presented in cost of sales.

Construction contracts are recognized using the percentage of completion (PoC) method, under which revenue and cost of sales are recognized by reference to the stage of completion at the end of the reporting period, based on the contract revenue agreed with the customer and the expected contract costs. As a rule, the stage of completion is determined as the proportion that contract costs incurred by the end of the reporting period bear to the estimated total contract costs (cost-to-cost method). In certain cases, in particular those involving innovative, complex contracts, the stage of completion is measured using contractually agreed milestones (milestone method). If the outcome of a construction contract cannot yet be estimated reliably, contract revenue is recognized only in the amount of the contract costs incurred to date (zero profit method). In the balance sheet, contract components whose revenue is recognized using the percentage of completion method are reported as trade receivables, net of prepayments received. Expected

losses from construction contracts are recognized immediately in full as expenses by recognizing impairment losses on recognized contract assets, and additionally by recognizing provisions for amounts in excess of the impairment losses.

Dividend income is recognized on the date when the dividend is legally approved.

#### **GOVERNMENT GRANTS**

Government grants related to assets are deducted when arriving at the carrying amount of the asset and are recognized in profit or loss over the life of the depreciable asset as a reduced depreciation expense. If the Group becomes entitled to a grant subsequently, the amount of the grant attributable to prior periods is recognized in profit or loss.

Government grants related to income, i.e. that compensate the Group for expenses incurred, are recognized in profit or loss for the period in those items in which the expenses to be compensated by the grants are also recognized. Grants in the form of nonmonetary assets (e.g. the use of land free of charge or the transfer of resources free of charge) are disclosed as a memo item.

#### **ESTIMATES AND ASSUMPTIONS BY MANAGEMENT**

Preparation of the consolidated financial statements requires management to make certain estimates and assumptions that affect the reported amounts of assets and liabilities, and income and expenses, as well as the related disclosure of contingent assets and liabilities of the reporting period. The estimates and assumptions relate largely to the following matters:

The impairment testing of nonfinancial assets (especially goodwill, brand names, capitalized development costs and special tools) and equity-accounted investments, or investments accounted at cost, and the measurement of options on shares in companies that are not traded in an active market require assumptions about the future cash flows during the planning period, and possibly beyond it, as well as about the discount rate to be applied. The estimates made in order to separate cash flows mainly relate to future market shares, the trend in the respective markets and the profitability of the Volkswagen Group's products. In addition, the recoverability of the Group's lease assets depends in particular on the residual value of the leased vehicles after expiration of the lease term, because this represents a significant portion of the expected cash flows. More detailed information on impairment tests and the measurement parameters used for those tests can be found in the explanations on the accounting policies for intangible assets.

If there are no observable market inputs, the fair values of assets acquired and liabilities assumed in a business combination are measured using recognized valuation techniques, such as the relief-from-royalty method or the residual method.

Impairment testing of financial assets requires estimates about the extent and probability of occurrence of future events. As far as possible, estimates are derived from past experience taking into account current market data as well as rating categories and scoring information. In the case of financial services receivables, both specific and portfolio-based valuation allowances are recognized. The more detailed balance sheet disclosures on IFRS 7 (Financial Instruments) contain an overview of these specific and portfolio-based valuation allowances.

Accounting for provisions is also based on estimates of the extent and probability of occurrence of future events, as well as estimates of the discount rate. As far as possible, these are also based on past experience or external opinions. The assumptions applied in the measurement of pension provisions are described in the "Provisions for pensions and other post-employment benefits" section. Remeasurements are recognized in other comprehensive income and do not affect profit or loss reported in the income statement. Any change in the estimates of the amount of other provisions is always recognized in profit or loss. The provisions are regularly adjusted to reflect new information obtained. The use of expected values means that additional amounts must frequently be recognized for provisions, or that unused provisions are reversed. Reversals of provisions are recognized as other operating income, whereas expenses relating to the recognition of provisions are allocated directly to the functions. Warranty claims from sales transactions are calculated on the basis of losses to date, estimated future losses and the policy on ex gratia arrangements. This requires assumptions to be made about the nature and extent of future guarantee and ex gratia claims. Assumptions were made in respect of the provisions recognized in connection with the diesel issues. These depend on the series, model year and country concerned and relate in particular to the effort, material costs and hourly wage rates involved, or to vehicle values in the case of repurchases. In addition, assumptions are made about future

resale prices of repurchased vehicles. They are based on qualified estimates, which are based in turn on external data, and also reflect additional information available internally, such as values derived from past experience. An overview of other provisions can be found in the “Noncurrent and current other provisions” section. Further information on the legal proceedings and on the legal risks associated with the diesel issue can be found in the “Litigation” section. The put options and compensation rights of free float shareholders recognized within liabilities depend in particular on the outcome of the MAN award proceedings. The liability was based on estimates of the length of the award proceedings and the amount of the put options and compensation rights. The length was estimated based on the fact that proceedings take seven years on average. The amount of the put options and compensation rights of MAN’s free float shareholders is derived from the cash settlement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act).

Government grants are recognized based on an assessment as to whether there is reasonable assurance that the Group companies will fulfill the attached conditions and the grants will be awarded. This assessment is based on the nature of the legal entitlement and past experience.

Estimates of the useful life of finite-lived assets are based on past experience and are reviewed regularly. Where estimates are modified the residual useful life is adjusted and an impairment loss is recognized, if necessary.

Measuring deferred tax assets requires assumptions regarding future taxable income and the timing of the realization of deferred tax assets.

The estimates and assumptions are based on underlying assumptions that reflect the current state of available knowledge. Specifically, the expected future development of business was based on the circumstances known at the date of preparation of these consolidated financial statements and a realistic assessment of the future development of the global and sector-specific environment. Our estimates and assumptions remain subject to a high degree of uncertainty because future business developments are subject to uncertainties that in part cannot be influenced by the Group. This applies in particular to short- and medium-term cash flow forecasts and to the discount rates used.

Developments in this environment that differ from the assumptions and that cannot be influenced by management could result in amounts that differ from the original estimates. If actual developments differ from the expected developments, the underlying assumptions and, if necessary, the carrying amounts of the assets and liabilities affected are adjusted.

Global gross domestic product (GDP) rose by 3.2% (previous year: 2.5%) in 2017. In our forecasts, we assume that global economic growth will weaken slightly in 2018. As a result, from today’s perspective, we are not expecting material adjustments in the following fiscal year in the carrying amounts of the assets and liabilities reported in the consolidated balance sheet.

Estimates and assumptions by management were based in particular on assumptions relating to the development of the general economic environment, the automotive markets and the legal environment. These and further assumptions are explained in detail in the Report on Expected Developments, which is part of the Group Management Report.

## Segment reporting

Segments are identified on the basis of the Volkswagen Group's internal management and reporting. In line with the Group's multibrand strategy, each of its brands (operating segments) is managed by its own board of management. The Group targets and requirements laid down by the Board of Management of Volkswagen AG must be complied with. Segment reporting comprises four reportable segments: Passenger Cars, Commercial Vehicles, Power Engineering and Financial Services.

The activities of the Passenger Cars segment cover the development of vehicles and engines, the production and sale of passenger cars, and the corresponding genuine parts business. Given the high degree of technological and economic interlinking in the production network of the individual brands, the Passenger Cars reporting segment combines the Volkswagen Group's individual car brands to a single reportable segment. Furthermore, there is collaboration within key areas such as procurement, research and development or treasury.

The Commercial Vehicles segment primarily comprises the development, production and sale of light commercial vehicles, trucks and buses, the corresponding genuine parts business and related services. Just as in the case of the car brands, there is collaboration within the areas procurement, development and sale. The aim is to achieve further forms of interlinking.

The activities of the Power Engineering segment consist of the development and production of large-bore diesel engines, turbo compressors, industrial turbines and chemical reactor systems, as well as the production of gear units, propulsion components and testing systems.

The activities of the Financial Services segment comprise dealer and customer financing, leasing, banking and insurance activities, fleet management and mobility services. In this segment, combinations occur especially while taking into account the comparability of the type of services as well as the regulatory situation permits.

Purchase price allocation for companies acquired is allocated directly to the corresponding segments.

At Volkswagen, segment profit or loss is measured on the basis of the operating result.

In the segment reporting, the share of the result of joint ventures is contained in the share of the result of equity-accounted investments in the corresponding segments.

The reconciliation contains activities and other operations that by definition do not constitute segments. It also includes the unallocated Group financing activities. Consolidation adjustments between the segments are also contained in the reconciliation.

Investments in intangible assets, property, plant and equipment, and investment property are reported net of investments under finance leases.

As a matter of principle, business relationships between the companies within the segments of the Volkswagen Group are transacted at arm's length prices.

## REPORTING SEGMENTS 2016

€ million	Passenger Cars	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue from external customers	160,461	25,385	3,590	27,884	217,320	-54	217,267
Intersegment sales revenue	17,354	6,695	3	3,367	27,418	-27,418	-
Total sales revenue	177,815	32,080	3,593	31,251	244,739	-27,472	217,267
Depreciation and amortization	10,846	2,293	368	6,224	19,731	-159	19,572
Impairment losses	886	126	3	491	1,506	-137	1,368
Reversal of impairment losses	152	0	-	92	245	-139	106
Segment result (operating result)	5,235	718	-217	2,435	8,171	-1,068	7,103
Share of the result of equity-accounted investments	3,147	25	-	64	3,236	261	3,497
Net interest result and other financial result	-1,674	-379	-8	-91	-2,152	-1,157	-3,308
Equity-accounted investments	7,349	418	-	849	8,616	-	8,616
Investments in intangible assets, property, plant and equipment, and investment property	15,891	2,433	194	357	18,875	27	18,902

## REPORTING SEGMENTS 2017

€ million	Passenger Cars	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue from external customers	169,513	27,632	3,280	30,191	230,618	64	230,682
Intersegment sales revenue	18,892	7,568	3	3,541	30,004	-30,004	-
Total sales revenue	188,405	35,200	3,283	33,733	260,621	-29,939	230,682
Depreciation and amortization	11,363	2,557	371	6,797	21,089	-147	20,941
Impairment losses	704	2	0	574	1,280	0	1,280
Reversal of impairment losses	14	1	-	41	56	-	56
Segment result (operating result)	12,644	1,892	-55	2,673	17,153	-3,335	13,818
Share of the result of equity-accounted investments	3,390	83	1	9	3,482	-	3,482
Net interest result and other financial result	-1,920	-220	-2	-180	-2,321	-1,067	-3,388
Equity-accounted investments	6,724	753	18	710	8,205	-	8,205
Investments in intangible assets, property, plant and equipment, and investment property	15,713	1,915	159	421	18,208	104	18,313

**RECONCILIATION**

€ million	2017	2016
<b>Segment sales revenue</b>	<b>260,621</b>	<b>244,739</b>
Unallocated activities	948	749
Group financing	25	42
Consolidation	-30,912	-28,263
<b>Group sales revenue</b>	<b>230,682</b>	<b>217,267</b>
 <b>Segment result (operating result)</b>	 <b>17,153</b>	 <b>8,171</b>
Unallocated activities	10	86
Group financing	-16	22
Consolidation	-3,328	-1,176
<b>Operating result</b>	<b>13,818</b>	<b>7,103</b>
<b>Financial result</b>	<b>94</b>	<b>189</b>
<b>Consolidated result before tax</b>	<b>13,913</b>	<b>7,292</b>

**BY REGION 2016**

€ million	Germany	Europe/Other markets <sup>1</sup>	North America	South America	Asia-Pacific	Total
Sales revenue from external customers	43,634	94,445	35,454	7,973	35,761	217,267
Intangible assets, property, plant and equipment, lease assets and investment property	84,525	40,717	23,958	3,320	3,064	155,583

<sup>1</sup> Excluding Germany.

**BY REGION 2017**

€ million	Germany	Europe/Other markets <sup>1</sup>	North America	South America	Asia-Pacific	Total
Sales revenue from external customers	44,333	98,420	38,818	9,988	39,123	230,682
Intangible assets, property, plant and equipment, lease assets and investment property	89,594	37,050	26,076	2,851	2,812	158,384

<sup>1</sup> Excluding Germany.

Allocation of sales revenue to the regions follows the destination principle.

## Income statement disclosures

### 1. Sales revenue

#### STRUCTURE OF GROUP SALES REVENUE

	€ million	2017	2016
Vehicles	145,958	137,293	
Genuine parts	15,628	15,220	
Used vehicles and third-party products	13,355	13,324	
Engines, powertrains and parts deliveries	11,318	9,770	
Power Engineering	3,280	3,590	
Motorcycles	601	589	
Leasing business	24,570	22,306	
Interest and similar income	7,119	6,695	
Other sales revenue	8,853	8,481	
	<b>230,682</b>	<b>217,267</b>	

For segment reporting purposes, the sales revenue of the Group is presented by segment and market.

Other sales revenue comprises revenue from workshop services and license revenue, among other things.

Sales revenue from construction contracts amounted to €965 million (previous year: €1,069 million) and mainly related to the Power Engineering segment.

### 2. Cost of sales

Cost of sales includes interest expenses of €1,961 million (previous year: €1,930 million) attributable to the financial services business. This item also includes impairment losses on intangible assets (primarily development costs), property, plant and equipment (primarily other equipment, operating and office equipment), and lease assets in the amount of €1,185 million (previous year: €1,369 million). The impairment losses amounting to a total of €700 million recognized during the reporting period on intangible assets and items of property, plant and equipment result in particular from lower values in use of various products in the Passenger Cars segment, from market and exchange rate risks, and in particular from expected declines in volumes. The impairment losses on lease assets in the amount of €485 million (including €37 million reported in current lease assets), which are attributable predominantly to the Financial Services segment, are based on constantly updated internal and external information that is factored into the forecast residual values of the vehicles.

Government grants related to income amounted to €424 million in the fiscal year (previous year: €435 million) and were generally allocated to the functions.

### 3. Distribution expenses

Distribution expenses amounting to €22.7 billion (previous year: €22.7 billion) include nonstaff overheads and personnel costs, and depreciation and amortization applicable to the distribution function, as well as the costs of shipping, advertising and sales promotions.

### 4. Administrative expenses

The administrative expenses of €8.3 billion (previous year: €7.3 billion) mainly include nonstaff overheads and personnel costs, as well as depreciation and amortization applicable to the administrative function.

### 5. Other operating income

€ million	2017	2016
Income from reversal of valuation allowances on receivables and other assets	1,043	847
Income from reversal of provisions and accruals	4,384	3,738
Income from foreign currency hedging derivatives	2,259	1,739
Income from foreign exchange gains	2,656	2,842
Income from sale of promotional material	502	440
Income from cost allocations	1,386	1,222
Income from investment property	16	14
Gains on asset disposals and the reversal of impairment losses	212	363
Miscellaneous other operating income	2,041	1,843
	<b>14,500</b>	<b>13,049</b>

Income from the reversal of provisions and accrued liabilities is mainly attributable to a reduction in provisions. A further breakdown can be found in the “Noncurrent and current other provisions” section. Foreign exchange gains mainly comprise gains from changes in exchange rates between the dates of recognition and payment of receivables and liabilities denominated in foreign currencies, as well as exchange rate gains resulting from measurement at the closing rate. Foreign exchange losses from these items are included in other operating expenses.

## 6. Other operating expenses

€ million	2017	2016
Valuation allowances on receivables and other assets	1,650	1,787
Losses from foreign currency hedging derivatives	1,753	2,964
Foreign exchange losses	2,839	3,077
Expenses from cost allocations	609	542
Expenses for termination agreements	35	424
Losses on disposal of noncurrent assets	175	144
Miscellaneous other operating expenses	5,197	7,970
	<b>12,259</b>	<b>16,907</b>

Miscellaneous other operating expenses consist of litigation expenses of €1.0 billion (previous year: €5.1 billion) in connection with the diesel issue. In the previous year, they had also included provisions of €0.4 billion for the antitrust proceedings that the European Commission opened against European truck manufacturers including MAN and Scania. The prior-year expenses for termination agreements result primarily from the restructuring expenses for the South American market and at MAN. In addition, the changes in the currency hedging derivatives are due to the exchange rate changes between the trade price and the price on realization; this applies in particular to the US dollar, the Chinese renminbi and sterling.

## 7. Share of the result of equity-accounted investments

€ million	2017	2016
Share of profits of equity-accounted investments	3,519	3,563
of which: from joint ventures	(3,327)	(3,534)
of which: from associates	(191)	(29)
Share of losses of equity-accounted investments	36	66
of which: from joint ventures	(2)	–
of which: from associates	(34)	(66)
	<b>3,482</b>	<b>3,497</b>

## 8. Interest result

€ million	2017	2016 <sup>1</sup>
<b>Interest income</b>	<b>951</b>	<b>1,285</b>
Other interest and similar income	839	915
Income from valuation of interest derivatives	113	370
<b>Interest expenses</b>	<b>-2,317</b>	<b>-2,955</b>
Other interest and similar expenses	-1,305	-1,400
Expenses from valuation of interest derivatives	-368	-448
Interest cost included in lease payments	-29	-29
Interest result on other liabilities	-13	-347
Net interest on the net defined benefit liability	-602	-731
<b>Interest result</b>	<b>-1,366</b>	<b>-1,670</b>

<sup>1</sup> Prior-year figures adjusted.

To enhance comparability, the structure within the financial result has been changed. The presentation of finance costs has been replaced with the interest result. The new structure has led to changes in various items in the financial result. Specifically, the realized expenses from loan receivables and liabilities in foreign currency reported in the finance cost item in previous years have been reclassified to other financial result. In addition, income and expenses from the measurement and realization of interest rate risk, which were previously reported in income and expenses from fair value changes relating to hedging transactions within hedge accounting are now presented in the interest result. The prior-year figures for other financial result have been adjusted accordingly by an amount of €1.6 billion.

## 9. Other financial result

€ million	2017	2016
Income from profit and loss transfer agreements	35	33
Cost of loss absorption	-76	-24
Other income from equity investments	71	110
Other expenses from equity investments	-289	-155
Income from marketable securities and loans <sup>1,2</sup>	-222	-58
Realized income of loan receivables and payables in foreign currency	734	882
Realized expenses of loan receivables and payables in foreign currency	-1,107	-810
Gains and losses from remeasurement and impairment of financial instruments <sup>1</sup>	-475	-303
Gains and losses from fair value changes of derivatives not included in hedge accounting	-810	-1,148
Gains and losses from fair value changes of derivatives included in hedge accounting <sup>1</sup>	117	-166
<b>Other financial result<sup>1</sup></b>	<b>-2,022</b>	<b>-1,638</b>

<sup>1</sup> Prior-year figures adjusted.

<sup>2</sup> Including disposal gains/losses.

## 10. Income tax income/expense

### COMPONENTS OF TAX INCOME AND EXPENSE

€ million	2017	2016
Current tax expense, Germany	614	885
Current tax expense, abroad	2,590	2,388
<b>Current income tax expense</b>	<b>3,205</b>	<b>3,273</b>
of which prior-period income (−)/expense (+)	(216)	(188)
Deferred tax income (−)/expense (+), Germany	385	−736
Deferred tax income (−)/expense (+), abroad	−1,315	−625
<b>Deferred tax income (−)/expense (+)</b>	<b>−930</b>	<b>−1,361</b>
<b>Income tax income/expense</b>	<b>2,275</b>	<b>1,912</b>

The statutory corporation tax rate in Germany for the 2017 assessment period was 15%. Including trade tax and the solidarity surcharge, this resulted in an aggregate tax rate of 29.9% (previous year: 29.9%).

A tax rate of 29.9% (previous year: 29.9%) was used to measure deferred taxes in the German consolidated tax group.

The local income tax rates applied for companies outside Germany vary between 0% and 45%. In the case of split tax rates, the tax rate applicable to undistributed profits is applied.

The realization of tax benefits from tax loss carryforwards from previous years resulted in a reduction in current income taxes in 2017 of €422 million (previous year: €146 million).

Previously unused tax loss carryforwards amounted to €14,931 million (previous year: €17,686 million). Tax loss carryforwards amounting to €9,660 million (previous year: €11,494 million) can be used indefinitely, while €3,834 million (previous year: €4,237 million) must be used within the next ten years. There are additional tax loss carryforwards amounting to €1,437 million (previous year: €1,956 million) that can be used within a period of 15 or 20 years. Tax loss carryforwards of €7,222 million (previous year: €6,380 million) were estimated not to be usable overall. Of these, €343 million (previous year: €276 million) will expire within five years, €2,152 million (previous year: €2,341 million) within 6 to 20 years and €93 million (previous year: €38 million) after 20 years. Tax loss carryforwards of €4,634 million (previous year: €3,725 million) that are estimated not to be usable will not expire.

The benefit arising from previously unrecognized tax losses or tax credits of a prior period that is used to reduce current tax expense in the current fiscal year amounts to €114 million (previous year: €135 million). Deferred tax expense was reduced by €75 million (previous year: €211 million) because of a benefit arising from previously unrecognized tax losses and tax credits of a prior period. Deferred tax expense resulting from the write-down of a deferred tax asset amounts to €130 million (previous year: €297 million). Deferred tax income resulting from the reversal of a write-down of deferred tax assets amounts to €40 million (previous year: €304 million).

Tax credits granted by various countries amounted to €500 million (previous year: €756 million).

No deferred tax assets were recognized for deductible temporary differences of €1,028 million (previous year: €1,533 million) and for tax credits of €228 million (previous year: €353 million) that would expire in the next 20 years, or for tax credits of €0 million (previous year: €65 million) that will not expire.

In accordance with IAS 12.39, deferred tax liabilities of €266 million (previous year: €326 million) for temporary differences and undistributed profits of Volkswagen AG subsidiaries were not recognized because control exists.

Due to the change in the statutory provisions in Germany, a refund claim for corporation tax was recognized as a current tax asset for the first time in fiscal year 2006. As of the balance sheet date, the previous year's refund claim (€134 million) had been amortized in full.

Deferred tax income resulting from changes in tax rates amounted to €1,044 million at Group level (previous year: expense of €120 million). This is primarily attributable to the effects of the tax reform in the United States.

Deferred taxes in respect of temporary differences and tax loss carryforwards of €8,344 million (previous year: €9,890 million) were recognized without being offset by deferred tax liabilities in the same amount. The deferred tax assets of companies within the German tax group were recognized due to positive results in the past and are included in this analysis. The companies concerned are expecting positive tax income in the future, following losses in the reporting period or the previous year.

€3,655 million (previous year: €5,486 million) of the deferred taxes recognized in the balance sheet was credited to equity and relates to other comprehensive income. €2 million (previous year: €3 million) of this figure is attributable to noncontrolling interests. In the fiscal year under review, changes of €–3 million arising from items that will not be reclassified to profit or loss were recognized directly in equity. Changes in deferred taxes classified by balance sheet item are presented in the statement of comprehensive income.

In fiscal year 2017, tax effects of €8 million resulting from equity transaction costs were recognized in equity.

#### DEFERRED TAXES CLASSIFIED BY BALANCE SHEET ITEM

The following recognized deferred tax assets and liabilities were attributable to recognition and measurement differences in the individual balance sheet items and to tax loss carryforwards:

€ million	DEFERRED TAX ASSETS		DEFERRED TAX LIABILITIES	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Intangible assets	363	302	10,055	9,884
Property, plant and equipment, and lease assets	4,567	4,387	6,017	8,315
Noncurrent financial assets	35	26	43	24
Inventories	2,653	2,223	784	792
Receivables and other assets (including Financial Services Division)	1,879	2,107	8,889	7,273
Other current assets	3,884	2,768	42	92
Pension provisions	6,652	6,776	24	22
Liabilities and other provisions	9,603	10,746	4,109	2,750
Valuation allowances on deferred tax assets from temporary differences	–327	–368	–	–
Temporary differences, net of valuation allowances	29,307	28,967	29,963	29,152
Tax loss carryforwards, net of valuation allowances	2,090	3,365	–	–
Tax credits, net of valuation allowances	273	337	–	–
<b>Value before consolidation and offset</b>	<b>31,670</b>	<b>32,670</b>	<b>29,963</b>	<b>29,152</b>
of which noncurrent	(18,858)	(21,736)	(22,863)	(23,681)
Offset	24,816	25,198	24,816	25,198
Consolidation	2,956	2,284	489	791
<b>Amount recognized</b>	<b>9,810</b>	<b>9,756</b>	<b>5,636</b>	<b>4,745</b>

In accordance with IAS 12, deferred tax assets and liabilities are offset if, and only if, they relate to income taxes levied by the same taxation authority and relate to the same tax period.

The tax expense reported for 2017 of €2,275 million (previous year: €1,912 million) was €1,885 million lower (previous year: €268 million lower) than the expected tax expense of €4,160 million that would have resulted from application of a tax rate for the Group of 29.9% (previous year: 29.9%) to the earnings before tax of the Group.

#### RECONCILIATION OF EXPECTED TO EFFECTIVE INCOME TAX

€ million	2017	2016
<b>Profit before tax</b>	<b>13,913</b>	<b>7,292</b>
<b>Expected income tax income (–) / expense (+) (tax rate 29.9%; previous year: 29.9%)</b>	<b>4,160</b>	<b>2,180</b>
Reconciliation:		
Effect of different tax rates outside Germany	-541	-446
Proportion of taxation relating to:		
tax-exempt income	-1,237	-1,226
expenses not deductible for tax purposes	407	409
effects of loss carryforwards and tax credits	476	35
permanent differences	5	12
Tax credits	-50	-137
Prior-period tax expense	-212	234
Effect of tax rate changes	-1,044	139
Nondeductible withholding tax	383	437
Other taxation changes	-73	275
<b>Effective income tax expense</b>	<b>2,275</b>	<b>1,912</b>

The tax expense recognized in the fiscal year was reduced by €1,007 million on the basis of the tax reform passed in the United States, which envisages a reduction in the corporate income tax rate from 35% to 21%, among other things. The reduction resulted mainly from the remeasurement of deferred taxes of subsidiaries in the United States.

## 11. Earnings per share

Basic earnings per share are calculated by dividing earnings attributable to Volkswagen AG shareholders by the weighted average number of ordinary and preferred shares outstanding during the reporting period. Since the basic and diluted number of shares is identical, basic earnings per share also correspond to diluted earnings per share. Article 27(2) No. 1 of the Articles of Association of Volkswagen AG sets out that, even in the event of a deficit, a preferred dividend of €0.11 per preferred share must be paid out in the subsequent fiscal years based on the cumulative arrangement if no dividend is paid for the year under review; consequently, this must be factored into the calculation of earnings per share for the current fiscal year. The dividend proposal that is based on Volkswagen AG's net income for the year under the German Commercial Code is not relevant for the calculation of earnings per share in accordance with IAS 33. The distribution of further dividends in accordance with Article 27(2) Nos. 2 and 3 of the Articles of Association of Volkswagen AG, whereby, in the case of a full distribution, the dividend paid for each preferred share is €0.06 higher than that paid for each ordinary share, is only included in the calculation of earnings per share if there is a profit after tax attributable to the shareholders of Volkswagen AG.

Quantity	ORDINARY		PREFERRED	
	2017	2016	2017	2016
Weighted average number of shares outstanding – basic	295,089,818	295,089,818	206,205,445	206,205,445
Weighted average number of shares outstanding – diluted	295,089,818	295,089,818	206,205,445	206,205,445

€ million	2017	2016
Earnings after tax	11,638	5,379
Noncontrolling interests	10	10
Earnings attributable to Volkswagen AG hybrid capital investors	274	225
Earnings attributable to Volkswagen AG shareholders	11,354	5,144
Basic earnings attributable to ordinary shares	6,676	3,021
Diluted earnings attributable to ordinary shares	6,676	3,021
Basic earnings attributable to preferred shares	4,678	2,123
Diluted earnings attributable to preferred shares	4,678	2,123

€	2017	2016
Basic earnings per ordinary share	22.63	10.24
Diluted earnings per ordinary share	22.63	10.24
Basic earnings per preferred share	22.69	10.30
Diluted earnings per preferred share	22.69	10.30

## Additional Income Statement Disclosures in accordance with IAS 23 (Borrowing Costs)

Capitalized borrowing costs amounted to €83 million (previous year: €83 million) and related mainly to capitalized development costs. An average cost of debt of 1.5% (previous year: 1.5%) was used as a basis for capitalization in the Volkswagen Group.

## Additional Income Statement Disclosures in accordance with IFRS 7 (Financial Instruments)

### CLASSES OF FINANCIAL INSTRUMENTS

Financial instruments are divided into the following classes at the Volkswagen Group:

- > financial instruments measured at fair value,
- > financial instruments measured at amortized cost and
- > financial instruments not falling within the scope of IFRS 7.

Financial instruments not falling within the scope of IFRS 7 include in particular investments in associates and joint ventures accounted for using the equity method.

### NET GAINS OR LOSSES FROM FINANCIAL INSTRUMENTS BY IAS 39 MEASUREMENT CATEGORY

€ million	2017	2016
Financial instruments at fair value through profit or loss	-840	-1,203
Loans and receivables <sup>1</sup>	2,105	3,434
Available-for-sale financial assets	-206	-39
Financial liabilities measured at amortized cost	1,689	-3,480
	<b>2,748</b>	<b>-1,288</b>

1 Prior-year figures adjusted. Further details can be found in the disclosures in the section entitled "Noncurrent and current financial services receivables".

Net gains and losses from financial assets and liabilities at fair value through profit or loss are composed of the fair value measurement gains and losses on derivatives, including interest and gains and losses on currency translation.

Net gains and losses from available-for-sale financial assets primarily comprise income and expenses from marketable securities including disposal gains/losses, impairment losses on investments and currency translation effects.

Net gains and losses from loans and receivables and from financial liabilities carried at amortized cost comprise interest income and expenses in accordance with the effective interest method under IAS 39, including currency translation effects. Interest also includes interest income and expenses from the lending business of the financial services operations.

**TOTAL INTEREST INCOME AND EXPENSES ATTRIBUTABLE TO FINANCIAL INSTRUMENTS NOT  
MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS**

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€ million	2017	2016
Interest income <sup>1</sup>	4,794	4,670
Interest expenses	3,509	3,534
	<b>1,285</b>	<b>1,136</b>

1 Prior-year figures adjusted. Further details can be found in the disclosures in the section entitled "Noncurrent and current financial services receivables".

**IMPAIRMENT LOSSES ON FINANCIAL ASSETS BY CLASS**

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€ million	2017	2016
Measured at fair value	3	18
Measured at amortized cost	1,628	1,707
	<b>1,631</b>	<b>1,725</b>

Impairment losses relate to write-downs of financial assets, such as valuation allowances on receivables and marketable securities. Interest income on impaired financial assets amounted to €56 million in the fiscal year (previous year: €48 million).

In fiscal year 2017, €3 million (previous year: €3 million) was recognized as an expense and €58 million (previous year: €67 million) as income from fees and commissions for trust activities and from financial assets and liabilities not measured at fair value that are not accounted for using the effective interest method.

## Balance sheet disclosures

### 12. Intangible assets

#### CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2016

€ million	Brand names	Goodwill	Capitalized development costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
<b>Cost</b>						
<b>Balance at Jan. 1, 2016</b>	<b>17,062</b>	<b>23,646</b>	<b>6,781</b>	<b>23,681</b>	<b>8,529</b>	<b>79,699</b>
Foreign exchange differences	-37	-86	-12	-90	137	-89
Changes in consolidated Group	-	9	-	-	29	37
Additions	-	-	4,857	893	385	6,135
Transfers	-	-	-4,324	4,324	12	12
Disposals	-	10	17	1,442	456	1,925
<b>Balance at Dec. 31, 2016</b>	<b>17,024</b>	<b>23,559</b>	<b>7,285</b>	<b>27,366</b>	<b>8,637</b>	<b>83,870</b>
<b>Amortization and impairment</b>						
<b>Balance at Jan. 1, 2016</b>	<b>76</b>	<b>-</b>	<b>37</b>	<b>12,968</b>	<b>5,472</b>	<b>18,553</b>
Foreign exchange differences	5	0	0	-80	84	9
Changes in consolidated Group	-	-	-	-	7	7
Additions to cumulative amortization	3	-	-	3,278	906	4,187
Additions to cumulative impairment losses	-	10	16	293	55	375
Transfers	-	-	0	-	-3	-3
Disposals	-	10	14	1,419	412	1,855
Reversal of impairment losses	-	-	-	1	0	1
<b>Balance at Dec. 31, 2016</b>	<b>84</b>	<b>0</b>	<b>39</b>	<b>15,040</b>	<b>6,109</b>	<b>21,271</b>
<b>Carrying amount at Dec. 31, 2016</b>						
	<b>16,941</b>	<b>23,558</b>	<b>7,246</b>	<b>12,326</b>	<b>2,527</b>	<b>62,599</b>

**CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017**

€ million	Brand names	Goodwill	Capitalized development costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
<b>Cost</b>						
<b>Balance at Jan. 1, 2017</b>	<b>17,024</b>	<b>23,559</b>	<b>7,285</b>	<b>27,366</b>	<b>8,637</b>	<b>83,870</b>
Foreign exchange differences	-30	-91	-44	-183	-192	-539
Changes in consolidated Group	-	-18	-	-	-112	-130
Additions	-	-	4,080	1,180	528	5,788
Transfers	-	-	-4,197	4,197	-7	-7
Disposals	-	7	10	3,607	266	3,890
<b>Balance at Dec. 31, 2017</b>	<b>16,995</b>	<b>23,443</b>	<b>7,115</b>	<b>28,952</b>	<b>8,588</b>	<b>85,093</b>
<b>Amortization and impairment</b>						
<b>Balance at Jan. 1, 2017</b>	<b>84</b>	<b>0</b>	<b>39</b>	<b>15,040</b>	<b>6,109</b>	<b>21,271</b>
Foreign exchange differences	-3	0	0	-122	-138	-263
Changes in consolidated Group	-	0	-	-	-84	-84
Additions to cumulative amortization	3	-	-	3,345	831	4,178
Additions to cumulative impairment losses	-	7	57	332	1	397
Transfers	-	-	-	-	2	2
Disposals	-	7	-	3,595	226	3,827
Reversal of impairment losses	-	-	-	-	-	-
<b>Balance at Dec. 31, 2017</b>	<b>83</b>	<b>0</b>	<b>95</b>	<b>14,999</b>	<b>6,496</b>	<b>21,674</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>16,911</b>	<b>23,442</b>	<b>7,020</b>	<b>13,953</b>	<b>2,093</b>	<b>63,419</b>

Other intangible assets comprise in particular concessions, purchased customer lists and dealer relationships, industrial and similar rights, and licenses in such rights and assets.

The allocation of the brand names and goodwill to the operating segments is shown in the following table:

€ million	2017	2016
<b>Brand names by operating segment</b>		
Porsche	13,823	13,823
Scania Vehicles and Services	990	1,017
MAN Truck & Bus	1,127	1,127
MAN Diesel & Turbo	415	415
Ducati	404	404
Other	153	155
	<b>16,911</b>	<b>16,941</b>
<b>Goodwill by operating segment</b>		
Porsche	18,825	18,825
Scania Vehicles and Services	2,866	2,947
MAN Truck & Bus	595	608
MAN Diesel & Turbo	268	249
Ducati	290	290
ŠKODA	159	150
Porsche Holding Salzburg	151	197
Other	289	293
	<b>23,442</b>	<b>23,558</b>

The impairment test for recognized goodwill is based on value in use. Recoverability is not affected by a variation in the growth forecast with respect to the perpetual annuity or in the discount rate of +/-0.5 percentage points.

Research and development costs developed as follows:

€ million	2017	2016	%
Total research and development costs	13,141	13,672	-3.9
of which: capitalized development costs	5,260	5,750	-8.5
Capitalization ratio in %	40.0	42.1	-
Amortization of capitalized development costs	3,734	3,587	4.1
<b>Research and development costs recognized in profit or loss</b>	<b>11,614</b>	<b>11,509</b>	<b>0.9</b>

## 13. Property, plant and equipment

### CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2016

€ million	Land, land rights and buildings, including buildings on third-party land	Technical equipment and machinery	Other equipment, operating and office equipment	Payments on account and assets under construction	Total
<b>Cost</b>					
<b>Balance at Jan. 1, 2016</b>	<b>31,036</b>	<b>39,836</b>	<b>58,243</b>	<b>7,717</b>	<b>136,832</b>
Foreign exchange differences	228	429	498	51	1,206
Changes in consolidated Group	42	26	30	1	98
Additions	742	1,843	5,150	5,025	12,760
Transfers	1,639	2,296	1,879	-5,758	55
Disposals	154	1,076	1,203	28	2,461
<b>Balance at Dec. 31, 2016</b>	<b>33,534</b>	<b>43,353</b>	<b>64,595</b>	<b>7,008</b>	<b>148,490</b>
<b>Depreciation and impairment</b>					
<b>Balance at Jan. 1, 2016</b>	<b>12,789</b>	<b>28,148</b>	<b>45,645</b>	<b>79</b>	<b>86,661</b>
Foreign exchange differences	90	305	397	5	796
Changes in consolidated Group	6	14	16	-	36
Additions to cumulative depreciation	1,000	2,918	4,707	-	8,625
Additions to cumulative impairment losses	67	143	291	8	508
Transfers	17	21	15	-46	7
Disposals	81	1,011	1,071	0	2,164
Reversal of impairment losses	-	7	0	7	13
<b>Balance at Dec. 31, 2016</b>	<b>13,887</b>	<b>30,531</b>	<b>49,999</b>	<b>39</b>	<b>94,456</b>
<b>Carrying amount at Dec. 31, 2016</b>	<b>19,647</b>	<b>12,822</b>	<b>14,596</b>	<b>6,969</b>	<b>54,033</b>
of which assets leased under finance leases					
Carrying amount at Dec. 31, 2016	318	9	45	-	372

Future finance lease payments due, and their present values, are shown in the following table:

€ million	2017	2018 – 2021	from 2022	Total
Finance lease payments	79	306	480	865
Interest component of finance lease payments	26	100	200	326
<b>Carrying amount of liabilities</b>	<b>53</b>	<b>206</b>	<b>279</b>	<b>539</b>

**CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017**

€ million	Land, land rights and buildings, including buildings on third-party land	Technical equipment and machinery	Other equipment, operating and office equipment	Payments on account and assets under construction	Total
<b>Cost</b>					
<b>Balance at Jan. 1, 2017</b>	<b>33,534</b>	<b>43,353</b>	<b>64,595</b>	<b>7,008</b>	<b>148,490</b>
Foreign exchange differences	-440	-824	-1,056	-152	-2,473
Changes in consolidated Group	-303	-71	-117	-11	-501
Additions	630	1,355	5,056	5,474	12,516
Transfers	1,063	2,509	1,829	-5,411	-11
Disposals	149	873	1,399	31	2,452
<b>Balance at Dec. 31, 2017</b>	<b>34,335</b>	<b>45,450</b>	<b>68,909</b>	<b>6,876</b>	<b>155,569</b>
<b>Depreciation and impairment</b>					
<b>Balance at Jan. 1, 2017</b>	<b>13,887</b>	<b>30,531</b>	<b>49,999</b>	<b>39</b>	<b>94,456</b>
Foreign exchange differences	-153	-560	-790	-5	-1,508
Changes in consolidated Group	-117	-62	-80	-	-259
Additions to cumulative depreciation	1,058	3,211	5,152	-	9,421
Additions to cumulative impairment losses	3	-9	254	55	303
Transfers	14	-16	-1	0	-3
Disposals	71	807	1,183	7	2,068
Reversal of impairment losses	0	2	0	13	15
<b>Balance at Dec. 31, 2017</b>	<b>14,621</b>	<b>32,286</b>	<b>53,352</b>	<b>69</b>	<b>100,327</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>19,714</b>	<b>13,164</b>	<b>15,557</b>	<b>6,807</b>	<b>55,243</b>
of which assets leased under finance leases					
Carrying amount at Dec. 31, 2017	286	6	46	-	339

Options to purchase buildings and plant leased under the terms of finance leases exist in most cases, and are also expected to be exercised.

Future finance lease payments due, and their present values, are shown in the following table:

€ million	2018	2019 – 2022	from 2023	Total
Finance lease payments	67	263	390	721
Interest component of finance lease payments	16	87	139	242
<b>Carrying amount of liabilities</b>	<b>51</b>	<b>176</b>	<b>252</b>	<b>479</b>

For assets leased under operating leases, payments recognized in the income statement amounted to €1,449 million (previous year: €1,498 million). With respect to internally used assets, €1,302 million (previous year: €1,320 million) of this figure is attributable to minimum lease payments and €55 million (previous year: €60 million) to contingent lease payments. The payments of €92 million (previous year: €118 million) under subleases primarily relate to minimum lease payments.

Government grants of €135 million (previous year: €218 million) were deducted from the cost of property, plant and equipment and noncash benefits received amounting to €12 million (previous year: €12 million) were not capitalized as the cost of assets.

Real property liens of €916 million (previous year: €762 million) are pledged as collateral for financial liabilities related to land and buildings.

## 14. Lease assets and investment property

### CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2016

€ million	Leasing assets	Investment property	Total
<b>Cost</b>			
<b>Balance at Jan. 1, 2016</b>	<b>45,118</b>	<b>761</b>	<b>45,879</b>
Foreign exchange differences	321	12	333
Changes in consolidated Group	64	66	130
Additions	20,628	33	20,661
Transfers	3	-70	-67
Disposals	14,652	21	14,673
<b>Balance at Dec. 31, 2016</b>	<b>51,483</b>	<b>780</b>	<b>52,262</b>
<b>Depreciation and impairment</b>			
<b>Balance at Jan. 1, 2016</b>	<b>11,945</b>	<b>257</b>	<b>12,202</b>
Foreign exchange differences	74	2	76
Changes in consolidated Group	15	1	16
Additions to cumulative depreciation	6,743	17	6,760
Additions to cumulative impairment losses	455	0	455
Transfers	0	-4	-4
Disposals	6,097	4	6,101
Reversal of impairment losses	92	-	92
<b>Balance at Dec. 31, 2016</b>	<b>13,044</b>	<b>268</b>	<b>13,312</b>
<b>Carrying amount at Dec. 31, 2016</b>	<b>38,439</b>	<b>512</b>	<b>38,950</b>

The following payments from noncancelable leases and rental agreements were expected to be received over the coming years:

€ million	2017	2018 – 2021	from 2022	Total
Lease payments	3,649	4,759	56	8,464

**CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017**

€ million	Leasing assets	Investment property	Total
<b>Cost</b>			
<b>Balance at Jan. 1, 2017</b>	<b>51,483</b>	<b>780</b>	<b>52,262</b>
Foreign exchange differences	-3,093	-36	-3,129
Changes in consolidated Group	-873	-	-873
Additions	21,319	18	21,336
Transfers	6	12	18
Disposals	16,616	26	16,641
<b>Balance at Dec. 31, 2017</b>	<b>52,226</b>	<b>748</b>	<b>52,973</b>
<b>Depreciation and impairment</b>			
<b>Balance at Jan. 1, 2017</b>	<b>13,044</b>	<b>268</b>	<b>13,312</b>
Foreign exchange differences	-803	-5	-808
Changes in consolidated Group	-228	0	-228
Additions to cumulative depreciation	7,327	15	7,343
Additions to cumulative impairment losses	448	3	451
Transfers	0	1	1
Disposals	6,775	4	6,779
Reversal of impairment losses	41	-	41
<b>Balance at Dec. 31, 2017</b>	<b>12,972</b>	<b>279</b>	<b>13,251</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>39,254</b>	<b>468</b>	<b>39,722</b>

Lease assets include assets leased out under the terms of operating leases and assets covered by long-term buy-back agreements.

Investment property includes apartments rented out and leased dealerships with a fair value of €993 million (previous year: €1,150 million). Fair value is estimated using an investment method based on internal calculations (Level 3 of the fair value hierarchy). Operating expenses of €52 million (previous year: €46 million) were incurred for the maintenance of investment property in use. Expenses of €3 million (previous year: €1 million) were incurred for unused investment property.

The following payments from noncancelable leases and rental agreements are expected to be received over the coming years:

€ million	2018	2019 – 2022	from 2023	Total
Lease payments	3,392	4,675	46	8,112

## 15. Equity-accounted investments and other equity investments

### CHANGES IN EQUITY-ACCOUNTED INVESTMENTS AND OTHER EQUITY INVESTMENTS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2016

€ million	Equity-accounted investments	Other equity investments	Total
<b>Gross carrying amount at Jan. 1, 2016</b>	<b>10,985</b>	<b>1,333</b>	<b>12,318</b>
Foreign exchange differences	-100	-1	-101
Changes in consolidated Group	-11	-103	-114
Additions	525	191	716
Transfers	-	-	-
Disposals	2,193	3	2,197
Changes recognized in profit or loss	3,250	-	3,250
Dividends	-3,598	-	-3,598
Other changes recognized in other comprehensive income	-131	-	-131
<b>Balance at Dec. 31, 2016</b>	<b>8,727</b>	<b>1,417</b>	<b>10,143</b>
<b>Impairment losses</b>			
<b>Balance at Jan. 1, 2016</b>	<b>81</b>	<b>358</b>	<b>439</b>
Foreign exchange differences	-1	1	0
Changes in consolidated Group	-	-57	-57
Additions	30	120	150
Transfers	-	-	-
Disposals	-	1	1
Reversal of impairment losses	-	0	0
<b>Balance at Dec. 31, 2016</b>	<b>110</b>	<b>420</b>	<b>531</b>
<b>Carrying amount at Dec. 31, 2016</b>	<b>8,616</b>	<b>996</b>	<b>9,613</b>

**CHANGES IN EQUITY-ACCOUNTED INVESTMENTS AND OTHER EQUITY INVESTMENTS  
IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2017**

€ million	Equity-accounted investments	Other equity investments	Total
<b>Gross carrying amount at Jan. 1, 2017</b>	<b>8,727</b>	<b>1,417</b>	<b>10,143</b>
Foreign exchange differences	-129	-17	-146
Changes in consolidated Group	-13	-90	-104
Additions	348	519	867
Transfers	-	0	0
Held for sale	-86	-	-86
Disposals	7	34	40
Changes recognized in profit or loss	3,495	-	3,495
Dividends	-3,640	-	-3,640
Other changes recognized in other comprehensive income	-251	30	-221
<b>Balance at Dec. 31, 2017</b>	<b>8,443</b>	<b>1,825</b>	<b>10,268</b>
<b>Impairment losses</b>			
<b>Balance at Jan. 1, 2017</b>	<b>110</b>	<b>420</b>	<b>531</b>
Foreign exchange differences	-1	-3	-4
Changes in consolidated Group	-	-15	-15
Additions	129	129	258
Transfers	-	-	-
Disposals	-	24	24
Reversal of impairment losses	-	1	1
<b>Balance at Dec. 31, 2017</b>	<b>238</b>	<b>507</b>	<b>745</b>
<b>Carrying amount at Dec. 31, 2017</b>	<b>8,205</b>	<b>1,318</b>	<b>9,523</b>

Equity-accounted investments include joint ventures in the amount of €6,459 million (previous year: €7,068 million) and associates in the amount of €1,746 million (previous year: €1,548 million).

The additions of equity-accounted investments are mainly attributable to the acquisition of the investment in Navistar in the amount of €0.3 billion (previous year: acquisition of investment in Gett and measurement of shares in GMH at the selling price). In the previous year, the disposals resulted from the divestment of LeasePlan by GMH. Further details can be found in the disclosures in the section entitled "Basis of consolidation".

Of the other changes recognized in other comprehensive income, €-249 million (previous year: €-132 million) is attributable to joint ventures and €-2 million (previous year: €1 million) to associates. They are mainly the result of foreign exchange differences in the amount of €-327 million (previous year: €-156 million), pension plan remeasurements in the amount of €112 million (previous year: €-1 million) and losses on the fair value measurement of cash flow hedges in the amount of €-30 million (previous year: €33 million).

## 16. Noncurrent and current financial services receivables

€ million	CARRYING AMOUNT			FAIR VALUE			CARRYING AMOUNT			FAIR VALUE		
	Current	Noncurrent	Dec. 31, 2017	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016	Dec. 31, 2016	Current	Noncurrent	Dec. 31, 2016	Dec. 31, 2016
<b>Receivables from financing business</b>												
Customer financing <sup>1</sup>	19,841	40,899	60,739	61,763	19,630	38,907	58,537	60,119				
Dealer financing	17,033	2,194	19,227	19,200	15,531	2,108	17,639	17,626				
Direct banking	269	4	272	272	254	2	256	256				
	<b>37,142</b>	<b>43,096</b>	<b>80,239</b>	<b>81,236</b>	<b>35,415</b>	<b>41,018</b>	<b>76,433</b>	<b>78,002</b>				
Receivables from operating leases	193	—	193	193	197	—	197	197				
Receivables from finance leases <sup>1</sup>	15,810	30,153	45,963	46,766	14,060	27,384	41,445	42,240				
	<b>53,145</b>	<b>73,249</b>	<b>126,395</b>	<b>128,195</b>	<b>49,673</b>	<b>68,402</b>	<b>118,075</b>	<b>120,438</b>				

<sup>1</sup> Prior-year figures adjusted.

The receivables from customer financing and finance leases contained in financial services receivables of €126.4 billion (previous year: €118.1 billion) decreased by €31 million (previous year: €7 million) as a result of a fair value adjustment from portfolio hedging.

The receivables from customer and dealer financing are secured by vehicles or real property liens. Of the receivables, €287 million (previous year: €251 million) was furnished as collateral for financial liabilities and contingent liabilities.

The receivables from dealer financing include €51 million (previous year: €51 million) receivable from unconsolidated affiliated companies.

In the consolidated financial statements, some of the receivables previously reported as customer financing in individual markets are now presented as receivables from finance leases. The prior-year figures have been restated, resulting in a €12.2 billion reduction in receivables from customer financing and a corresponding €12.2 billion increase in receivables from finance leases as of December 31, 2016. The adjustments as of January 1, 2016 amounted to €11.9 billion. In addition, the expected cash flows from finance leases have been adjusted accordingly.

The receivables from finance leases – almost entirely in respect of vehicles – were or are expected to generate the following cash flows as of December 31, 2016 and December 31, 2017:

€ million	2017	2018 – 2021	from 2022	Total
Future payments from finance lease receivables	15,117	29,352	137	44,605
Unearned finance income from finance leases (discounting)	-1,058	-2,094	-11	-3,162
<b>Present value of minimum lease payments outstanding at the reporting date</b>	<b>14,059</b>	<b>27,258</b>	<b>126</b>	<b>41,443</b>

€ million	2018	2019 – 2022	from 2023	Total
Future payments from finance lease receivables	16,952	32,280	145	49,377
Unearned finance income from finance leases (discounting)	-1,142	-2,261	-11	-3,414
<b>Present value of minimum lease payments outstanding at the reporting date</b>	<b>15,810</b>	<b>30,018</b>	<b>135</b>	<b>45,963</b>

Accumulated valuation allowances for uncollectible minimum lease payments receivable amount to €116 million (previous year: €94 million).

## 17. Noncurrent and current other financial assets

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
Positive fair value of derivatives	2,845	4,091	6,936	2,317	3,274	5,591
Marketable securities	–	3	3	–	46	46
Receivables from loans, bonds, profit participation rights (excluding interest)	5,367	2,531	7,898	5,352	2,338	7,690
Miscellaneous financial assets	3,786	1,829	5,615	4,175	2,598	6,773
	<b>11,998</b>	<b>8,455</b>	<b>20,453</b>	<b>11,844</b>	<b>8,256</b>	<b>20,099</b>

Other financial assets include receivables from related parties of €7.7 billion (previous year: €6.9 billion). Other financial assets and noncurrent marketable securities amounting to €1,819 million (previous year: €1,870 million) were furnished as collateral for financial liabilities and contingent liabilities. There is no original right of disposal or pledge for the furnished collateral on the part of the collateral taker.

In addition, the miscellaneous financial assets include cash and cash equivalents that serve as collateral (mainly under asset-backed securities transactions).

The positive fair values of derivatives relate to the following items:

€ million	Dec. 31, 2017	Dec. 31, 2016
<b>Transactions for hedging</b>		
foreign currency risk from assets using fair value hedges	228	239
foreign currency risk from liabilities using fair value hedges	108	186
interest rate risk using fair value hedges	400	592
interest rate risk using cash flow hedges	86	65
foreign currency and price risk from future cash flows (cash flow hedges)	4,401	3,032
<b>Hedging transactions</b>	<b>5,224</b>	<b>4,114</b>
Assets related to derivatives not included in hedging relationships	1,712	1,477
	<b>6,936</b>	<b>5,591</b>

The positive fair value of transactions for hedging price risk from future cash flows (cash flow hedges) amounted to €– million (previous year: €36 million).

Positive fair values of €17 million (previous year: €1 million) were recognized from transactions for hedging interest rate risk (fair value hedges) used in portfolio hedges.

Further details on derivative financial instruments as a whole are given in the section entitled “Financial risk management and financial instruments”.

## 18. Noncurrent and current other receivables

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
<b>Other recoverable income</b>						
taxes	3,881	896	4,777	4,037	841	4,878
Miscellaneous receivables	1,465	1,356	2,821	1,093	1,169	2,261
	<b>5,346</b>	<b>2,252</b>	<b>7,598</b>	<b>5,130</b>	<b>2,009</b>	<b>7,139</b>

Miscellaneous receivables include assets to fund post-employment benefits in the amount of €64 million (previous year: €46 million). This item also includes the share of the technical provisions attributable to reinsurers amounting to €73 million (previous year: €73 million).

Current other receivables are predominantly non-interest-bearing.

## 19. Tax assets

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
Deferred tax assets	–	9,810	9,810	–	9,756	9,756
Tax receivables	1,339	407	1,746	1,126	392	1,518
	<b>1,339</b>	<b>10,217</b>	<b>11,557</b>	<b>1,126</b>	<b>10,148</b>	<b>11,274</b>

€7,456 million (previous year: €6,294 million) of the deferred tax assets are due within one year.

## 20. Inventories

€ million	Dec. 31, 2017	Dec. 31, 2016
Raw materials, consumables and supplies	4,858	4,396
Work in progress	4,143	4,408
Finished goods and purchased merchandise	26,514	25,719
Current lease assets	4,774	4,276
Prepayments	127	178
	<b>40,415</b>	<b>38,978</b>

At the same time as the relevant revenue was recognized, inventories in the amount of €173 billion (previous year: €166 billion) were included in cost of sales. Valuation allowances (excluding lease assets) recognized as expenses in the reporting period amounted to €878 million (previous year: €1,310 million). Vehicles amounting to €271 million (previous year: €263 million) were assigned as collateral for partial retirement obligations.

## 21. Trade receivables

€ million	Dec. 31, 2017	Dec. 31, 2016
Trade receivables from		
third parties	9,667	9,110
unconsolidated subsidiaries	220	179
joint ventures	3,341	2,847
associates	44	47
other investees and investors	86	4
	<b>13,357</b>	<b>12,187</b>

The fair values of the trade receivables correspond to the carrying amounts.

The trade receivables include receivables from construction contracts accounted for using the percentage of completion (PoC) method. These are calculated as follows:

€ million	Dec. 31, 2017	Dec. 31, 2016
Contract costs and proportionate contract profit/loss of construction contracts	1,122	955
Progress billings	-38	-91
Exchange rate effects	-3	2
<b>PoC receivables, gross</b>	<b>1,081</b>	<b>865</b>
Prepayments received	-739	-652
<b>PoC receivables, net</b>	<b>342</b>	<b>213</b>

Other payments received on account of construction contracts in the amount of €270 million (previous year: €225 million), for which no construction costs have yet been incurred, are recognized under other liabilities.

## 22. Marketable securities

The marketable securities serve to safeguard liquidity. Marketable securities are quoted, mainly short-term fixed-income securities and shares allocated to the available-for-sale financial assets category.

## 23. Cash, cash equivalents and time deposits

€ million	Dec. 31, 2017	Dec. 31, 2016
Bank balances	18,343	19,093
Checks, cash-in-hand, bills and call deposits	114	171
	<b>18,457</b>	<b>19,265</b>

Bank balances are held at various banks in different currencies and include time deposits, for example.

## 24. Equity

The subscribed capital of Volkswagen AG is composed of no-par value bearer shares with a notional value of €2.56. As well as ordinary shares, there are preferred shares that entitle the bearer to a €0.06 higher dividend than ordinary shares, but do not carry voting rights.

Authorized capital of up to €110 million created by a resolution of the Annual General Meeting on April 19, 2012 for the issue of new ordinary bearer shares or preferred shares expired on April 18, 2017. Apart from an amount of €83 million, the authorized capital was utilized.

The Annual General Meeting on May 5, 2015 resolved to create authorized capital of up to €179 million, expiring on May 4, 2020, to issue new preferred bearer shares.

In June 2017, Volkswagen AG placed unsecured subordinated hybrid notes with an aggregate principal amount of €3.5 billion via a subsidiary, Volkswagen International Finance N.V. Amsterdam, the Netherlands (VIF). The perpetual hybrid notes were issued in two tranches and can be called by VIF. The first call date for the first tranche (€1.5 billion and a coupon of 2.700%) is after 5.5 years, and the first call date for the second tranche (€2.0 billion and a coupon of 3.875%) is after ten years. Interest may be accumulated depending on whether a dividend is paid to Volkswagen AG shareholders. Under IAS 32, the hybrid notes must be classified in their entirety as equity. The capital raised was recognized in equity, less a discount and transaction costs and net of deferred taxes. The interest payments payable to the noteholders will be recognized directly in equity, net of income taxes.

#### CHANGE IN ORDINARY AND PREFERRED SHARES AND SUBSCRIBED CAPITAL

	SHARES		€	
	2017	2016	2017	2016
Balance at January 1	501,295,263	501,295,263	1,283,315,873	1,283,315,873
Capital increase	–	–	–	–
Balance at December 31	501,295,263	501,295,263	1,283,315,873	1,283,315,873

The capital reserves comprise the share premium totaling €14,225 million (previous year: €14,225 million) from capital increases, the share premium of €219 million from the issuance of bonds with warrants and an amount of €107 million appropriated on the basis of the capital reduction implemented in 2006. No amounts were withdrawn from the capital reserves.

#### DIVIDEND PROPOSAL

In accordance with section 58(2) of the Aktiengesetz (AktG – German Stock Corporation Act), the dividend payment by Volkswagen AG is based on the net retained profits reported in the annual financial statements of Volkswagen AG prepared in accordance with the German Commercial Code. Based on these annual financial statements of Volkswagen AG, net retained profits of €2,181 million are eligible for distribution following the transfer of €2,174 million to the revenue reserves. The Board of Management and Supervisory Board will propose to the Annual General Meeting that a total dividend of €1,967 million, i.e. €3.90 per ordinary share and €3.96 per preferred share, be paid from the net retained profits. Shareholders are not entitled to a dividend payment until it has been resolved by the Annual General Meeting.

A dividend of €2.00 per ordinary share and €2.06 per preferred share was distributed in fiscal year 2017.

#### NONCONTROLLING INTERESTS

As of December 31, 2017, total noncontrolling interests amounted to €229 million (previous year: €221 million). The noncontrolling interests in equity are attributable primarily to shareholders of RENK AG and AUDI AG and are immaterial individually and in the aggregate.

## 25. Noncurrent and current financial liabilities

The details of noncurrent and current financial liabilities are presented in the following table:

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
Bonds	14,146	48,971	63,118	18,831	33,191	52,022
Commercial paper and notes	22,506	13,399	35,905	23,173	18,004	41,178
Liabilities to banks	14,487	15,357	29,844	14,180	10,816	24,996
Deposits business	29,291	2,114	31,405	31,019	2,759	33,779
Loans and miscellaneous liabilities	1,363	1,358	2,721	1,204	1,102	2,306
Bills of exchange	—	—	—	—	—	—
Finance lease liabilities	51	428	479	53	486	539
	<b>81,844</b>	<b>81,628</b>	<b>163,472</b>	<b>88,461</b>	<b>66,358</b>	<b>154,819</b>

## 26. Noncurrent and current other financial liabilities

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
Negative fair values of derivative financial instruments	1,212	1,034	2,246	3,428	2,630	6,058
Interest payable	570	44	614	581	48	630
Miscellaneous financial liabilities	6,788	1,586	8,374	5,428	1,810	7,239
	<b>8,570</b>	<b>2,665</b>	<b>11,234</b>	<b>9,438</b>	<b>4,488</b>	<b>13,926</b>

The negative fair values of derivatives relate to the following items:

€ million	Dec. 31, 2017	Dec. 31, 2016
<b>Transactions for hedging</b>		
foreign currency risk from assets using fair value hedges	58	74
foreign currency risk from liabilities using fair value hedges	19	286
interest rate risk using fair value hedges	64	147
interest rate risk using cash flow hedges	24	11
foreign currency and price risk from future cash flows (cash flow hedges)	542	4,135
<b>Hedging transactions</b>	<b>706</b>	<b>4,652</b>
Liabilities related to derivatives not included in hedging relationships	1,540	1,406
	<b>2,246</b>	<b>6,058</b>

The negative fair value of transactions for hedging price risk from future cash flows (cash flow hedges) amounted to €– million (previous year: €21 million).

Negative fair values of €22 million (previous year: €85 million) were recognized from transactions for hedging interest rate risk (fair value hedges) used in portfolio hedges.

Further details on derivative financial instruments as a whole are given in the section entitled “Financial risk management and financial instruments”.

## 27. Noncurrent and current other liabilities

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
Payments received on account of orders	4,084	694	4,779	4,042	572	4,614
Liabilities relating to						
other taxes	2,301	249	2,550	2,611	204	2,815
social security	564	38	601	536	35	571
wages and salaries	4,941	844	5,785	4,495	750	5,245
Miscellaneous liabilities	4,071	4,375	8,446	3,777	4,103	7,880
	<b>15,961</b>	<b>6,199</b>	<b>22,160</b>	<b>15,461</b>	<b>5,664</b>	<b>21,125</b>

## 28. Tax liabilities

€ million	CARRYING AMOUNT			CARRYING AMOUNT		
	Current	Noncurrent	Dec. 31, 2017	Current	Noncurrent	Dec. 31, 2016
Deferred tax liabilities	–	5,636	5,636	–	4,745	4,745
Provisions for taxes	1,397	3,030	4,427	1,301	3,556	4,857
Tax payables	430	–	430	500	–	500
	<b>1,827</b>	<b>8,666</b>	<b>10,492</b>	<b>1,801</b>	<b>8,301</b>	<b>10,102</b>

€320 million (previous year: €328 million) of the deferred tax liabilities are due within one year.

## 29. Provisions for pensions and other post-employment benefits

Provisions for pensions are recognized for commitments in the form of retirement, invalidity and dependents' benefits payable under pension plans. The benefits provided by the Group vary according to the legal, tax and economic circumstances of the country concerned, and usually depend on the length of service and remuneration of the employees.

Volkswagen Group companies provide occupational pensions under both defined contribution and defined benefit plans. In the case of defined contribution plans, the Company makes contributions to state or private pension schemes based on legal or contractual requirements, or on a voluntary basis. Once the contributions have been paid, there are no further obligations for the Volkswagen Group. Current contributions are recognized as pension expenses of the period concerned. In 2017, they amounted to a total of €2,214 million (previous year: €2,084 million) in the Volkswagen Group. Of this figure, contributions to the compulsory state pension system in Germany amounted to €1,634 million (previous year: €1,552 million).

In the case of defined benefit plans, a distinction is made between pensions funded by provisions and externally funded plans.

The pension provisions for defined benefits are measured by independent actuaries using the internationally accepted projected unit credit method in accordance with IAS 19, under which the future obligations are measured on the basis of the ratable benefit entitlements earned as of the balance sheet date. Measurement reflects actuarial assumptions as to discount rates, salary and pension trends, employee turnover rates, longevity and increases in healthcare costs, which were determined for each Group company depending on the economic environment. Remeasurements arise from differences between what has actually occurred and the prior-year assumptions as well as from changes in assumptions. They are recognized in other comprehensive income, net of deferred taxes, in the period in which they arise.

Multi-employer pension plans exist in the Volkswagen Group in the United Kingdom, Switzerland, Sweden and the Netherlands. These plans are defined benefit plans. A small proportion of them are accounted for as defined contribution plans, as the Volkswagen Group is not authorized to receive the information required in order to account for them as defined benefit plans. Under the terms of the multi-employer plans, the Volkswagen Group is not liable for the obligations of the other employers. In the event of its withdrawal from the plans or their winding-up, the proportionate share of the surplus of assets attributable to the Volkswagen Group will be credited or the proportionate share of the deficit attributable to the Volkswagen Group will have to be funded. In the case of the defined benefit plans accounted for as defined contribution plans, the Volkswagen Group's share of the obligations represents a small proportion of the total obligations. No probable significant risks arising from multi-employer defined benefit pension plans that are accounted for as defined contribution plans have been identified. The expected contributions to those plans will amount to €25 million for fiscal year 2018.

Owing to their benefit character, the obligations of the US Group companies in respect of post-employment medical care in particular are also carried under provisions for pensions and other post-employment benefits. These post-employment benefit provisions take into account the expected long-term rise in the cost of health-care. In fiscal year 2017, €17 million (previous year: €19 million) was recognized as an expense for health care costs. The related carrying amount as of December 31, 2017 was €210 million (previous year: €232 million).

The following amounts were recognized in the balance sheet for defined benefit plans:

€ million	Dec. 31, 2017	Dec. 31, 2016
Present value of funded obligations	15,605	15,104
Fair value of plan assets	11,192	10,749
Funded status (net)	4,413	4,355
Present value of unfunded obligations	28,224	28,585
Amount not recognized as an asset because of the ceiling in IAS 19	29	26
<b>Net liability recognized in the balance sheet</b>	<b>32,666</b>	<b>32,967</b>
of which provisions for pensions	32,730	33,012
of which other assets	64	46

#### SIGNIFICANT PENSION ARRANGEMENTS IN THE VOLKSWAGEN GROUP

For the period after their active working life, the Volkswagen Group offers its employees benefits under attractive, modern occupational pension arrangements. Most of the arrangements in the Volkswagen Group are pension plans for employees in Germany classified as defined benefit plans under IAS 19. The majority of these obligations are funded solely by recognized provisions. These plans are now largely closed to new members. To reduce the risks associated with defined benefit plans, in particular longevity, salary increases and inflation, the Volkswagen Group has introduced new defined benefit plans in recent years whose benefits are funded by appropriate external plan assets. The above-mentioned risks have been largely reduced in these pension plans. The proportion of the total defined benefit obligation attributable to pension obligations funded by plan assets will continue to rise in the future. The significant pension plans are described in the following.

#### German pension plans funded solely by recognized provisions

The pension plans funded solely by recognized provisions comprise both contribution-based plans with guarantees and final salary plans. For contribution-based plans, an annual pension expense dependent on income and status is converted into a lifelong pension entitlement using annuity factors (guaranteed modular pension entitlements). The annuity factors include a guaranteed rate of interest. At retirement, the modular pension entitlements earned annually are added together. For final salary plans, the underlying salary is multiplied at retirement by a percentage that depends on the years of service up until the retirement date.

The present value of the guaranteed obligation rises as interest rates fall and is therefore exposed to interest rate risk.

The pension system provides for lifelong pension payments. The companies bear the longevity risk in this respect. This is accounted for by calculating the annuity factors and the present value of the guaranteed obligation using the latest generational mortality tables – the “Heubeck 2005 G” mortality tables – which already reflect future increases in life expectancy.

To reduce the inflation risk from adjusting the regular pension payments by the rate of inflation, a pension adjustment that is not indexed to inflation was introduced for pension plans where this is permitted by law.

#### **German pension plans funded by external plan assets**

The pension plans funded by external plan assets are contribution-based plans with guarantees. In this case, an annual pension expense dependent on income and status is either converted into a lifelong pension entitlement using annuity factors (guaranteed modular pension entitlement) or paid out in a single lump sum or in installments. In some cases, employees also have the opportunity to provide for their own retirement through deferred compensation. The annuity factors include a guaranteed rate of interest. At retirement, the modular pension entitlements earned annually are added together. The pension expense is contributed on an ongoing basis to a separate pool of assets that is administered independently of the Company in trust and invested in the capital markets. If the plan assets exceed the present value of the obligations calculated using the guaranteed rate of interest, surpluses are allocated (modular pension bonuses).

Since the assets administered in trust meet the IAS 19 criteria for classification as plan assets, they are deducted from the obligations.

The amount of the pension assets is exposed to general market risk. The investment strategy and its implementation are therefore continuously monitored by the trusts' governing bodies, on which the companies are also represented. For example, investment policies are stipulated in investment guidelines with the aim of limiting market risk and its impact on plan assets. In addition, asset-liability management studies are conducted if required so as to ensure that investments are in line with the obligations that need to be covered. The pension assets are currently invested primarily in fixed-income or equity funds. The main risks are therefore interest rate and equity price risk. To mitigate market risk, the pension system also provides for cash funds to be set aside in an equalization reserve before any surplus is allocated.

The present value of the obligation is the present value of the guaranteed obligation after deducting the plan assets. If the plan assets fall below the present value of the guaranteed obligation, a provision must be recognized in that amount. The present value of the guaranteed obligation rises as interest rates fall and is therefore exposed to interest rate risk.

In the case of lifelong pension payments, the Volkswagen Group bears the longevity risk. This is accounted for by calculating the annuity factors and the present value of the guaranteed obligation using the latest generational mortality tables – the “Heubeck 2005 G” mortality tables – which already reflect future increases in life expectancy. In addition, the independent actuaries carry out annual risk monitoring as part of the review of the assets administered by the trusts.

To reduce the inflation risk from adjusting the regular pension payments by the rate of inflation, a pension adjustment that is not indexed to inflation was introduced for pension plans where this is permitted by law.

Calculation of the pension provisions was based on the following actuarial assumptions:

%	GERMANY		ABROAD	
	2017	2016	2017	2016
Discount rate at December 31	1.88	1.79	3.52	3.82
Payroll trend	3.56	3.46	3.00	3.32
Pension trend	1.50	1.50	2.48	2.44
Employee turnover rate	1.15	1.13	3.25	3.63
Annual increase in healthcare costs	–	–	4.98	4.88

These assumptions are averages that were weighted using the present value of the defined benefit obligation.

With regard to life expectancy, consideration is given to the latest mortality tables in each country.

The discount rates are generally defined to reflect the yields on prime-rated corporate bonds with matching maturities and currencies. The iBoxx AA 10+ Corporates index was taken as the basis for the obligations of German Group companies. Similar indices were used for foreign pension obligations.

The payroll trends cover expected wage and salary trends, which also include increases attributable to career development.

The pension trends either reflect the contractually guaranteed pension adjustments or are based on the rules on pension adjustments in force in each country.

The employee turnover rates are based on past experience and future expectations.

The following table shows changes in the net defined benefit liability recognized in the balance sheet:

€ million	2017	2016
<b>Net liability recognized in the balance sheet at January 1</b>	<b>32,967</b>	<b>27,464</b>
Current service cost	1,372	1,066
Net interest expense	600	729
Actuarial gains (–)/losses (+) arising from changes in demographic assumptions	33	17
Actuarial gains (–)/losses (+) arising from changes in financial assumptions	–616	5,862
Actuarial gains (–)/losses (+) arising from experience adjustments	–88	–283
Income/expenses from plan assets not included in interest income	117	349
Change in amount not recognized as an asset because of the ceiling in IAS 19	–6	–4
Employer contributions to plan assets	582	680
Employee contributions to plan assets	–8	–7
Pension payments from company assets	841	833
Past service cost (including plan curtailments)	7	–24
Gains (–) or losses (+) arising from plan settlements	–1	4
Changes in consolidated Group	0	0
Other changes	–44	–42
Foreign exchange differences from foreign plans	–37	25
<b>Net liability recognized in the balance sheet at December 31</b>	<b>32,666</b>	<b>32,967</b>

The change in the amount not recognized as an asset because of the ceiling in IAS 19 contains an interest component, part of which was recognized in the financial result in profit or loss, and part of which was recognized outside profit or loss directly in equity.

The change in the present value of the defined benefit obligation is attributable to the following factors:

€ million	2017	2016
<b>Present value of obligations at January 1</b>	<b>43,689</b>	<b>37,215</b>
Current service cost	1,372	1,066
Interest cost	883	1,075
Actuarial gains(–)/losses (+) arising from changes in demographic assumptions	33	17
Actuarial gains(–)/losses (+) arising from changes in financial assumptions	–616	5,862
Actuarial gains(–)/losses (+) arising from experience adjustments	–88	–283
Employee contributions to plan assets	33	31
Pension payments from company assets	841	833
Pension payments from plan assets	307	308
Past service cost (including plan curtailments)	7	–24
Gains (–) or losses (+) arising from plan settlements	–3	–64
Changes in consolidated Group	0	0
Other changes	–41	–4
Foreign exchange differences from foreign plans	–290	–62
<b>Present value of obligations at December 31</b>	<b>43,829</b>	<b>43,689</b>

Changes in the relevant actuarial assumptions would have had the following effects on the defined benefit obligation:

Present value of defined benefit obligation if	DEC. 31, 2017		DEC. 31, 2016	
	€ million	Change in percent	€ million	Change in percent
Discount rate	is 0.5 percentage points higher	39,979	-8.79	39,761
	is 0.5 percentage points lower	48,290	10.18	48,249
Pension trend	is 0.5 percentage points higher	46,055	5.08	45,985
	is 0.5 percentage points lower	41,801	-4.63	41,601
Payroll trend	is 0.5 percentage points higher	44,398	1.30	44,297
	is 0.5 percentage points lower	43,304	-1.20	43,145
Longevity	increases by one year	45,106	2.91	44,986

The sensitivity analysis shown above considers the change in one assumption at a time, leaving the other assumptions unchanged versus the original calculation, i.e. any correlation effects between the individual assumptions are ignored.

To examine the sensitivity of the defined benefit obligation to a change in assumed longevity, the estimates of mortality were reduced as part of a comparative calculation to the extent that doing so increases life expectancy by approximately one year.

The average duration of the defined benefit obligation weighted by the present value of the defined benefit obligation (Macaulay duration) is 19 years (previous year: 20 years).

The present value of the defined benefit obligation is attributable as follows to the members of the plan:

€ million	2017	2016
Active members with pension entitlements	26,067	25,622
Members with vested entitlements who have left the Company	2,233	2,222
Pensioners	15,530	15,846
	<b>43,829</b>	<b>43,689</b>

The maturity profile of payments attributable to the defined benefit obligation is presented in the following table, which classifies the present value of the obligation by the maturity of the underlying payments:

€ million	2017	2016
Payments due within the next fiscal year	1,151	1,126
Payments due between two and five years	4,994	4,801
Payments due in more than five years	37,685	37,762
	<b>43,829</b>	<b>43,689</b>

Changes in plan assets are shown in the following table:

€ million	2017	2016
<b>Fair value of plan assets at January 1</b>	<b>10,749</b>	<b>9,769</b>
Interest income on plan assets determined using the discount rate	283	346
Income/expenses from plan assets not included in interest income	117	349
Employer contributions to plan assets	582	680
Employee contributions to plan assets	25	25
Pension payments from plan assets	307	308
Gains (+) or losses (-) arising from plan settlements	2	68
Changes in consolidated Group	-1	-
Other changes	3	38
Foreign exchange differences from foreign plans	-258	-82
<b>Fair value of plan assets at December 31</b>	<b>11,192</b>	<b>10,749</b>

The investment of the plan assets to cover future pension obligations resulted in income in the amount of €400 million (previous year: €695 million).

Employer contributions to plan assets are expected to amount to €617 million (previous year: €594 million) in the next fiscal year.

Plan assets are invested in the following asset classes:

	DEC. 31, 2017			DEC. 31, 2016			
	€ million	Quoted prices in active markets	No quoted prices in active markets	Total	Quoted prices in active markets	No quoted prices in active markets	Total
Cash and cash equivalents	585	5	590	269	—	—	269
Equity instruments	337	—	337	360	—	—	360
Debt instruments	1,578	0	1,578	1,658	0	0	1,659
Direct investments in real estate	2	101	104	2	107	109	109
Derivatives	38	-60	-23	-15	—	—	-15
Equity funds	1,532	34	1,567	1,531	43	43	1,574
Bond funds	5,233	114	5,348	5,310	108	108	5,418
Real estate funds	207	—	207	192	—	—	192
Other funds	864	4	868	591	2	2	593
Other instruments	40	577	617	32	559	559	591

49.1% (previous year: 48.1%) of the plan assets are invested in German assets, 27.6% (previous year: 26.7%) in other European assets and 23.4 % (previous year: 25.2%) in assets in other regions.

Plan assets include €15 million (previous year: €19 million) invested in Volkswagen Group assets and €18 million (previous year: €9 million) in Volkswagen Group debt instruments.

The following amounts were recognized in the income statement:

€ million	2017	2016
Current service cost	1,372	1,066
Net interest on the net defined benefit liability	602	731
Past service cost (including plan curtailments)	7	-24
Gains (-) or losses (+) arising from plan settlements	-1	4
<b>Net income (-) and expenses (+) recognized in profit or loss</b>	<b>1,981</b>	<b>1,777</b>

The above amounts are generally included in the personnel costs of the functions in the income statement. Net interest on the net defined benefit liability is reported in interest expenses.

## 30. Noncurrent and current other provisions

€ million	Obligations arising from sales	Employee expenses	Litigation and legal risks	Miscellaneous provisions	Total
<b>Balance at Jan. 1, 2016</b>	<b>31,326</b>	<b>4,148</b>	<b>8,409</b>	<b>7,075</b>	<b>50,958</b>
Foreign exchange differences	174	35	93	100	402
Changes in consolidated Group	23	1	3	124	151
Utilized	9,265	1,344	1,583	2,103	14,295
Additions/New provisions	12,180	1,736	5,605	3,419	22,939
Unwinding of discount/effect of change in discount rate	123	196	-84	3	238
Reversals	1,533	227	726	713	3,199
<b>Balance at Dec. 31, 2016</b>	<b>33,027</b>	<b>4,546</b>	<b>11,717</b>	<b>7,904</b>	<b>57,193</b>
of which current	19,521	1,900	8,624	5,666	35,711
of which noncurrent	13,506	2,646	3,092	2,238	21,482
<b>Balance at Jan. 1, 2017</b>	<b>33,027</b>	<b>4,546</b>	<b>11,717</b>	<b>7,904</b>	<b>57,193</b>
Foreign exchange differences	-689	-61	-119	-169	-1,038
Changes in consolidated Group	13	3	-13	-27	-24
Utilized	17,546	1,450	7,444	2,334	28,774
Additions/New provisions	14,990	2,030	2,190	3,217	22,426
Unwinding of discount/effect of change in discount rate	-50	11	-25	6	-57
Reversals	1,881	193	504	962	3,540
<b>Balance at Dec. 31, 2017</b>	<b>27,865</b>	<b>4,886</b>	<b>5,802</b>	<b>7,634</b>	<b>46,186</b>
of which current	14,821	2,069	2,999	5,458	25,347
of which noncurrent	13,044	2,817	2,802	2,176	20,839

The obligations arising from sales contain provisions covering all risks relating to the sale of vehicles, components and genuine parts through to the disposal of end-of-life vehicles. They primarily comprise warranty obligations, calculated on the basis of losses to date and estimated future losses. They also include provisions for discounts, bonuses and similar allowances which are incurred after the balance sheet date, but for which there is a legal or constructive obligation attributable to sales revenue before the balance sheet date.

Provisions for employee expenses are recognized for long-service awards, time credits, partial retirement arrangements, severance payments and similar obligations, among other things.

The decline in provisions for obligations arising from sales and for litigation and legal risks result primarily from the utilization of the provisions recognized in connection with the diesel issue. In addition to residual provisions relating to the diesel issue, the provisions for litigation and legal risks contain amounts related to a large number of legal disputes and official proceedings in which Volkswagen Group companies become involved in Germany and internationally in the course of their operating activities. In particular, such legal disputes and other proceedings may occur in relation to suppliers, dealers, customers, employees, or investors. Please refer to the "Litigation" section for a discussion of the legal risks.

Miscellaneous provisions relate to a wide range of identifiable specific risks, price risks and uncertain obligations, which are measured in the amount of the expected settlement value.

Miscellaneous provisions additionally include provisions amounting to €534 million (previous year: €490 million) relating to the insurance business.

### 31. Put options and compensation rights granted to noncontrolling interest share-holders

This balance sheet item consists primarily of the present value of the cash settlement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) offered to MAN shareholders in connection with the control and profit and loss transfer agreement, including the basic interest rate in accordance with section 247 of the Bürgerliches Gesetzbuch (BGB – German Civil Code) assumed until the end of the award proceedings. The Annual General Meeting of MAN SE approved the conclusion of a control and profit and loss transfer agreement between MAN SE and Volkswagen Truck & Bus GmbH, a subsidiary of Volkswagen AG, in June 2013. The agreement sets out that the noncontrolling interest shareholders of MAN SE are entitled to either a cash settlement in accordance with section 305 of the AktG amounting to €80.89 per tendered ordinary or preferred share, or cash compensation in accordance with section 304 of the AktG in the amount of €3.07 per ordinary or preferred share (after corporate taxes, before the shareholder's individual tax liability) for each full fiscal year. In July 2013, award proceedings were instituted to review the appropriateness of the cash settlement set out in the agreement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) and the cash compensation in accordance with section 304 of the AktG. In July 2015, the Munich Regional Court ruled in the first instance that the amount of the cash settlement payable to the noncontrolling interest shareholders of MAN should be increased from €80.89 to €90.29; at the same time, the amount of the cash compensation was confirmed. The ruling is not yet legally effective, and both parties to the proceedings have since appealed. Volkswagen continues to maintain that the results of the valuation are correct. The appropriateness of the valuation was confirmed by the audit firms and by the court-appointed auditor of the agreement. As a precaution, the measurement was adjusted in 2015 to the higher settlement payable.

### 32. Trade payables

€ million	Dec. 31, 2017	Dec. 31, 2016
Trade payables to		
third parties	22,661	22,311
unconsolidated subsidiaries	187	182
joint ventures	64	157
associates	127	141
other investees and investors	7	3
	<b>23,046</b>	<b>22,794</b>

**Additional balance sheet disclosures in accordance with IFRS 7  
(Financial Instruments)**

**CARRYING AMOUNT OF FINANCIAL INSTRUMENTS BY IAS 39 MEASUREMENT CATEGORY**

€ million	Dec. 31, 2017	Dec. 31, 2016
Financial assets at fair value through profit or loss	1,712	990
Loans and receivables <sup>1</sup>	125,550	122,376
Available-for-sale financial assets	16,182	17,707
Financial liabilities at fair value through profit or loss	1,540	2,358
Financial liabilities measured at amortized cost	198,821	188,791

<sup>1</sup> Prior-year figures adjusted. Further details can be found in the disclosures in the section entitled "Noncurrent and current financial services receivables".

**RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS**

The following table shows the reconciliation of the balance sheet items to the relevant classes of financial instruments, broken down by the carrying amount and fair value of the financial instruments.

The fair value of financial instruments measured at amortized cost, such as receivables and liabilities, is calculated by discounting using a market rate of interest for a similar risk and matching maturity. For reasons of materiality, the fair value of current balance sheet items is generally deemed to be their carrying amount.

Financial instruments measured at fair value also include shares in partnerships and corporations. There is no active market for these instruments. Since the future cash flows cannot be reliably determined, fair value cannot be determined using measurement models. The shares in these companies are carried at cost.

**RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS**  
**AS OF DECEMBER 31, 2016**

€ million	MEASURED AT FAIR VALUE		Fair value	DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING		Carrying amount	Carrying amount	BALANCE SHEET ITEM AT DEC. 31, 2016
	Carrying amount	Carrying amount		Carrying amount	Carrying amount			
<b>Noncurrent assets</b>								
Equity-accounted investments	—	—	—	—	—	8,616	8,616	
Other equity investments	187	—	—	—	—	809	996	
Financial services receivables	—	68,402	70,766	—	—	—	—	68,402
Other financial assets	251	4,982	5,008	3,023	—	—	—	8,256
<b>Current assets</b>								
Trade receivables	—	12,187	12,187	—	—	—	—	12,187
Financial services receivables	—	49,673	49,673	—	—	—	—	49,673
Other financial assets	740	9,527	9,527	1,577	—	—	—	11,844
Marketable securities	17,520	—	—	—	—	—	—	17,520
Cash, cash equivalents and time deposits	—	19,265	19,265	—	—	—	—	19,265
<b>Noncurrent liabilities</b>								
Noncurrent financial liabilities	—	66,358	66,932	—	—	—	—	66,358
Other noncurrent financial liabilities	885	1,859	1,863	1,745	—	—	—	4,488
<b>Current liabilities</b>								
Put options and compensation rights granted to noncontrolling interest shareholders	—	3,849	3,861	—	—	—	—	3,849
Current financial liabilities	—	88,461	88,461	—	—	—	—	88,461
Trade payables	—	22,794	22,794	—	—	—	—	22,794
Other current financial liabilities	1,473	6,010	6,010	1,956	—	—	—	9,438

**RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS  
AS OF DECEMBER 31, 2017**

€ million	MEASURED AT FAIR VALUE		Fair value	DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING		NOT WITHIN SCOPE OF IFRS 7	BALANCE SHEET ITEM AT DEC. 31, 2017
	Carrying amount	Carrying amount		Carrying amount	Carrying amount		
<b>Noncurrent assets</b>							
Equity-accounted investments	–	–	–	–	–	8,205	8,205
Other equity investments	243	–	–	–	–	1,075	1,318
Financial services receivables	–	73,249	75,049	–	–	–	73,249
Other financial assets	776	4,364	4,391	3,315	–	–	8,455
<b>Current assets</b>							
Trade receivables	–	13,357	13,357	–	–	–	13,357
Financial services receivables	–	53,145	53,145	–	–	–	53,145
Other financial assets	936	9,153	9,153	1,909	–	–	11,998
Marketable securities	15,939	–	–	–	–	–	15,939
Cash, cash equivalents and time deposits	–	18,457	18,457	–	–	–	18,457
Assets held for sale	–	–	–	–	90	90	90
<b>Noncurrent liabilities</b>							
Noncurrent financial liabilities	–	81,628	82,567	–	–	–	81,628
Other noncurrent financial liabilities	774	1,630	1,633	261	–	–	2,665
<b>Current liabilities</b>							
Put options and compensation rights granted to noncontrolling interest shareholders	–	3,795	3,811	–	–	–	3,795
Current financial liabilities	–	81,844	81,844	–	–	–	81,844
Trade payables	–	23,046	23,046	–	–	–	23,046
Other current financial liabilities	766	7,358	7,358	446	–	–	8,570

Uniform valuation techniques and inputs are used to measure fair value. The fair value of Level 2 and 3 financial instruments is measured in the individual divisions on the basis of Group-wide specifications. The measurement techniques used are explained in the section on "Accounting policies". The fair value of put options and compensation rights granted to noncontrolling interest shareholders is calculated using a present value model based on the cash settlement determined by the Munich Regional Court in the award proceedings, including cash compensation, as well as the minimum statutory interest rate and a risk-adjusted discount rate for a matching maturity. For further information, please see section entitled "Put options and compensation rights granted to noncontrolling interest shareholders". The fair value of Level 3 receivables was measured by reference to individual expectations of losses; these are based to a significant extent on the Company's assumptions about counterparty credit quality. Financial services receivables are allocated to Level 3 because their fair value was measured using inputs that are not observable in an active market.

The following table contains an overview of the financial assets and liabilities measured at fair value by level:

**FINANCIAL ASSETS AND LIABILITIES MEASURED AT FAIR VALUE BY LEVEL**

€ million	Dec. 31, 2016	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other equity investments	187	76	—	111
Other financial assets	251	—	216	34
<b>Current assets</b>				
Other financial assets	740	—	734	6
Marketable securities	17,520	17,520	—	—
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	885	—	722	163
<b>Current liabilities</b>				
Other current financial liabilities	1,473	—	1,406	67

€ million	Dec. 31, 2017	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other equity investments	243	103	—	140
Other financial assets	776	—	705	71
<b>Current assets</b>				
Other financial assets	936	—	933	3
Marketable securities	15,939	15,939	—	—
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	774	—	242	532
<b>Current liabilities</b>				
Other current financial liabilities	766	—	533	233

**FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES MEASURED AT AMORTIZED COST BY LEVEL**

€ million	Dec. 31, 2016	Level 1	Level 2	Level 3
<b>Fair value of financial assets measured at amortized cost</b>				
Financial services receivables	120,438	—	—	120,438
Trade receivables	12,187	—	11,977	210
Other financial assets	14,535	550	6,695	7,289
Cash, cash equivalents and time deposits	19,265	18,838	426	—
<b>Fair value of financial assets measured at amortized cost</b>	<b>166,425</b>	<b>19,389</b>	<b>19,099</b>	<b>127,937</b>
<b>Fair value of financial liabilities measured at amortized cost</b>				
Put options and compensation rights granted to noncontrolling interest shareholders	3,861	—	—	3,861
Trade payables	22,794	—	22,794	—
Financial liabilities	155,394	39,391	114,198	1,804
Other financial liabilities	7,873	537	7,159	177
<b>Fair value of financial liabilities measured at amortized cost</b>	<b>189,921</b>	<b>39,928</b>	<b>144,151</b>	<b>5,842</b>

€ million	Dec. 31, 2017	Level 1	Level 2	Level 3
<b>Fair value of financial assets measured at amortized cost</b>				
Financial services receivables	128,195	—	—	128,195
Trade receivables	13,357	—	13,184	173
Other financial assets	13,544	170	5,925	7,449
Cash, cash equivalents and time deposits	18,457	18,043	414	—
<b>Fair value of financial assets measured at amortized cost</b>	<b>173,553</b>	<b>18,213</b>	<b>19,524</b>	<b>135,817</b>
<b>Fair value of financial liabilities measured at amortized cost</b>				
Put options and compensation rights granted to noncontrolling interest shareholders	3,811	—	—	3,811
Trade payables	23,046	—	23,046	—
Financial liabilities	164,411	50,970	111,606	1,835
Other financial liabilities	8,992	596	8,184	212
<b>Fair value of financial liabilities measured at amortized cost</b>	<b>200,259</b>	<b>51,566</b>	<b>142,836</b>	<b>5,857</b>

**DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING BY LEVEL**

€ million	Dec. 31, 2016	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other financial assets	3,023	—	3,019	4
<b>Current assets</b>				
Other financial assets	1,577	—	1,577	—
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	1,745	—	1,745	0
<b>Current liabilities</b>				
Other current financial liabilities	1,956	—	1,956	—

€ million	Dec. 31, 2017	Level 1	Level 2	Level 3
<b>Noncurrent assets</b>				
Other financial assets	3,315	—	3,315	—
<b>Current assets</b>				
Other financial assets	1,909	—	1,909	—
<b>Noncurrent liabilities</b>				
Other noncurrent financial liabilities	261	—	261	—
<b>Current liabilities</b>				
Other current financial liabilities	446	—	445	0

The allocation of fair values to the three levels in the fair value hierarchy is based on the availability of observable market prices. Level 1 is used to report the fair value of financial instruments for which a price is directly available in an active market. Examples include marketable securities and other equity investments measured at fair value. Fair values in Level 2, for example of derivatives, are measured on the basis of observable market inputs using market-based valuation techniques. In particular, the inputs used include exchange rates, yield curves and commodity prices that are observable in the relevant markets and obtained through pricing services. Level 3 fair values are calculated using valuation techniques that incorporate inputs that are not observable in active markets. In the Volkswagen Group, long-term commodity futures are allocated to Level 3 because the prices available on the market must be extrapolated for measurement purposes. This is done on the basis of observable inputs obtained for the different commodities through pricing services. Options on equity instruments and residual value protection models are also reported in Level 3. Equity instruments are measured primarily using the relevant business plans and entity-specific discount rates. The significant inputs used to measure fair value for the residual value protection models include forecasts and estimates of used vehicle residual values for the appropriate models.

**CHANGES IN BALANCE SHEET ITEMS MEASURED AT FAIR VALUE BASED ON LEVEL 3**

€ million	Financial assets measured at fair value	Financial liabilities measured at fair value
<b>Balance at Jan. 1, 2016</b>	<b>119</b>	<b>251</b>
Foreign exchange differences	0	0
Total comprehensive income	24	97
recognized in profit or loss	17	100
recognized in other comprehensive income	7	-3
Additions (purchases)	23	-
Sales and settlements	-9	-89
Transfers into Level 2	-6	-30
<b>Balance at Dec. 31, 2016</b>	<b>152</b>	<b>230</b>
 <b>Total gains or losses recognized in profit or loss</b>	<b>17</b>	<b>-100</b>
Net other operating expense/income	-	-
of which attributable to assets/liabilities held at the reporting date	-	-
Financial result	17	-100
of which attributable to assets/liabilities held at the reporting date	14	-74

€ million	Financial assets measured at fair value	Financial liabilities measured at fair value
<b>Balance at Jan. 1, 2017</b>	<b>152</b>	<b>230</b>
Foreign exchange differences	-9	-1
Total comprehensive income	68	526
recognized in profit or loss	72	526
recognized in other comprehensive income	-4	0
Additions (purchases)	47	115
Sales and settlements	-11	-104
Transfers into Level 2	-31	-2
<b>Balance at Dec. 31, 2017</b>	<b>215</b>	<b>765</b>
 <b>Total gains or losses recognized in profit or loss</b>	<b>72</b>	<b>-526</b>
Net other operating expense/income	-	-
of which attributable to assets/liabilities held at the reporting date	-	-
Financial result	72	-526
of which attributable to assets/liabilities held at the reporting date	32	-525

The transfers between the levels of the fair value hierarchy are reported at the respective reporting dates. The transfers out of Level 3 into Level 2 comprise commodity futures for which observable quoted prices are now available for measurement purposes due to the decline in their remaining maturities; consequently, no extrapolation is required. There were no transfers between other levels of the fair value hierarchy.

Commodity prices are the key risk variable for the fair value of commodity futures. Sensitivity analyses are used to present the effect of changes in commodity prices on earnings after tax and equity.

If commodity prices for commodity futures classified as Level 3 had been 10% higher (lower) as of December 31, 2017, earnings after tax would have been €10 million (previous year: €6 million) higher (lower) and equity would have been €– million (previous year: €3 million) higher (lower).

The key risk variable for measuring options on equity instruments held by the Company is the relevant enterprise value. Sensitivity analyses are used to present the effect of changes in risk variables on earnings after tax.

If the assumed enterprise values had been 10% higher, earnings after tax would have been €3 million (previous year: €1 million) higher. If the assumed enterprise values had been 10% lower, earnings after tax would have been €3 million (previous year: €1 million) lower.

Residual value risks result from hedging agreements with dealers under which earnings effects caused by market-related fluctuations in residual values that arise from buy-back obligations under leases are borne in part by the Volkswagen Group.

The key risk variable influencing the fair value of the options relating to residual value risks is used car prices. Sensitivity analyses are used to quantify the effects of changes in used car prices on earnings after tax.

If the prices for the used cars covered by the residual value protection model had been 10% higher as of December 31, 2017, earnings after tax would have been €319 million (previous year: €249 million) higher. If the prices for the used cars covered by the residual value protection model had been 10% lower as of December 31, 2017, earnings after tax would have been €333 million (previous year: €249 million) lower.

### OFFSETTING OF FINANCIAL ASSETS AND LIABILITIES

The following tables contain information about the effects of offsetting in the balance sheet and the potential financial effects of offsetting in the case of instruments that are subject to a legally enforceable master netting arrangement or a similar agreement.

€ million	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET					Net amount at Dec. 31, 2016
	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities set off in the balance sheet	Net amounts of financial assets presented in the balance sheet	Financial instruments	Collateral received	
Derivatives	5,591	–	5,591	–3,425	–175	1,990
Financial services receivables	118,470	–395	118,075	–	–65	118,010
Trade receivables	12,188	–2	12,187	0	–7	12,179
Marketable securities	17,520	–	17,520	–	–	17,520
Cash, cash equivalents and time deposits	19,265	–	19,265	–	–	19,265
Other financial assets	14,709	–14	14,695	0	–	14,695

€ million	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET					Net amount at Dec. 31, 2017
	Gross amounts of recognized financial assets	Gross amounts of recognized financial liabilities set off in the balance sheet	Net amounts of financial assets presented in the balance sheet	Financial instruments	Collateral received	
Derivatives	6,936	0	6,936	–1,036	–197	5,704
Financial services receivables	126,877	–482	126,395	–	–67	126,328
Trade receivables	13,356	0	13,356	0	–1	13,355
Marketable securities	15,939	–	15,939	–	–	15,939
Cash, cash equivalents and time deposits	18,457	–	18,457	–	–	18,457
Other financial assets	13,780	–20	13,760	–	–	13,760

€ million	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET					Net amount at Dec. 31, 2016
	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets set off in the balance sheet	Net amounts of financial liabilities presented in the balance sheet	Financial instruments	Collateral pledged	
Put options and compensation rights granted to noncontrolling interest shareholders	3,849	—	3,849	—	—	3,849
Derivatives	6,058	—	6,058	—3,427	—24	2,607
Financial liabilities	154,819	—	154,819	—	—3,041	151,778
Trade payables	22,796	—2	22,794	0	—	22,794
Other financial liabilities	8,278	—409	7,869	—	—	7,869

€ million	AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET					Net amount at Dec. 31, 2017
	Gross amounts of recognized financial liabilities	Gross amounts of recognized financial assets set off in the balance sheet	Net amounts of financial liabilities presented in the balance sheet	Financial instruments	Collateral pledged	
Put options and compensation rights granted to noncontrolling interest shareholders	3,795	—	3,795	—	—	3,795
Derivatives	2,254	—7	2,246	—904	—12	1,330
Financial liabilities	163,472	—	163,472	—	—2,795	160,677
Trade payables	23,046	0	23,046	0	—	23,045
Other financial liabilities	9,483	—495	8,988	—	—	8,988

The “Financial instruments” column shows the amounts that are subject to a master netting arrangement but were not set off because they do not meet the criteria for offsetting in the balance sheet. The “Collateral received” and “Collateral pledged” columns show the amounts of cash collateral and collateral in the form of financial instruments received and pledged for the total assets and liabilities that do not meet the criteria for offsetting in the balance sheet.

**CHANGES IN CREDIT RISK VALUATION ALLOWANCES ON FINANCIAL ASSETS**

€ million	Specific valuation allowances	Portfolio-based valuation allowances	2017	Specific valuation allowances	Portfolio-based valuation allowances	2016
<b>Balance at Jan. 1</b>	<b>2,092</b>	<b>2,175</b>	<b>4,268</b>	<b>2,142</b>	<b>1,970</b>	<b>4,112</b>
Exchange rate and other changes	-87	-46	-132	90	-12	78
Changes in consolidated Group	-18	0	-18	-25	0	-25
Additions	853	525	1,378	663	727	1,390
Utilization	427	-	427	429	-	429
Reversals	339	676	1,014	404	453	857
Reclassification	20	-20	-	56	-56	0
<b>Balance at Dec. 31</b>	<b>2,094</b>	<b>1,959</b>	<b>4,054</b>	<b>2,092</b>	<b>2,175</b>	<b>4,268</b>

The valuation allowances mainly relate to the credit risks associated with receivables from the financial services business.

**ASSET-BACKED SECURITIES TRANSACTIONS**

Asset-backed securities transactions with financial assets amounting to €24,561 million (previous year: €24,191 million) entered into to refinance the financial services business are included in bonds, commercial paper and notes, and liabilities from loans. The corresponding carrying amount of the receivables from the customer and dealer financing and the finance lease business amounted to €26,689 million (previous year: €26,184 million). Collateral of €41,799 million (previous year: €43,847 million) in total was furnished as part of asset-backed securities transactions. The expected payments were assigned to structured entities and the equitable liens in the financed vehicles were transferred. These asset-backed securities transactions did not result in the receivables from financial services business being derecognized, as the Group retains nonpayment and late payment risks. The difference between the assigned receivables and the related liabilities is the result of different terms and conditions and the share of the securitized paper and notes held by the Volkswagen Group itself, as well as the proportion of vehicles financed within the Group.

Most of the public and private asset-backed securities transactions of the Volkswagen Group can be repaid in advance (clean-up call) if less than 9% or 10%, as appropriate, of the original transaction volume is outstanding. The assigned receivables cannot be assigned again or pledged elsewhere as collateral. The claims of the holders of commercial paper and notes are limited to the assigned receivables and the receipts from those receivables are earmarked for the repayment of the corresponding liability.

As of December 31, 2017, the fair value of the assigned receivables still recognized in the balance sheet was €27,089 million (previous year: €27,856 million). The fair value of the related liabilities was €24,511 million (previous year: €24,424 million) at that reporting date.

Companies of the Volkswagen Financial Services subgroup are contractually obliged, under certain conditions, to transfer funds to the structured entities that are included in its financial statements. Since the receivables are transferred to the special purpose entity by way of undisclosed assignment, the situation may occur in which the receivable has already been reduced in a legally binding manner at the originator, for example if the obligor effectively offsets it against receivables owed to it by a company belonging to the Volkswagen Group. In this case, collateral must be furnished for the resulting compensation claims against the special purpose entity, for example if the rating of the Group company concerned declines to a contractually agreed reference value.

## Other disclosures

### 33. Cash flow statement

Cash flows are presented in the cash flow statement classified into cash flows from operating activities, investing activities and financing activities, irrespective of the balance sheet classification.

Cash flows from operating activities are derived indirectly from earnings before tax. Earnings before tax are adjusted to eliminate noncash expenditures (mainly depreciation, amortization and impairment losses) and income. Other noncash income and expense results mainly from measurement effects in connection with financial instruments and to fair value changes relating to hedging transactions (see section entitled "Other financial result"). This results in cash flows from operating activities after accounting for changes in working capital, which also include changes in lease assets and in financial services receivables.

Investing activities include additions to property, plant and equipment and equity investments, additions to capitalized development costs and investments in securities, loans and time deposits.

Financing activities include outflows of funds from dividend payments and redemption of bonds, inflows from the capital increases and issuance of bonds, and changes in other financial liabilities. Please refer to the "Equity" section for information on the inflows from the issuance of hybrid capital in June 2017 in the amount of €3,473 million contained in the capital contributions.

The changes in balance sheet items that are presented in the cash flow statement cannot be derived directly from the balance sheet, as the effects of currency translation and changes in the consolidated Group are noncash transactions and are therefore eliminated.

In 2017, cash flows from operating activities include interest received amounting to €6,641 million (previous year: €6,364 million) and interest paid amounting to €2,332 million (previous year: €2,716 million). Cash flows from operating activities also include dividend payments received from joint ventures and associates of €3,653 million (previous year: €3,613 million).

Dividends amounting to €1,015 million (previous year: €68 million) were paid to Volkswagen AG shareholders.

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€ million	Dec. 31, 2017	Dec. 31, 2016
Cash, cash equivalents and time deposits as reported in the balance sheet	18,457	19,265
Time deposits	–420	–431
Cash and cash equivalents as reported in the cash flow statement	<u>18,038</u>	<u>18,833</u>

Time deposits are not classified as cash equivalents. Time deposits have a contractual maturity of more than three months. The maximum default risk corresponds to its carrying amount.

The following table shows the classification of changes in financial liabilities into cash and non-cash transactions:

€ million	Jan. 1, 2017	NON-CASH CHANGES				Dec. 31, 2017
		Cash-effective changes	Foreign exchange differences	Changes in consolidated group	Changes in fair values	
Bonds	52,022	12,402	-1,018	-	-289	63,118
Other total third-party borrowings	102,259	3,501	-5,273	-370	-240	99,875
Finance lease liabilities	539	-28	-25	-16	9	479
<b>Total third-party borrowings</b>	<b>154,819</b>	<b>15,875</b>	<b>-6,316</b>	<b>-386</b>	<b>-520</b>	<b>163,472</b>
Put options and compensation rights granted to noncontrolling interest shareholders	3,849	-118	-	-	64	3,795
Other financial assets and liabilities	87	-274	17	-	10	-160
<b>Financial assets and liabilities in financing activities</b>	<b>158,755</b>	<b>15,483</b>	<b>-6,299</b>	<b>-386</b>	<b>-446</b>	<b>167,107</b>

## 34. Financial risk management and financial instruments

### 1. HEDGING GUIDELINES AND FINANCIAL RISK MANAGEMENT PRINCIPLES

The principles and responsibilities for managing and controlling the risks that could arise from financial instruments are defined by the Board of Management and monitored by the Supervisory Board. General rules apply to the Group-wide risk policy; these are oriented on the statutory requirements and the “Minimum Requirements for Risk Management by Credit Institutions”.

Group Treasury is responsible for operational risk management and control of risks from financial instruments. The main functions of the MAN and PHS subgroups are included in Group Treasury's operational risk management and control for risks relating to financial instruments, while the Scania subgroup is only included to a limited extent. Subgroups have their own risk management structures. The Risk Management Group Executive Committee is regularly informed about current financial risks. In addition, the Group Board of Management and the Supervisory Board are regularly updated on the current risk situation.

For more information, please see the management report on page 187-188.

### 2. CREDIT AND DEFAULT RISK

The credit and default risk arising from financial assets involves the risk of default by counterparties, and therefore comprises at a maximum the amount of the claims under carrying amounts receivable from them and the irrevocable credit commitments. The maximum potential credit and default risk is reduced by collateral held and other credit enhancements in the amount of €78,934 million (previous year: €77,465 million). Collateral is held exclusively for financial assets in the “measured at amortized cost” category. It relates primarily to collateral for financial services receivables and trade receivables. Collateral comprises vehicles and assets transferred as security, as well as guarantees and real property liens. Cash collateral is also used in hedging transactions. The risk arising from nonderivative financial instruments is also accounted for by recognizing bad debt losses. Significant cash and capital investments, as well as derivatives, are only entered into with national and international banks. Risk is additionally limited by a limit system based primarily on the equity base of the counterparties concerned and on credit assessments by international rating agencies. Financial guarantees issued also give rise to credit and default risk. The maximum potential credit and default risk is calculated from the amount Volkswagen would have to pay if claims were to be asserted under the guarantees. The corresponding amounts are presented in the Liquidity risk section.

There were no material concentrations of risk at individual counterparties or counterparty groups in the past fiscal year due to the global allocation of the Group's business activities and the resulting diversification. There was a slight change in the concentration of credit and default risk exposures to the German public banking sector as a whole that has arisen from Group-wide cash and capital investments as well as derivatives: the portion attributable to this sector was 7.4% at the end of 2017 compared with 13.0% at the end of 2016. Any existing concentration of risk is assessed and monitored both at the level of individual counterparties or counterparty groups and with regard to the countries in which these are based, in each case using the share of all credit and default risk exposures accounted for by the risk exposure concerned.

For China, credit and default risk exposures accounted for 29.5% at the end of 2017, as against 27.9% at the end of 2016. There were no other concentrations of credit and default risk exposures in individual countries.

#### CREDIT AND DEFAULT RISK RELATING TO FINANCIAL ASSETS BY GROSS CARRYING AMOUNT

€ million	Neither past due nor impaired	Past due and not impaired	Impaired	Dec. 31, 2017	Neither past due nor impaired	Past due and not impaired	Impaired	Dec. 31, 2016
<b>Measured at amortized cost</b>								
Financial services receivables	124,044	2,888	2,900	129,832	115,747	3,001	3,003	121,751
Trade receivables	10,395	2,833	562	13,791	9,421	2,596	607	12,624
Other receivables	13,403	102	196	13,700	14,391	110	162	14,663
Measured at fair value	16,862	–	290	17,152	17,907	–	259	18,166
	<b>164,704</b>	<b>5,822</b>	<b>3,948</b>	<b>174,475</b>	<b>157,466</b>	<b>5,706</b>	<b>4,031</b>	<b>167,203</b>

There are no past due financial instruments measured at fair value in the Volkswagen Group. In fiscal year 2017, marketable securities measured at fair value with a cost of €86 million (previous year: €83 million) were individually impaired. In addition, portfolio-based impairment losses are recognized in respect of the financial services receivables presented above that are not past due and not individually impaired, as well as of the financial services receivables presented above that are past due and not individually impaired. The assets in the class used for hedging are neither past due nor impaired.

**CREDIT RATING OF THE GROSS CARRYING AMOUNTS OF FINANCIAL ASSETS  
THAT ARE NEITHER PAST DUE NOR IMPAIRED**

€ million	Risk class 1	Risk class 2	Dec. 31, 2017	Risk class 1	Risk class 2	Dec. 31, 2016
<b>Measured at amortized cost</b>						
Financial services receivables	104,143	19,901	124,044	99,153	16,595	115,747
Trade receivables	10,259	136	10,395	9,284	137	9,421
Other receivables	13,313	90	13,403	14,238	153	14,391
<b>Measured at fair value</b>	<b>22,086</b>	<b>–</b>	<b>22,086</b>	<b>22,021</b>	<b>–</b>	<b>22,021</b>
	<b>149,802</b>	<b>20,127</b>	<b>169,928</b>	<b>144,694</b>	<b>16,885</b>	<b>161,580</b>

The Volkswagen Group performs a credit assessment of borrowers in all loan and lease agreements, using scoring systems for the high-volume business and rating systems for corporate customers and receivables from dealer financing. Receivables rated as good are contained in risk class 1. Receivables from customers whose credit rating is not good but have not yet defaulted are contained in risk class 2. The financial assets measured at fair value include derivative financial instruments within hedge accounting in an amount of €5.2 billion (previous year: €4.1 billion); they are allocated to risk class 1.

**MATURITY ANALYSIS OF THE GROSS CARRYING AMOUNTS OF FINANCIAL ASSETS  
THAT ARE PAST DUE AND NOT IMPAIRED**

€ million	PAST DUE BY			GROSS CARRYING AMOUNT Dec. 31, 2016
	up to 30 days	30 to 90 days	more than 90 days	
<b>Measured at amortized cost</b>				
Financial services receivables	2,205	788	8	3,001
Trade receivables	1,080	720	795	2,596
Other receivables	49	36	24	110
<b>Measured at fair value</b>	<b>–</b>	<b>–</b>	<b>–</b>	<b>–</b>
	<b>3,334</b>	<b>1,544</b>	<b>828</b>	<b>5,706</b>

€ million	PAST DUE BY			GROSS CARRYING AMOUNT Dec. 31, 2017
	up to 30 days	30 to 90 days	more than 90 days	
<b>Measured at amortized cost</b>				
Financial services receivables	2,148	728	12	2,888
Trade receivables	1,164	689	980	2,833
Other receivables	43	21	37	102
Measured at fair value	–	–	–	–
	<b>3,355</b>	<b>1,438</b>	<b>1,029</b>	<b>5,822</b>

Collateral that was accepted for financial assets in the current fiscal year was recognized in the balance sheet in the amount of €109 million (previous year: €120 million). This mainly relates to vehicles.

### 3. LIQUIDITY RISK

The solvency and liquidity of the Volkswagen Group are ensured at all times by rolling liquidity planning, a liquidity reserve in the form of cash, confirmed credit lines and the issuance of securities on the international money and capital markets. The volume of confirmed bilateral and syndicated credit lines stood at €19.9 billion as of December 31 2017, of which €3.4 billion was drawn down.

Local cash funds in certain countries (e.g. China, Brazil, Argentina, India and South Africa) are only available to the Group for cross-border transactions subject to exchange controls. There are no significant restrictions over and above these.

The following overview shows the contractual undiscounted cash flows from financial instruments.

#### MATURITY ANALYSIS OF UNDISCOUNTED CASH FLOWS FROM FINANCIAL INSTRUMENTS

€ million	REMAINING CONTRACTUAL MATURITIES			2017	REMAINING CONTRACTUAL MATURITIES			2016
	under one year	within one to five years	over five years		under one year	within one to five years	over five years	
Put options and compensation rights granted to noncontrolling interest shareholders	3,379	–	–	3,379	3,382	–	–	3,382
Financial liabilities	83,867	69,968	16,113	169,949	90,044	60,603	10,955	161,602
Trade payables	23,041	5	–	23,046	22,788	6	–	22,794
Other financial liabilities	7,360	1,557	86	9,003	6,009	1,789	83	7,880
Derivatives	72,635	47,414	332	120,381	77,294	59,007	119	136,420
	<b>190,281</b>	<b>118,945</b>	<b>16,531</b>	<b>325,758</b>	<b>199,517</b>	<b>121,405</b>	<b>11,157</b>	<b>332,079</b>

When calculating cash outflows related to put options and compensation rights, it was assumed that shares would be tendered at the earliest possible repayment date.

Derivatives comprise both cash flows from derivative financial instruments with negative fair values and cash flows from derivatives with positive fair values for which gross settlement has been agreed. Derivatives entered into through offsetting transactions are also accounted for as cash outflows. The cash outflows from derivatives for which gross settlement has been agreed are matched in part by cash inflows. These cash inflows are not reported in the maturity analysis. If these cash inflows were also recognized, the cash outflows presented would be substantially lower. This applies in particular also if hedges have been closed with offsetting transactions.

The cash outflows from irrevocable credit commitments are presented in section entitled "Other financial obligations", classified by contractual maturities.

As of December 31, 2017, the maximum potential liability under financial guarantees amounted to €261 million (previous year: €173 million). Financial guarantees are assumed to be due immediately in all cases.

#### 4. MARKET RISK

##### 4.1 Hedging policy and financial derivatives

During the course of its general business activities, the Volkswagen Group is exposed to foreign currency, interest rate, commodity price, equity price and fund price risk. Corporate policy is to limit or eliminate such risk by means of hedging. All necessary hedging transactions with the exception of the Scania, MAN and Porsche Holding GmbH (Salzburg) subgroups are executed or coordinated centrally by Group Treasury.

The following table shows the gains and losses on hedges:

€ million	2017	2016
Hedging instruments used in fair value hedges	307	670
Hedged items used in fair value hedges	-300	-739
Ineffective portion of cash flow hedges	-11	6

The ineffective portion of cash flow hedges represents the income and expenses from changes in the fair value of hedging instruments that exceed the changes in the fair value of the hedged items but that are documented to be within the permitted range of 80% to 125% overall when measuring effectiveness. Such income or expenses are recognized directly in the financial result.

During the fiscal year, €554 million increasing earnings (previous year: €1,222 million reducing earnings) was transferred from the cash flow hedge reserve to the other operating result, €11 million increasing earnings (previous year: €10 million reducing earnings), was transferred to the financial result, and €7 million (previous year: €90 million), both reducing earnings, was transferred to cost of sales and the financial result.

The Volkswagen Group uses two different methods to present market risk from nonderivative and derivative financial instruments in accordance with IFRS 7. For quantitative risk measurement, interest rate and foreign currency risk in the Volkswagen Financial Services subgroup are measured using a value-at-risk (VaR) model on the basis of a historical simulation, while market risk in the other Group companies is determined using a sensitivity analysis. The value-at-risk calculation indicates the size of the maximum potential loss on the portfolio as a whole within a time horizon of 40 days, measured at a confidence level of 99%. To provide the basis for this calculation, all cash flows from nonderivative and derivative financial instruments are aggregated into an interest rate gap analysis. The historical market data used in calculating value at risk covers a period of 1,000 trading days. The sensitivity analysis calculates the effect on equity and profit or loss by modifying risk variables within the respective market risks.

#### 4.2 Market risk in the Volkswagen Group (excluding Volkswagen Financial Services subgroup)

##### 4.2.1 Foreign currency risk

Foreign currency risk in the Volkswagen Group (excluding Volkswagen Financial Services subgroup) is attributable to investments, financing measures and operating activities. Currency forwards, currency options, currency swaps and cross-currency swaps are used to limit foreign currency risk. These transactions relate to the exchange rate hedging of all material payments covering general business activities that are not made in the functional currency of the respective Group companies. The principle of matching currencies applies to the Group's financing activities.

Hedging transactions entered into in 2017 as part of foreign currency risk management were amongst others in Argentine pesos, Australian dollars, Brazilian real, sterling, Chinese renminbi, Hong Kong dollars, Indian rupees, Japanese yen, Canadian dollars, Mexican pesos, Norwegian kroner, Polish zloty, Russian rubles, Swedish kronor, Swiss francs, Singapore dollars, South African rand, South Korean won, Taiwan dollars, Czech koruna, Hungarian forints and US dollars.

All nonfunctional currencies in which the Volkswagen Group enters into financial instruments are included as relevant risk variables in the sensitivity analysis in accordance with IFRS 7.

If the functional currencies concerned had appreciated or depreciated by 10% against the other currencies, the exchange rates shown below would have resulted in the following effects on the hedging reserve in equity and on earnings after tax. It is not appropriate to add together the individual figures, since the results of the various functional currencies concerned are based on different scenarios.

The following table shows the sensitivities of the main currencies in the portfolio as of December 31, 2017.

€ million	DEC. 31, 2017		DEC. 31, 2016	
	+10%	-10%	+10%	-10%
<b>Exchange rate</b>				
<b>EUR/USD</b>				
Hedging reserve	1,627	-1,303	1,929	-2,294
Profit/loss after tax	-365	193	-338	649
<b>EUR/GBP</b>				
Hedging reserve	1,126	-1,124	1,202	-1,189
Profit/loss after tax	-73	75	-58	51
<b>EUR/CNY</b>				
Hedging reserve	515	-491	665	-662
Profit/loss after tax	-58	62	6	25
<b>EUR/JPY</b>				
Hedging reserve	271	-244	318	-318
Profit/loss after tax	-40	20	-7	7
<b>EUR/CHF</b>				
Hedging reserve	246	-232	380	-375
Profit/loss after tax	16	-20	-9	2
<b>EUR/AUD</b>				
Hedging reserve	164	-164	178	-182
Profit/loss after tax	-36	37	-23	26
<b>EUR/CAD</b>				
Hedging reserve	121	-113	145	-154
Profit/loss after tax	-51	48	-54	63
<b>EUR/SEK</b>				
Hedging reserve	105	-100	91	-89
Profit/loss after tax	-22	18	-24	23
<b>CZK/GBP</b>				
Hedging reserve	91	-91	106	-106
Profit/loss after tax	0	0	0	0
<b>EUR/CZK</b>				
Hedging reserve	69	-69	31	-31
Profit/loss after tax	-20	20	-43	43
<b>EUR/TWD</b>				
Hedging reserve	72	-72	36	-36
Profit/loss after tax	-10	10	-10	10
<b>GBP/USD</b>				
Hedging reserve	63	-63	106	-106
Profit/loss after tax	-2	2	2	-2
<b>EUR/KRW</b>				
Hedging reserve	55	-59	77	-82
Profit/loss after tax	-3	6	-8	13
<b>EUR/PLN</b>				
Hedging reserve	-	-	-107	108
Profit/loss after tax	-60	60	-21	21
<b>PLN/CZK</b>				
Hedging reserve	58	-58	14	-14
Profit/loss after tax	0	0	0	0
<b>BRL/USD</b>				
Hedging reserve	-16	16	-20	20
Profit/loss after tax	41	-41	82	-82

#### 4.2.2 Interest rate risk

Interest rate risk in the Volkswagen Group (excluding Volkswagen Financial Services subgroup) results from changes in market interest rates, primarily for medium- and long-term variable interest receivables and liabilities. Interest rate swaps and cross-currency interest rate swaps are entered into to hedge against this risk primarily under fair value or cash flow hedges, and depending on market conditions. Intragroup financing arrangements are mainly structured to match the maturities of their refinancing. Departures from the Group standard are subject to centrally defined limits and monitored on an ongoing basis.

Interest rate risk within the meaning of IFRS 7 is calculated for these companies using sensitivity analyses. The effects of the risk-variable market rates of interest on the financial result and on equity are presented, net of tax.

If market interest rates had been 100 bps higher as of December 31, 2017, equity would have been €88 million (previous year: €60 million) lower. If market interest rates had been 100 bps lower as of December 31, 2017, equity would have been €24 million (previous year: €60 million) higher.

If market interest rates had been 100 bps higher as of December 31, 2017, earnings after tax would have been €76 million (previous year: €10 million) higher. If market interest rates had been 100 bps lower as of December 31, 2017, earnings after tax would have been €64 million (previous year: €24 million) lower.

#### 4.2.3 Commodity price risk

Commodity price risk in the Volkswagen Group (excluding Volkswagen Financial Services subgroup) primarily results from price fluctuations and the availability of ferrous and non-ferrous metals, precious metals, commodities required in connection with the Group's digitalization and electrification strategy, as well as of coal, CO<sub>2</sub> certificates and rubber.

Commodity price risk is limited by entering into forward transactions and swaps.

Up to the end of 2016, hedge accounting in accordance with IAS 39 was applied in some cases to the hedging of commodity risk associated with aluminum and coal. Since the beginning of 2017, hedge accounting has not been applied to these hedging relationships.

Commodity price risk within the meaning of IFRS 7 is presented using sensitivity analyses. These show the effect on earnings after tax of changes in the risk variable commodity prices.

If the commodity prices of the hedged nonferrous metals, coal and rubber had been 10% higher (lower) as of December 31, 2017, earnings after tax would have been €101 million (previous year: €82 million) higher (lower).

If the commodity prices of the hedges included in hedge accounting had been 10% higher (lower) as of December 31, 2016, equity would have been €48 million higher (lower). As of the end of 2017, hedge accounting was not applied to these hedging relationships.

#### 4.2.4 Equity and bond price risk

The Spezialfonds (special funds) launched using surplus liquidity and the equity interests measured at fair value are subject in particular to equity price and bond price risk, which can arise from fluctuations in quoted market prices, stock exchange indices and market rates of interest. The changes in bond prices resulting from variations in the market rates of interest are quantified in sections 4.2.1 and 4.2.2, as are the measurement of foreign currency and other interest rate risks arising from the special funds and the equity interests measured at fair value. As a rule, we counter the risks arising from the special funds by ensuring a broad diversification of products, issuers and regional markets when investing funds, as stipulated by our Investment Guidelines. In addition, we hedge exchange rates when market conditions are appropriate.

As part of the presentation of market risk, IFRS 7 requires disclosures on how hypothetical changes in risk variables affect the price of financial instruments. Potential risk variables here are in particular quoted market prices or indices, as well as interest rate changes as bond price parameters.

If share prices had been 10% higher as of December 31, 2017, equity would have been €28 million (previous year: €4 million) higher. If share prices had been 10% lower as of December 31, 2017, equity would have been €108 million (previous year: €28 million) lower.

#### 4.3 Market risk at Volkswagen Financial Services subgroup

Exchange rate risk in the Volkswagen Financial Services subgroup is mainly attributable to assets that are not denominated in the functional currency and from refinancing within operating activities. Interest rate risk relates to refinancing without matching maturities and the varying interest rate elasticity of individual asset and liability items. The risks are limited by the use of currency and interest rate hedges.

Microhedges and portfolio hedges are used for interest rate hedging. Fixed-rate assets and liabilities included in the hedging strategy are recognized at fair value, as opposed to their original subsequent measurement at amortized cost. The resulting effects in the income statement are offset by the corresponding gains and losses on the interest rate hedging instruments (swaps). Currency hedges (currency forwards and cross-currency interest rate swaps) are used to mitigate foreign currency risk. All cash flows in foreign currency are hedged.

As of December 31, 2017, the value at risk was €167 million (previous year: €95 million) for interest rate risk and €165 million (previous year: €199 million) for foreign currency risk.

The entire value at risk for interest rate and foreign currency risk at the Volkswagen Financial Services subgroup was €167 million (previous year: €197 million).

#### 5. METHODS FOR MONITORING HEDGE EFFECTIVENESS

In the Volkswagen Group, hedge effectiveness is assessed prospectively using the critical terms match method and using statistical methods in the form of a regression analysis. Retrospective analysis of effectiveness uses effectiveness tests in the form of the dollar offset method or a regression analysis.

Under the dollar offset method, the changes in value of the hedged item expressed in monetary units are compared with the changes in value of the hedging instrument expressed in monetary units.

Where regression analysis is used, the change in value of the hedged item is presented as an independent variable, and that of the hedging instrument as a dependent variable. Hedge relationships are classified as effective if they have sufficient coefficients of determination and slope factors.

**NOTIONAL AMOUNT OF DERIVATIVES**

€ million	REMAINING TERM			TOTAL NOTIONAL AMOUNT Dec. 31, 2017	TOTAL NOTIONAL AMOUNT Dec. 31, 2016		
	under one year	within one to five years	over five years				
<b>Notional amount of hedging instruments used in cash flow hedges:</b>							
Interest rate swaps	3,490	8,999	38	12,527	17,054		
Currency forwards	32,329	35,538	–	67,867	84,754		
Currency options	8,128	11,435	–	19,563	26,081		
Cross-currency swaps	–	–	–	–	2,295		
Cross-currency interest rate swaps	387	165	–	551	1,951		
Commodity future contracts	–	–	–	–	679		
<b>Notional amount of other derivatives:</b>							
Interest rate swaps	20,483	48,067	20,125	88,675	84,612		
Interest rate option contracts	–	–	–	–	–		
Currency forwards	19,592	2,942	2	22,535	28,436		
Other currency options	10	–	–	10	45		
Cross-currency swaps	20,825	1,451	–	22,276	12,207		
Cross-currency interest rate swaps	3,350	6,025	293	9,667	8,839		
Commodity future contracts	798	477	–	1,275	1,235		

Both derivatives closed with offsetting transactions and the offsetting transactions themselves are included in the respective notional amount. The offsetting transactions cancel out the effects of the original hedging transactions. If the offsetting transactions were not included, the respective notional amount would be significantly lower. In addition to the derivatives used for hedging foreign currency, interest rate and price risk, the Group held options and other derivatives on equity instruments at the reporting date with a notional amount of €29 million (previous year: €45 million) whose remaining maturity is under one year.

Existing cash flow hedges in the notional amount of €361 million (previous year: €811 million) were discontinued because of a reduction in the projections. €3 million (previous year: €5 million) was transferred from the cash flow hedge reserve to the financial result, reducing earnings. In addition, hedges were to be terminated due to internal risk regulations.

Items hedged under cash flow hedges are expected to be realized in accordance with the maturity buckets of the hedges reported in the table.

The fair values of the derivatives are estimated using market data at the balance sheet date as well as by appropriate valuation techniques. The following term structures were used for the calculation:

in %	EUR	CHF	CNY	CZK	GBP	JPY	KRW	SEK	USD
Interest rate for six months	-0.3214	-0.5535	4.9281	0.4824	0.5446	0.0281	1.7108	-0.3815	1.7499
Interest rate for one year	-0.2826	-0.4924	4.7799	0.4543	0.6229	0.0295	1.8385	-0.3298	1.9011
Interest rate for five years	0.3170	-0.1410	4.7400	1.6200	1.0325	0.1013	2.1275	0.4980	2.2400
Interest rate for ten years	0.8840	0.2690	4.6300	1.8450	1.2735	0.2613	2.2000	1.2000	2.3920

## 35. Capital management

The Group's capital management ensures that its goals and strategies can be achieved in the interests of shareholders, employees and other stakeholders. In particular, management focuses on generating the minimum return on invested assets in the Automotive Division that is required by the capital markets, and on increasing the return on equity in the Financial Services Division. In the process, it aims overall to achieve the highest possible growth in the value of the Group and its divisions for the benefit of all the Company's stakeholder groups.

In order to maximize the use of resources in the Automotive Division and to measure the success of this, we have for a number of years been using a value-based management system, with value contribution as an absolute performance measure and return on investment (ROI) as a relative indicator.

Value contribution is defined as the difference between operating profit after tax and the opportunity cost of invested capital. The opportunity cost of capital is calculated by multiplying the market cost of capital by average invested capital. Invested capital is calculated by taking the operating assets reported in the balance sheet (property, plant and equipment, intangible assets, lease assets, inventories and receivables) and deducting non-interest-bearing liabilities (trade payables and payments on account received). Average invested capital is derived from the balance at the beginning and the end of the reporting period. Despite the charges relating to the special items recognized in the operating result, the Automotive Division disclosed a positive value contribution of €5,935 million in the reporting period which, due to the improvement in the operating result before special items and an only slight increase in the cost of capital, was significantly higher than the prior-year figure.

The return on investment (ROI) is defined as the return on invested capital for a particular period based on the operating result after tax. If the return on investment exceeds the market cost of capital, there is an increase in the value of the invested capital and a positive value contribution. In the Group, a minimum required rate of return on invested capital of 9% is defined, which applies to both the business units and the individual products and product lines. Our goal of generating a sustained return on investment of over 15% is anchored in Strategy 2025. The return on investment therefore serves as a consistent target in operational and strategic management and is used to measure target attainment for the Automotive Division, the individual business units, and projects and products. The return on investment achieved for the Automotive Division was 12.1%, which is above our minimum rate of return on invested capital of 9% and significantly exceeds the current cost of capital of 6.0%.

Due to the specific features of the Financial Services Division, its management focuses on return on equity, a special target linked to invested capital. This measure is calculated as the ratio of earnings before tax to average equity. Average equity is calculated from the balance at the beginning and the end of the reporting period. In addition, the goals of the Financial Services Division are to meet the banking supervisory authorities' regulatory capital requirements, to procure equity for the growth planned in the coming fiscal years and to support its external rating by ensuring capital adequacy. To ensure compliance with prudential requirements at all times, a planning procedure integrated into internal reporting has been put in place at the Volkswagen Bank, allowing the required equity to be continuously determined on the basis of actual and expected business performance. In the reporting period, this again ensured that regulatory minimum capital requirements were always met both at Group level and at the level of subordinate companies' individual, specific capital requirements.

The return on investment and value contribution in the Automotive Division as well as the return on equity and the equity ratio in the Financial Services Division are shown in the following table:

€ million	2017	2016
<b>Automotive Division<sup>1</sup></b>		
Operating result after tax	11,756	7,419
Invested capital (average)	97,021	91,020
<b>Return on investment (RoI) in %</b>	<b>12.1</b>	<b>8.2</b>
Cost of capital in %	6.0	6.2
Opportunity cost of invested capital	5,821	5,643
<b>Value contribution<sup>2</sup></b>	<b>5,935</b>	<b>1,775</b>
<b>Financial Services Division</b>		
Earnings before tax	2,502	2,408
Average equity	25,626	22,342
<b>Return on equity before tax in %</b>	<b>9.8</b>	<b>10.8</b>
<b>Equity ratio in %</b>	<b>13.7</b>	<b>12.5</b>

1 Including proportionate inclusion of the Chinese joint ventures and allocation of consolidation adjustments between the Automotive and Financial Services Divisions; excluding effects on earnings and assets from purchase price allocation.

2 The value contribution corresponds to the Economic Value Added (EVA®). EVA® is a registered trademark of Stern Stewart & Co.

## 36. Contingent liabilities

€ million	Dec. 31, 2017	Dec. 31, 2016
Liabilities under guarantees	423	419
Liabilities under warranty contracts	60	75
Assets pledged as security for third-party liabilities	21	20
Other contingent liabilities	7,909	6,305
	<b>8,413</b>	<b>6,819</b>

The trust assets and liabilities of the savings and trust entities belonging to the South American subsidiaries not included in the consolidated balance sheet amount to €768 million (previous year: €944 million).

In the case of liabilities from guarantees, the Group is required to make specific payments if the debtors fail to meet their obligations.

The other contingent liabilities primarily comprise potential liabilities arising from matters relating to taxes and customs duties, as well as litigation and proceedings relating to suppliers, dealers, customers, employees and investors. The contingent liabilities recognized in connection with the diesel issue totaled €4.3 billion, of which €3.4 billion was attributable to investor lawsuits. Also included are certain elements of the class action lawsuits relating to the diesel issue as well as criminal proceedings/misdemeanor proceedings as far as these can be quantified. As some of these proceedings are still at a very early stage, the plaintiffs have in a number of cases so far not specified the basis of their claims and/or there is insufficient certainty about the number of plaintiffs or the amounts being claimed. These lawsuits meet the definition of a contingent liability but cannot, as a rule, be disclosed because it is impossible to measure the amount involved.

In addition, other contingent liabilities include an amount of €0.7 billion for potential liabilities from tax risks at MAN Latin America. In the tax proceedings involving MAN Latin America and the Brazilian tax authorities, the Brazilian tax authorities take a different position with regard to the tax effects of the acquisition structure for MAN Latin America chosen by MAN in 2009. It is not currently considered likely that a claim will be made against MAN Latin America in connection with these liabilities.

On May 5, 2016, the U.S. National Highway Traffic Safety Administration (NHTSA) announced, jointly with the Takata company, a further extension of the recall for various models from different manufacturers containing certain airbags produced by the Takata company. Recalls were also ordered by the local authorities in individual countries. The recalls also included models manufactured by the Volkswagen Group. Appropriate provisions have been recognized. Currently, the possibility of further extensions to the recalls that could also affect Volkswagen Group models cannot be ruled out. It is not possible at the moment to provide further disclosures in accordance with IAS 37.86 in relation to this matter because the technical investigations and consultations with the authorities are still being carried out.

As permitted by IAS 37.92, in order not to prejudice the outcomes of the proceedings and the interests of the Company, we have not made any further disclosures about estimates in connection with the financial effects of, and disclosures about, uncertainty regarding the timing or amount of contingent liabilities in connection with the diesel issue and investigations by the European Commission. Further information can be found under the section entitled "Litigation".

## 37. Litigation

In the course of their operating activities, Volkswagen AG and the companies in which it is directly or indirectly invested become involved in a great number of legal disputes and governmental proceedings in Germany and abroad. In particular, such legal disputes and other proceedings may occur in relation to suppliers, dealers, customers, employees, or investors. For the companies involved, these may result in payment or other obligations. Above all, in cases where US customers assert claims for vehicle defects individually or by way of a class action, highly cost-intensive measures may have to be taken and substantial compensation or punitive damages paid. Corresponding risks also result from US patent infringement proceedings.

Risks may also emerge in connection with the adherence to regulatory requirements. This particularly applies in the case of regulatory vagueness that may be interpreted differently by Volkswagen and the authorities responsible for the respective regulations. In addition, legal risks can arise from the criminal activities of individual persons, which even the best compliance management system can never completely prevent.

Where transparent and economically viable, adequate insurance coverage was taken out for these risks. For the identifiable and measurable risks, provisions considered appropriate were recognized and information about contingent liabilities disclosed. As some risks cannot be assessed or can only be assessed to a limited extent, the possibility of loss or damage not being covered by the insured amounts and provisions cannot be ruled out. This particularly applies to legal risk assessment regarding the diesel issue.

### Diesel issue

On September 18, 2015, the US Environmental Protection Agency (EPA) publicly announced in a "Notice of Violation" that irregularities in relation to nitrogen oxide (NO<sub>x</sub>) emissions had been discovered in emissions tests on certain vehicles of Volkswagen Group with type 2.0 l diesel engines in the USA. It was alleged that Volkswagen had installed undisclosed engine management software installed in 2009 to 2015 model year 2.0 l diesel engines to circumvent NO<sub>x</sub> emissions testing regulations in the USA in order to comply with certification requirements. The California Air Resources Board (CARB), a unit of the US environmental authority of California, announced its own enforcement investigation into this matter.

In this context, Volkswagen AG announced that noticeable discrepancies between the figures achieved in testing and in actual road use had been identified in around eleven million vehicles worldwide with type EA 189 diesel engines. The vast majority of these engines were type EA 189 Euro 5 engines.

On November 2, 2015, the EPA issued a "Notice of Violation" alleging that irregularities had also been discovered in the software installed in US vehicles with type V6 3.0 l diesel engines. CARB also issued a letter announcing its own enforcement investigation into this matter. AUDI AG has confirmed that at least three auxiliary emission control devices were inadequately disclosed in the course of the US approval documentation. Around 113 thousand vehicles from the 2009 to 2016 model years with certain six-cylinder diesel engines were affected in the USA and Canada, where regulations governing NO<sub>x</sub> emissions limits for vehicles are stricter than those in other parts of the world.

Numerous court and governmental proceedings were subsequently initiated in the USA and the rest of the world. During the reporting period, we succeeded in ending most significant court and governmental proceedings in the USA by concluding settlement agreements. This includes, in particular, settlements with the US Department of Justice (DOJ). Outside the USA, we also reached agreements with regard to the implementation of the technical measures with numerous authorities.

The Supervisory Board of Volkswagen AG formed a special committee that coordinates the activities relating to the diesel issue for the Supervisory Board.

The global law firm Jones Day was instructed by Volkswagen AG to carry out an extensive investigation of the diesel issue in light of the DOJ's and the Braunschweig public prosecutor's criminal investigations as well as other investigations and proceedings which were expected. Jones Day was instructed by Volkswagen AG to present factual evidence to the DOJ.

To resolve US criminal law charges, Volkswagen AG and the DOJ entered into a Plea Agreement, which includes a Statement of Facts containing a summary of the factual allegations which the DOJ considered relevant to the settlement with Volkswagen AG. The Statement of Facts is based in part on Jones Day's factual findings as well as the evidence identified by the DOJ itself.

Jones Day has completed the work required to assist Volkswagen AG in assessing the criminal charges in the USA with respect to the diesel issue. However, work in respect of the legal proceedings which are still pending in the USA and the rest of the world is ongoing and will require considerable efforts and a considerable period of time. In connection with this work, Volkswagen AG is being advised by a number of external law firms.

Furthermore, in September 2015, Volkswagen AG filed a criminal complaint in Germany against unknown persons as did AUDI AG. Volkswagen AG and AUDI AG are cooperating with all responsible authorities in the scope of reviewing the incidents.

Potential consequences for Volkswagen's results of operations, financial position and net assets could emerge primarily in the following legal areas:

#### 1. Coordination with the authorities on technical measures

Based on decisions dated October 15, 2015, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) ordered the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles and SEAT brands to recall all the diesel vehicles that had been issued with vehicle type approval by the KBA from among the eleven million vehicles affected with type EA 189 engines. The recall concerns the member states of the European Union (EU28). On December 10, 2015 a similar decision was issued regarding Audi vehicles with the EA 189 engine. The timetable and action plan forming the basis for the recall order corresponded to the proposals presented in advance by Volkswagen. Depending on the technical complexity of the concerned remedial actions, this means that the Volkswagen Group has been recalling the affected vehicles, of which there are around 8.5 million in total in the EU28 countries, to the service workshops since January 2016. The remedial actions differ in scope depending on the engine variant. The technical measures cover software and in some cases hardware modifications, depending on the series and model year. The technical measures for all vehicles in the European Union have since been approved without exception. The KBA ascertained for all clusters (groups of vehicles) that implementation of the technical measures would not bring about any adverse changes in fuel consumption figures, CO<sub>2</sub> emissions figures, engine power, maximum torque and noise emissions. Once the modifications have been made, the vehicles will thus also continue to comply with the legal requirements and the emission standards applicable in each case. The technical measures for all affected vehicles with type EA 189 engines in the European Union were approved without exception, and implemented in most cases.

In some countries outside the EU – among others South Korea, Taiwan and Turkey – national type approval is based on prior recognition of the EC/ECE type approval; the technical measures must therefore be approved by the national authorities. With the exception of South Korea and Chile, we were able to conclude this approval process in all countries. There, the majority of approvals were likewise granted; in relation to the pending approvals, Volkswagen is in close contact with the authorities.

In addition, there is an intensive exchange of information with the authorities in the USA and Canada, where Volkswagen's proposed modifications in relation to the four-cylinder and the six-cylinder diesel engines also have to be approved. Due to NO<sub>x</sub> limits that are considerably stricter than in the EU and the rest of the world, it is a greater technical challenge here to refit the vehicles so that the emission standards defined in the settlement agreements for these vehicles can be achieved.

For many months, AUDI AG has been intensively checking all diesel concepts for possible discrepancies and retrofit potentials. A systematic review process for all engine and gear variants has been underway since 2016.

On June 14, 2017, based on a technical error in the parameterization of the transmission software for a limited number of specific Audi A7/A8 models that AUDI AG itself discovered and reported to the KBA, the KBA issued an order under which a correction proposed by AUDI AG will be submitted. The technical error lies in the fact that, in the cases concerned, by way of exception a specific function that is standard in all other vehicle concepts is not implemented in actual road use. In Europe, this affects around 24,800 units of certain Audi A7/A8 models. The KBA has not categorized this error as an unlawful defeat device.

On July 21, 2017, AUDI AG offered a software-based retrofit program for up to 850,000 vehicles with V6 and V8 TDI engines meeting the Euro 5 and Euro 6 emission standards in Europe and other markets except the USA and Canada. The measure will mainly serve to further improve the vehicles' emissions in real driving conditions in inner city areas beyond the legal requirements. This was done in close cooperation with the authorities, which were provided with detailed reports, especially the German Federal Ministry of Transport and the KBA. The retrofit package comprises voluntary measures and, to a small extent, measures directed by the authorities; these are measures taken within the scope of a recall, which were proposed by AUDI AG itself, reported to the KBA and taken up and ordered by the latter. The voluntary tests have already reached an advanced stage, but have not yet been completed. The measures adopted and mandated by the KBA involved the recall of different diesel vehicles with a V6 or V8 engine meeting the Euro 6 emission standard, for which the KBA categorized certain emission strategies as an unlawful defeat device. From July 2017 to January 2018, the measures proposed by AUDI AG were adopted and mandated in various decisions by the KBA on vehicle models with V6 and V8 TDI engines.

Currently, AUDI AG assumes that the total costs of the software-based retrofit program including the amount based on recalls will be manageable and has recognized corresponding balance-sheet risk provisions. Should additional measures become necessary as a result of the investigations by AUDI AG and the consultations with the KBA, AUDI AG will quickly implement these as part of the retrofit program in the interest of customers.

## 2. Criminal and administrative proceedings worldwide (excluding the USA/Canada)

In addition to the described approval processes with the responsible registration authorities, in some countries criminal investigations/misdemeanor proceedings (for example, by the public prosecutor's office in Braunschweig and Munich, Germany) and/or administrative proceedings (for example, by the Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin – the German Federal Financial Supervisory Authority) have been opened. The public prosecutor's offices in Braunschweig and Munich are investigating the core issue of the criminal investigations. Whether this will result in fines for the Company, and if so what their amount might be, is currently subject to estimation risks. According to Volkswagen's estimates so far, the likelihood of a sanction in the majority of these proceedings is less than 50%. Contingent liabilities have therefore been disclosed in cases where they can be assessed and for which the likelihood of a sanction was deemed not lower than 10%.

### 3. Product-related lawsuits worldwide (excluding the USA/ Canada)

In principle, it is possible that customers in the affected markets will file civil lawsuits against Volkswagen AG and other Volkswagen Group companies. In addition, it is possible that importers and dealers could assert claims against Volkswagen AG and other Volkswagen Group companies, e.g. through recourse claims. As well as individual lawsuits, class action lawsuits are possible in various jurisdictions (albeit not in Germany). Furthermore, in a number of markets it is possible that consumer and/or environmental organizations will apply for an injunction or assert claims for a declaratory judgment or for damages.

In the context of the diesel issue, various lawsuits are currently pending against Volkswagen AG and other Volkswagen Group companies at present.

There are pending class action proceedings and lawsuits brought by consumer and/or environmental associations against Volkswagen AG and other companies of the Volkswagen Group in various countries such as Argentina, Australia, Belgium, Brazil, China, the Czech Republic, Israel, Italy, Mexico, the Netherlands, Poland, Portugal, Switzerland, Taiwan and the United Kingdom. The class action proceedings are lawsuits aimed among other things at asserting damages or, as is the case in the Netherlands, at a declaratory judgment that customers are entitled to damages. With the exception of Brazil, where there has already been a non-binding judgment in the first instance, the amount of these damages cannot yet be quantified more precisely due to the early stage of the proceedings. Volkswagen does not estimate the litigants' prospect of success to be more than 50% in any of the class action proceedings.

In South Korea, various mass proceedings are pending (in some of these individual lawsuits several hundred litigants have been aggregated). These lawsuits have been filed to assert damages and to rescind the purchase contract including repayment of the purchase price. Due to special circumstances in the market and specific characteristics of the South Korean legal system, Volkswagen estimates the litigants' prospects of success in the South Korean mass proceedings mentioned above to be inherently higher than in other jurisdictions outside the USA and Canada. On May 12, 2017, one first-instance judgment was delivered in these proceedings in South Korea during the fiscal year, in which the court completely dismissed an action filed to assert criminal damages over pollution. The judgment has since become binding.

Contingent liabilities have been disclosed for pending class action and mass proceedings that can be assessed and for which the chance of success was deemed not implausible. Provisions were recognized to a small extent.

Furthermore, individual lawsuits and similar proceedings are pending against Volkswagen AG and other Volkswagen Group companies in numerous countries. In Germany, there are around 9,500 individual lawsuits. In Italy, Austria and Spain, lawsuits numbering in the low three-digit range and in France and Ireland individual lawsuits in the two-digit range are pending against Volkswagen AG and other companies of the Volkswagen Group, most of which are aimed at asserting damages or rescinding the purchase contract.

In addition, on November 29, 2017, Volkswagen AG was served with an action brought by financialright GmbH asserting the rights assigned to it by a total of approximately 15,000 customers in Germany. This action seeks the payment of around €350 million in return for restitution of the vehicles.

In Switzerland, a claim for damages was brought against Volkswagen AG in December 2017 from the assigned rights of some 6,000 customers; the stated amount in dispute is approximately 30 million Swiss francs.

According to Volkswagen's estimates so far, the litigants' prospect of success is below 50% in the vast majority of the individual lawsuits. Contingent liabilities have therefore been disclosed for those lawsuits that can be assessed and for which the chance of success was deemed not implausible.

It is too early to estimate how many customers will take advantage of the option to file lawsuits in the future, beyond the existing lawsuits, or what their prospects of success will be.

#### 4. Lawsuits filed by investors worldwide (excluding the USA/ Canada)

Investors from Germany and abroad have filed claims for damages against Volkswagen AG – in some cases along with Porsche Automobil Holding SE (Porsche SE) as joint and several debtors – based on purported losses due to alleged misconduct in capital market communications in connection with the diesel issue.

The vast majority of these investor lawsuits are currently pending at the District Court (Landgericht) in Braunschweig. On August 5, 2016, the District Court in Braunschweig ordered that common questions of law and fact relevant to the lawsuits pending at the District Court in Braunschweig be referred to the Higher Regional Court (Oberlandesgericht) in Braunschweig for a binding declaratory decision pursuant to the German Act on Model Case Proceedings in Disputes Regarding Capital Market Information (Kapitalanleger-Musterverfahrensgesetz – KapMuG). In this proceeding, common questions of law and fact relevant to these actions shall be adjudicated in a consolidated manner by the Higher Regional Court in Braunschweig (model case proceedings). All lawsuits at the District Court in Braunschweig will be stayed pending up until resolution of the common issues, unless they can be dismissed for reasons independent of the common issues that are adjudicated in the model case proceedings. The resolution of the common questions of law and fact in the model case proceedings will be binding for all pending cases in the stayed lawsuits.

At the District Court in Stuttgart, further investor lawsuits have been filed against Volkswagen AG, in some cases along with Porsche SE as joint and several debtors. On December 6, 2017, the District Court in Stuttgart issued an order for reference to the Higher Regional Court in Stuttgart in relation to procedural issues, particularly for clarification of jurisdiction. On account of the diesel issue, model case proceedings against Porsche SE are also pending before the Higher Regional Court in Stuttgart.

Further investor lawsuits have been filed at various courts in Germany as well as in Austria and the Netherlands. In Austria, the Supreme Court ruled on July 7, 2017 that the investor lawsuits against Volkswagen AG do not fall within the jurisdiction of the Austrian courts. Consequently, all but one of the investor lawsuits that were formerly pending in Austria have been dismissed or withdrawn. The last pending lawsuit has been dismissed at first instance.

Worldwide (excluding USA and Canada), investor lawsuits, judicial applications for dunning procedures and conciliation proceedings, and claims under the KapMuG are currently pending against Volkswagen in connection with the diesel issue, with the claims totaling approximately €9 billion. Volkswagen remains of the opinion that it duly complied with its capital market obligations. Therefore, no provisions have been recognized for these investor lawsuits. Insofar as the chance of success was estimated at not lower than 10%, contingent liabilities have been disclosed.

#### 5. Proceedings in the USA/Canada

Following the publication of the EPA's "Notices of Violation", Volkswagen AG and other Volkswagen Group companies have been the subject of intense scrutiny, ongoing investigations (civil and criminal) and civil litigation. Volkswagen AG and other Volkswagen Group companies have received subpoenas and inquiries from state attorneys general and other governmental authorities and are responding to such investigations and inquiries.

In addition, Volkswagen AG and other Volkswagen Group companies in the USA/Canada are facing litigation on a number of different fronts relating to the matters described in the EPA's "Notices of Violation".

A large number of putative class action lawsuits by customers and dealers have been filed in US federal courts and consolidated for pretrial coordination purposes in the federal multidistrict litigation proceeding in the State of California.

On January 4, 2016, the DOJ, Civil Division, on behalf of the EPA, initiated a civil complaint against Volkswagen AG, AUDI AG and certain other Volkswagen Group companies. The action sought statutory penalties under the US Clean Air Act, as well as certain injunctive relief, and was consolidated for pretrial coordination purposes in the California multidistrict litigation.

On January 12, 2016, CARB announced that it intended to seek civil fines for alleged violations of the California Health & Safety Code and various CARB regulations.

In June 2016, Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates reached settlement agreements with the DOJ on behalf of the EPA, CARB and the California Attorney General, private plaintiffs represented by a Plaintiffs' Steering Committee (PSC) in the multidistrict litigation pending in California, and the U.S. Federal Trade Commission (FTC). These settlement agreements resolved certain civil claims made in relation to affected diesel vehicles with 2.0 l TDI engines from the Volkswagen Passenger Cars and Audi brands

in the USA. Volkswagen AG and certain affiliates also entered into a First Partial Consent Decree with the DOJ, EPA, CARB and the California Attorney General, which was lodged with the court on June 28, 2016. On October 18, 2016, a fairness hearing on whether final approval should be granted was held, and on October 25, 2016, the court granted final approval of the settlement agreements and the partial consent order. A number of class members have filed appeals to an US appellate court from the order approving the settlements.

The settlements include buyback or, for leased vehicles, early lease termination, or a free emissions modification of the vehicles, provided that the EPA and CARB approve the modification. Volkswagen will also make additional cash payments to affected current owners or lessees as well as certain former owners or lessees.

Volkswagen also agreed to support environmental programs. The company will pay USD 2.7 billion over three years into an environmental trust, managed by a trustee appointed by the court, to offset excess nitrogen oxide ( $\text{NO}_x$ ) emissions. Volkswagen will also invest a total of USD 2.0 billion over ten years in zero emissions vehicle infrastructure as well as corresponding access and awareness initiatives.

Volkswagen AG and certain affiliates also entered into a separate Partial Consent Decree with CARB and the California Attorney General resolving certain claims under California unfair competition, false advertising, and consumer protection laws related to both the 2.0 l and 3.0 l TDI vehicles, which was lodged with the court on July 7, 2016. Under the terms of the agreement, Volkswagen agreed to pay California USD 86 million. The court entered judgment on the Partial Consent Decree on September 1, 2016 and the USD 86 million payment was made on September 28, 2016.

On December 20, 2016, Volkswagen entered into a Second Partial Consent Decree, subject to court approval, with the DOJ, EPA, CARB and the California Attorney General that resolved claims for injunctive relief under the Clean Air Act and California environmental, consumer protection and false advertising laws related to the 3.0 l TDI vehicles. Under the terms of this Consent Decree, Volkswagen agreed to implement a buyback and lease termination program for Generation 1 3.0 l TDI vehicles and a free emissions recall and modification program for Generation 2 3.0 l TDI vehicles, and to pay USD 225 million into the environmental mitigation trust that has been established pursuant to the First Partial Consent Decree. The Second Partial Consent Decree was lodged with the court on December 20, 2016 and approved on May 17, 2017.

In addition, on December 20, 2016, Volkswagen entered into an additional, concurrent California Second Partial Consent Decree, subject to court approval, with CARB and the California Attorney General that resolved claims for injunctive relief under California environmental, consumer protection and false advertising laws related to the 3.0 l TDI vehicles. Under the terms of this Consent Decree, Volkswagen agreed to provide additional injunctive relief to California, including the implementation of a "Green City" initiative and the introduction of three new Battery Electric Vehicle (BEV) models in California by 2020, as well as a USD 25 million payment to CARB to support the availability of BEVs in California.

On January 11, 2017, Volkswagen entered into a Third Partial Consent Decree with the DOJ and EPA that resolved claims for civil penalties and injunctive relief under the Clean Air Act related to the 2.0 l and 3.0 l TDI vehicles. Volkswagen agreed to pay USD 1.45 billion (plus any accrued interest) to resolve the civil penalty and injunctive relief claims under the Clean Air Act, as well as the customs claims of the US Customs and Border Protection. Under the Third Partial Consent Decree, the injunctive relief includes monitoring, auditing and compliance obligations. This Consent Decree, which was subject to public comment, was lodged with the court on January 11, 2017 and approved on April 13, 2017. Also on January 11, 2017, Volkswagen entered into a settlement agreement with the DOJ to resolve any claims under the Financial Institutions Reform, Recovery and Enforcement Act of 1989 and agreed to pay USD 50 million (plus any accrued interest), specifically denying any liability and expressly disputing any claims.

On July 21, 2017, the federal court in the multidistrict litigation in California approved the Third California Partial Consent Decree, in which Volkswagen AG and certain affiliates agreed with the California Attorney General and CARB to pay USD 153.8 million in civil penalties and cost reimbursements. These penalties covered California environmental penalties for both the 2.0 l and 3.0 l TDI vehicles. An agreement in principle had been reached on January 11, 2017.

The DOJ also opened a criminal investigation focusing on allegations that various federal law criminal offenses were committed. On January 11, 2017, Volkswagen AG agreed to plead guilty to three federal criminal felony counts, and to pay a USD 2.8 billion criminal penalty. Pursuant to the terms of this agreement, Volkswagen will be on probation for three years and will work with an independent monitor for three years. The independent monitor will assess and oversee the company's compliance with the terms of the resolution. This includes overseeing the implementation of measures to further strengthen compliance, reporting and monitoring systems, and an enhanced ethics program. Volkswagen will also continue to cooperate with the DOJ's ongoing investigation of individual employees or former employees who may be responsible for criminal violations.

Moreover, investigations by various US regulatory and government authorities are ongoing, including in areas relating to securities, financing and tax.

On January 31, 2017, Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates entered into a settlement agreement with private plaintiffs represented by the PSC in the multidistrict litigation pending in California, and a consent order with the FTC. These agreements resolved certain civil claims made in relation to affected diesel vehicles with 3.0 l TDI engines from the Volkswagen, Audi and Porsche brands in the USA. On February 14, 2017, the court preliminarily approved the settlement agreement with private plaintiffs. On May 11, 2017, the court held a fairness hearing on whether approval should be granted and on May 17, 2017, the court granted final approval of the settlement agreement and the partial stipulated consent order.

Under the settlements, consumers' options and compensation will depend on whether their vehicles are classified as Generation 1 or Generation 2. Generation 1 (model years 2009-2012) consumers will have the option of a buyback, early lease termination, trade-in, or a free emissions modification, provided that EPA and CARB approve the modification. Additionally, Generation 1 owners and lessees, as well as certain former owners and lessees, will be eligible to receive cash payments.

Generation 2 (model years 2013-2016) consumers will receive a free emissions-compliant repair to bring the vehicles into compliance with the emissions standards to which they were originally certified, as well as cash payments. Volkswagen has received approval from the EPA and CARB for emissions-compliant repairs within the time limits set out in the settlement agreement. Volkswagen will also make cash payments to certain former Generation 2 owners or lessees.

In September 2016, Volkswagen announced that it had finalized an agreement to resolve the claims of Volkswagen branded franchise dealers in the USA relating to TDI vehicles and other matters asserted concerning the value of the franchise. The settlement agreement includes a cash payment of up to USD 1,208 billion, and additional benefits to resolve alleged past, current, and future claims of losses in franchise value. On January 18, 2017, a fairness hearing on whether final approval should be granted was held, and on January 23, 2017, the court granted final approval of the settlement agreement.

Additionally, in the USA, some putative class actions, some individual customers' lawsuits and some state or municipal claims have been filed in state courts.

Volkswagen reached separate agreements with the attorneys general of 45 US states, the District of Columbia and Puerto Rico, to resolve their existing or potential consumer protection and unfair trade practices claims – in connection with both 2.0l TDI and 3.0l TDI vehicles in the USA – for a settlement amount of USD 622 million. Five states did not join these settlements and still have consumer claims outstanding: Arizona, New Mexico, Oklahoma, Vermont and West Virginia. Volkswagen has also reached separate agreements with the attorneys general of eleven US states (Connecticut, Delaware, Maine, Massachusetts, New Jersey, New York, Oregon, Pennsylvania, Rhode Island, Vermont, and Washington) to resolve their existing or potential future claims for civil penalties and injunctive relief for alleged violations of environmental laws for a settlement amount of 207 million. The attorneys general of ten other US states (Illinois, Maryland, Minnesota, Missouri, Montana, New Hampshire, New Mexico, Ohio, Tennessee and Texas) and some municipalities have also filed suits in state and federal courts against Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates, seeking civil penalties and injunctive relief for alleged violations of environmental laws. Illinois, Maryland, Minnesota, Missouri, Montana, New Hampshire, Ohio, Tennessee and Texas participated in the state settlements described above with respect to consumer protection and unfair trade practices claims, but those settlements did not include claims for environmental penalties. The environmental claims of two other states – Alabama and Wyoming – have been dismissed as preempted by federal law. Alabama has appealed this dismissal.

In addition to the lawsuits described above, for which provisions have been recognized, a putative class action has been filed on behalf of purchasers of Volkswagen AG American Depository Receipts, alleging a drop in price purportedly resulting from the matters described in the EPA's "Notices of Violation". A putative class action has also been filed on behalf of purchasers of certain USD-denominated Volkswagen bonds, alleging that these bonds were trading at artificially inflated prices due to Volkswagen's alleged misstatements and that the value of these bonds declined after the EPA issued its "Notices of Violation".

These lawsuits have also been consolidated in the federal multidistrict litigation proceeding in the State of California described above. Volkswagen is of the opinion that it duly complied with its capital market obligations. Therefore, no provisions have been recognized. In addition, contingent liabilities have not been disclosed as they currently cannot be measured.

In Canada, civil consumer claims and regulatory investigations have been initiated for vehicles with 2.0l and 3.0l TDI engines. On December 19, 2016, Volkswagen AG and other Canadian and US Volkswagen Group companies reached a class action settlement in Canada with consumers relating to 2.0l diesel vehicles. Also on December 19, 2016, Volkswagen Group Canada agreed with the Commissioner of Competition in Canada to a civil resolution regarding its regulatory inquiry into consumer protection issues as to those vehicles. On December 21, 2017, Volkswagen announced an agreement in principle on a proposed consumer settlement in Canada involving 3.0l diesel vehicles. The court preliminarily approved the settlement agreement on January 12, 2018, and the notice and opt out period began on January 17, 2018. Final approval hearings are scheduled in Quebec and Ontario for April 3 and 5, 2018, respectively. On January 12, 2018, Volkswagen and the Canadian Commissioner of Competition reached a resolution related to civil consumer protection issues relating to 3.0l diesel vehicles. Also, criminal enforcement-related investigations by the federal environmental regulator and quasi-criminal enforcement-related investigations by a provincial environmental regulator are ongoing in Canada related to 2.0l and 3.0l diesel vehicles. On September 15, 2017, a provincial regulator in Canada, the Ontario Ministry of the Environment and Climate Change, charged Volkswagen AG under the province's environmental statute with one count alleging that it caused or permitted the operation of model year 2010–2014 Volkswagen and Audi brand 2.0l diesel vehicles that did not comply with prescribed emission standards. Following initial court appearances on November 15, 2017 and February 7, 2018, the matter was put over to April 4, 2018 pending ongoing evidence disclosure. No trial date has been set. Provisions have been recognized for possible obligations stemming from pending lawsuits in Canada.

Moreover, in Canada, two securities class actions by investors in Volkswagen AG American Depository Receipts and shares are pending against Volkswagen AG in the Quebec and Ontario provincial courts. These actions allege misrepresentations and omissions in financial reporting issued from 2009–2015 stemming from the diesel issue. The proposed class periods are for residents in the provinces who purchased the relevant securities between March 12, 2009 and September 18, 2015, and held all or some of the acquired securities until after the alleged first corrective disclosures. Discovery has not begun. In both actions, motions for certification were filed. In the Quebec matter, the motion was heard on February 5 and 6, 2018 and the court's decision is on reserve. In the Ontario matter, the motion is scheduled for hearing on July 10 and 11, 2018.

In addition, putative class action and joinder lawsuits by customers, and a certified environmental class action on behalf of residents, remain pending in certain provincial courts in Canada.

An assessment of the underlying situation is not possible at this early stage of those proceedings.

#### 6. Additional proceedings

With its ruling from November 8, 2017, the Higher Regional Court of Celle ordered, upon the request of three US funds, the appointment of a special auditor for Volkswagen AG. The special auditor should examine whether there was a breach of duties on behalf of the members of the Board of Management and Supervisory Board of Volkswagen AG in connection with the diesel issue starting from June 22, 2006 and if this resulted in damages for Volkswagen AG. The ruling from the Higher Regional Court of Celle is formally legally binding. However, Volkswagen AG lodged a constitutional complaint toward the German Federal Constitutional Court regarding the infringement of its constitutionally guaranteed rights. It is currently unclear when the Federal Constitutional Court will reach a decision on this matter.

In addition, the District Court of Hanover has filed a second motion for the appointment of a special auditor for Volkswagen AG, which is also aimed at the examination of transactions in connection with the diesel issue. This proceeding will be suspended until the ruling has been announced by the Federal Constitutional Court.

#### 7. Risk assessment regarding the diesel issue

To protect against the currently known legal risks related to the diesel issue, provisions of approximately €2.0 billion exist as of December 31, 2017 on the basis of existing information and current assessments. Beyond this, appropriate provisions have been recognized for defense and legal advice expenses. Insofar as these can be adequately measured at this stage, total contingent liabilities in relation to the diesel issue to the aggregate amount of €4.3 billion (previous year: €3.2 billion), of which lawsuits filed by investors account for €3.4 billion (previous year: €3.1 billion), were disclosed in the notes. The provisions recognized for this matter and the contingent liabilities disclosed as well as the other latent legal risks are partially subject to substantial estimation risks given the complexity of the individual factors, the ongoing approval process with the authorities and the fact that the independent, comprehensive investigations have not yet been completed.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or about uncertainty regarding the amount or maturity of provisions and contingent liabilities in relation to the diesel issue. This is so as to not compromise the results of the proceedings or the interests of the Company.

#### Additional important legal cases

In 2011, ARFB Anlegerschutz UG (haftungsbeschränkt) brought an action against Volkswagen AG and Porsche Automobil Holding SE for claims for damages for allegedly violating disclosure requirements under capital market law in connection with the acquisition of ordinary shares in Volkswagen AG by Porsche in 2008. The damages currently being sought based on allegedly assigned rights amounted to approximately €2.26 billion plus interest. In April 2016, the District Court in Hanover had formulated numerous objects of declaratory judgment that the cartel senate of the Higher Regional Court in Celle will decide on in model case proceedings under the KapMuG. In the first hearing on October 12, 2017, the senate indicated that it currently does not see claims against Volkswagen AG as justified, both in view of a lack of substantiated evidence and for legal reasons. Some of the desired objects of declaratory judgment on the litigants' side may also be inadmissible, it said. Volkswagen AG sees the statements of the court's senate as confirmation that the claims made against the company have absolutely no basis.

At the time (2010/2011), other investors had also asserted claims – including claims against Volkswagen AG – arising out of the same circumstances in an approximate total amount of €4.6 billion and initiated conciliation proceedings. Volkswagen AG always refused to participate in these conciliation proceedings; since then, these claims have not been pursued further.

In 2011, the European Commission conducted searches at European truck manufacturers on suspicion of an unlawful exchange of information during the period 1997–2011 and issued a statement of objections to MAN, Scania and the other truck manufacturers concerned in November 2014. With its settlement decision in July 2016, the European Commission fined five European truck manufacturers. MAN's fine was waived in full as the company had informed the European Commission about the irregularities as a key witness.

In September 2017, the European Commission then fined Scania €0.88 billion. Scania has appealed to the European Court in Luxembourg and will use all means at its disposal to defend itself. Scania had already recognized a provision of €0.4 billion in 2016.

Furthermore, antitrust lawsuits for damages from customers were received. As is the case in any antitrust proceedings, this may result in further lawsuits for damages. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

The Annual General Meeting of MAN SE approved the conclusion of a control and profit and loss transfer agreement between MAN SE and Volkswagen Truck & Bus GmbH (formerly Truck & Bus GmbH), a subsidiary of Volkswagen AG, in June 2013. In July 2013, award proceedings were instituted to review the appropriateness of the cash settlement set out in the agreement in accordance with section 305 of the Aktiengesetz (AktG – German Stock Corporation Act) and the cash compensation in accordance with section 304 of the AktG. It is not uncommon for noncontrolling interest shareholders to institute such proceedings. In July 2015, the Munich Regional Court ruled in the first instance that the amount of the cash settlement payable to the noncontrolling interest shareholders of MAN should be increased from €80.89 to €90.29 per share; at the same time, the amount of the cash compensation was confirmed. The assessment of liability for put options and compensation rights granted to noncontrolling interest shareholders was adjusted in 2015. Both applicants and Volkswagen Truck & Bus GmbH have appealed to the Higher Regional Court in Munich. Volkswagen continues to maintain that the results of the valuation are correct. The appropriateness of the valuation was confirmed by the audit firms engaged by the parties and by the court-appointed auditor of the agreement.

Within the scope of the European Commission's ongoing antitrust investigations regarding German automakers, authorities examined documents in the offices of Volkswagen AG in Wolfsburg and AUDI AG in Ingolstadt as part of an announced review. The Volkswagen Group and the Group brands concerned have been cooperating fully and for a long time with the European Commission and have submitted a corresponding application. It is currently unclear whether the European Commission will instigate formal proceedings.

In addition, a few national and international authorities have initiated antitrust investigations. Volkswagen is cooperating closely with the responsible authorities in these investigations. An assessment of the underlying situation is not possible at this early stage.

Since November 2016, Volkswagen has been responding to information requests from the EPA and CARB related to automatic transmissions in certain vehicles with petrol engines.

Additionally, fourteen putative class actions have been filed against Audi and certain affiliates alleging that defendants concealed the existence of “defeat devices” in Audi brand vehicles with automatic transmissions. All of these putative class actions have been transferred to the federal multidistrict litigation proceeding in the State of California, and plaintiffs filed a consolidated class action complaint on October 12, 2017, which Volkswagen AG and certain of its affiliates moved to dismiss on December 11, 2017. On January 16, 2018, plaintiffs filed an opposition to the motion to dismiss and the court has set a deadline of February 16, 2018 for defendants to file a reply. A hearing is scheduled for May 11, 2018. On December 22, 2017, a mass action on behalf of approximately 75 individual plaintiffs alleging similar claims was filed in a California state court, which was removed to the Northern District of California on January 25, 2018.

In Canada, two similar putative class actions, including a national class, have been filed in Ontario and Quebec provincial courts against AUDI AG, Volkswagen AG and US and Canadian affiliates regarding alleged CO<sub>2</sub> “defeat devices” in certain petrol Audi models with automatic transmissions. Both of the Canadian actions are in the pre-certification stage. Contingent liabilities have therefore been disclosed in cases where they can be assessed and for which the likelihood of a sanction was deemed not lower than 10%.

From July through November 2017, plaintiffs filed numerous complaints in various US jurisdictions on behalf of putative classes of purchasers of German luxury vehicles against several automobile manufacturers, including Volkswagen AG and other Group companies. These complaints assert claims under the US Sherman Antitrust Act, the Racketeer Influenced and Corrupt Organizations Act, state unfair competition and consumer protection statutes, and common law unjust enrichment. The complaints allege that since the 1990s, defendants engaged in a conspiracy to unlawfully increase the prices of German luxury vehicles by agreeing to share commercially sensitive information and to reach unlawful agreements regarding technology, costs, and suppliers. Moreover, the plaintiffs allege that the defendants agreed to limit the size of AdBlue tanks to ensure that US emissions regulators did not scrutinize the emissions control systems in defendants' vehicles, and that such an agreement for Volkswagen was the impetus for the creation of the defeat device. On September 28, 2017, a hearing before the Judicial Panel on Multidistrict Litigation (JPML) was held, and on October 4, 2017 the JPML issued its decision consolidating and transferring these cases to Judge Breyer in the Northern District of California. On December 14, 2017, co-lead counsel were appointed representing the interests of a putative class of indirect purchasers and a putative class of direct purchasers, as well as Plaintiffs' Steering Committee. On December 20, 2017, deadlines were set for the filing of initial and responsive pleadings and an initial case status conference scheduled for April 5, 2018, and co-lead counsel were directed to file consolidated class action complaints on behalf of the two putative classes by March 15, 2018. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

From July through October 2017, plaintiffs filed claims in Ontario, Quebec and British Columbia on behalf of putative classes of purchasers of German luxury vehicles against several automobile manufacturers, including Volkswagen Canada Inc., Audi Canada Inc., and other Group companies. The claims assert causes of action under the Competition Act, common law, and Quebec's civil law and contain similar allegations to the US complaints described in the paragraph above. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

In the tax proceedings between MAN Latin America and the Brazilian tax authorities, the Brazilian tax authorities took a different view of the tax implications of the acquisition structure chosen for MAN Latin America in 2009. In December 2017, a second instance judgment was rendered in administrative court proceedings, which was negative for MAN Latin America. MAN Latin America will initiate proceedings against this judgment before the regular court in 2018. Due to the difference in the penalties plus interest which could potentially apply under Brazilian law, the estimated size of the risk in the event that the tax authorities are able to prevail overall with their view is laden with uncertainty. However, a positive outcome continues to be expected for MAN Latin America. Should the opposite occur, this could result in a risk of about €0.7 billion for the contested period from 2009 onwards, which has been stated within the section entitled “Contingent liabilities”.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or about uncertainty regarding the amount or maturity of provisions and contingent liabilities in relation to additional important legal cases. This is so as to not compromise the results of the proceedings or the interests of the Company.

### 38. Other financial obligations

€ million	PAYABLE	PAYABLE	PAYABLE	TOTAL
	2017	2018 – 2021	from 2022	Dec. 31, 2016
<b>Purchase commitments in respect of</b>				
property, plant and equipment	7,170	1,585	–	8,756
intangible assets	1,243	386	–	1,629
investment property	13	–	–	13
<b>Obligations from</b>				
loan commitments to unconsolidated subsidiaries	126	2	–	128
irrevocable credit and lease commitments to customers	4,551	0	44	4,595
long-term leasing and rental contracts	995	2,489	2,261	5,745
Miscellaneous other financial obligations	2,569	1,416	1,072	5,056

€ million	PAYABLE	PAYABLE	PAYABLE	TOTAL
	2018	2019 – 2022	from 2023	Dec. 31, 2017
<b>Purchase commitments in respect of</b>				
property, plant and equipment	7,347	1,394	–	8,740
intangible assets	946	479	–	1,425
investment property	41	–	–	41
<b>Obligations from</b>				
loan commitments to unconsolidated subsidiaries	186	21	–	207
irrevocable credit commitments to customers	3,436	201	59	3,695
long-term leasing and rental contracts	1,026	2,389	2,133	5,548
Miscellaneous other financial obligations	2,476	1,469	929	4,874

Other financial obligations from long-term leasing and rental contracts are partly offset by expected income from subleases of €1,467 million (previous year: €1,664 million).

To enhance comparability, irrevocable credit commitments to customers are reported without leasing commitments from fiscal year 2017 onward. As of December 31, 2016, the corresponding amount was €2.1 billion.

Other financial obligations include an amount of €1.3 billion for investments in zero emissions vehicle infrastructure to which the Volkswagen Group had committed itself in the settlement agreements in the USA in connection with the diesel issue and in corresponding access and awareness initiatives for these technologies.

### 39. Total audit fees of the Group auditor

Under the provisions of the Handelsgesetzbuch (HGB – German Commercial Code), Volkswagen AG is obliged to disclose the total audit fee of the Group auditor, PricewaterhouseCoopers GmbH Wirtschaftsprüfungs-gesellschaft.

€ million	2017	2016 <sup>1</sup>
Financial statement audit services	17	19
Other assurance services	2	4
Tax advisory services	1	0
Other services	13	4
	33	27

<sup>1</sup> Some services, which were previously reported as other assurance services, are now classified as audit services.  
Prior-year figures have been adjusted accordingly.

The fee paid to the auditors in 2017 was mostly attributable to the audit of the consolidated financial statements of Volkswagen AG and of annual financial statements of German Group companies as well as to reviews of the interim consolidated financial statements of Volkswagen AG and of interim financial statements of German Group companies. The auditors provided assurance services and tax advice only to a small extent. Other services provided by the auditors in the reporting period focused on advice on how to implement new legal standards and on support for measures in connection with the diesel issue.

#### 40. Total expense for the period

€ million	2017	2016
<b>Cost of materials</b>		
Cost of raw materials, consumables and supplies, purchased merchandise and services	151,449	140,307
<b>Personnel expenses</b>		
Wages and salaries	31,432	29,971
Social security, post-employment and other employee benefit costs	7,518	7,046
	<b>38,950</b>	<b>37,017</b>

#### 41. Average number of employees during the year

	2017	2016
Performance-related wage-earners	253,469	236,204
Salaried staff	288,478	292,240
	<b>541,947</b>	<b>528,444</b>
of which in the passive phase of partial retirement	(7,156)	(5,915)
Vocational trainees	17,891	17,962
	<b>559,838</b>	<b>546,406</b>
Employees of Chinese joint ventures	74,558	72,940
	<b>634,396</b>	<b>619,346</b>

#### 42. Events after the balance sheet date

There were no significant events after the end of fiscal year 2017.

### 43. Remuneration based on performance shares and phantom shares (share-based payment)

At the beginning of 2017, the Supervisory Board of Volkswagen AG resolved to adjust the remuneration system of the Board of Management with effect from January 1, 2017. All members of the Board of Management voted in favor of switching to the new remuneration system in the course of fiscal year 2017. The new remuneration system of the Board of Management comprises non-performance-related and performance-related components. The performance-related remuneration consists of a performance-related annual bonus with a one-year assessment period and a long-term incentive (LTI) in the form of a performance share plan with a forward-looking three-year term (share-based payment). In addition, a bonus was converted into phantom preferred shares (phantom shares) in 2016.

#### **PERFORMANCE SHARES**

Each performance period of the performance share plan has a term of three years. At the time the LTI is granted, the annual target amount under the LTI is converted, on the basis of the initial reference price of Volkswagen's preferred shares, into performance shares of Volkswagen AG, which are allocated to the respective member of the Board of Management as a pure calculation position. After the end of the three-year term of the performance share plan, a cash settlement shall take place. The payment amount corresponds to the number of determined performance shares, multiplied by the closing reference price at the end of the three-year period plus a dividend equivalent for the relevant term. The payment amount under the performance share plan shall be limited to 200% of the target amount. If 100% of the targets agreed in each case are achieved, the target amount is €1.8 million for each member of the Board of Management and €3.8 million for the Chairman of the Board of Management.

A total of 141,426 performance shares were allocated to the members of the Board of Management for 2017. The fair value of the obligation as of December 31, 2017 amounts to €43.8 million. The compensation cost of €43.8 million is recognized under personnel costs. If the members of the Board of Management had left the Company as of December 31, 2017, the obligation (intrinsic value) would have amounted to a total of €20.3 million.

#### **PHANTOM SHARES**

At its meeting on April 22, 2016, Volkswagen AG's Supervisory Board accepted the offer made by the members of the Board of Management to withhold 30% of the variable remuneration for fiscal year 2015 for the Board of Management members active on the date of the resolution and to make its disposal subject to future share price performance by means of phantom shares. The amount withheld led to the creation of 50,703 phantom preferred shares. The fair value of the obligation to the members of the Board of Management as of December 31, 2017 amounted to €7.0 million. The change in the fair value of €2.0 million was recognized under personnel costs. If all members of the Board of Management had left as of December 31, 2017, the obligation (intrinsic value) would have amounted to a total of €7.3 million.

For further details on performance shares and phantom shares, please refer to our disclosures in the remuneration report, which is part of the Group management report.

### 44. Related party disclosures in accordance with IAS 24

Related parties as defined by IAS 24 are natural persons and entities that Volkswagen AG has the ability to control or on which it can exercise significant influence, or natural persons and entities that have the ability to control or exercise significant influence on Volkswagen AG, or that are influenced by another related party of Volkswagen AG.

All transactions with related parties are conducted on an arm's length basis.

At 52.2%, Porsche SE held the majority of the voting rights in Volkswagen AG as of the reporting date. The creation of rights of appointment for the State of Lower Saxony was resolved at the Extraordinary General Meeting of Volkswagen AG on December 3, 2009. As a result, Porsche SE cannot appoint the majority of the members of Volkswagen AG's Supervisory Board for as long as the State of Lower Saxony holds at least 15% of

Volkswagen AG's ordinary shares. However, Porsche SE has the power to participate in the operating policy decisions of the Volkswagen Group and is therefore classified as a related party as defined by IAS 24.

The contribution of Porsche SE's holding company operating business to Volkswagen AG on August 1, 2012 has the following effects on the agreements between Porsche SE, Volkswagen AG and companies of the Porsche Holding Stuttgart Group that existed prior to the contribution and were entered into on the basis of the Comprehensive Agreement and its related implementation agreements:

- Volkswagen AG continues to indemnify Porsche SE against certain financial guarantees issued by Porsche SE to creditors of the companies belonging to the Porsche Holding Stuttgart Group up to the amount of its share in the capital of Porsche Holding Stuttgart, which amounts to 100% since the contribution as of August 1, 2012. Porsche Holding Finance plc, Dublin, Ireland, was contributed to the Volkswagen Group in the course of the transfer of Porsche SE's holding company operating business. Until June 2017, the indemnification also included financial guarantees issued by Porsche SE to creditors of Porsche Holding Finance plc in relation to interest payments on, and the repayment of, bonds in the aggregate amount of €250 million. As part of the contribution of Porsche SE's holding company operating business to Volkswagen AG, Volkswagen AG undertook to assume standard market liability compensation effective August 1, 2012 for guarantees issued to external creditors, whereby it is indemnified internally.
- Volkswagen AG continues to indemnify Porsche SE internally against claims by the Einlagensicherungsfonds (German deposit protection fund) after Porsche SE submitted an indemnification agreement required by the Bundesverband Deutscher Banken (Association of German Banks) to the Einlagensicherungsfonds in August 2009. Volkswagen AG has also undertaken to indemnify the Einlagensicherungsfonds against any losses caused by measures taken by the latter in favor of a bank in which Volkswagen AG holds a majority interest.
- Under certain conditions, Porsche SE continues to indemnify Porsche Holding Stuttgart, Porsche AG and their legal predecessors against tax liabilities that exceed the obligations recognized in the financial statements of those companies relating to periods up to and including July 31, 2009. In return, Volkswagen AG has undertaken to pay to Porsche SE any tax benefits or tax refunds of Porsche Holding Stuttgart, Porsche AG and their legal predecessors and subsidiaries for tax assessment periods up to July 31, 2009. Based on the results of the external tax audit for the assessment periods 2006 to 2008 that has now been completed, a compensation obligation running into the low triple-digit millions of euros would arise for Volkswagen AG. New information emerging in the future from the external tax audit that commenced at the end of 2015 for the 2009 assessment period could result in an increase or decrease in the potential compensation obligation.

Under the terms of the Comprehensive Agreement, Porsche SE and Volkswagen AG had granted each other put and call options with regard to the remaining 50.1% interest in Porsche Holding Stuttgart held by Porsche SE until the contribution of its holding company operating business to Volkswagen AG. Both Volkswagen AG (if it had exercised its call option) and Porsche SE (if it had exercised its put option) had undertaken to bear the tax burden resulting from the exercise of the options and any subsequent activities in relation to the equity investment in Porsche Holding Stuttgart (e.g. from recapture taxation on the spin-off in 2007 and/or 2009). If tax benefits had accrued to Volkswagen AG, Porsche Holding Stuttgart, Porsche AG, or their respective subsidiaries as a result of recapture taxation on the spin-off in 2007 and/or 2009, the purchase price to be paid by Volkswagen AG for the transfer of the outstanding 50.1% equity investment in Porsche Holding Stuttgart if the put option had been exercised by Porsche SE would have been increased by the present value of the tax benefit. This arrangement was taken over under the terms of the contribution agreement to the effect that Porsche SE has a claim against Volkswagen AG for payment in the amount of the present value of the realizable tax benefits from any recapture taxation of the spin-off in 2007 as a result of the contribution. It was also agreed under the terms of the contribution that Porsche SE will indemnify Volkswagen AG, Porsche Holding Stuttgart and their subsidiaries against taxes if measures taken by or not taken by Porsche SE result in recapture taxation for 2012 at these companies in the course of or following implementation of the contribution. In this case, too, Porsche SE is entitled to assert a claim for payment against Volkswagen AG in the amount of the present value of the realizable tax benefits that arise at the level of Volkswagen AG or one of its subsidiaries as a result of such a transaction.

Further agreements were entered into and declarations were issued in connection with the contribution of Porsche SE's holding company operating business to Volkswagen AG, in particular:

- › Porsche SE indemnifies its contributed subsidiaries, Porsche Holding Stuttgart, Porsche AG and their subsidiaries against liabilities to Porsche SE that relate to the period up to and including December 31, 2011 and that exceed the obligations recognized in the financial statements of those companies for that period.
- › Porsche SE indemnifies Porsche Holding Stuttgart and Porsche AG against obligations arising from certain legal disputes; this includes the costs of an appropriate legal defense.
- › Moreover, Porsche SE indemnifies Volkswagen AG, Porsche Holding Stuttgart, Porsche AG and their subsidiaries against half of the taxes (other than taxes on income) arising at those companies in conjunction with the contribution that would not have been incurred in the event of the exercise of the call option on the shares of Porsche Holding Stuttgart that continued to be held by Porsche SE until the contribution. Volkswagen AG therefore indemnifies Porsche SE against half of such taxes that it incurs. In addition, Porsche Holding Stuttgart is indemnified against half of the land transfer tax and other costs triggered by the merger.
- › Additionally, Porsche SE and Porsche AG agreed to allocate any subsequent VAT receivables or liabilities from transactions in the period up to December 31, 2009 to the company entitled to the receivable or incurring the liability.
- › A range of information, conduct and cooperation obligations were agreed by Porsche SE and the Volkswagen Group.

According to a notification dated January 2, 2018, the State of Lower Saxony and Hannoversche Beteiligungs-gesellschaft Niedersachsen mbH, Hanover, held 20.00% of the voting rights of Volkswagen AG on December 31, 2017. As mentioned above, the General Meeting of Volkswagen AG on December 3, 2009 also resolved that the State of Lower Saxony may appoint two members of the Supervisory Board (right of appointment).

The following tables present the amounts of supplies and services transacted, as well as outstanding receivables and liabilities, between consolidated companies of the Volkswagen Group and related parties.

#### RELATED PARTIES

€ million	SUPPLIES AND SERVICES RENDERED		SUPPLIES AND SERVICES RECEIVED	
			2017	2016
			2017	2016
Porsche SE and its majority interests		7	12	1
Supervisory Board members		2	3	2
Board of Management members		0	0	0
Unconsolidated subsidiaries		1,039	890	1,300
Joint ventures and their majority interests		14,294	13,728	1,225
Associates and their majority interests		214	190	733
Pension plans		1	4	0
Other related parties		0	0	0
State of Lower Saxony, its majority interests and joint ventures		11	6	9

€ million	RECEIVABLES FROM		LIABILITIES (INCLUDING OBLIGATIONS) TO	
	Dec. 31, 2017	Dec. 31, 2016	Dec. 31, 2017	Dec. 31, 2016
Porsche SE and its majority interests	13	323	0	1
Supervisory Board members	0	0	254	297
Board of Management members	0	0	72	39
Unconsolidated subsidiaries	1,480	1,036	1,773	1,188
Joint ventures and their majority interests	9,889	8,808	2,168	1,784
Associates and their majority interests	76	53	572	495
Pension plans	1	1	–	8
Other related parties	–	–	63	64
State of Lower Saxony, its majority interests and joint ventures	2	2	1	1

The tables above do not contain the dividend payments of €3,653 million (previous year: €3,613 million) received from joint ventures and associates and dividends of €308 million (previous year: €17 million) paid to Porsche SE.

Receivables from joint ventures are primarily attributable to loans granted in an amount of €6,277 million (previous year: €5,769 million) as well as trade receivables in an amount of €3,354 million (previous year: €2,855 million). Receivables from non-consolidated subsidiaries also result mainly from loans granted in an amount of €1,038 million (previous year: €479 million) and from trade receivables in an amount of €224 million (previous year: €196 million).

Impairment losses of €56 million (previous year: €35 million) were recognized on the outstanding related party receivables. In fiscal year 2017, expenses of €36 million (previous year: €18 million) were incurred in this context.

In addition, the Volkswagen Group has furnished guarantees to external banks on behalf of related parties in the amount of €220 million (previous year: €112 million).

In the reporting period, the Volkswagen Group made capital contributions of €203 million (previous year: €391 million) to related parties.

The changes in supplies and services received from and rendered to joint ventures and their majority interests are primarily attributable to deliveries to the Chinese joint ventures.

The decrease in receivables from Porsche SE is attributable to a loan repayment.

As in the previous year, obligations to members of the Supervisory Board relate primarily to interest-bearing bank balances of Supervisory Board members that were invested at standard market terms and conditions at Volkswagen Group companies.

Obligations to the Board of Management comprise outstanding balances for the annual bonus and the fair values of the performance shares and phantom shares in the amount of €67.0 million (previous year: €26.1 million) granted to Board of Management members.

In addition to the amounts shown above, the following expenses were recognized for the members of the Board of Management and Supervisory Board of the Volkswagen Group in the course of their activities as members of these bodies:

€	2017	2016
Short-term benefits	33,967,996	45,456,678
Benefits based on performance shares and virtual shares	45,777,248	-670,296
Post-employment benefits	10,872,088	9,347,409
Termination benefits	6,940,142	-
	<b>97,557,473</b>	<b>54,133,791</b>

Benefits paid on the basis of performance shares include the cost of €43.8 million attributable to the performance shares granted to Board of Management members under the remuneration system applicable as from 2017. Pursuant to the guidance of IFRS 2, this requires inclusion of not only the performance share plan for 2017, but also of a pro-rated amount for future share plans to be granted during the current employment contract.

Overall, benefits based on phantom shares resulted in income in 2016, because the income from reversing the provision for performance-based Board of Management remuneration (€1.5 million) due to the waiver for fiscal year 2015 exceeded the cost attributable to the performance of the share price up to December 31, 2016 (€0.8 million). In fiscal year 2017, the share price performance led to the recognition of expenses of €2.0 million for the phantom shares.

The employee representatives and the representative of the senior executives on the Supervisory Board are also entitled to a regular salary as set out in their employment contracts. For members of German works councils, this is based on the provisions of the Betriebsverfassungsgesetz (BetrVG – German Works Constitution Act). Investigations by the authorities are currently under way to determine whether the remuneration of some works council members can be justified. As a precaution, components of the remuneration of some works council members has been retained in this context until the matter is clarified.

The post-employment benefits relate to additions to pension provisions for current members of the Board of Management. The termination benefits relate to the severance payment made to Ms. Hohmann-Dennhardt in connection with her early departure from the Board of Management.

Disclosures on the pension provisions for members of the Board of Management and more detailed explanations of the remuneration of the Board of Management and the Supervisory Board can be found in the section entitled “Remuneration of the Board of Management and the Supervisory Board” and in the remuneration report, which is part of the management report.

## 45. German Corporate Governance Code

On November 17, 2017, the Board of Management and Supervisory Board of Volkswagen AG issued their declaration of conformity with the German Corporate Governance Code as required by section 161 of the Aktiengesetz (AktG – German Stock Corporation Act) and made it permanently available to the shareholders of Volkswagen AG on the Company’s website at [www.volkswagenag.com/ir](http://www.volkswagenag.com/ir).

On November 30, 2017, the Board of Management and Supervisory Board of AUDI AG likewise issued their declaration of conformity with the German Corporate Governance Code and made it permanently available to the shareholders at [www.audi.com/cgk-declaration](http://www.audi.com/cgk-declaration).

In December 2017, the Executive Board and Supervisory Board of MAN SE issued their declaration of conformity with the German Corporate Governance Code as required by section 161 of the AktG and made it permanently available to the shareholders at [www.corporate.man.eu/en](http://www.corporate.man.eu/en).

The Executive and Supervisory Boards of RENK AG issued a declaration of conformity on December 5, 2017 and made it permanently available to the shareholders at [www.renk.biz/corporate-governance.html](http://www.renk.biz/corporate-governance.html).

## 46. Remuneration of the Board of Management and the Supervisory Board

€	2017	2016
<b>Board of Management remuneration</b>		
Non-performance-related remuneration	14,337,116	18,093,835
Performance-related remuneration	15,844,041	21,453,778
Long-term incentive component	20,104,770	–
	<b>50,285,927</b>	<b>39,547,612</b>
<b>Supervisory Board remuneration</b>		
Non-performance-related remuneration	3,516,389	709,346
Performance-related remuneration	270,450	4,687,220
	<b>3,786,839</b>	<b>5,396,565</b>

### NON-PERFORMANCE-RELATED REMUNERATION OF THE BOARD OF MANAGEMENT

The non-performance-related remuneration of the Board of Management comprises fixed remuneration and fringe benefits. In addition to the basic level of remuneration, the fixed remuneration also includes differing levels of remuneration for appointments assumed at Group companies. The prior-year figure also includes an amount of €6.3 million to compensate Ms. Hohmann-Dennhardt for lost entitlements resulting from the change in employer. The fringe benefits result from the grant of noncash benefits and include in particular the use of operating assets such as company cars and the payment of insurance premiums. Taxes due on these noncash benefits were mainly borne by Volkswagen AG.

### PERFORMANCE-RELATED REMUNERATION AND LONG-TERM INCENTIVE COMPONENT OF THE BOARD OF MANAGEMENT

Performance-related remuneration includes the annual bonus with a one-year assessment period. The long-term incentive component contains the long-term incentive (LTI) in the form of a performance share plan with a forward-looking three-year term. The performance shares granted to the incumbent members of the Board of Management under the new remuneration system in 2017 were recognized at their fair value of €20.1 million at the grant date; this amount represents remuneration under German GAAP.

At its meeting on April 22, 2016, Volkswagen AG's Supervisory Board accepted the offer made by the members of the Board of Management to withhold 30% of the variable remuneration for fiscal year 2015 for the Board of Management members active on the date of the resolution and to make its disposal subject to future share price performance by means of phantom shares. The resulting effects on remuneration were reported as appropriate in previous years.

In fiscal year 2017, expenses of €43.8 million were recognized for the performance shares and of €2.0 million for the phantom shares. If these expenses exceed the fair value of the performance shares at the grant date, they do not represent remuneration under German GAAP and are therefore not included in the tables above.

As in the previous year, no interest-free advances were paid to members of the Board of Management.

#### **SUPERVISORY BOARD REMUNERATION**

As a result of its regular review of the Supervisory Board remuneration, the Supervisory Board proposed a reorganization of the system of Supervisory Board remuneration to the 2017 Annual General Meeting, which was approved on May 10, 2017 with 99.98 % of the votes cast. The remuneration of the members of the Supervisory Board of Volkswagen AG no longer contains any performance-related remuneration components but consists entirely of non-performance-related remuneration components. Remuneration for supervisory board work at subsidiaries continues to comprise a mix of non-performance-related and performance-related components.

The remuneration disclosed for members of the Supervisory Board for 2016 shows the amounts determined on the basis of the old system of Supervisory Board remuneration. The members of the Supervisory Board declared to the Management Board that they would waive the portion of their remuneration for fiscal year 2016 that exceeds the amount that would have resulted for fiscal year 2016 from implementing the system of Supervisory Board remuneration resolved by the Annual General Meeting on May 10, 2017 with retroactive effect to January 1, 2017. The total amount waived for 2016 by all members of the Supervisory Board is €1.2 million. Mr. Pötsch additionally waived an amount of €0.1 million of his variable remuneration for fiscal year 2016 and waived his remuneration for fiscal year 2017 in full. The reason for this waiver is the agreement made in connection with Mr. Pötsch's transfer from the Management Board to the Supervisory Board as of October 8, 2015, which specified that the amount of Supervisory Board remuneration received up to December 31, 2017 would be deducted from the compensation payment to which he would have been entitled for the period from October 8, 2015 to December 31, 2017.

#### **PENSION ENTITLEMENTS**

On December 31, 2017, the pension provisions for members of the Board of Management in accordance with IFRSs amounted to €125.4 million (previous year: €113.5 million). Current pensions are index-linked in accordance with the index-linking of the highest collectively agreed salary insofar as the application of section 16 of the Gesetz zur Verbesserung der betrieblichen Altersversorgung (BetrAVG – German Company Pension Act) does not lead to a larger increase.

Former members of the Board of Management and their surviving dependents received €19.9 million (previous year: €11.1 million). This includes the amounts promised to Ms. Hohmann-Dennhardt in connection with her departure from the Board of Management. Ms. Hohmann-Dennhardt received non-performance-related remuneration of €2.1 million and performance-related remuneration of €4.9 million for the period from February 1, 2017 to December 31, 2018.

Pension provisions in accordance with IFRSs for this group of individuals amounted to €269.0 million (previous year: €270.0 million).

The individual remuneration of the members of the Board of Management and the Supervisory Board is explained in the remuneration report in the management report on page 67. A comprehensive assessment of the individual bonus components and of the LTI in the form of the performance share plan can also be found there.

# Responsibility Statement

To the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit or loss of the Group, and the Group management report includes a fair review of the development and performance of the business and the position of the Group, together with a description of the material opportunities and risks associated with the expected development of the Group.

Wolfsburg, February 23, 2018

Volkswagen Aktiengesellschaft  
The Board of Management



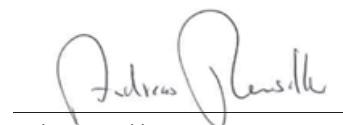
Matthias Müller

  
Karlheinz Blessing

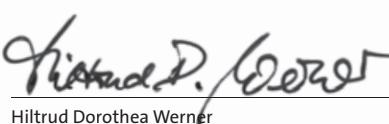
  
Herbert Diess

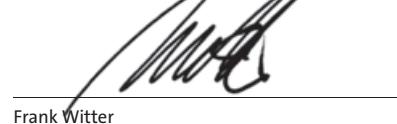
Francisco Javier Garcia Sanz

  
Jochem Heizmann

  
Andreas Renschler

Rupert Stadler

  
Hiltrud Dorothea Werner

  
Frank Witter

# Independent Auditor's Report

On completion of our audit, we issued the following unqualified auditor's report dated February 23, 2018. This report was originally prepared in German. In case of ambiguities the German version takes precedence:

To VOLKSWAGEN AKTIENGESELLSCHAFT, Wolfsburg

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

## AUDIT OPINIONS

We have audited the consolidated financial statements of VOLKSWAGEN AKTIENGESELLSCHAFT, Wolfsburg, and its subsidiaries (the Group), which comprise the income statement and the statement of comprehensive income, the balance sheet, the statement of changes in equity and the cash flow statement for the financial year from January 1 to December 31, 2017, and notes to the consolidated financial statements, including a summary of significant accounting policies. In addition, we have audited the group management report of VOLKSWAGEN AKTIENGESELLSCHAFT, which is combined with the Company's management report, for the financial year from January 1 to December 31, 2017. We have not audited the content of those parts of the group management report listed in the "Other Information" section of our auditor's report in accordance with the German legal requirements.

In our opinion, on the basis of the knowledge obtained in the audit,

- the accompanying consolidated financial statements comply, in all material respects, with the IFRSs as adopted by the EU, and the additional requirements of German commercial law pursuant to § [Article] 315e Abs. [paragraph] 1 HGB [Handelsgesetzbuch: German Commercial Code] and, in compliance with these requirements, give a true and fair view of the assets, liabilities, and financial position of the Group as at December 31, 2017, and of its financial performance for the financial year from January 1 to December 31, 2017, and
- the accompanying group management report as a whole provides an appropriate view of the Group's position. In all material respects, this group management report is consistent with the consolidated financial statements, complies with German legal requirements and appropriately presents the opportunities and risks of future development. Our audit opinion on the group management report does not cover the content of those parts of the group management report listed in the "Other Information" section of our auditor's report.

Pursuant to § 322 Abs. 3 Satz [sentence] 1 HGB, we declare that our audit has not led to any reservations relating to the legal compliance of the consolidated financial statements and of the group management report.

## BASIS FOR THE AUDIT OPINIONS

We conducted our audit of the consolidated financial statements and of the group management report in accordance with § 317 HGB and the EU Audit Regulation (No. 537/2014, referred to subsequently as "EU Audit Regulation") and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer [Institute of Public Auditors in Germany] (IDW). Our responsibilities under those requirements and principles are further described in the "Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report" section of our auditor's report. We are independent of the group entities in accordance with the requirements of European law and German commercial and professional law, and we have fulfilled our other German professional responsibilities in accordance with these requirements. In addition, in accordance with Article 10 (2) point (f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Article 5 (1) of the EU Audit Regulation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions on the consolidated financial statements and on the group management report.

**EMPHASIS OF MATTER – DIESEL ISSUE**

We draw attention to the information provided and statements made in section “Key Events” of the notes to the consolidated financial statements and in section “Diesel Issue” of the group management report with regard to the diesel issue including information about the underlying causes, the noninvolvement of members of the board of management as well as the impact on these financial statements.

Based on the results of the various measures taken to investigate the issue presented so far, which underlie the consolidated financial statements and the group management report, there is still no evidence that members of the Company’s board of management were aware of the deliberate manipulation of engine management software before summer 2015. Nevertheless, should as a result of the ongoing investigation new solid knowledge be obtained showing that members of the board of management were informed earlier about the diesel issue, this could eventually have an impact on the consolidated financial statements and on the group management report for financial year 2017 and prior years.

The provisions for warranties and legal risks recorded so far are based on the presented state of knowledge. Due to the inevitable uncertainties associated with the current and expected litigation it cannot be excluded that a future assessment of the risks may be different.

Our opinions on the consolidated financial statements and on the group management report are not modified in respect of this matter.

**KEY AUDIT MATTERS IN THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS**

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements for the financial year from January 1 to December 31, 2017. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our audit opinion thereon; we do not provide a separate audit opinion on these matters.

In our view, the matters of most significance in our audit were as follows:

- ① Accounting treatment of risk provisions for the diesel issue
- ② Recoverability of goodwill and brand names
- ③ Impairment of capitalized development costs
- ④ Completeness and measurement of provisions for warranty obligations arising from sales
- ⑤ Financial instruments – hedge accounting

Our presentation of these key audit matters has been structured in each case as follows:

- ① Matter and issue
- ② Audit approach and findings
- ③ Reference to further information

Hereinafter we present the key audit matters:

- ① Accounting treatment of risk provisions for the diesel issue

① Companies of the Volkswagen Group are involved in investigations by government authorities in numerous countries (in particular in Europe, the United States, Canada and South Korea) with respect to irregularities in the exhaust gas emissions from diesel engines in certain vehicles of the Volkswagen Group. Different measures are being implemented in various countries for affected vehicles. These include hardware and/or software solutions, vehicle repurchases or the early termination of leases and, in some cases, cash payments to vehicle owners. Furthermore, payments are being made as a result of criminal proceedings and civil law settlements with various parties. In addition, there are civil lawsuits pending from customers, dealers and holders of securities. Further direct and indirect effects concern in particular impairment of assets (intangible assets, property, plant and equipment, and inventories) and customer-specific sales programs.

The Volkswagen Group recognizes the expenses directly related to the diesel issue in its operating income. The expenses incurred in fiscal year 2017 amount to EUR 3.2 billion and relate in their entirety to further additions to reserves for field activities and repurchases (EUR 2.2 billion) as well as legal risks (EUR 1.0 billion). In addition to provisions, contingent liabilities for legal risks in the amount of EUR 4.3 billion are reported as of December 31, 2017.

The reported provisions and contingent liabilities are exposed to considerable estimation risk due to the wide-ranging investigations and proceedings that are ongoing, the complexity of the various negotiations and pending approval procedures by authorities, and developments in market conditions. This matter was of particular importance for our audit due to the material amounts of the provisions as well as the scope of assumptions and discretion on the part of management.

② In order to audit the recognition and measurement of provisions for field activities and vehicle repurchases arising as a result of the diesel issue, we critically examined the processes put in place by the companies of the Volkswagen Group to make substantive preparations to address the diesel issue, and assessed the progress made in implementing the technical solutions developed to remedy it. We compared this knowledge with the technical and legal opinions of independent experts, as presented to us. We used an IT data analysis solution to examine the quantity structure underlying the field activities and repurchases. We assessed the inputs used to measure the repair solutions that have been defined to date or are still in development and the planned repurchases. We used this as a basis to evaluate the calculation of the provisions.

In order to audit the recognition and measurement of the provisions for legal risks and the disclosure of contingent liabilities for legal risks resulting from the diesel issue, we assessed both the available official documents such as those from the US Department of Justice, as well as in particular the work delivered and opinions prepared by experts commissioned by the Volkswagen Group. As part of a targeted selection of key procedures and supplemented by additional samples, we inspected the correspondence relating to the litigation and, in talks with officials from the affected companies and the lawyers involved, and including our own technical and legal experts, we discussed the assessments made.

Taking into consideration the information provided and statements made in the section entitled "Key events" in the notes to the consolidated financial statements and in the section entitled "Diesel Issue" in the combined management report with regard to the diesel issue including information about the underlying causes, the non-involvement of members of the board of management as well as the impact on these financial statements, we believe that, overall, the assumptions and inputs underlying the calculation of the risk provisions for the diesel issue are appropriate to properly recognize and measure the provisions.

③ The Company's disclosures on the diesel issue are contained in the sections entitled "Key events" and "Litigation" in the notes to the consolidated financial statements, and in the sections entitled "Diesel Issue" and "Report on Risks and Opportunities", subsections "Risks from the Diesel Issue" and "Litigation" in the combined management report.

## 2 Recoverability of goodwill and brand names

① The intangible assets reported in the consolidated financial statements of VOLKSWAGEN AKTIENGESELLSCHAFT include EUR 40.4 billion in goodwill and purchased brand names (intangible assets with indefinite useful lives). The Company allocates goodwill and brand names to the subgroups and brands, respectively, within the Volkswagen Group. As part of the regular impairment testing of goodwill and brand names, the Company compares the carrying amount of the subgroups and brands, respectively, against their respective recoverable amount. In general, the recoverable amount is calculated on the basis of the value in use. The value in use is calculated using discounted cash flow models on the basis of the Volkswagen Group's five year operating plan prepared by management and acknowledged by the Supervisory Board and extrapolated based on assumptions about long term growth rates. The discount rate used is the weighted average cost of

capital for the relevant reporting segment. The result of this measurement depends to a large extent on management's assessment with regard to the future cash inflows of the respective subgroups and brands, respectively, and on the discount rate used, and is therefore subject to considerable uncertainty. Against this background and due to the underlying complexity of the measurement models, this matter was of particular importance for our audit.

② As part of our audit, we assessed, among other things, the method used to perform impairment tests and the calculation of the weighted cost of capital. We evaluated the appropriateness of the future cash inflows used in the measurement, including by comparing this data with the five-year operating plan prepared by management and acknowledged by the Supervisory Board, and through reconciliation with general and sector-specific market expectations. We also evaluated that the costs for Group functions not recognized in a segment were properly included in the impairment test for the respective subgroup and brand, respectively. With the knowledge that even relatively small changes in the discount rate applied can have a material impact on the recoverable amounts calculated in this way, we also focused our testing in particular on the parameters used to determine the discount rate applied, and evaluated the measurement model. Furthermore, due to the materiality of the goodwill and brand names, we also performed our own sensitivity analyses for the subgroups and brands, respectively, (comparison of carrying amounts and recoverable amounts) and determined that the respective goodwill and brand names were sufficiently covered by the discounted future cash flows. Overall, we consider the measurement inputs and assumptions used by management to be in line with our expectations and to lie also within a range that we consider reasonable.

③ The Company's disclosures on goodwill and brand names are contained in section entitled "Intangible assets" in the notes to the consolidated financial statements.

### ③ Impairment of capitalized development costs

① In the consolidated financial statements of VOLKSWAGEN AKTIENGESELLSCHAFT capitalized development costs amounting to EUR 21.0 billion are reported under the "Intangible assets" balance sheet item. In accordance with IAS 38, research costs are treated as expenses incurred, while development costs for future series products are capitalized provided that sale of these products is likely to bring an economic benefit. Until amortization begins, developments must be tested for impairment in accordance with IAS 36 at least once a year based on the cash-generating units to which they are allocated. To meet this requirement, over the period from capitalization until completion of development the Company assesses whether the costs incurred are covered by future cash flows. Once amortization begins, an assessment must be carried out at each reporting date as to whether there are indications of impairment. If this is the case, an impairment test must be performed and any impairment loss recognized. For impairment losses recognized in prior periods, an annual assessment must be carried out as to whether there are indications that the reason for the impairment has ceased to apply.

The Volkswagen Group generally applies the present value of the future cash flows (value in use) from the relevant cash-generating units to test these intangible assets for impairment. The value in use is determined using the discounted cash flow method based on the Group's five-year financial planning prepared by management. The discount rate used is the weighted average cost of capital (WACC). The weighted average cost of capital applied in the Volkswagen Group includes the weighted average cost of equity and debt before taxes.

The impairment identified during the impairment testing was recognized under the "Cost of sales" line item in the income statement as impairment losses amounting to EUR 0.4 billion.

The result of this measurement depends to a large extent on management's assessment of future cash inflows and the discount rate used, and is therefore subject to considerable uncertainty. Against this background and due to the complex nature of the valuation, this matter was of particular significance in the context of our audit.

② As part of our audit we assessed whether, overall, the assumptions underlying the measurements particularly in the form of future cash inflows, and the discount rates used provide an appropriate basis by which to test the individual cash-generating units for impairment. We based our assessment, among other things, on a comparison with general and sector-specific market expectations as well as management's detailed explanations regarding key planning value drivers. We also evaluated that the costs for Group functions were properly included in the impairment tests of the respective cash-generating units. With the knowledge that even relatively small changes in the discount rate applied can in some cases have material effects on values, we also focused our testing on the parameters used to determine the discount rate applied, and evaluated the measurement model. We also assessed the consistency of the measurement model applied and evaluated the mathematical accuracy of the calculations. Furthermore, we performed our own additional sensitivity analysis for those cash-generating units with little headroom (present value exceeds carrying amount) in order to gauge the impairment risk and enable us to adapt our audit procedures accordingly. With respect to completed development projects, we inquired management about whether or not there were indications of impairment or that reasons for impairment had ceased to apply, and critically examined these assumptions based on our knowledge of the Group's legal and economic environment. In the case of impairment losses or a reversal of impairment losses, we assessed that these were properly assigned to the assets allocated to the cash-generating unit. In our view, the measurement inputs and assumptions used by management, and the measurement model, were properly derived for the purposes of conducting impairment tests.

③ Company's disclosures on capitalized development costs and the associated impairment testing are contained in sections entitled "Accounting policies" and "Intangible assets" in the notes to the consolidated financial statements.

#### ④ Completeness and measurement of provisions for warranty obligations arising from sales

① In the consolidated financial statements of the Volkswagen Group EUR 27.9 billion in provisions for obligations arising from sales are reported under the "Other provisions" balance sheet item. These obligations primarily relate to warranty claims arising from the sale of vehicles, motorcycles, components and genuine parts. Warranty claims are calculated on the basis of losses to date, estimated future losses and the policy on ex gratia arrangements. An estimate is also made of the discount rate. In addition, assumptions must be made about the nature and extent of future warranty and ex gratia claims. These assumptions are based on qualified estimates.

From our point of view, this matter was of particular importance for our audit because the recognition and measurement of this material item is to a large extent based on estimates and assumptions made by the Company's management.

② With the knowledge that estimated values result in an increased risk of accounting misstatements and that the measurement decisions made by management have a direct and significant effect on consolidated net profit/loss, we assessed the appropriateness of the carrying amounts, including by comparing these figures with historical data and using the measurement bases presented to us. Furthermore, we assessed that the interest rates with matching terms were properly derived from market data. We evaluated the entire calculations (including discounting) for the provisions using the applicable measurement inputs and assessed the planned timetable for utilizing the provisions.

In doing so, we were able to satisfy ourselves that the estimates applied and the assumptions made by management were sufficiently documented and supported to justify the recognition and measurement of the provisions for warranty obligations arising from sales.

③ The Company's disclosures on other provisions are contained in sections entitled "Accounting policies" and "Noncurrent and current other provisions" in the notes to the consolidated financial statements.

⑤ Financial instruments – hedge accounting

① The companies of the Volkswagen Group use a variety of derivative financial instruments to hedge in particular against currency and interest rate risks arising from their ordinary business activities. Management's hedging policy is documented in corresponding internal guidelines and serves as the basis for these transactions. Currency risk arises primarily from sales and procurement transactions and financing denominated in foreign currencies. The means of limiting this risk include entering into currency forwards, currency options and cross-currency interest rate swaps. The companies enter into interest rate hedges for the purpose of achieving an economically sensible ratio of variable to fixed interest rate exposures. Interest rate risk is minimized by entering into interest rate swaps and cross-currency interest rate swaps.

Derivatives are measured at fair value as of the balance sheet date. The positive fair values of all of the derivatives used for hedging purposes amount to EUR 6.9 billion as of the balance sheet date, while the negative fair values amount to EUR 2.2 billion. Insofar the financial instruments used by the Volkswagen Group are effective hedges of future cash flows in the context of hedging pursuant to the requirements of IAS 39, the effective portion of the changes in fair value is recognized in other comprehensive income over the duration of the hedging relationships until the maturity of the hedged cash flows (cash flows hedges). As of the balance sheet date, a cumulative EUR 3.5 billion under consideration of income taxes was recognized in equity as the effective portion of fair value changes. Insofar derivative financial instruments are used to hedge against changes in the carrying amount of balance sheet items pursuant to the requirements of IAS 39, changes in the fair value of both the hedged items and the hedging instruments are recognized on a net basis in the corresponding income statement item (fair value hedges).

From our point of view these matters were of particular importance for our audit due to the high complexity and number of transactions as well as the extensive accounting and disclosure requirements of IAS 39.

② As a part of our audit and with the support of our internal specialists from Corporate Treasury Solutions, among other things we assessed the contractual and financial parameters and evaluated the accounting treatment, including the effects on equity and profit or loss, of the various hedging relationships. Together with our specialists, we also evaluated the Company's internal control system with regard to derivative financial instruments, including the internal activities to monitor compliance with the hedging policy. In addition, for the purpose of auditing the fair value measurement of financial instruments, we also assessed the methods of calculation employed on the basis of market data. In addition to evaluating the internal control system, we obtained bank confirmations for the hedging instruments in order to assess completeness. With regard to the expected cash flows and the assessment of the effectiveness of hedges, we essentially conducted a retrospective assessment of past hedging levels. In doing so, we were able to satisfy ourselves that the estimates and assumptions made by management were substantiated and sufficiently documented.

③ The Company's disclosures on hedge accounting are contained in sections entitled "Accounting policies", "Noncurrent and current other financial assets", "Noncurrent and current other financial liabilities", "Additional balance sheet disclosures in accordance with IFRS 7 (Financial Instruments)" in the notes to the consolidated financial statements.

## OTHER INFORMATION

The executive directors are responsible for the other information. The other information comprises the following non-audited parts of the group management report:

- the statement on corporate governance pursuant to § 289f HGB and § 315d HGB included in section "Corporate Governance Report" of the group management report
- the corporate governance report pursuant to No. 3.10 of the German Corporate Governance Code
- the separate non-financial report pursuant to § 289b Abs. 3 HGB and § 315b Abs. 3 HGB

The other information comprises further the remaining parts of the annual report, which we obtained prior to the date of our auditor's report – excluding cross-references to external information – with the exception of the audited consolidated financial statements, the audited group management report and our auditor's report.

Our audit opinions on the consolidated financial statements and on the group management report do not cover the other information, and consequently we do not express an audit opinion or any other form of assurance conclusion thereon.

In connection with our audit, our responsibility is to read the other information and, in so doing, to consider whether the other information

- is materially inconsistent with the consolidated financial statements, with the group management report or our knowledge obtained in the audit, or
- otherwise appears to be materially misstated.

## Responsibilities of the Executive Directors and the Supervisory Board for the Consolidated Financial Statements and the Group Management Report

The executive directors are responsible for the preparation of the consolidated financial statements that comply, in all material respects, with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB and that the consolidated financial statements, in compliance with these requirements, give a true and fair view of the assets, liabilities, financial position, and financial performance of the Group. In addition the executive directors are responsible for such internal control as they have determined necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the executive directors are responsible for assessing the Group's ability to continue as a going concern. They also have the responsibility for disclosing, as applicable, matters related to going concern. In addition, they are responsible for financial reporting based on the going concern basis of accounting unless there is an intention to liquidate the Group or to cease operations, or there is no realistic alternative but to do so.

Furthermore, the executive directors are responsible for the preparation of the group management report that, as a whole, provides an appropriate view of the Group's position and is, in all material respects, consistent with the consolidated financial statements, complies with German legal requirements, and appropriately presents the opportunities and risks of future development. In addition, the executive directors are responsible for such arrangements and measures (systems) as they have considered necessary to enable the preparation of a group management report that is in accordance with the applicable German legal requirements, and to be able to provide sufficient appropriate evidence for the assertions in the group management report.

The supervisory board is responsible for overseeing the Group's financial reporting process for the preparation of the consolidated financial statements and of the group management report.

**Auditor's Responsibilities for the Audit of the Consolidated Financial Statements and of the Group Management Report**  
Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and whether the group management report as a whole provides an appropriate view of the Group's position and, in all material respects, is consistent with the consolidated financial statements and the knowledge obtained in the audit, complies with the German legal requirements and appropriately presents the opportunities and risks of future development, as well as to issue an auditor's report that includes our audit opinions on the consolidated financial statements and on the group management report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with § 317 HGB and the EU Audit Regulation and in compliance with German Generally Accepted Standards for Financial Statement Audits promulgated by the Institut der Wirtschaftsprüfer (IDW) will always detect a material misstatement. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements and this group management report.

We exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements and of the group management report, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our audit opinions. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit of the consolidated financial statements and of arrangements and measures (systems) relevant to the audit of the group management report in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an audit opinion on the effectiveness of these systems.

- Evaluate the appropriateness of accounting policies used by the executive directors and the reasonableness of estimates made by the executive directors and related disclosures.
- Conclude on the appropriateness of the executive directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in the auditor's report to the related disclosures in the consolidated financial statements and in the group management report or, if such disclosures are inadequate, to modify our respective audit opinions. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to be able to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements present the underlying transactions and events in a manner that the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and financial performance of the Group in compliance with IFRSs as adopted by the EU and the additional requirements of German commercial law pursuant to § 315e Abs. 1 HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express audit opinions on the consolidated financial statements and on the group management report. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinions.
- Evaluate the consistency of the group management report with the consolidated financial statements, its conformity with German law, and the view of the Group's position it provides.
- Perform audit procedures on the prospective information presented by the executive directors in the group management report. On the basis of sufficient appropriate audit evidence we evaluate, in particular, the significant assumptions used by the executive directors as a basis for the prospective information, and evaluate the proper derivation of the prospective information from these assumptions. We do not express a separate audit opinion on the prospective information and on the assumptions used as a basis. There is a substantial unavoidable risk that future events will differ materially from the prospective information.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with the relevant independence requirements, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, the related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter.

**OTHER LEGAL AND REGULATORY REQUIREMENTS****Further Information pursuant to Article 10 of the EU Audit Regulation**

We were elected as group auditor by the annual general meeting on May 10, 2017. We were engaged by the supervisory board on May 11, 2017. We have been the group auditor of the VOLKSWAGEN AKTIENGESELLSCHAFT, Wolfsburg, without interruption since the financial year 1948/1949.

We declare that the audit opinions expressed in this auditor's report are consistent with the additional report to the audit committee pursuant to Article 11 of the EU Audit Regulation (longform audit report).

**GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT**

The German Public Auditor responsible for the engagement is Frank Hübner.

Hanover, February 23, 2018

PricewaterhouseCoopers GmbH  
Wirtschaftsprüfungsgesellschaft

Norbert Winkeljohann  
Wirtschaftsprüfer  
(German Public Auditor)

Frank Hübner  
Wirtschaftsprüfer  
(German Public Auditor)

# Five-Year Review

	2017	2016	2015	2014	2013
<b>Volume Data (thousands)</b>					
<b>Vehicle sales (units)</b>	<b>10,777</b>	<b>10,391</b>	<b>10,010</b>	<b>10,217</b>	<b>9,728</b>
Germany	1,264	1,257	1,279	1,247	1,187
Abroad	9,513	9,135	8,731	8,970	8,541
<b>Production (units)</b>	<b>10,875</b>	<b>10,405</b>	<b>10,017</b>	<b>10,213</b>	<b>9,728</b>
Germany	2,579	2,685	2,681	2,559	2,458
Abroad	8,296	7,720	7,336	7,653	7,270
<b>Employees (yearly average)</b>	<b>642</b>	<b>619</b>	<b>604</b>	<b>583</b>	<b>563</b>
Germany	287	280	276	265	255
Abroad	355	339	329	318	308
<b>Financial Data (in € million)</b>					
<b>Income Statement</b>					
<b>Sales revenue</b>	<b>230,682</b>	<b>217,267</b>	<b>213,292</b>	<b>202,458</b>	<b>197,007</b>
Cost of sales	188,140	176,270	179,382	165,934	161,407
<b>Gross profit</b>	<b>42,542</b>	<b>40,997</b>	<b>33,911</b>	<b>36,524</b>	<b>35,600</b>
Distribution expenses	22,710	22,700	23,515	20,292	19,655
Administrative expenses	8,254	7,336	7,197	6,841	6,888
Net other operating result	2,240	-3,858	-7,267	3,306	2,613
<b>Operating result</b>	<b>13,818</b>	<b>7,103</b>	<b>-4,069</b>	<b>12,697</b>	<b>11,671</b>
Financial result	94	189	2,767	2,097	757
<b>Earnings before tax</b>	<b>13,913</b>	<b>7,292</b>	<b>-1,301</b>	<b>14,794</b>	<b>12,428</b>
Income tax expense	2,275	1,912	59	3,726	3,283
<b>Earnings after tax</b>	<b>11,638</b>	<b>5,379</b>	<b>-1,361</b>	<b>11,068</b>	<b>9,145</b>
<b>Cost of materials</b>	<b>151,449</b>	<b>140,307</b>	<b>143,700</b>	<b>132,514</b>	<b>127,089</b>
<b>Personnel expenses</b>	<b>38,950</b>	<b>37,017</b>	<b>36,268</b>	<b>33,834</b>	<b>31,747</b>
<b>Balance Sheet (at December 31)</b>					
Noncurrent assets	262,081	254,010	236,548	220,106	202,141
Current assets	160,112	155,722	145,387	131,102	122,192
<b>Total assets</b>	<b>422,193</b>	<b>409,732</b>	<b>381,935</b>	<b>351,209</b>	<b>324,333</b>
Equity	109,077	92,910	88,270	90,189	90,037
of which: noncontrolling interests	229	221	210	198	2,304
Noncurrent liabilities	152,726	139,306	145,175	130,314	115,672
Current liabilities	160,389	177,515	148,489	130,706	118,625
<b>Total equity and liabilities</b>	<b>422,193</b>	<b>409,732</b>	<b>381,935</b>	<b>351,209</b>	<b>324,333</b>
<b>Cash flows from operating activities</b>	<b>-1,185</b>	<b>9,430</b>	<b>13,679</b>	<b>10,784</b>	<b>12,595</b>
<b>Cash flows from investing activities attributable to operating activities</b>	<b>18,218</b>	<b>16,797</b>	<b>15,523</b>	<b>16,452</b>	<b>14,936</b>
<b>Cash flows from financing activities</b>	<b>17,625</b>	<b>9,712</b>	<b>9,068</b>	<b>4,645</b>	<b>8,973</b>

# Financial Key Performance Indicators

%	2017	2016	2015	2014	2013
<b>Volkswagen Group</b>					
Gross margin	18.4	18.9	15.9	18.0	18.1
Personnel expense ratio	16.9	17.0	17.0	16.7	16.1
Operating result as a percentage of sales revenue	6.0	3.3	-1.9	6.3	5.9
Return on sales before tax	6.0	3.4	-0.6	7.3	6.3
Return on sales after tax	5.0	2.5	-0.6	5.5	4.6
Equity ratio	25.8	22.7	23.1	25.7	27.8
Dynamic gearing <sup>1</sup> (years)	0.0	0.1	0.1	0.1	0.1
<b>Automotive Division<sup>2</sup></b>					
Change in unit sales year-on-year <sup>3</sup>	+ 3.7	+ 3.8	-2.0	+ 5.0	+ 4.1
Change in sales revenue year-on-year	+ 5.9	+ 1.1	+ 3.6	+ 1.4	+ 1.3
Research and development costs as a percentage of sales revenue	6.7	7.3	7.4	7.4	6.7
Operating result as a percentage of sales revenue	5.7	2.5	-3.4	6.1	5.6
EBITDA (in € million) <sup>4</sup>	26,094	18,999	7,212	23,100	20,594
Return on investment (ROI) <sup>5</sup>	12.1	8.2	-0.2	14.9	14.5
Cash flows from operating activities as a percentage of sales revenue	5.9	10.9	12.9	12.2	11.8
Cash flows from investing activities attributable to operating activities as a percentage of sales revenue	9.0	8.6	8.1	8.7	9.3
Capex as a percentage of sales revenue	6.4	6.9	6.9	6.5	6.3
Net liquidity as a percentage of sales revenue	9.7	12.5	11.5	8.7	8.6
Ratio of noncurrent assets to total assets <sup>6</sup>	23.7	23.4	23.1	22.3	21.3
Ratio of current assets to total assets <sup>7</sup>	16.3	15.9	15.2	14.3	13.4
Inventory turnover <sup>8</sup>	5.2	5.5	5.8	6.2	6.5
Equity ratio	36.9	31.4	32.6	36.9	39.8
<b>Financial Services Division</b>					
Increase in total assets	6.0	8.3	13.9	15.1	3.9
Return on equity before tax <sup>9</sup>	9.8	10.8	12.2	12.5	14.3
Equity ratio	13.7	12.5	11.9	11.3	10.5

1 Ratio of cash flows from operating activities to current and noncurrent financial liabilities.

2 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

3 Including the Chinese joint ventures. These companies are accounted for using the equity method.

4 Operating result plus net depreciation/amortization and impairment losses/reversals of impairment losses on property, plant and equipment, capitalized development costs, lease assets, goodwill and financial assets as reported in the cash flow statement.

5 For details, see Value-based management on page 127.

6 Ratio of property, plant and equipment to total assets.

7 Ratio of inventories to total assets at the balance sheet date.

8 Ratio of sales revenue to average monthly inventories.

9 Earnings before tax as a percentage of average equity.

# Glossary

## Selected terms at a glance

### **Big Data**

Big data is a term used to describe new ways of analyzing and evaluating data volumes that are too vast and too complex to be processed using manual or conventional methods.

### **Compliance**

Adherence to statutory provisions, internal company policies and ethical principles.

### **Compressed Natural Gas (CNG)**

Burning this compressed natural gas releases approximately 25% less CO<sub>2</sub> than petrol because of its low carbon and high energy content.

### **Corporate Governance**

International term for responsible corporate management and supervision driven by long-term value added.

### **Direct Shift Gearbox (DSG)**

Gearbox that consists of two gearboxes with a dual clutch and so combines the agility, driving pleasure and low consumption levels of a manual gearbox with the comfort of an automatic.

### **Driving Cycles**

Levels of fuel consumption and exhaust gas emissions for vehicles registered in Europe were previously measured on a chassis dynamometer with the help of the "New European Driving Cycle (NEDC)". Since fall 2017, the existing test procedure for emissions and fuel consumption used in the EU is being gradually replaced by the Worldwide Harmonized Light-Duty Vehicles Test Procedure (WLTP). This has been in place for new vehicle types since fall 2017 and will apply to all new vehicles from fall 2018. The aim of this new test cycle is to state CO<sub>2</sub> emissions and fuel consumption in a more practice-oriented manner. A further important European regulation is the Real Driving Emissions (RDE) for passenger cars and light commercial vehicles, which also monitors emissions using portable emission measuring technology in real road traffic.

### **Hybrid drive**

Drive combining two different types of engine and energy storage systems (usually an internal combustion engine and an electric motor).

### **Hybrid notes**

Hybrid notes issued by Volkswagen are classified in their entirety as equity. The issuer has call options at defined dates during their perpetual maturities. They pay a fixed coupon until the first possible call date, followed by a variable rate depending on their terms and conditions.

### **Industry 4.0**

Describes the fourth industrial revolution and the systematic development of real-time and intelligent networks between people, objects and systems, exploiting all of the opportunities of information technology along the entire value added chain. Intelligent machines, inventory systems and operating equipment that independently exchange information, trigger actions and control each other will be integrated into production and logistics at a technical level. This offers tremendous versatility, efficient resource utilization, ergonomics and the integration of customers and business partners in operational processes throughout the entire value chain.

### **Liquefied Natural Gas (LNG)**

LNG is needed so that natural gas engines can be used in long-distance trucks and buses, since this is the only way of achieving the required energy density.

### **Modular Electric Toolkit (MEB)**

The modular system is being developed for the manufacturing of electric vehicles. The MEB establishes parameters for axles, drive systems, high-voltage batteries, wheelbases and weight ratios to ensure a vehicle optimally fulfills the requirements of e-mobility. The first vehicle based on the MEB should go into series production in 2020.

### **Modular Transverse Toolkit (MQB)**

As an extension of the modular strategy, this platform can be deployed in vehicles whose architecture permits a transverse arrangement of the engine components. The modular perspective enables high synergies to be achieved between the vehicles in the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, Audi, SEAT and ŠKODA brands.

### **Plug-in hybrid**

Performance levels of hybrid vehicles. Plug-in hybrid electric vehicles (PHEVs) have a larger battery with a correspondingly higher capacity that can be charged via the combustion engine, the brake system, or an electrical outlet. This increases the range of the vehicle.

### **Rating**

Systematic assessment of companies in terms of their credit quality. Ratings are expressed by means of rating classes, which are defined differently by the individual rating agencies.

### **Turntable concept**

Concept of flexible manufacturing enabling the production of different models in variable daily volumes within a single plant, as well as offering the facility to vary daily production volumes of one model between two or more plants.

### **Vocational groups**

For example, electronics, logistics, marketing, or finance. A new teaching and learning culture is gradually being established by promoting training in the vocational groups. The specialists are actively involved in the teaching process by passing on their skills and knowledge to their colleagues.

### **Zero-Emissions Vehicle (ZEV)**

Vehicles that operate without exhibiting any harmful emissions from combustion gases. Examples of zero-emissions vehicles include purely battery-powered electric vehicles (BEV) or fuel cell vehicles.

**Capitalization ratio**

The capitalization ratio is defined as the ratio of capitalized development costs to total research and development costs in the Automotive Division. It shows the proportion of primary research and development costs subject to capitalization.

**Return on equity before tax**

The return on equity shows the ratio of profit before tax to average shareholders' equity of a period, expressed as a percentage. It reflects the company's profitability per share and indicates the interest rate earned on equity.

**Distribution ratio**

The distribution ratio is the ratio of total dividends attributable to ordinary and preferred shares to earnings after tax attributable to the shareholders of Volkswagen AG. The distribution ratio provides information on how earnings are distributed.

**Return on sales before tax**

The return on sales is the ratio of profit before tax to sales revenue in a period, expressed as a percentage. It shows the level of profit generated for each unit of sales revenue. The return on sales provides information on the profitability of all business activities before deducting income tax expense.

**Dividend yield**

The dividend yield is the ratio of the dividend for the reporting year to the closing price per share class on the last trading day of the reporting year; it represents the interest rate earned per share. The dividend yield is used in particular for measuring and comparing shares.

**Tax rate**

The tax rate is the ratio of income tax expense to profit before tax, expressed in percent. It shows what percentage of the profit generated has to be paid over as tax.

**Equity ratio**

The equity ratio measures the percentage of total assets attributable to shareholders' equity as of a reporting date. This ratio indicates the stability and financial strength of the company and shows the degree of financial independence.

**Gross margin**

Gross margin is the percentage of sales revenue attributable to gross profit in a period. Gross margin provides information on profitability net of cost of sales.

**Price-earnings ratio**

The price-earnings ratio is calculated by dividing the share price per share class at the end of the year by the earnings per share. It reflects a company's profitability per share; a comparison over several years shows how its performance has developed over time.

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March 13

Volkswagen AG Annual Media Conference  
and Investor Conference, Berlin

April 26

Interim Report January – March

May 3

Volkswagen AG Annual General Meeting (CityCube Berlin)

August 1

Half-Yearly Financial Report

October 30

Interim Report January – September

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# FACE

THE VOLKSWAGEN GROUP MAGAZINE

THE CHANGE



2018

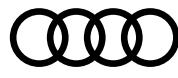
# VOLKSWAGEN

AKTIENGESELLSCHAFT

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Volkswagen



Audi



SEAT



ŠKODA



BENTLEY



BUGATTI



LAMBORGHINI



PORSCHE



DUCATI



Commercial  
Vehicles



SCANIA



MAN

## VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY

# The Volkswagen Group 2018: From people. For people.

**E-mobility, autonomous driving, mobility as a service** – the entire automotive industry is facing enormous challenges. With our “TOGETHER – Strategy 2025” program for the future, we have come up with convincing answers: we are making the Volkswagen Group more open and efficient, more innovative and customer-centric. The figures show we are on the right track. The Volkswagen Group delivered more vehicles in 2017 than ever before. And we are making rapid progress with “Roadmap E” – the most comprehensive electrification initiative in our industry.

**Notwithstanding these successes**, it is also clear that realigning a company like Volkswagen takes time. It takes patience and stamina on the part of all involved. And we must learn to live with setbacks along the way. We will not allow ourselves to be discouraged by them. We will continue to devote all our energy to making the Volkswagen Group a leading provider of sustainable mobility.

**The magazine section** of the Volkswagen Group Annual Report 2017 also reflects this spirit of change. The magazine has a new face – or to be more precise, many faces. Transparency and integrity, a team spirit and a zest for innovation are core values in our company, values that are lived and shaped by our employees day in, day out. Their opinion counts – irrespective of hierarchy or field of expertise. That is why we asked colleagues from different continents and departments to share their views on important mobility issues with us for this magazine. Their statements and portraits are both the leitmotif of this issue, and a symbol of our sense of a new beginning. Jennifer Wittmann and Servet Çelik feature on the cover pages. Wittmann is an Executive Assistant at MOIA in Berlin, Çelik is an Enterprise Architect at Volkswagen IT Sales & Marketing in Wolfsburg.

“**Face the change**” is the motto of the 2018 magazine. It is a twofold motto. On the one hand, it expresses our firm resolve to tackle change together. And on the other, it reminds us that good, genuine, sustainable change always comes from people, for people. We hope you find this magazine enjoyable and informative.



**THE  
WIND OF  
CHANGE  
IS A  
PRETTY  
POWERFUL  
MOTOR,  
ISN'T  
IT?**

Courtney Cox

UX Motion Designer, Electronics Research Lab,  
Volkswagen Group of America, Belmont

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Go Electric

# EVs are the best option for everyone.

Especially if they have green license plates.

Xiaohang Yin  
Head of Digitalization & Connectivity,  
Audi China, R&D, Beijing

About half a million electric vehicles are already being sold in China.

Why? Because buying an EV is a lucrative alternative.

In many big cities, EV owners are issued with their green license plates straight away. For other owners, it takes years.



# “The thirst for innovation is stronger than ever.”

The auto industry is facing the biggest transformation in its history. Ulrich Eichhorn and Henning Kagermann discuss the most pressing issues.

**Text:** Jochen Förster, Tom Levine | **Photos:** Holger Talinski

Where are e-mobility and CNG drives headed? How will today's automakers become the mobility services providers of tomorrow? Will we still own cars ten years from now? And what can the Volkswagen Group learn from the software industry? When it comes to the top issues impacting future mobility, hardly anyone can match the expertise of the two gentlemen we are meeting this afternoon at DRIVE, the Volkswagen Group Forum in Berlin: Dr. Ulrich Eichhorn, Head of Research and Development at the Volkswagen Group, and Prof. Henning Kagermann, President of the Deutsche Akademie der Technikwissenschaften (National Academy of Science and Engineering (acatech)) and a leading thinker on mobility issues. They know each other from many expert discussions. They both hold science PhDs – one of them in mechanical engineering, the other in physics. And both value a frank and open exchange.

**Mr. Eichhorn, people have been predicting the beginning of the electric era for years, but so far e-mobility still hasn't become a mass market anywhere, not even in its heartland of China. When will this change?**

**EICHHORN** My estimate is 2020. By then battery production will have become so cost-efficient that we will be able to offer EVs at affordable prices, and we will have a meaningful charging structure by then, too. In other words, the EVs we will be putting on sale from 2020 will have a range of up to 600 kilometers, and get an 80 percent charge in 15 to 20 minutes. And they will cost about the same as conventional drives. That does away with the three main reasons why customers are reluctant to buy electric: high price, low range and inadequate charging facilities.

**When it comes to EV numbers, Norway and China are way ahead of the U.S. or Germany. What can we learn from these trailblazers?**

**KAGERMANN** Market support from the governments in these countries is far more extensive.

FACE THE CHANGE

**Go Electric**



To steer or not to steer? Ulrich Eichhorn (right) shows Henning Kagermann that self-driving can be fun, too.



Should the Volkswagen Group produce its own battery cells? The experts can't quite agree.

## “We’ll soon be able to produce synthetic natural gas from sustainable sources. So CNG vehicles will be carbon neutral.”

**Dr. Ulrich Eichhorn**, Head of Research and Development  
at the Volkswagen Group since 2016

In Norway, EV drivers are allowed to use bus lanes and they have free public parking in cities. China uses an even more powerful instrument – vehicle registration. If you buy a car with an internal combustion engine in Shanghai you can often wait years to get your license plates. But if you buy an EV, you get them straight away. There are good reasons why we don’t use such methods. Nevertheless, things have changed quite a bit in Germany, too. Take the environmental incentive and the charging infrastructure program, for example. In global terms, though, other countries are much further ahead.

### What is Volkswagen doing with regard to infrastructure?

**EICHHORN** Together with other manufacturers we have founded a pan-European high-power charging network called IONITY to build a network of fast charging stations along motorways and major routes in Europe. We are doing something similar in America with Electrify America. We believe fast charging is essential for making e-mobility attractive for long journeys, too. There will be high-power charging stations at all motorway gas stations and service stations in Germany by 2020. We will be providing many of them.

**Let's talk about range. Surely anyone who wants to become a leading e-mobility services provider must have their own battery production?**

**KAGERMANN** In my view, the complete battery technology, in particular the battery cells, is the core competence. The battery is the critical factor for quality, costs, and performance. In the future, it will be just as crucial as the engine is today. It's encouraging to see that Volkswagen is already producing battery packs in Salzgitter. If we look at battery cell production, on the other hand, we see a different picture. And yet this is a strategic factor.

**EICHHORN** We have already been running a battery lab for decades – although we haven't yet started mass production. Battery packs are undoubtedly an integral part of an EV. We produce them ourselves, for instance in Brunswick, or purchase them from suppliers. In-depth expertise about battery cells is a must. As a car manufacturer we need to understand how battery cells behave in the vehicle, even at a temperature of minus 15° Celsius. On the other hand, going into mass production is first and foremost a question of cost-effectiveness.

**The Volkswagen Group is not currently focusing exclusively on e-mobility, but rather on a drivetrain mix which also includes Euro 6 diesel engines and CNG powertrains. Is that half-hearted or clever?**

**EICHHORN** Above all, it is realistic and caters for the fact that, today, vehicles with internal combustion engines are genuine all-rounders. For buses and trucks, diesel is not only the most efficient solution, it's also the cleanest – particularly for long-haul journeys. And as far as cars are concerned, our present-generation EA 288 TDI engines rank among the cleanest there are. We have got the upper hand when it comes to pollutant emissions – and it's important to remember that the diesel engine has significant benefits as regards CO<sub>2</sub>. The reason we are backing CNG is that we will soon be able to produce synthetic natural gas from sustainable sources. Audi operates a plant near Cloppenburg that converts wind power into synthetic methane. That makes CNG vehicles carbon neutral. I believe that in the foreseeable future we will have a drivetrain mix where electric drives take the place of the internal combustion engine. By 2025, one-quarter of the



**Learning from IT:** Ex-SAP executive Henning Kagermann (left) believes software firms have the edge when it comes to teamwork.

vehicles we sell will be pure electric models. And this also means that, by that time, we need a solid infrastructure to be able to produce 2.5 million vehicles.

**Obviously, drivetrains are important. But don't car manufacturers also need to step on the gas when it comes to connectivity? There's a software update for cell phones every few weeks.**

**EICHHORN** We can only follow that approach to a certain extent. Let's say a cell phone has just been updated and then some of the features no longer function properly or the phone simply switches off. That's nothing like as dangerous as it would be if the same thing were to happen in a car. When it comes to testing and validation, we are talking about a totally different scale.

**To what extent is connectivity redefining the mobility sector?**

**KAGERMANN** The challenge isn't so much creating a link between the car and the internet. That's easy. In my view, it is mobility platforms that



**Driverless driving: For Henning Kagermann, one benefit will be improving everyday life for the elderly, the blind, and people with disabilities.**

will play a central role in the future. They are the thing that will radically change the market. Platform operators may possibly become the strongest competitors for car makers. For me, one big advantage for the manufacturers is autonomous driving. When it comes to self-driving, customers are more likely to trust Volkswagen than start-ups.

**EICHHORN** Over the next few years, three technological innovations – e-mobility, connectivity and autonomous driving – will merge with two social trends: urbanization and sustainability. That brings our customers a totally new experience on three levels: mobility as a service in an autonomous electric car. We tested that with Sedric back in 2016, and demonstrated how well it works. At the moment, we are conducting intensive research into the easiest way for customers to book cars like Sedric and integrate them in their everyday mobility.

**How can an automobile brand stay relevant in such a service market?**

**EICHHORN** If the Volkswagen Group operates its own ride services then the quality of our vehicles is a decisive factor – design, engineering, ride comfort. As is service, in every respect: availability, cleanliness, billing system, assistance systems. And another factor will be: how well does autonomous driving function? In short, as the Volkswagen Group, we will then be judged by far more performance criteria than we are today.

**So far Volkswagen has had a strong bias on engineering. Does the Group need to be more IT-driven?**

**KAGERMANN** I think that is a challenge for the entire automotive sector. Agile working and “disruptive-creative innovation cycles” have been common practice in the software industry for a long time. In other words, the entire system is challenged every few months; you need to adjust your leadership structures and retrain your developers in new methods. In addition, software firms have always had a strong focus on innovation partnerships. The auto industry can learn quite a lot in these areas.

**So for car manufacturers, that means much closer cooperation among Research, Design and IT in the future?**

**EICHHORN** The Group strategy is called “TOGETHER 2025” and not “TOGETHER 2020” for a reason. We can’t switch to new mindsets and ways of working overnight. Even so, there is already much closer R&D cooperation among the brands today than there was a few years ago. And we introduced a new function in 2017 with the heads of the series groups who are responsible for all aspects of the vehicles in one series, as well as moving forward with integrated work processes.

**At what levels do you see the Volkswagen Group well equipped for the electric era?**

**EICHHORN** We have a high-quality, broad-based, global portfolio. On top of that, we have developed a previously unknown drive for reform in recent years. The diesel crisis was a wake-up call for the future viability of the Group. It was serious and shocking, but the call came at the right time. Three years ago, we certainly would not have been showcasing a vehicle like Sedric at a motor show, or setting up MOIA, or forging cooperations with start-ups like Aurora. Today, the thirst for

innovation, the intense desire to explore new terrain, is stronger than ever in the Group.

**We have talked a lot about connectivity and mobility services. But are we maybe forgetting rural areas? After all, the majority of car buyers today do not live in inner cities.**

**EICHHORN** If I don't live in Berlin or Los Angeles, but in a much more remote region, I would be wasting my time trying to contact a mobility services provider. But Sedric could be deployed in rural regions, too, for example to collect customers after a visit to the pub. One thing is certain: private vehicles will still be a necessity in the future. And there will still be auto fans who just enjoy

getting their hands on the steering wheel. Multi-optionality will be the catchword for mobile life.

**KAGERMANN** I believe autonomous driving will be an enormous chance to revive rural regions. Vehicles such as Sedric give mobile access to remote areas that cannot be reached by bus or train. And for some target groups, this means greater mobile freedom and quality of life – for the elderly, the blind, and people with disabilities, to name just a few. Not to mention more freedom for everyone and less stress, for instance on journeys in heavy traffic. Some models already offer enormous assistance today. In this sense, autonomous driving really is a wonderful thing.



**Ulrich Eichhorn**  
was born in  
Obernburg am  
Main in 1961.  
He holds a PhD  
in mechanical  
engineering.



**Henning  
Kagermann**  
was born in  
Brunswick  
in 1947.  
He holds a PhD  
in physics.

## “Agile working has been common practice in the software industry for a long time.”

**Prof. Henning Kagermann** has served as Chair of the German National Platform for Electric Mobility since 2010



Discussion with drive: The experts and their interviewers Jochen Förster and Tom Levine (right) at DRIVE. Volkswagen Group Forum in Berlin.

# Roadmap E: full of energy!

The Volkswagen Group is gathering speed as it heads towards the age of e-mobility. What can we expect? Here are seven recent milestones.

Text: Joachim Hentschel

**A**nyone who has already sat in an e-Golf<sup>1</sup> or e-up!<sup>2</sup>, an A3 e-tron<sup>3</sup> or Passat GTE<sup>4</sup> and experienced the acceleration, the silent ride, and the ease of use will happily confirm that e-mobility really is quite something – and it's happening right now. The transition from internal combustion engines to electric powertrains is often talked about as if it were an abstract principle, a topic for forecasts and visions. For Volkswagen Group brands and their customers, though, electric drives have been the real thing for quite some time now. Go electric? Let's go!

Several all-electric cars and plug-in hybrids are already on sale, and many more developments are in the pipeline. CEO Matthias Müller presented "Roadmap E," the most comprehensive electrification initiative in the global automotive industry, in fall of 2017. By 2030 at the latest, Volkswagen Group brands will be offering at least one all-electric or hybrid version of their entire portfolio, comprising some 300 different models. Setting itself such a deadline is an unusual step in the automotive industry – and above all one that testifies to just how seriously the Group is taking e-mobility. "We are reinventing the car," Matthias Müller says. "To achieve this, we are making targeted investments to provide the necessary funds from our own resources."

**€50  
billion**  
and more is the sum the Group will be investing in battery cell procurement over the coming years.



The Volkswagen brand, for example, is currently developing the Modular Electrification Toolkit (MEB). This is a vehicle architecture optimized for e-mobility, which will serve as the basis for all future electric vehicles in the volume segment. Audi and Porsche are collaborating on the Premium Platform Electric (PPE) for the premium segment. In addition, the Group is researching battery potentials, getting production ready for manufacturing electric vehicles – and taking responsibility for the customer experience in



## Volkswagen I.D. family

**The project:** It all began in 2016 with the all-electric I.D. concept car for the compact class (left). This was followed by the I.D. BUZZ electric van (center) and the I.D. CROZZ electric SUV (right). The trio was then showcased as a model family at the Los Angeles Auto Show in winter 2017. The family is designed for a range of between 500 (I.D. CROZZ) and 600 kilometers (I.D., I.D. BUZZ). The first model in this family, the compact-class I.D., is scheduled to go into production at the Zwickau plant in Saxony, Germany, at the end of 2019.

**The mission:** Volume models like the Golf or Bulli have cult status – the electric chapter of the Volkswagen legend begins now.



**80**  
new electric and  
plug-in hybrid  
models from  
the Group will  
be on sale by  
2025.

charging and the charging infrastructure. One goal of the IONITY joint venture, launched in co-operation with other automotive manufacturers, in November 2017 is to expand the vitally important network of fast charging stations along major routes across Europe.

But what does all this mean for the immediate future? What concrete ideas and models from the Group and its brands are already driving Roadmap E forward? Here are seven current examples.

## MOIA ride pooling

**The project:** The first vehicle from MOIA, Volkswagen AG's new mobility services company, is a fully-electric six-seater. It is part of a comprehensive ecosystem for ride pooling to be rolled out in Hamburg at the end of 2018. Like taxi sharing, rides can be booked via an app. An algorithm groups together passengers with similar destinations.

**The mission:** Clever e-concepts make urban transport cleaner and more relaxed.

## Porsche Mission E

**The project:** Fans caught a glimpse of the first test mule at the Nürburgring in October 2017. The all-electric four-door sports sedan (shown here as a concept study) offers the driving pleasure and dynamics that have made Porsche a legendary brand. The Mission E is designed for a driving range of 500 kilometers. It is expected to go into production late 2019 at the brand's main plant in Zuffenhausen, which is being expanded specifically for the purpose.

**The mission:** This model from Porsche underscores just how sporty, fast, and luxuriously stylish e-mobility can be.



## MAN eTGM

**The project:** Silent and emission-free distribution transport will revolutionize logistics.

MAN has debuted the eTGM, a fully electric truck, with practical trials starting in 2018. Other key e-projects from Volkswagen Truck & Bus include the e-Delivery electric distribution truck from Volkswagen Caminhões e Ônibus, electric city buses from MAN and Scania, the Electric Road Truck from Scania, and the e-Crafter from Volkswagen Commercial Vehicles.

**The mission:** Electrification opens up new opportunities for freight transport – and the Volkswagen Truck & Bus brands have the solutions.

5



## e-smartConnect quick-charging station

**The project:** One of the most frequently expressed reservations about e-mobility is the risk of not being able to find a charging station – or only finding the wrong kind – while traveling. Group Research is currently developing e-smartConnect, an automated e-filling station, in order to provide an optimal service in the future.

The connector and the vehicle are linked via a special cable arrangement and the use of a lightweight robot. Research on mobile charging robots is also underway.

**The mission:** Volkswagen is working on innovative projects that address the critical issues associated with the charging infrastructure.

4



6



## Audi Brussels plant

**The project:** The Audi e-tron, the brand's first all-electric SUV model (shown here as a concept study) is to be produced at the Audi plant in Brussels, Belgium, from 2018. Work began in 2016 to transform the present factory, which has been producing the A1 family since 2010, into a model facility for the carbon-neutral production of electric vehicles. A1 output will be shifted to Martorell in Spain.

**The mission:** As e-mobility gathers momentum, Audi is investing wisely in innovative production technology.

7



## ŠKODA VISION E

**The project:** The VISION E concept car from ŠKODA is a fully electric SUV coupe. The brand's emotionally designed first electric model has a range of 500 kilometers and also meets the Level 3 requirements for autonomous driving (Conditional Automation – the system monitors its performance limits and transfers to the driver when these limits are reached). A production version is in the pipeline for 2020.

**The mission:** SUVs are a great favorite with customers, and ŠKODA is proving that elegant and efficient electric versions are possible.

1 Volkswagen e-Golf: power consumption in kWh/100 km: combined 12.7; CO<sub>2</sub> emissions combined in g/km: 0; efficiency class: A+

2 Volkswagen e-up!: power consumption in kWh/100 km: combined 11.7; CO<sub>2</sub> emissions combined in g/km: 0; efficiency class: A+

3 Audi A3 e-tron: fuel consumption, l/100 km: combined 1.8 - 1.6 (petrol); Power consumption in kWh/100 km: combined 12.0 to 11.4; CO<sub>2</sub> emissions combined in g/km: 40 to 36; efficiency class: A+

4 Volkswagen Passat GTE: fuel consumption, l/100 km: combined 1.8 to 1.7; power consumption in kWh/100 km: combined 13.9 to 13.4; CO<sub>2</sub> emissions combined in g/km: 40 to 38; efficiency class: A+



# Traffic in tomorrow's world.

How will people get from A to B in the future? The Futures of Mobility project developed scenarios for 2030+.

**Text:** Jana Galinowski | **Illustrations:** Hannes Geipel

**V**ehicles that take you direct to the 30<sup>th</sup> floor. Automated deliveries direct to your doorstep whenever suits you best. Passenger drones that fly round traffic jams. That could be the future shape of mobility in metropolitan cities. Everyday life for people living in a megacity is very different from

daily life in a sparsely populated rural area. That is why demands on mobility also vary so much. The Volkswagen Group has developed several scenarios for the year of 2030+. "With Futures of Mobility, we offer a tangible vision of the lives that our customer will lead in various regions of the world in the future," says Dr. Daniel Kauer, Head of Product and Platform Strategy at the



**“Our worlds of the future don’t focus on specific vehicle innovations. Rather, they concern the wishes and desires of people.”**

**Dr. Daniel Kauer**

Head of Product and Platform Strategy,  
Volkswagen Group



**“The scenarios of the worlds of the future will be developed further and refined.”**

**Dr. Axel Heinrich**

Head of Group Research,  
Volkswagen Group

that modify themselves to a user’s needs and can become mobile offices or living rooms. In rural areas like eastern Saxony, shared mobility concepts could feature more prominently.

Volkswagen Group. San Francisco, Beijing, Mumbai and eastern Saxony serve as representative examples for many other regions on the planet.

### No blanket solution

Numerous trends and factors were examined under the project led by Dr. Michael Müller and Bita Daryan. One such factor is urbanization. In 2050, around 80 percent of the world’s population will live in metropolitan areas – double the present figure. The impact of urbanization on traffic will be felt in both urban areas and rural regions. The economic and political framework, cultural trends, environmental aspects and innovative strength also play a role. “That means each type of city needs its own mobility solution,” explains Dr. Axel Heinrich, Head of Group Research at Volkswagen. Beijing, for example, will produce significant amounts of vertical growth, which is why vertical transportation is more important there. In contrast, San Francisco could give priority to adaptive vehicles – in other words, vehicles

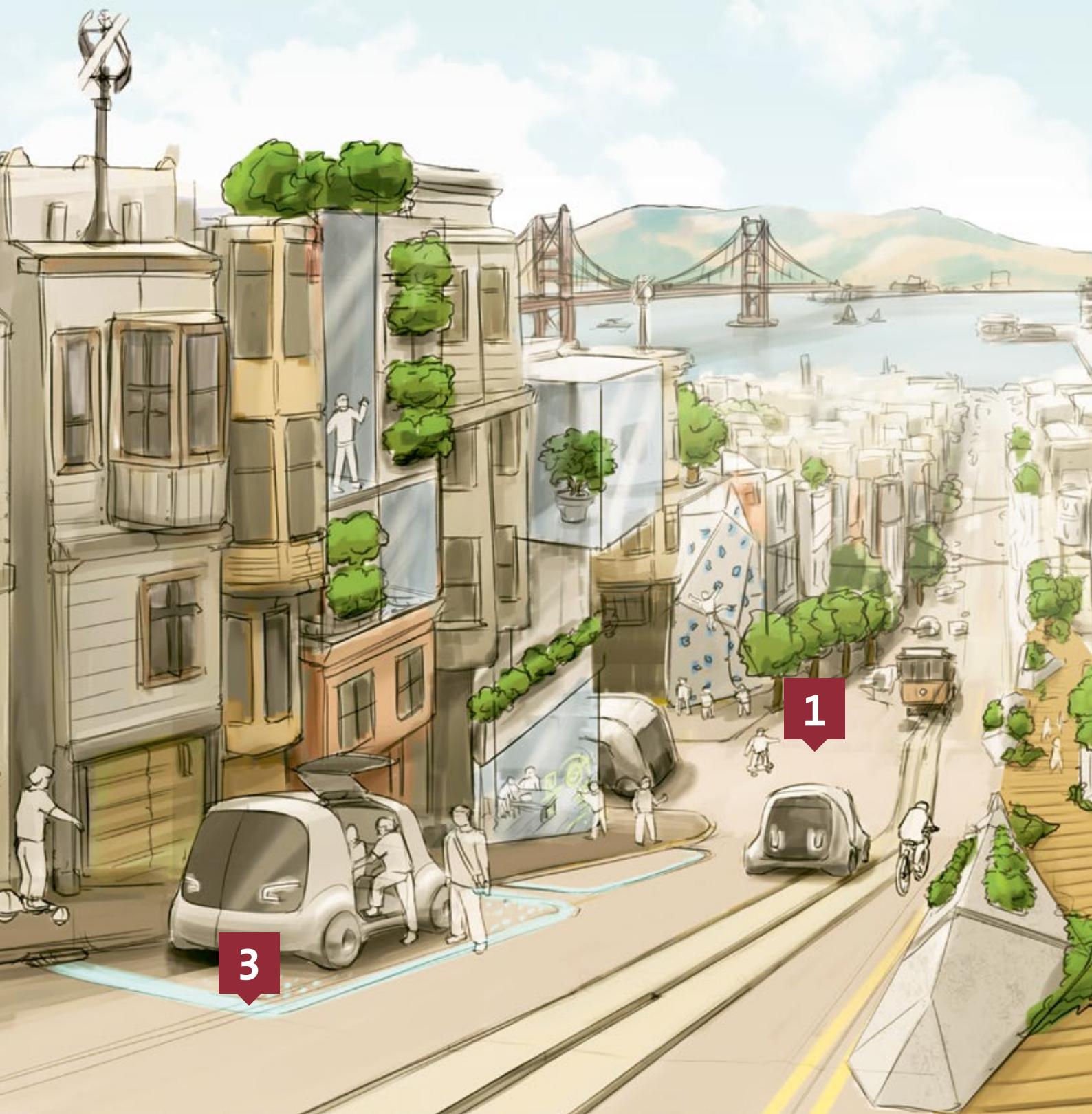
### Out of the lab and onto the road

Group Future Heads, a network of some 200 experts from different fields and regions, bundles the expertise and knowledge in the project. The company is expanding its portfolio based on Futures of Mobility. Describing the approach, Kauer says, “Product, service and business models will no longer be segregated from one another. Instead they will be developed into a holistic mobility solution for our customers.” And the future is already defining the work of the Volkswagen Group. “We are already experiencing and shaping the change in many areas,” says Heinrich. “I’m talking about things like new drive technologies, new mobility services, or autonomous driving.”

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Our videos at [annualreport2017.volkswagenag.com](http://annualreport2017.volkswagenag.com)

# SAN FRANCISCO: West Coast trailblazer

Hardly any other place has defined the digital transformation like San Francisco. Nearby Silicon Valley is one of the most important IT and high-tech locations in the world. On the other hand, the city needs to overcome major challenges such as the risk of earthquakes and the threat of water shortages. Housing is becoming increasingly scarce. For these reasons, the city needs an infrastructure that enables mobility and is environmentally efficient.



## San Francisco 2017 – 2030+

**Economy:** The region's economy is booming and will continue to grow. The number of jobs is forecast to increase from 600,740 (2013) to just short of 707,000 in 2030. At the same time, social imbalances could be exacerbated. San Francisco already has the highest poverty rate in the region.

**Mobility:** Housing space is becoming ever more scarce and rents are getting ever more expensive, particularly in the city. As a result, more and more people will have to move to outlying areas and commute downtown. San Francisco wants to make its streets safer: traffic fatalities are to be totally eliminated by 2024 (Vision Zero).

**Innovation:** With Silicon Valley nearby, people in San Francisco are very open to future technologies. The city will continue to rank among the leading innovation economies in the future. The city's trailblazing role will be strengthened by planned infrastructure investments of some \$10.1 billion by 2030.

**Environment:** There is a keen interest in sustainability and the city has set itself ambitious targets: the goal is to have 100 percent renewable electricity supply community wide by 2030. Moreover, there is to be zero waste by 2020. Today, the recycling rate is already 80 percent.



2

## On the streets of the future

1

### Adaptive vehicles

The car as a place to live and work – on the move. In the future, cars can be individually configured and adapted to suit specific needs. As an open-air office, for instance: the car becomes both a workplace and a means of transport. It is fully connected and equipped with sensors, among other things. That means it can even turn itself into a camera or a scanner, for example to make 3-D recordings for virtual reality videos.

2

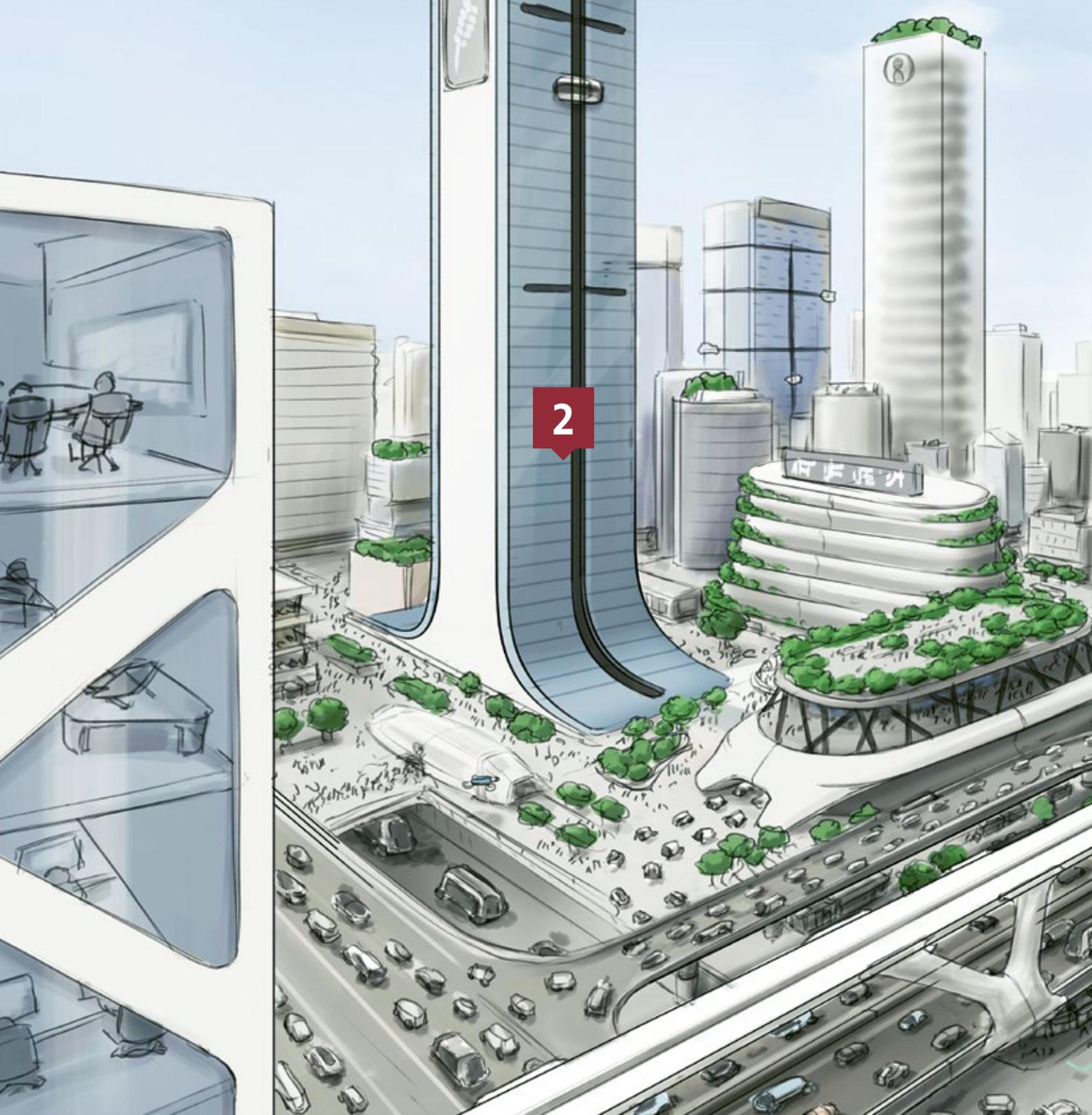
### Smart bicycles

Equipped with navigation system, GPS, and sensors, bicycles become another part of the digital infrastructure. So the interaction between the different forms of transport – cars, autonomous shuttles and bicycles – is stress-free. Eliminating parking space means greater freedom for cyclists, too. Moreover, the extra bicycle lanes ensure greater safety.

3

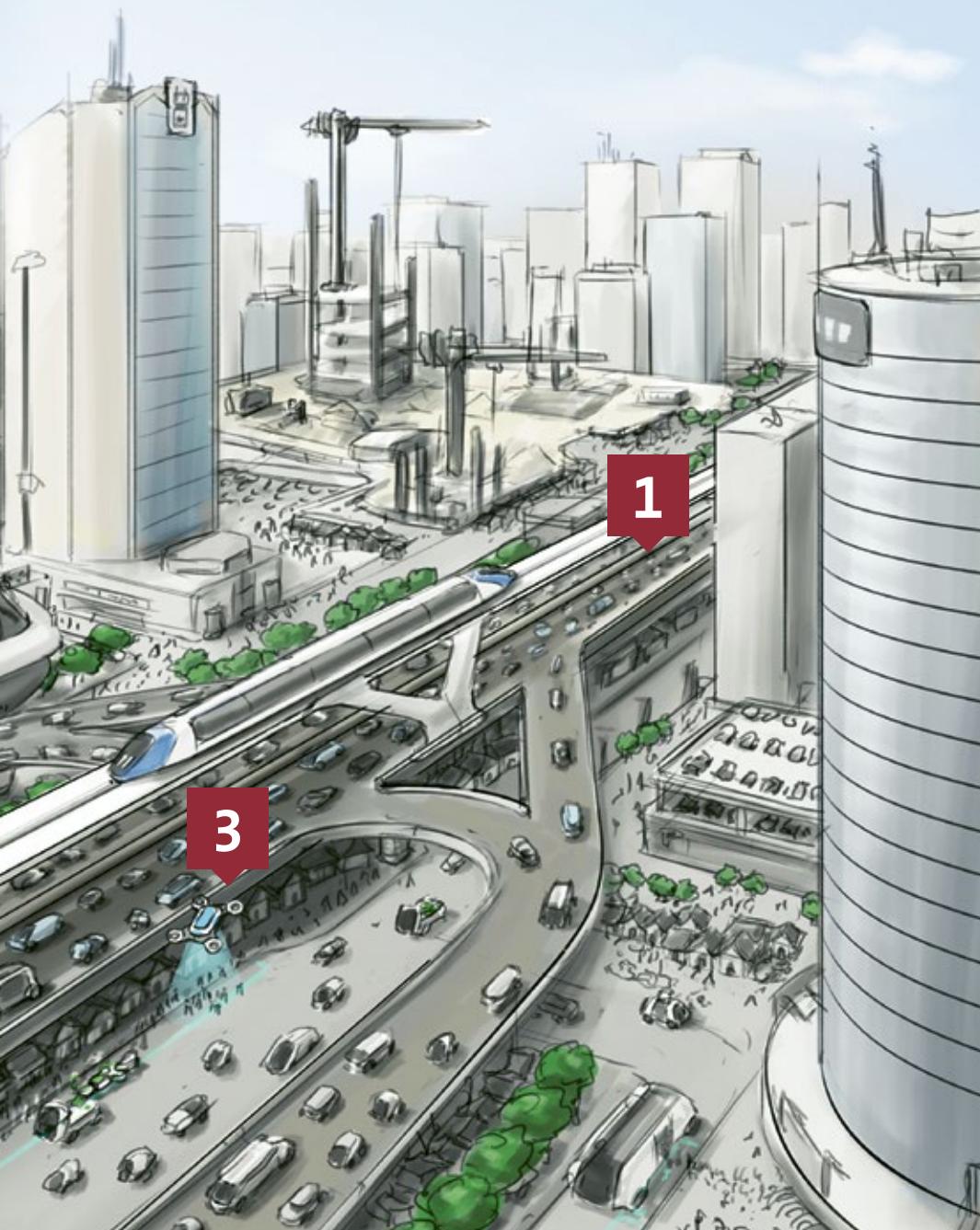
### Wireless charging stations

E-mobility will become standard. Charging stations throughout the city will make it easy to fuel up – minus the tangled mess of cables. In the future, there will be special loading plates for wireless charging at parking spaces, for example. An EV parked on one of these spaces is automatically charged.



## BEIJING: Efficient hypercity

It's a megacity between traditional and modern: society is shaped by the political framework, but prosperity and education lay the foundation for a growing middle class, and individuality and sustainability are gaining in importance. As a result, demands on infrastructure, mobility, and safety are increasing. Moreover, the Beijing metropolitan region is to become the urban development model for the China of the future.



## On the streets of the future

1

### High-speed lines

Given the high population density, efficient mobility is particularly difficult. One solution is dedicated lanes for autonomous vehicles, where they can travel faster and more safely than on roads with mixed traffic.

2

### Vertical mobility concepts

Anyone who likes to travel in comfort can enjoy "first-class mobility" in luxuriously equipped vehicles, where business professionals, for example, can relax or work during the journey. In the future, these vehicles will dock onto skyscrapers and deliver their passengers to the right floor.

3

### Passenger drones

Despite smart traffic concepts, there will still be congestion on Beijing's streets. The fastest way to travel will be by air. The first passenger drones will take Beijingers to their destinations. Quadcopters will be fitted with cabins that can comfortably transport one or two passengers.

## Beijing 2017 – 2030+

**Economy:** Beijing is an ever growing, attractive industrial location. China plans to strengthen its technology industry and industrial production over the coming ten years. Some 70 percent of industrial robots, for example, are to be manufactured domestically.

**Mobility:** By 2030, some 130 million people will be living in the Beijing metropolitan area – about 30 million more than today. That means an immense increase in traffic flows. High-speed trains will enable efficient transport. Today, China's bullet train rail network is already longer than the European network. A further 7,000 kilometers are to be added by 2020. In addition, the government is planning to build 23 new subway lines by 2030.

**Innovation:** Beijingers are known to have a high affinity for new technologies. Not only that, but the region is also the most important player in the gigantic market for data collection and analysis. Furthermore, the government encourages forward-looking technologies and innovations to locate in the region.

**Environment:** Smog is a big problem in Beijing. Decisive action is being taken against air pollution in preparation for the 2022 Winter Olympics. Political restrictions such as e-mobility incentives and banning certain car models have already significantly improved air quality and the quality of life.

# MUMBAI: On the road to the modern world

To an outsider, the scene is one of chaos. With a population of around 18 million, Mumbai has the world's highest population density. The modern metropolis is a magnet for international professionals and young, highly educated Indians. The population of Mumbai Metropolitan Region is likely to reach 33 million by 2030. Rapid growth is exacerbating the social and infrastructure problems – first and foremost as regards housing, which is already in short supply. The state government is aiming for a slum-free Mumbai by 2022.

## Mumbai 2017 – 2030+

**Economy:** The young population and ever more skilled specialists make Mumbai a favorite location for the digital industry and the financial sector. There will be significant economic growth. By 2025 Mumbai will rank among the world's richest cities.

**Mobility:** As a result of the growing economic strength, more people will be able to afford a car of their own. By 2025, the number of cars in Mumbai will rise to about 40 – 45 per 1,000 inhabitants, compared with only 20 today. The transport system is already overloaded and the situation will get worse.

**Innovation:** Mumbai is a city of contrasts. On the one hand, Mumbai residents love high-tech and enjoy trying out new technologies. On the other, society is still shaped by traditional ways of thinking and working.

**Environment:** The quality of life in Mumbai is suffering. This is due to the critical state of the environment in terms of emissions, air and water quality, and hygiene. The Indian government is taking the first steps and has pledged to reduce emissions by 35 percent by 2030.



## On the streets of the future

1

### Shared mobility concepts

Digitalization will make more efficient use of the existing infrastructure in Mumbai. Shared mobility concepts, for example, will ease the strain on mobility. People can select and share different models from a vehicle fleet to suit the specific occasion.

2

### Bus rapid transportation

For getting to your destination quickly and easily despite the immense commuter traffic, Mumbai will have exclusive lanes for innovative rapid buses. Thanks to their own infrastructure, these buses take their passengers to their destinations faster and more reliably.

3

### e-mobility zones

The widespread use of electric vehicles helps to improve air quality. That is why creating emission-free areas in the city is one element of the sustainable urban planning concept. The only vehicles allowed to travel in these areas are electrically powered. Anyone who does not own an EV can book an e-shuttle using the MOIA app.



# EASTERN SAXONY:

## Bridging the distance

Picturesque landscapes, but not many people – Saxony is already clearly feeling the effects of demographic change. Some local communities will have lost almost one-quarter of their inhabitants by 2030. Young people in particular are moving to cities, and by 2030 the average age in Saxony will be about 48. Rural life does have its advantages, though. Everyone knows everyone else, people help each other and engage with their communities.

### Eastern Saxony 2017 – 2030+

**Economy:** Agriculture will remain a key sector, but tourism also generates revenues and jobs. However, given the demographic trend, pensions will be the most important source of income. At the same time, eastern Saxony could see the creation of social innovations such as community services and local exchange concepts.

**Mobility:** Because of the sparse population, infrastructure is expensive and expansion

is stagnating. That is true for broadband coverage as much as for energy, goods and services, schools, and physicians. Without a car, it is hardly possible to cope with everyday life in the region. Given the aging population and general budget restrictions, that could become a problem.

**Innovation:** There is still no reliable, area-wide broadband coverage. However, there are plans to invest €160 million in expanding

the broadband network. New living environments such as multigenerational homes are already being tested in the region.

**Environment:** Country air is healthy – above all tourists from the cities appreciate that. Consequently, sustainability and nature conservation are an issue in the region. Local production of energy from renewable sources will spread. And the majority of new vehicles will have an electric drive.





## On the streets of the future

1

### Delivery networks

People usually have to travel quite a distance to supermarkets, bakeries, or drugstores. That is why networked delivery systems are important. For example, mobile convenience stores could deliver basic groceries directly to the door. Thanks to community platforms, neighbors could run errands when they drive to town.

2

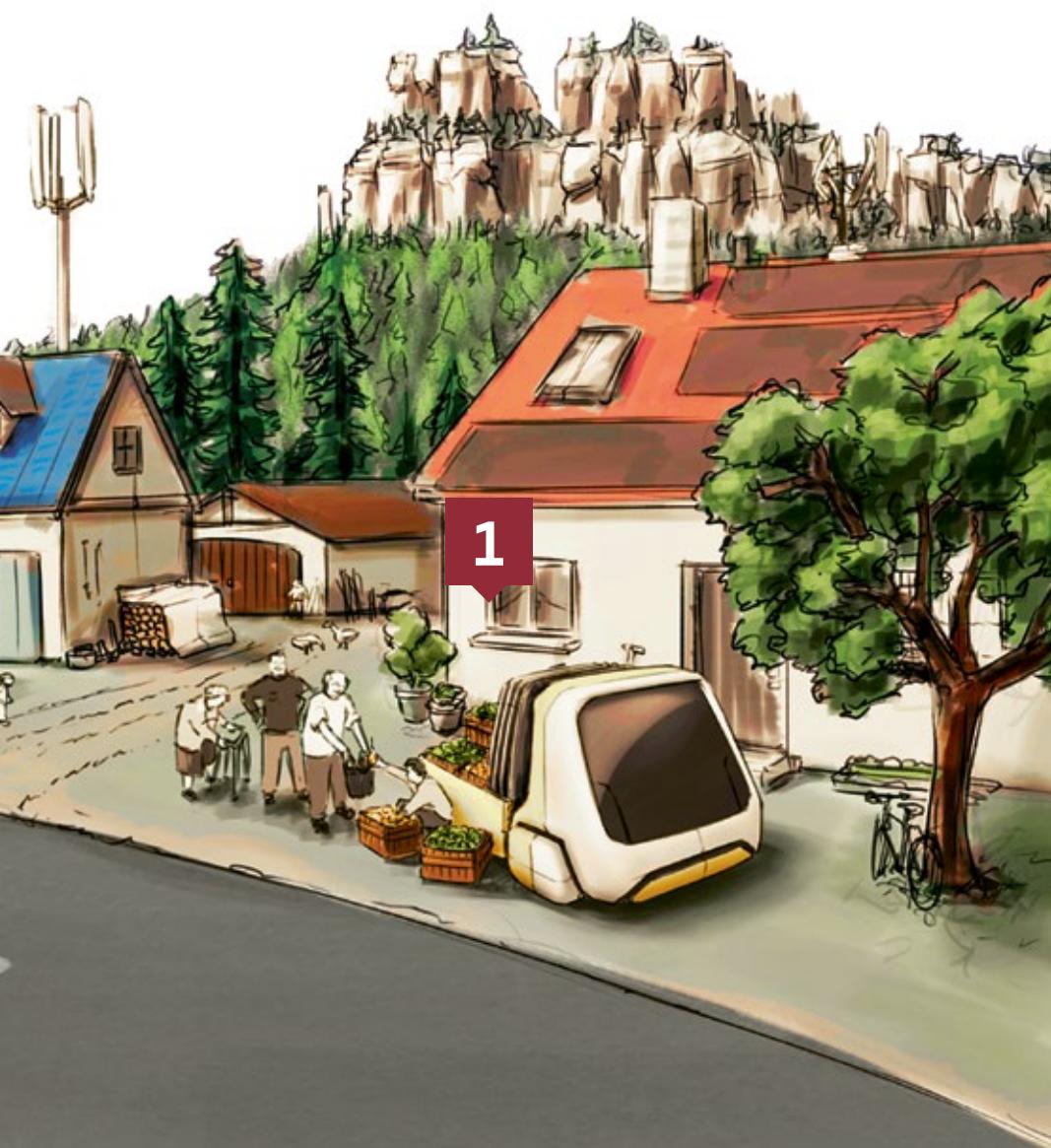
### Shared mobility

In rural areas, having your own car will always be important. Nevertheless, there will also be car-sharing concepts such as peer-to-peer platforms that function like ride-pooling centers. Or autonomous shuttles that collect passengers direct from their doorsteps.

3

### Temporary infrastructures

In 2030, area-wide broadband coverage will still not have materialized. That is why temporary digital infrastructures will be set up – in the air. Drones with integrated radio units will provide highly efficient data lines.



1

## Smart city concepts

All over the world, the Volkswagen Group is working on services and solutions for intelligent mobility. These activities include the following three research and pilot projects.

### SEAT Metropolis: Lab Barcelona

SEAT and the city of Barcelona wish to support innovation and sustainable mobility. The company is one of the initiators of CARNET. Other participants in this research and innovation network are Volkswagen Group Research and UPC (Polytechnical University of Catalonia). The lab has already presented concrete solutions such as the “About it” navigation app.

### Intelligent solutions for China

The requirements for smart mobility are growing in China's urban areas. The Volkswagen Group is working on concepts for the smart city of the future with partners, such as Tongji University in Shanghai and further cities in China.

### Smart City Dresden 2025+

Dresden is to become a model city for smart traffic concepts. That is why Volkswagen Saxony and the state capital have formed a partnership. Their aim is to introduce new solutions and services, such as the UMA Navigation app for smartphones that continually checks the current traffic situation to recommend the ideal route and provides information on parking availability.

**Connect with Consumers**

# Our cars are our smartphones.

They let us communicate  
directly with customers.

**Vânia Chicarolli**  
Body Shop production worker,  
Volkswagen do Brasil, Anchieta

Networking gives car manufacturers new opportunities for service and interaction. Customers can chat with them on Twitter or Facebook via consoles. In Brazil, roughly three quarters of adults actively use social networks.





Kristina Martin  
delivers the  
Bentley direct to  
the customer.

# Today a Bentayga, tomorrow a Continental GT.

Bentley on Demand offers a luxury mobility solution for customers. The Bentley of their choice is delivered to their door – thanks to concierges such as Kristina Martin.

Text: Lukas Hermsmeier | Photos: Kelly Serfoss

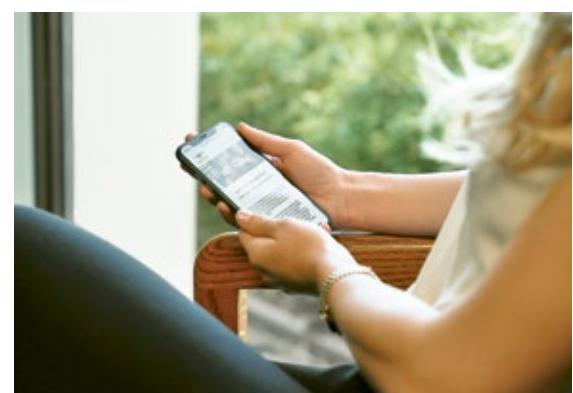
A sunny Monday morning in Long Beach. In a large hall about 30 kilometers from downtown Los Angeles, a Bentayga<sup>1</sup>, a Mulsanne<sup>2</sup> and a Continental GT<sup>3</sup> are lined up next to each other. So much Bentley luxury in one place. Mechanics and valeting staff are bustling about. The air smells of cleaning products. Every now and then one of the mighty engines gives a roar. In the thick of it all is Kristina Martin, one of the few not wearing overalls, but instead dressed in blazer, jeans and high heels. She walks past the highly polished luxury cars and heads straight for the office.

The 25-year-old is a concierge with the new Bentley on Demand service. Her working day already started two hours ago with an email from the Bentley office: a customer has reserved a vehicle for that morning at short notice.

## Bespoke service

All the information about the reservation is waiting for Kristina in the office. Apart from the customer's name, the delivery time, and the location, this also includes special requests. Just about every customer has some special wishes. "It could be a lactose-free coffee. Or we could be asked not to ring the bell when we deliver the Bentley," Kristina says. For her, each reservation is different. She prepares carefully for each individ-

ual customer, from the beverage of choice, ready and waiting when the car is handed over, to the optimal seat position or the pre-programmed radio stations. Because customers make their reservations via the Bentley Network app, all the preferences are saved. "One of my regular customers appreciates a bottle of mineral water in the car. But she doesn't need to request that every time she uses the service. The information is automatically included in the reservation and we take care of it," Kristina explains. It is this bespoke service, combined with digital comfort, that makes Bentley on Demand so exceptional.



Service 24/7: Customers communicate with the concierges via the Bentley Network app.

# “Possessing a Bentley is much more than just owning a car – it is an all-encompassing experience of luxury.”

Kristina Martin, concierge with Bentley on Demand



Car lover Kristina Martin looks forward to every journey in a Bentley. She delivers or collects a car from a customer almost every day.

## Perfect organization

At 10 a.m., the final preparations are underway. Kristina's customer this morning has chosen a silver Bentayga. Two of the valeting staff clean and polish the car before Kristina inspects the Bentley together with a mechanic. Tank: full. Paint-work: glossy. Tire pressure, windshield washer fluid, oil level: all perfect. “Cars have always been part of my life, they're in my blood,” she says. She grew up in Detroit, the “Motor City,” spent hours and hours in her father's body shop, and worked for a car dealer once she graduated from high school. That stands her in good stead today. Detailed questions from customers do not put her off her stride. Neither does the final check in the workshop.

Forty-five minutes to go before the Bentayga is scheduled for delivery. Kristina uses the app to send the customer a reminder that the car will be delivered to his door at 11 a.m. Now comes the best moment for her: she settles in behind the steering wheel, drives out of the garage and makes a quick stop at a café to buy two cappuccinos – one for the customer and one for herself. Then she takes the highway that follows the Pacific coastline, heading for the picturesque Palos Verdes Peninsula in Los Angeles County.

## Luxurious mobility

Bentley on Demand was launched as a pilot scheme in Los Angeles, New York, and Dallas in May 2017. Other cities in the United States and abroad are to follow soon. There are also plans to expand the connectivity features. Bentley on Demand already offers owners of these luxury cars a unique service: they can select a vehicle via the Bentley Network app and drive it for several days. The perfect solution for people who would like to try out a different model – or for Bentley drivers who do not want to forego the Bentley experience while on vacation or traveling on business. The concierges always deliver the car to the customer's preferred location – their home, a hotel, or a café. And they collect the car at the preferred location, too.

It's 11 a.m. sharp and Kristina has drawn up in front of a yellow house. The 30-minute drive was too short – for her anyway. But she has arrived exactly on time and that is the most important thing. Taking the cappuccino with her, she rings the doorbell, and a gentleman in his mid-thirties opens the door. A quick greeting, a little small talk. Kristina would like to know why the customer has chosen a Bentayga. He explains that he already owns a Bentley sedan, a 2013 Flying Spur<sup>4</sup>, and found out about the new Bentayga from the Bentley app. He has never sat in an SUV from Bentley before, so he wanted to try one out. The two make their way to the car.

“I don't have to explain the car's features very often, because the customer is already familiar with Bentleys,” Kristina says, and demonstrates some features of the new Bentayga, such as Apple CarPlay and the head-up display, that maximize driving pleasure. The brief introduction completed, Kristina hands over her business card – just in case there are any questions or emergencies – and takes a taxi back to the office. The customer has reserved the Bentayga for three days, and Kristina will be back again after that. What happens in the



meantime? "Sometimes customers contact me. They usually have specific questions about the car. They might want to know how the seat massage system works," she explains. The concierge and the customer communicate via the Bentley Network app. "Other customers let me know they would like to keep the Bentley for an extra day." And of course she does her best to accommodate special requests. "One customer wanted to let his brother drive. I soon sorted out the formalities."

When Kristina gets back to the hall in Long Beach, she meets Barrett, one of the other concierges, who is just about to set off. There is a Continental GT to collect at 2:30 p.m. in West Hollywood. Barrett has scheduled an hour to get there. "L.A. and the traffic, better safe than sorry," he says. The two have known each other for years, and both worked at the same motor shows. "We were really pleased when Bentley asked us both whether we would like to take on jobs as concier-



es, because it meant we could finally start working together," Kristina recalls.

Sometimes there are three customers a day. Sometimes there is only one. Like today. Kristina pops into the office and then gets into a taxi. She always keeps an eye on her business cell phone. Maybe the Bentayga driver will want to know how the seat massage system works.

**A Bentley instead of a rental car: Bentley offers customers a personalized mobility solution with the new service.**

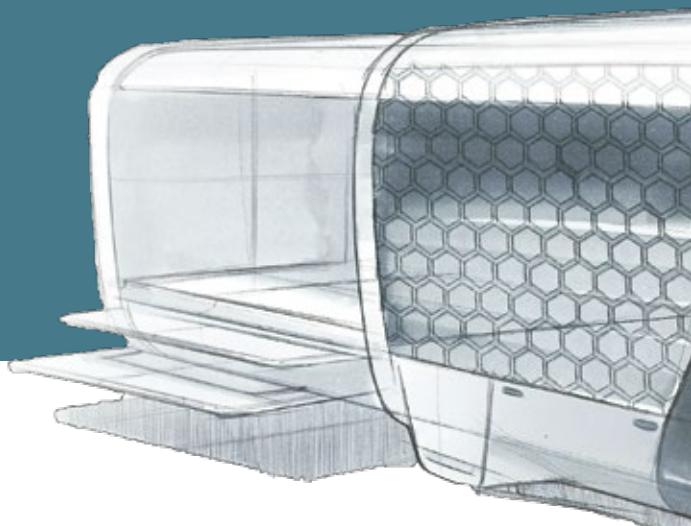
1 Bentley Bentayga: fuel consumption, l/100 km: combined 13.1; CO<sub>2</sub> emissions combined in g/km: 296; efficiency class: F

2 Bentley Mulsanne: fuel consumption, l/100 km: combined 16.9; CO<sub>2</sub> emissions combined in g/km: 393; efficiency class: G

3 Bentley Continental GT: fuel consumption, l/100 km: combined 14.5; CO<sub>2</sub> emissions combined in g/km: 338; efficiency class: G

4 Bentley 2013 Flying Spur: fuel consumption, l/100 km: combined 14.7; CO<sub>2</sub> emissions combined in g/km: 343; efficiency class: G

# “The car will soon be our second home.”



Tomorrow's mobility brings the promise of unimagined possibilities for car interior design. Michael Mauer, head of Group Design at Volkswagen AG, explains the secret of this great new freedom – and shares some visions of the future.

Text: Michael Mauer

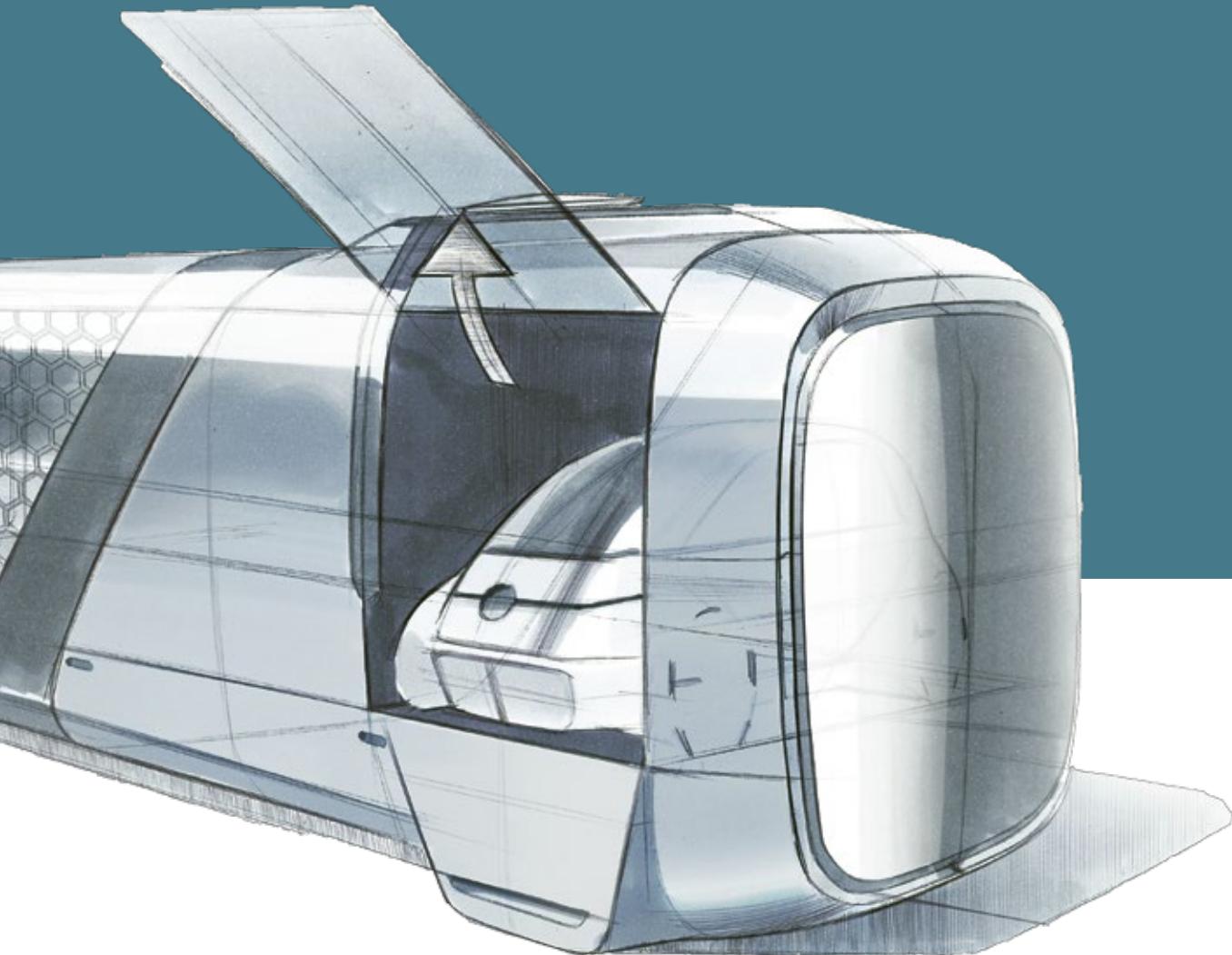
In the not too distant future, electric drives and highly intelligent driver assistance systems will be organizing driving, navigation, and even optimal traffic flows for us. This will not only make traveling greener, less stressful and more safe. It is also, for us designers, nothing short of truly revolutionary. So far, we have had to work within the boundaries of technology. Now, we are being given a technology that opens up entirely new possibilities.

Until now, the car interior has largely been determined by exterior design. But all of a sudden,

it is being turned into a more or less blank canvas. And that also means that, in the future, we can design cars from the inside out.

The Volkswagen Group is working on this future with tremendous energy and enthusiasm. Group Design is one driving force. We will be making full and very creative use of this technology and all its possibilities. The streetscape of the future will be even more diverse. More colorful. More emotional.

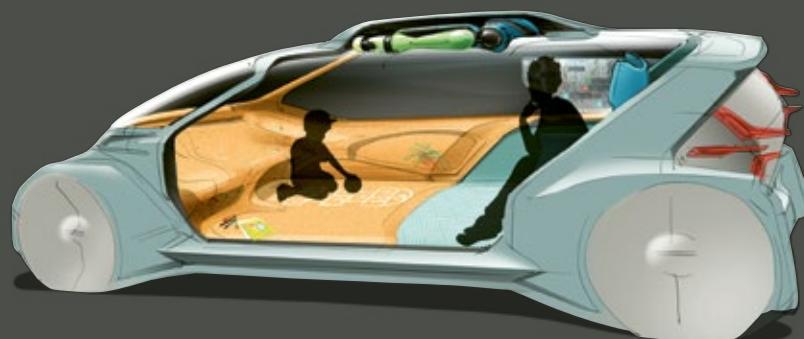
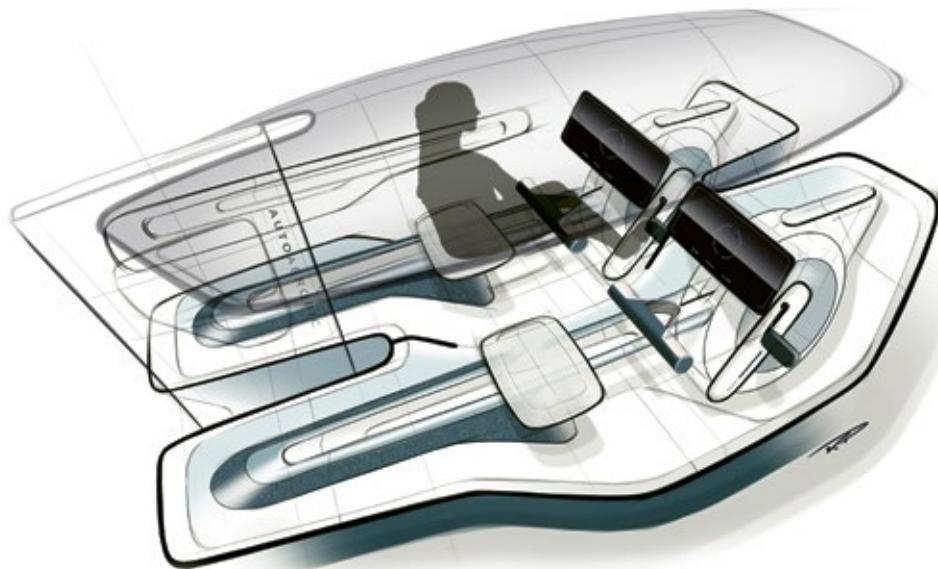
But why not see for yourself? I have selected some of our latest designs, and I would like to describe these to you in this chapter.



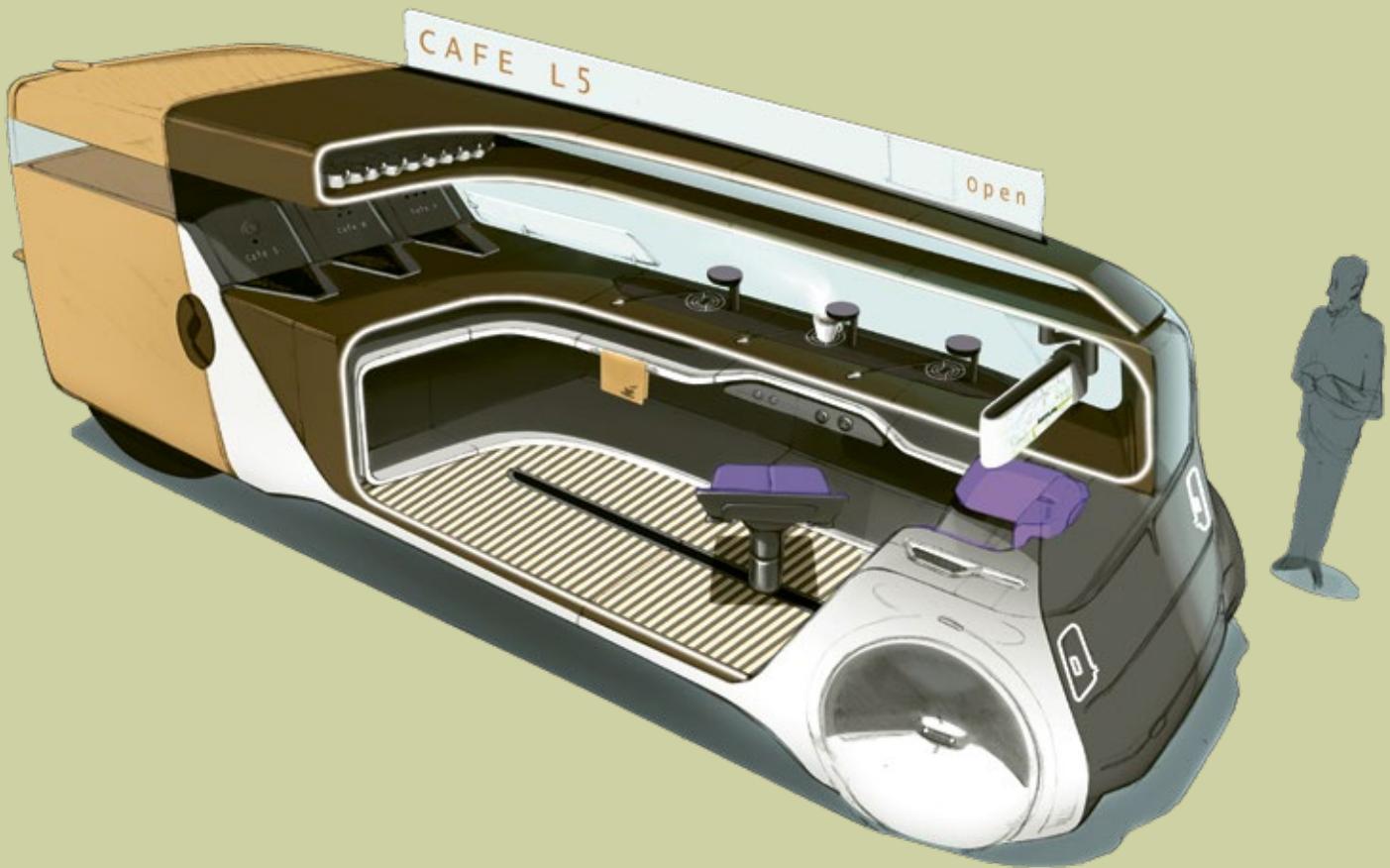
**Michael Mauer,**  
55, studied car design at Pforzheim University of Applied Sciences from 1982 to 1986. Following posts at Mercedes-Benz and Saab, he was appointed Chief Designer at Porsche AG in 2004. He became Head of Group Design at Volkswagen AG at the end of 2015.

**“In the near future, traveling will become incredibly relaxed. You board this campmobil in the evening, enjoy a meal together, get a good night’s rest, and are woken the next morning when you reach your destination, happy and relaxed in time for breakfast.”**

**“If you don’t need to concentrate on driving, you have so much more time for yourself. The driver becomes the passenger, the car becomes a second home. Or, as in this example, a workout area.”**



**“We’re giving a lot of thought to how a vehicle for young families might look in the future. For example, why shouldn’t a child sit in the front? That’s unthinkable today. In the box seat, in front of the parents, with the best view of what’s going on outside? That would be completely safe as the car would be self-driven, so there would be no risk of accident.”**

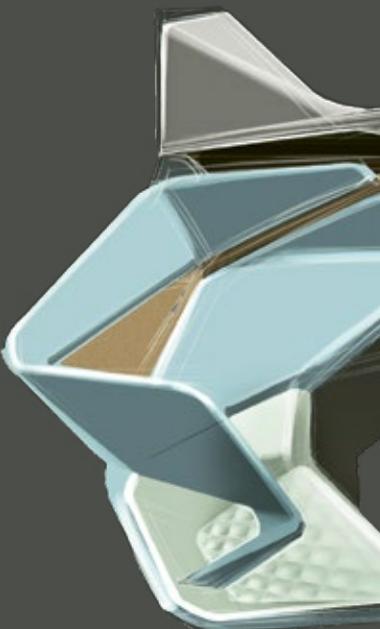


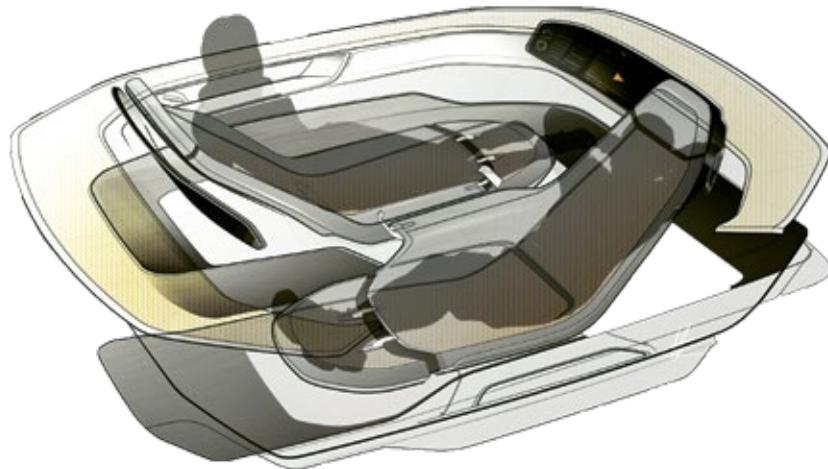
**“If the engine and the transmission, the fuel tank and the exhaust system are superfluous, then we designers have unbelievable creative possibilities. Shared mobility brings unprecedented leisure potential, creating an entire universe of new ideas. Just imagine – you could decide on the spur of the moment to make your journey to the office in a Viennese café, a pizzeria or an Italian bar. That sounds a bit utopian, but will soon become part of everyday life.”**

**“The outer skin of the car of the future will be a 360° screen, ready for all kinds of adventure. When your child gets bored, the windows are transformed into an aquarium, or passing cars become lifelike dinosaurs – thanks to augmented reality.”**



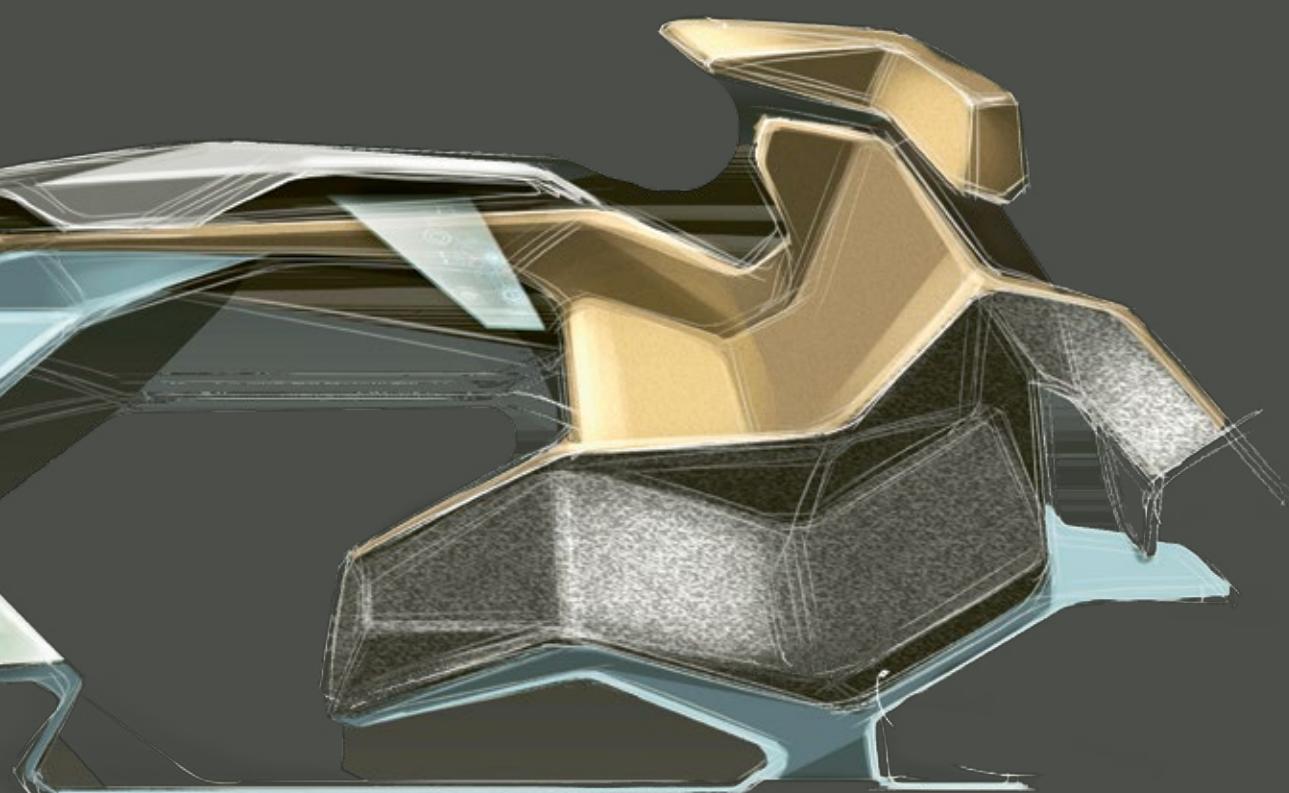
**“When cars were first invented, each one was a unique specimen. And we’re heading back that way again now. For instance, we can customize seating to suit our specific requirements. Modular systems mean flexible seating design – depending on the number of passengers, the situation and personal preferences. All things considered, what is an electric car after all? Basically it’s a skateboard with a battery in the middle, a compact drive at the front, and four wheels at the sides. We can work with that, with a totally new sense of freedom.”**





**“Up to now, safety criteria have restricted our creativity.  
Windscreen, a pillar, crumple zone, fixed seats,  
safety belts – all of that becomes obsolete in the future.**

**Glass compartments then only need to provide  
protection against wind, rain, heat or cold. The seating  
positions enable eye contact with other passengers.”**



# A trunk full of new ideas.

The Volkswagen brand is building a big digital user platform. The We Deliver service is one element. We meet one of the testers.

**Text:** Joachim Hentschel | **Photos:** Georg Roske

**I**t was worth it after all. Gufeng Zhou is pleased he braved the parking chaos in Berlin today. Just as well he left home a little earlier than usual this morning to find a good parking space for his Polo before starting work – his office is on the border between the Mitte and Friedrichshain districts, an area where parking spaces are in very short supply. The e-commerce firm that Gufeng works for has its headquarters there. And the email he has been expecting arrives at 11.45 a.m.: the parcel has been delivered.

“Yes! That will be the lamp.” Gufeng Zhou spotted the designer item from Sweden on Instagram at the end of last week and ordered it from an online retailer. Now, at last, it is waiting for him in the trunk of the Polo. The courier from the DHL Parcel service personally put it there, opening the trunk with the parcel scanner – and the help of a single-use access code that was issued by Volkswagen once Gufeng had notified the online retailer that the parcel should be delivered to the trunk of the car.

Where is this service from Volkswagen available? In spring 2018, the answer is nowhere – yet. However, the planned service, called We Deliver, has already passed the intensive practical test with

flying colors. Naturally, not everything is running smoothly yet. But the team at Volkswagen We, the brand’s digital mobility initiative, can work on the fine tuning using feedback from the 300 testers.

## **A cosmos of services and options**

Gufeng Zhou, 33, is one of the people who have trialed We Deliver for four weeks – he was given a Polo to use for the test period. The service is one element in the Volkswagen We digital ecosystem, which will also include many other features. Going forward, Volkswagen AG will be organizing many of its mobility services in similar platforms. As digital ecosystems. As a cosmos of services, preference settings, sharing options, and much more.

To make a long story short, we will soon be logging into an account with the Volkswagen Group brands, just like we do now with Google or an Apple ID. The crucial factor will be designing these platforms to be as practical, intuitive, user-friendly, and connectable as possible. According to a forecast from the consulting firm McKinsey, global revenues from digital mobility services

More than 800 people applied to test We Deliver. Gufeng Zhou, 33, is one of the successful candidates.



FACE THE CHANGE

## Connect with Consumers



Orders for delivery to the car trunk are placed with the online retailer. The participating cooperation partners list We Deliver as a delivery option.

### Volkswagen

**Volkswagen We** is the name of the platform that includes individual services such as We Deliver or the We Park app. This means that Volkswagen always has its eye on the big picture when it comes to digital services.

All services are designed to meet specific customer needs, but at the same time they are also part of an interactive network. Today, mobile connectivity not only links the driver and car with the Internet, it also connects drivers and cars with one another. The Volkswagen We modules will deliver on that, too – at the latest by the time the Volkswagen ID is launched. The Volkswagen We universe will also

encompass the service packages offered by Volkswagen Car-Net: Security & Service (automatic emergency call), Guide & Inform (traffic info), e-Remote (real-time info for e-models and hybrids) and App-Connect (smartphone integration).

#### Next steps for Volkswagen

**We:** We Deliver will undergo trials in more cities in 2018. In the near future, We Park is to be rolled out across Europe and also made available for parking garages. In addition, the VW Connect vehicle data app, currently available in Spain for example, is also to be launched in other countries. The new cosmos is filling up nicely.



The delivery message is transmitted via email. The moment of truth arrives when Gufeng opens the trunk.

could reach US\$1.5 trillion by 2030, one-quarter of all automotive revenues. The quality of the platforms will decide who comes out on top in attracting and keeping customers in this gigantic market.

### Tomorrow's ideal customer

The big players in Silicon Valley, too, are using this trend to set themselves apart from the rest. At the end of the day, it is not necessarily the biggest that wins, but the player that can provide the best customer experience. Jeff Bezos, CEO of Amazon, once said, "If you only take your lead from your competitors, then you are condemned to playing the waiting game. On the other hand, if you focus 100 percent on customers you can always be the pioneer." What Volkswagen We is currently developing is already shaping up to be a visionary and eminently practical solution.

"I'm very willing to download apps if I think a digital trend is a good idea," Gufeng Zhou says. "But I don't go along with every marketing gag." Gufeng, who was born in China, came to Germany in his early twenties, and has been living in Berlin since 2009. Today, he works as a data analytics manager in e-commerce.

He has always been an early adopter. He built his first computer as a 13-year-old student in



Gufeng Zhou can use the Polo equipped with We Deliver technology for four weeks. His girlfriend Dijana (right) also thinks the service is useful.

China. Today, Gufeng makes use of all the mobile services he considers meaningful – from digital wallets to education apps. He doesn't own a car, but uses car sharing up to three times a week. He has an account with sharing services for e-scooters and bikes, and is a real virtuoso when it comes to combining public transport, cars and two-wheelers. If you were to paint a picture of the ideal customer based on everything that has been written about urban mobility – Gufeng Zhou would be the perfect fit.

Meanwhile, it is afternoon in Berlin. Gufeng has quickly changed into his sports outfit at the office. Before he drives home, he wants to go for a jog along the bank of the River Spree. There are plenty of public parking options near Moltkebrücke. "That's good for me in two ways, because it also means that the courier is able to deliver the parcel," he says as he steers the Polo through the city.

A close-up photograph of a woman with long brown hair, smiling broadly with her eyes closed. She is wearing a light blue button-down shirt. A man with dark hair and a grey hoodie is holding her from behind, his hands visible near her head. The background is blurred.

FACE THE CHANGE

Connect with Consumers

**“Flexibility is the most important thing for us. It’s how we can optimize our daily lives.”**



**"We'd even be willing to pay 50 cents more if the parcel was delivered straight to the car." Dijana and Gufeng think the idea behind We Deliver is very convenient and practical.**



The reason for that is because he is going to a birthday party at the weekend with his girlfriend Dijana. The birthday present is a special pair of sneakers. And Gufeng has arranged for them to be delivered to the trunk of the car – to the parking space near the Spree where the Polo can be found most afternoons. The trunk delivery service specifies a 300-meter radius for the car's location to make sure the courier can deliver the parcel. "For

me, this is the typical use case," Gufeng says before he puts his headphones on. "I can go for a jog instead of queuing up at the post office."

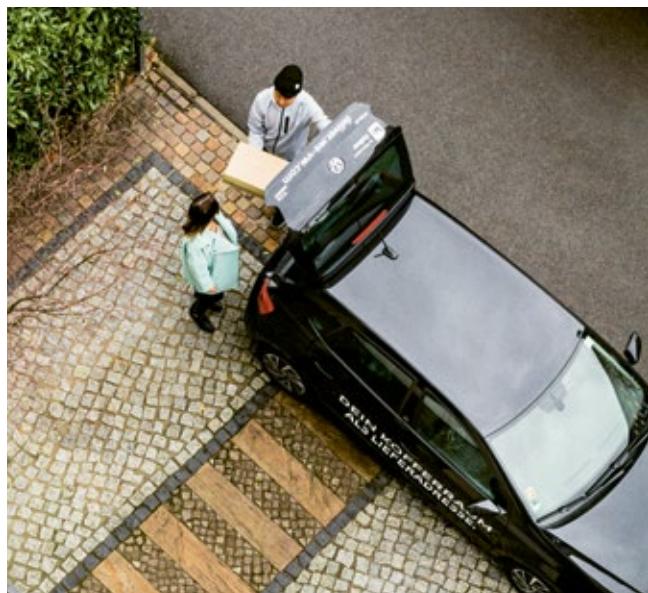
### One piece in the We universe

There are plenty of situations in which this kind of delivery service can help solve problems. And it is important to remember that car trunk delivery is only one of many pieces in the jigsaw that makes up the Volkswagen We universe. We Park pays for your parking ticket by app, VW Connect sends easy-to-read vehicle data to your smartphone, the Car-Net services provide real-time information and navigation – the list goes on.

We Deliver is symptomatic of the vision for a Group-wide ecosystem for two reasons. First, it features one variety of what is known as the digital key. If the parcel courier can be authorized to open the trunk – then a friend or partner could also be sent the authorization to use the car without the added complication of handing over the key. People who do not own a car themselves could also be issued with a Volkswagen user ID. That opens up entirely new answers to the question: How does the industry define its customers?

Second, We Deliver demonstrates how cooperation can function. Six online retailers who use DHL as their carrier are participating in the field trials – that, too, is an important step toward the best user experience. However tough competition

# “A digital trend must make sense. I don’t go along with every marketing gag.”



on digital markets may be, no online customer is willing to accept product boundaries that are too rigid. The brands must be aware of who they are and what they are, but they also need to stay compatible with the outside world.

We Deliver passed the demanding beta test on this particular afternoon. The message that the courier had found the car and delivered the sneakers came while Gufeng was still jogging. “No matter how many times it works, it’s still exciting,” Gufeng says when he shows Dijana the parcel once he has arrived back home. “Flexibility is the most important thing for us. It’s how we can optimize our daily lives. That’s what makes digitalization so valuable.”

Reliable and close to people – that was part of Volkswagen’s DNA in the analog age, and will likely be the best possible motto in the digital ecosystem of the future, too.

 **MORE ABOUT THIS ONLINE:**  
Our video at [annualreport2017.volkswagenag.com](http://annualreport2017.volkswagenag.com)

## The big ecosystem

To take account of the transition in the automotive industry, all brands in the Volkswagen Group will sooner or later offer their customers platform solutions. Although the positioning will vary, all of these platforms will be based on the idea of an overarching system architecture. What features belong to an ecosystem?

### User ID

The user ID is the log-in, the digital fingerprint, the unique code that gives a customer access to the ecosystem. And you do not need to buy a car from Volkswagen to be issued with a user ID. The goal for the future: an ID for every brand in the Group.

### Digital key

Anyone with a user ID can use one – or several – digital key(s) via a smartphone. There are many situations where that not only comes in very handy, but also brings with it convenient additional functions. You want to lend your car to someone? You want the trunk to be opened to take delivery of something? Everything is possible – uncomplicated and mobile.

### Vehicle settings

Personalization via user ID can turn a strange car into your own vehicle at the swipe of a smartphone. Infotainment system settings, seat position, heating and ambient lighting configurations – all just the way you like them in the other car thanks to the ecosystem.

### Vehicle features

In the future it will also be possible to purchase and manage additional functions and special features for mobile use via the ecosystem accounts. That makes it easy to transfer certain assistance systems, infotainment content, and apps to other models in the Group portfolio.

### Digital services

External ecosystem networking begins when external services become involved. The new Volkswagen We services are a good example. The We Park app is vehicle independent, We Deliver is an interface with cooperation partners. And the future has only just begun.

Act Sustainably

# Today, companies must make the world a better place.

That's why responsibility plays  
such a big role for us.

**Nonkqubela Maliza**  
Director of Corporate & Government Affairs,  
Volkswagen South Africa, Uitenhage

Equal rights, fighting poverty, nature conservation: in South Africa, the Volkswagen Group engages in social responsibility in many different ways. These activities include a monitoring system for greater equal opportunities at suppliers.



# “Like playing chess at 200 kph.”

World champion Lucas di Grassi explains why Formula E is so fascinating. And why it is the racing sport of the future.

Text: Marin Majica, Lucas di Grassi

**C**onceived in 2012 and inaugurated in 2014, the FIA Formula E Championship quickly established itself in the racing world, revolutionizing motorsport.

Formula E is the world's first fully electric international street-racing series and consists of 12 ePrix competitions in 10 cities. It is currently broadcast in 117 countries, and is covered by international channels such as Fox Sports, Canal+, and Eurosport. Last season's final in downtown Montreal drew some 45,000 spectators. The races all take place on city-center circuits. For the fourth season, namely the 2017/2018 championship, Formula E is visiting Hong Kong, Marrakesh, Paris, New York City, Santiago, Rome, Berlin, Mexico City, and Zurich – bringing motorsport back to Switzerland for the

first time in 60 years. The 20 drivers (two per team) include many famous names such as Nick Heidfeld and Nelson Piquet Jr. And the number of participating teams and manufacturers is constantly growing – Porsche AG recently revealed its plans to enter Formula E from the 2019/20 season.

The Audi Sport ABT Schaeffler team has been a regular competitor in Formula E since the inaugural race in Beijing in 2014. The two drivers, Lucas Di Grassi and teammate Daniel Abt, have been on board since the first season, with both drivers taking multiple podium finishes. Di Grassi was not only the winner of the first ever Formula E race, he is also Formula E's reigning world champion, having clinched victory in the 2016/17 season. So who could better explain the astonishing success of this racing series than the champion himself?



FACE THE CHANGE

Act Sustainably

**Electrifying power duo:**  
Together with Daniel Abt  
(right), Lucas di Grassi (left)  
has been driving for Team  
Audi Sport ABT Schaeffler  
since 2014.



# 1

## The driving

Formula E is very different from other racing series. First, we only drive on street circuits. They are much narrower than racing tracks so the drivers need total concentration. Then qualifying driving and race driving

are very different. In qualifying, you go as fast as possible, just as in any other race series. In the race itself, though, you only have a limited amount of energy. Strategically, that makes it very challenging. Another difference is that there is lots of overtaking during a race because the technological level of the cars is quite similar and, unlike in Formula One, any driver could overtake another competitor. That is why there's so much attacking driving. The circuits are much more complex than in Formula One, for example. And because there isn't really much risk of losing aerodynamic quality when you touch other cars, the drivers do it regularly during races, mostly at corners and turns. That means plenty of great action for spectators.

# 2

## The tracks

It's amazing to race through the very heart of magnificent cities such as New York and Paris, Mexico City and Marrakesh. Hong Kong, for example, where this season began, is a very small urban circuit.

The total distance raced is only 80 kilometers. Of course, when I'm racing, I don't have time to appreciate my surroundings, but when I'm in the pit and I can take a closer look at the scenery, it's quite spectacular. We can race in city centers because the cars are so quiet. Electric cars are



# 3

## The rules

Formula E has some special rules. There's the FanBoost, for example, an online voting system where fans can choose to give their favorite driver extra power for the second race in the second car. That's a great opportunity for the fans to interact with the race, even if the boost doesn't make much difference to the outcome. It's your performance as a driver that counts, much more

**Metropolitan role models: Clean, quiet racing cars like the Audi e-tron FE04 are welcome guests in megacities such as Hong Kong.**

FACE THE CHANGE

**Act Sustainably**



than the superior quality of your car. FIA made the regulations very strict so that the cars are very similar and every driver has an equal chance to win. The batteries, for example, are all the same. The team rules for developing aerodynamics and chassis are really tough. I'm in favor of that, even if it can have dramatic consequences for the drivers. My teammate Daniel Abt won the second race in Hong Kong and then was disqualified because there was a mistake with the car's technical passport. The mistake didn't give us any advantage, it was just an oversight on the part of the team. The same thing happened to me in seasons one and two, but that's how it is. It's part of racing. You just have to build your strategy on these regulations.

# 4

## The strategy

Because the amount of energy per race is limited, we have to shape our strategy according to our goals.

Let's say each battery has 28 kWh and you have to drive 28 laps. That means you can only use 1 kWh per lap on average. But how do you use this power? That's the tricky part. Where do you accelerate with maximum power, where do you ease up a little bit and save power? Where do you lift before a corner, how do you recuperate the energy when you brake? Sometimes

**Up-and-coming star: Daniel Abt was the fastest driver at the season's opener in Hong Kong.**





**Strategic challenge:** close teamwork with the data engineers is vital for Formula E drivers.

when you're fighting another driver it's better to save energy until your opponent hasn't got much energy left. Or the other way around – when you're defending you need to drive smart so that the guy can't overtake you. That's why I say it's like playing chess at 200 kph. We have a clear goal before the race, but we have to adapt fast while we're racing – depending on whether we're in a good or bad position, or how the pit stop worked out for us. You never become perfect at that, you're just learning all the time. Because it's game theory. It always depends on what the other drivers are doing. It's totally fascinating.



# 5

## The fans

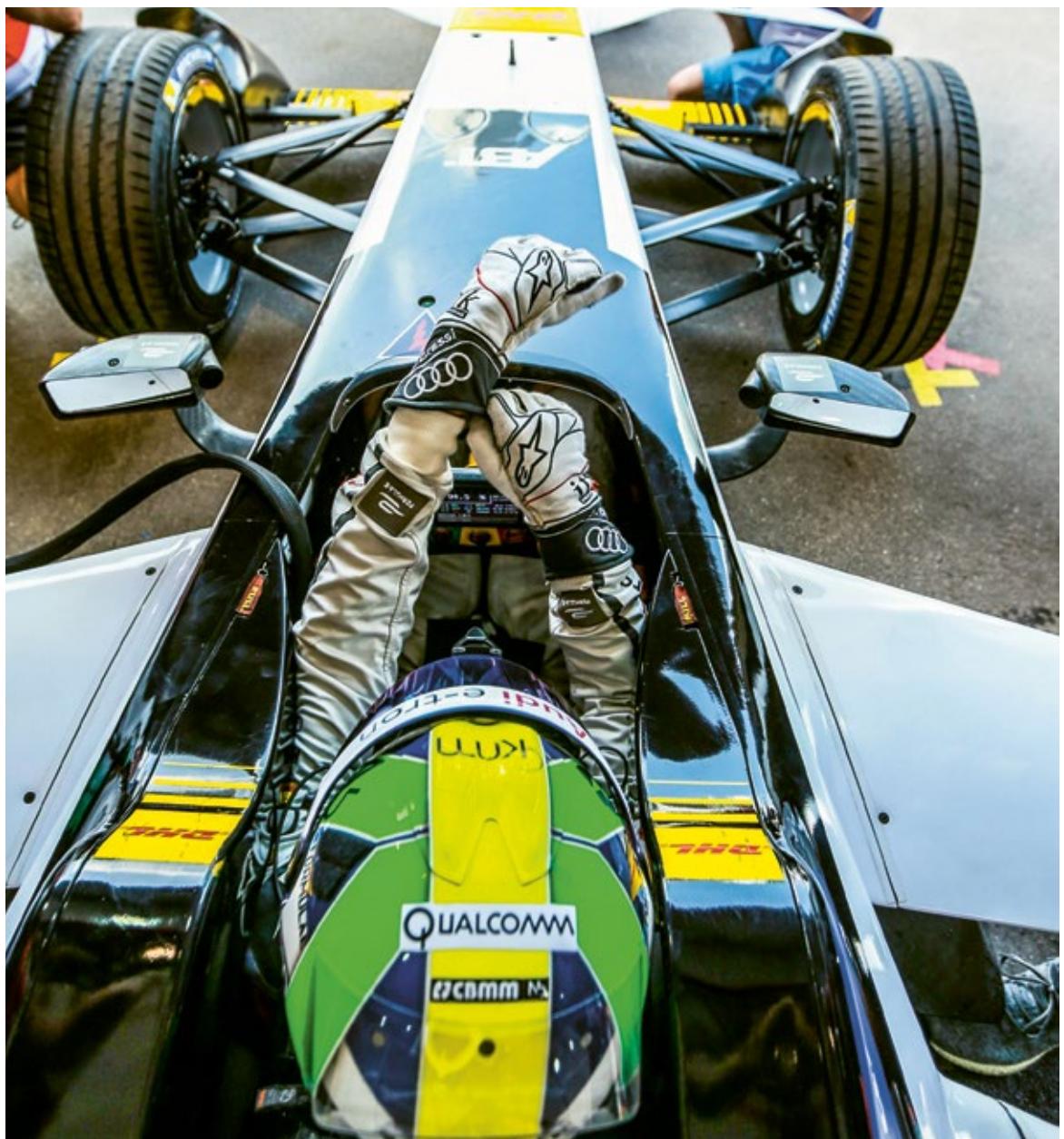
We race close to the spectators. That's a great way of demonstrating the advantages of e-mobility directly to the crowd. We take Formula E to the fans, they don't have to drive a couple of hours to get to the racing track. The fans are really excited about the new technology. We organize some events with them ahead of the race, such as driving with them in the simulator or saying hello during the driver parade. That's exciting. And I guess it's why people like Leonardo Di Caprio, Bar Refaeli and Adrien Brody come to the races.

# 6

## The technology

Formula E is all about sustainability and high-tech. When I started out in Formula 3 back in 2004, I only had mechanical engineers – let's say, nine engineers and one data expert. It's completely the reverse now. We do all the digital race and structure analysis before the race, and then during the race itself we fine-tune the last 1 percent. The driver, the team, the hardware – in Formula E you have to get everything right.

And sometimes you need to get lucky in the right place at the right time. Things will get even more exciting as driverless cars advance and motorsport gives them a higher profile. In Hong Kong we put on a "Human versus Machine" race. You'll find the video on YouTube. A Formula E presenter drove five laps and then artificial intelligence tried to beat her. This time round, the human triumphed, but we're working on the software. Roborace will never replace motorsport, but it can become a great addition. Formula E is an ideal platform for promoting this new technology.



**Total concentration:**  
overtaking is  
very common  
in Formula E.

**Close to the fans:**  
Formula E races take place on city-center circuits – for example, near landmarks such as the Central District (right) and the Observation Wheel (left) in Hong Kong.



## 7 The vision

The quicker we move towards e-mobility all over the world, the better for everyone. Electric racing has great potential in two areas. The first is improving e-technology. And the second is showcasing the fact that electric cars are fast and really cool to drive. This changes our perception of electric cars. It's not about us being the good guys and Formula One the bad ones because they are still driving combustion or hybrid engines. In racing, both will coexist for quite some time. But I'm very happy to be with Audi in Formula E. This is about promoting the technology for the future. The vision for the automotive industry is electric and autonomous cars.





## The world champion

With six victories and 20 podium results, Lucas di Grassi, born in São Paulo in 1984, is one of the two most successful drivers in Formula E history. He began racing karts at the age of ten, then progressed to car racing in 2002, and entered the GP2 Series in 2006, winning four races. He spent a season in Formula One driving for Virgin Racing in 2010, and subsequently switched to the FIA World Endurance Championship for Audi Sport Team Joest. Di Grassi has raced in Formula E since 2014. He is of Italian descent, as his grandfather came from Apulia. He currently lives in Monaco with his wife, the designer Bianca Diniz Caloi. In September 2017, he became CEO of Roborace, a motorsport championship for driverless electric cars that race on the same circuits as Formula E.



## Dates and venues for the 12 races

In the 2017/18 season, Rome, Santiago de Chile, and Zurich are new among the city hosts.



R1	DEC 2, 2017 Hong Kong, HK	
R2	DEC 3, 2017 Hong Kong, HK	
R3	JAN 13, 2018 Marrakesh, MA	
R4	FEB 3, 2018 Santiago, CL	
R5	MAR 3, 2018 Mexico City, MX	
R6	MAR 17, 2018 Punta del Este, UY	
R7	APR 14, 2018 Rome, IT	
R8	APR 28, 2018 Paris, FR	
R9	MAY 19, 2018 Berlin, GER	
R10	JUN 10, 2018 Zurich, CH	
R11	JUL 14, 2018 New York City, US	
R12	JUL 15, 2018 New York City, US	

# Vision Zero: Safety is digital

The Volkswagen Group wants to actively contribute to reducing the number of road traffic fatalities. But how? With clever assistance systems and connectivity.

**Text:** Joachim Hentschel | **Illustrations:** C3 Visual Lab

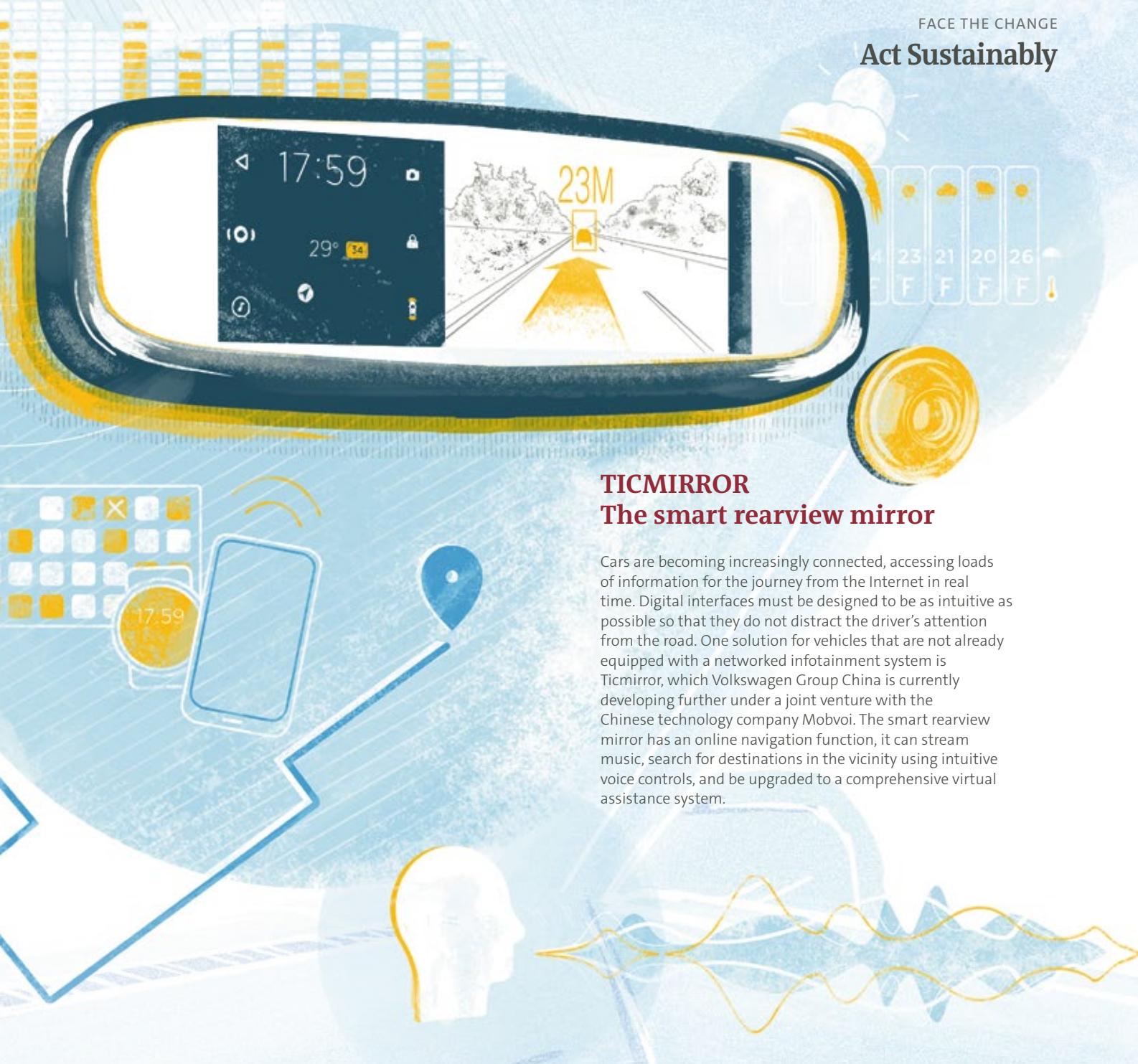
The good news first: Europe's roads are getting safer and safer. Statisticians at the World Health Organization (WHO) came to that conclusion in their most recent Global Status Report on Road Safety, published in October 2015. The study shows that, in relative terms, the number of road traffic fatalities in European countries decreased by more than 55 percent between 2000 and 2015 ("relative" means that the figures have been adjusted to factor out the effects of the increase in vehicle numbers during the same period, making the result more informative).

One reason for such a significant improvement in safety in many areas is stricter laws and intensified traffic checks, plus optimal infrastructure. Another is new assistance systems and further progress in automotive technology that makes protection for drivers, passengers and pedestrians ever more reliable.

The other, not-so-good news holds a challenge for the automotive industry. Despite all the progress, about 1.3 million road traffic fatalities per year worldwide is still far too many. Human behavior in road traffic will never be perfect,



that's for certain. But if carmakers were to be even more consistent in equipping their vehicles with digital safety systems and networked features, if they were to design displays and other infotainment sources to distract the driver as little as possible from what is happening on the road – then the number of accidents would fall even further in the future. And those accidents that are unavoidable would have less serious outcomes.



## TICMIRROR

### The smart rearview mirror

Cars are becoming increasingly connected, accessing loads of information for the journey from the Internet in real time. Digital interfaces must be designed to be as intuitive as possible so that they do not distract the driver's attention from the road. One solution for vehicles that are not already equipped with a networked infotainment system is Ticmirror, which Volkswagen Group China is currently developing further under a joint venture with the Chinese technology company Mobvoi. The smart rearview mirror has an online navigation function, it can stream music, search for destinations in the vicinity using intuitive voice controls, and be upgraded to a comprehensive virtual assistance system.

That is why Volkswagen Group Research has embraced the goals of the "Vision Zero" international initiative. Zero stands for no fatalities, the ultimate goal. In this particular case, the zero means that, in the long term, vehicles from Volkswagen Group brands will no longer be involved in any accidents resulting in death or serious injury.

For Vision Zero, then, the further development of self-driving functions is particularly promising – because if cars are capable of driving and braking autonomously, and can communicate with one another, then the mistakes that people make when driving will become less and less

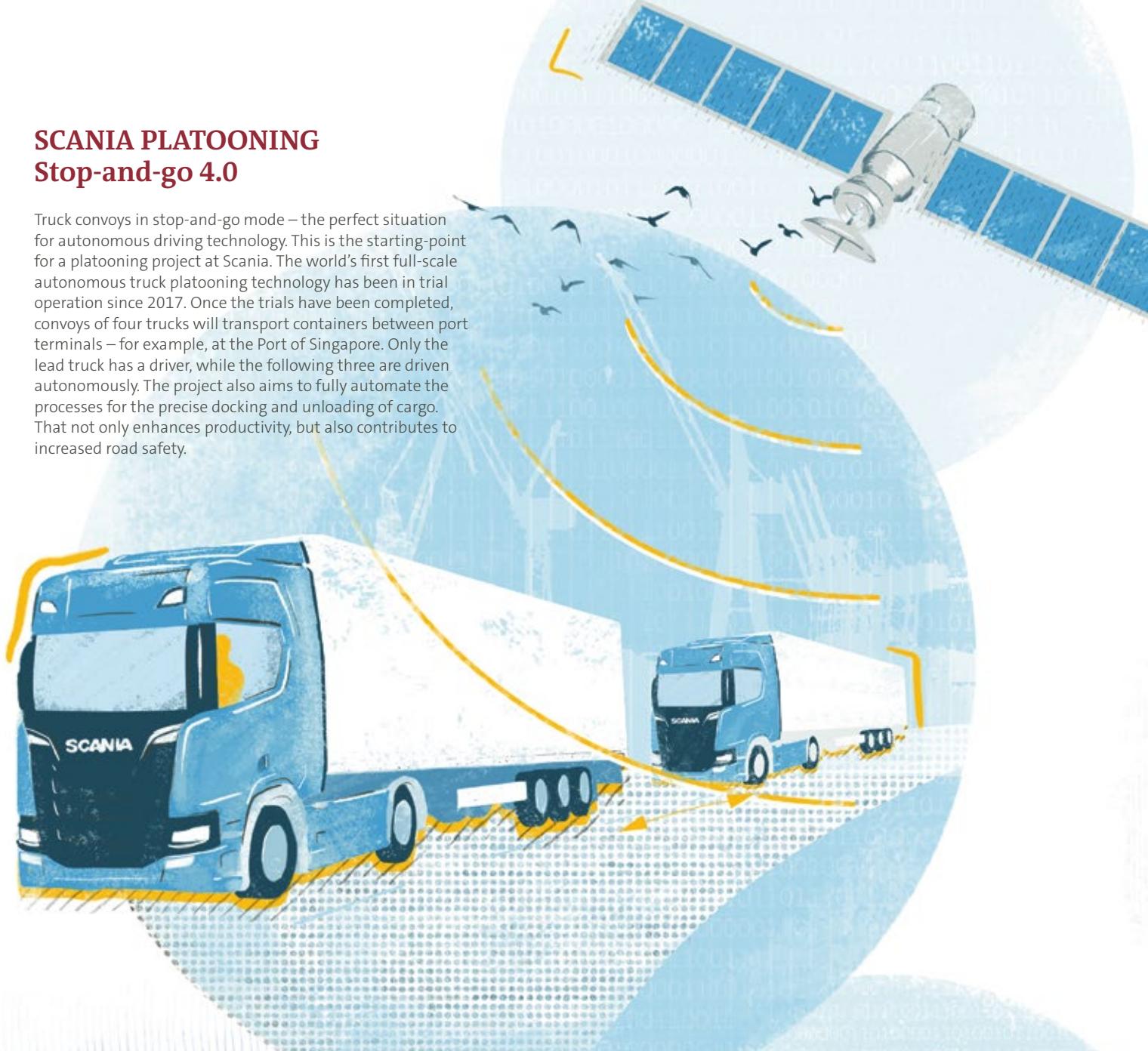
relevant. It will still take some time to arrive at that stage, but the technology is making rapid progress.

How are products and services from Group brands driving Vision Zero forward? The four highlights outlined in this chapter represent different approaches: improved user interfaces, real-time customer service, advanced assistance systems, and autonomous functions. Vision Zero is getting closer – step by step.

## SCANIA PLATOONING

### Stop-and-go 4.0

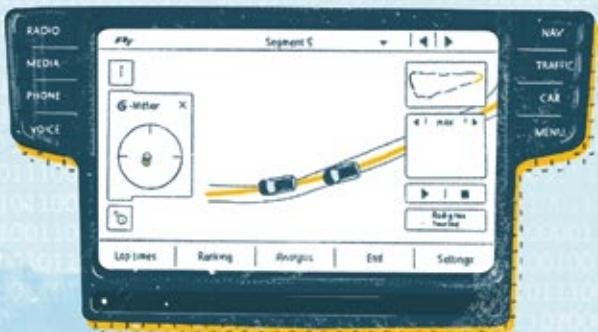
Truck convoys in stop-and-go mode – the perfect situation for autonomous driving technology. This is the starting-point for a platooning project at Scania. The world's first full-scale autonomous truck platooning technology has been in trial operation since 2017. Once the trials have been completed, convoys of four trucks will transport containers between port terminals – for example, at the Port of Singapore. Only the lead truck has a driver, while the following three are driven autonomously. The project also aims to fully automate the processes for the precise docking and unloading of cargo. That not only enhances productivity, but also contributes to increased road safety.



## RACE TRAINER

### The digital racing driver instructor

A lucky few have already been able to test this assistant at the Ehra-Lessien proving ground in Lower Saxony. The Race Trainer, a Group research project, is a visionary assistant that gives an insight into the interaction between autonomous driving, augmented reality, and road safety. With the help of steering and braking aids, acoustic assistance, and racing lines superimposed on the circuit in front of the vehicle, the system tells drivers when to brake on a specific section, how to accelerate, and the best way to take a corner. The findings from the research project will be used in the next generation of assistance systems, turning them into modern-day guardian angels.



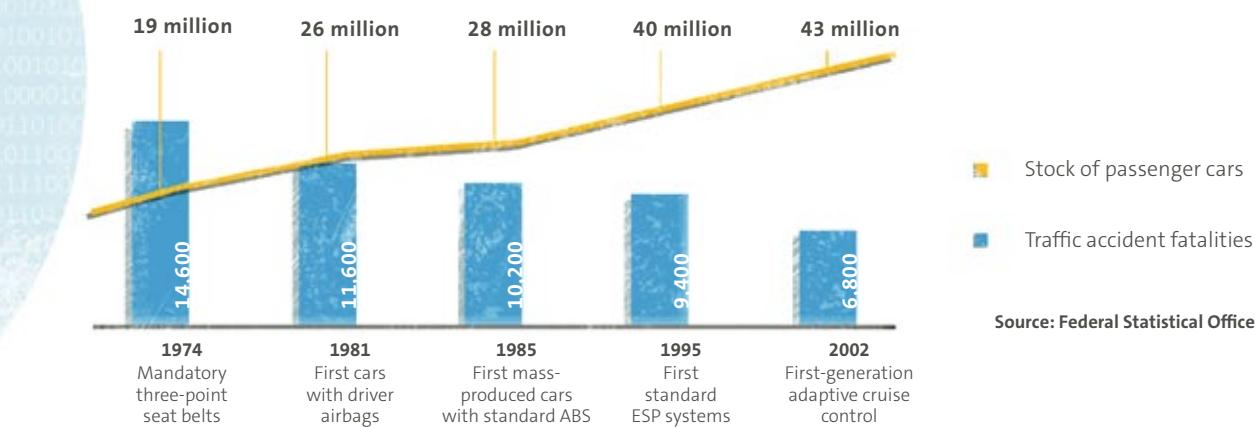


## BUGATTI TELEMETRY The real-time technical service

Bugatti customers have been enjoying this service since 2004, when a data transmission and analysis system that monitors the technical status of each individual Bugatti from the company's headquarters in Molsheim 24/7 was introduced for the Veyron 16.4. Since the launch of the new Chiron<sup>1</sup> in 2017, the data is even transmitted on a real-time basis. If unusual signals are received from a vehicle, Bugatti customer service receives a message and can immediately respond. The premium service used to be available for Formula 1 or DTM racing cars only, but now it also provides Bugatti drivers with optimal safety.

## Lifesavers on the move

Germany: this is how assistance systems have helped reduce the number of traffic fatalities since the 1970s.



<sup>1</sup> Bugatti Chiron: fuel consumption, l/100 km: combined 22.5; CO<sub>2</sub> emissions combined in g/km: 516; efficiency class: G



Fun-loving pioneers (from left):  
Oshi, Vuvu and Bubbles

# Love life.

They are groundBREAKERS – pioneers and role models who want more out of life than poverty, crime, and resignation. They prove that is possible – both in their community and throughout South Africa.

**Text:** Marin Majica | **Photos:** Jonas Nefzger



Drug prevention with music: groundBREAKER Vuvu during a presentation in a church in KwaNobuhle.

The karate trainer stands sweating in front of the picture of Jesus that someone has painted on a sheet and hung on the wall, watching as Vuvu calls the kids to gather round. Vuvu is 23 years old, and her full name is Vuyokazi Noyo. But to her friends and the kids who form a circle round the young woman in this church on the hill above the South African township of KwaNobuhle, she is simply Vuvu. She is getting ready to talk to the kids about drug prevention. But Vuvu's presentation technique bears as much resemblance to a dry educational lecture as this simple room with its wooden walls, corrugated roof and strip lights where karate training has just finished does to the traditional image of a church.

Vuvu claps her hands. She gesticulates, sings with the kids. Her sentences are a mixture of English words and the isiXhosa language with

its click consonants. She talks about "Flakka," the horror drug which can lead to violent aggression and is widespread among South Africa's poorest in particular. It is an everyday reality in this district where many of the houses are simple brick buildings or huts. Vuvu mimes an addict staggering about, and urges the openmouthed kids to be careful. Then she plays some techno music and everyone dances, even the karate trainer. The children crowd round Vuvu, she says her goodbyes and promises to come back soon.

"Has this work changed me?" Vuvu laughs at the question. "You have no idea what I used to be like. I've learned so much about myself here. I have never been shy, but I wasn't able to build up real relationships with people."

Vuvu has left the church and is now sitting in a bright room at the loveLife Centre in KwaNobuhle. The modern, purpose-built youth center opened in 2012, cost about €2 million, and is located in



**“Define your life, don’t let it be defined for you. Life always has something better in store for you.”**

Ayanda Sali alias Einstein,  
groundBREAKER



Everyone at the loveLife Centre calls Thobeka Mzuzu Szyre (left) “Sista T.” She talks to kids and adolescents about sexual education and health, and prescribes contraceptives.

the heart of the township where 99 percent of the population is black. It belongs to the city of Uitenhage (pronounced “yoo-tin-haig”). The center has seminar rooms, workstations, a snooker room, a radio studio and a health clinic with a counselling service, open WiFi, and a large sports arena in the inner courtyard. Vuvu comes here every day. This is the place that changed her life and where, day after day, she changes the lives of so many other people – sometimes just a little bit, sometimes in a big way.

Vuvu and her two friends nicknamed Bubbles and Oshi are groundBREAKERS. They are pioneers. Young people who are building a future for themselves in surroundings where the prospects

for many are not bright. And they are showing others how to build their futures, too.

Young people apply to join the program, and if they are accepted they are awarded a one-year scholarship. They work in the center financed by the Volkswagen Community Trust. The groundBREAKERS talk to the children and adolescents about contraception and health, about vocational training and family planning, they give courses and organize sports sessions. “loveLife is fun, entertainment, education, everything”, Vuvu explains. Oshi and Bubbles nod in agreement. For them, this is the ideal preparation for their working lives and brings the chance of a good education.

The Volkswagen logo on the outside of the building and on the partition walls inside indicates how closely the Group engages with the center and its work. This is not marketing, this is a deep commitment. The Volkswagen plant is the largest private-sector employer in Eastern Cape.

**Thema Maseti (right) is responsible for a total of four loveLife Centres and is always ready to listen.**



**Programming with Einstein:**  
**Ayanda Sali**  
**(right)** teaches  
children how  
to use a  
computer.

The province on the Indian Ocean coast has a twinning partnership with the German State of Lower Saxony, the home of Volkswagen. Some 1.2 million people live in Nelson Mandela Bay Metropolitan Municipality, which not only includes Uitenhage, but also the nearby coastal hub of Port Elizabeth. Like the rest of South Africa, unemployment, corruption, and, more recently, a renewed increase in HIV infection rates, are part of everyday life. Many have a distrust of politics, and there is great frustration. A great deal of progress has been made since apartheid ended in 1994, but much still remains to be done. That is why the work at the loveLife Centre is so important, not just for the district and the city, but much further afield as well. There are loveLife Centres all over the country, but according to Nonkqubela Maliza, Director of Corporate & Government Affairs at Volkswagen South Africa, this one is something special.



"It's this center's leadership that makes it so exceptional," Ms. Maliza says on a visit to the center. "The change theory behind loveLife is that you must love your own life, that you must master your own destiny, if you want to bring about change. So the change you are seeking must begin within yourself. Then you can take it into your community."



Vuvu plans to study social work at Nelson Mandela University in Port Elizabeth when she has completed her year as a ground-BREAKER.

The training currently in progress at the sports arena illustrates what this means in real life. Kids, adolescents and adults have met up for a joint fitness session in the inner courtyard. They jump up and down to music, do some shadow boxing, shout encouragement to one another. The youngest are three or four years old, the oldest are the grandmothers who brought their charges along.

**“I always say to the kids: Never forget where you come from. And always remember where you are headed.”**

**Vuyokazi Noyo alias Vuvu, groundBREAKER**

Medals and small prizes are distributed at the end of the session. “Looking after your health is very important,” Themba Maseti tells the children, using the microphone for maximum effect. Then the 41-year-old program manager – the face and driving force behind this center and three others – hands the mike back to the DJ. Bubbles and Oshi invite the kids to dance on the small stage, and a few of the boys perform some impressive dance moves. It’s all part of an ordinary morning in the loveLife Centre. “This isn’t a job, it’s a vocation,” Themba says. He is proud that several former groundBREAKERS now have good jobs, one has even made it as a breakfast television presenter. “That’s the very best example of what loveLife is all about.”

Energy and joie de vivre are sometimes not easy to find outside the center. Stray dogs roam the streets of KwaNobuhl, cows and pigs run free. A red and white circus tent has been erected in front of one house. Is there a celebration?

“There was a funeral yesterday,” says Vuvu, who lives nearby with her mother and brother. Their house stands high up on the slope where

the tarmac road becomes a sandy path. It overlooks hills, other houses and huts, interspersed with wasteland where plastic trash blown in by the coastal winds flutters. “Nice view”, the visitor says to Vuvu’s brother. “Really?” is his skeptical response.

The groundBREAKERS from the township all come from very different backgrounds. Oshi, whose full name is Owethu Danster, went to a

private school and is now studying at Nelson Mandela University in Port Elizabeth. That is what Babalwa Majola, known as Bubbles because of her vivacious temperament and unruly hair, also intends to do. As a groundBREAKER, she works in a clinic as a health counsellor, gaining her first valuable practical insights. “My mom has always done everything she can to help me get on in life,” Bubbles says. “And we never went to bed hungry.” The kitchen in her mother’s house is a cozy room with an enormous stove. In the next room, her brother is cutting the hair of some other kids; the annex doubles as his salon and bedroom. Every morning, Bubbles’ mother still cooks food, fills two insulated boxes, and takes her cooking to the factories in Uitenhage to sell to the workers. Bubbles has a photo on her mobile phone showing her mother setting off in the mornings with the boxes on a trolley. “I quite literally owe who I am to those boxes.” Bubbles wants to say a big thank you to her mother when she has graduated. “We’re going to have an enormous party, mom, with masses of food.”

The parents of groundBREAKER Ayanda Sali, 24, have also tried to give him as much support as possible. Ayanda, aka Einstein because of his love of math and IT, lives with his parents and two younger brothers on the outskirts of the township. The garden of his house is carefully looked after. Einstein’s father Amos grows pumpkins and strawberries, spinach and carrots there to feed the family. “They do great work,” his father says, referring to his son and the other groundBREAKERS.

Einstein’s room is at the back of the house, a wooden shack right next to the henhouse. Inside, there is just enough space for a bed, a television set and an ancient cassette recorder, which he uses as a speaker for the computer. The wall is covered with handwritten notes, one of which says: “The only limit is the one that exists in your mind.”

Einstein’s mind is not familiar with many limits. He has plenty of ideas – for example, he wants to write a program to create an app for a 3-D model of your body to try out new clothes or make up, which you can then order direct. “Who enjoys queuing up in a shop?” Unfortunately, his computer is on its last legs, so it is difficult for him to continue writing the code for the app. There are more limits in the real world than there are in his mind. He had a study bursary for university, but that meant getting up at three in the

## “My mom has always done everything she can to help me get on in life. We never went to bed hungry.”

Babalwa Majola alias Bubbles, groundBREAKER



Plenty of ideas and plans for the future: Einstein in his room behind his parents’ house.



Bubbles works in a clinic and has learnt a great deal about diabetes, HIV, and pregnancy tests. She wants to begin studying soon.

morning to walk to the station. And making the same journey back home every evening. Somewhere along the line he just couldn't take it any longer.

Give up? No way! At the loveLife Centre he teaches children and adolescents how to use a computer. He also visits schools and communities to talk about how to lead a healthy and self-determined life. What drives him? "The idea that I can change the world." With anyone else, that could sound like an empty phrase. Not with Einstein, though. He believes it. And he believes he has the strength to start something big. To be a groundBREAKER.

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[annualreport2017.volkswagenag.com](http://annualreport2017.volkswagenag.com)

## Volkswagen South Africa

**Volkswagen South Africa's Uitenhage plant** is the oldest Volkswagen plant outside Germany. The first Beetle in South Africa was assembled there in 1951. Today, the plant has a workforce of 3,900.

**The road to the KwaNobuhle township** passes the plant and a large compound where thousands of vehicle are stored, waiting to be delivered. From 2018, the plant will manufacture 150,000 vehicles a year. Two models are built here: the New Volkswagen Polo and the Volkswagen Polo Viva (bestselling model in sub-Saharan Africa).

**One striking feature** of the urban landscape is the large number of Golf I. This model was built in South Africa up to 2009 and is very popular among car owners, including tuning fans who spray them in the colors of the rainbow and fit alloy wheels and other extras.

Explore new ways

# The best ideas are created together.

We believe in team spirit and self-initiative.

**Krishna Bhojkar**  
Head of Manufacturing Engineering,  
Volkswagen India, Pune

Volkswagen India produced 150,000 vehicles in 2017. A new work culture is vital for continued growth in this boom market. Volkswagen AG is establishing agile team structures and creative labs all over the world.



# Never forget the users.

Just outside Berlin, some 100 digital experts and designers are researching the mobility solutions of tomorrow. But above all, they are trying out a pioneering new form of collaboration. We paid them a visit.

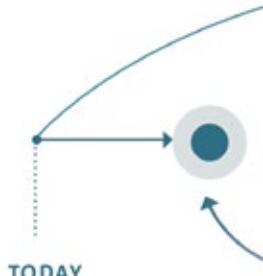
**Text:** Jochen Förster | **Photos:** Georg Roske

In the beginning, there was just a name: USP, the acronym for Urban Shared Pod. That was the goal – to develop a mobile structure that people could share and that was unlike anything ever seen before. The rest was TBD – to be discussed. The first thing the members of “Team USP” did was to make a list. With questions such as, does our pod solve people’s problems? Or, is our pod fun? Does it make everyday life easier for users? Does it inspire them?

Some one hundred designers and user experience experts, software developers and IT professionals are working on tomorrow’s mobility at the Volkswagen Group Future Center Europe, a glass and concrete building in a prime location in Potsdam, state capital of Brandenburg. One way or another, everyone in the automotive industry

seems to be doing that at the moment, but these particular colleagues can also claim another USP – their unique selling point. Their focus is not so much on developing new sales products, but rather on trying out new perspectives. “The very first question we ask is, what do users want?” Mark Bergold, Lead UX Design, says.

That might sound like stating the obvious, but it is a genuine first in the history of the tradition-rich Group. Until now, automobile production was usually dictated by technological innovations. The design and IT departments were given concrete tasks to complete. However, the digital age calls for a new work culture. The mission is to come up with swift and flexible solutions tailored to customer needs. To design digital offerings capable of learning and adapting. “Our aim is to



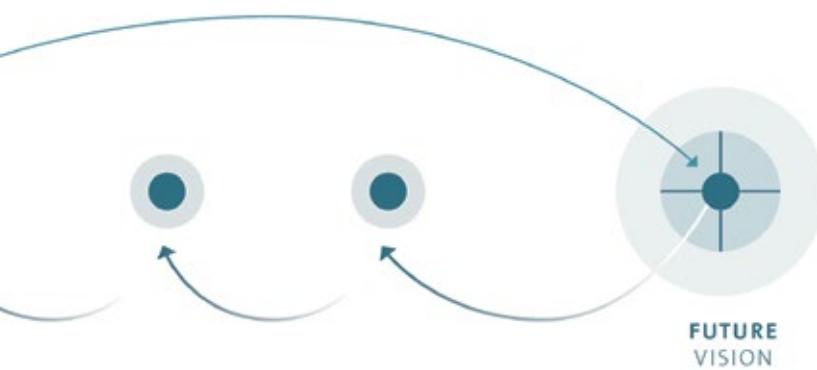
## Explore New Ways



**Asking questions,  
developing ideas,  
understanding customers:  
Four of the ten members  
of “Team USP” during a  
normal day at the office.**

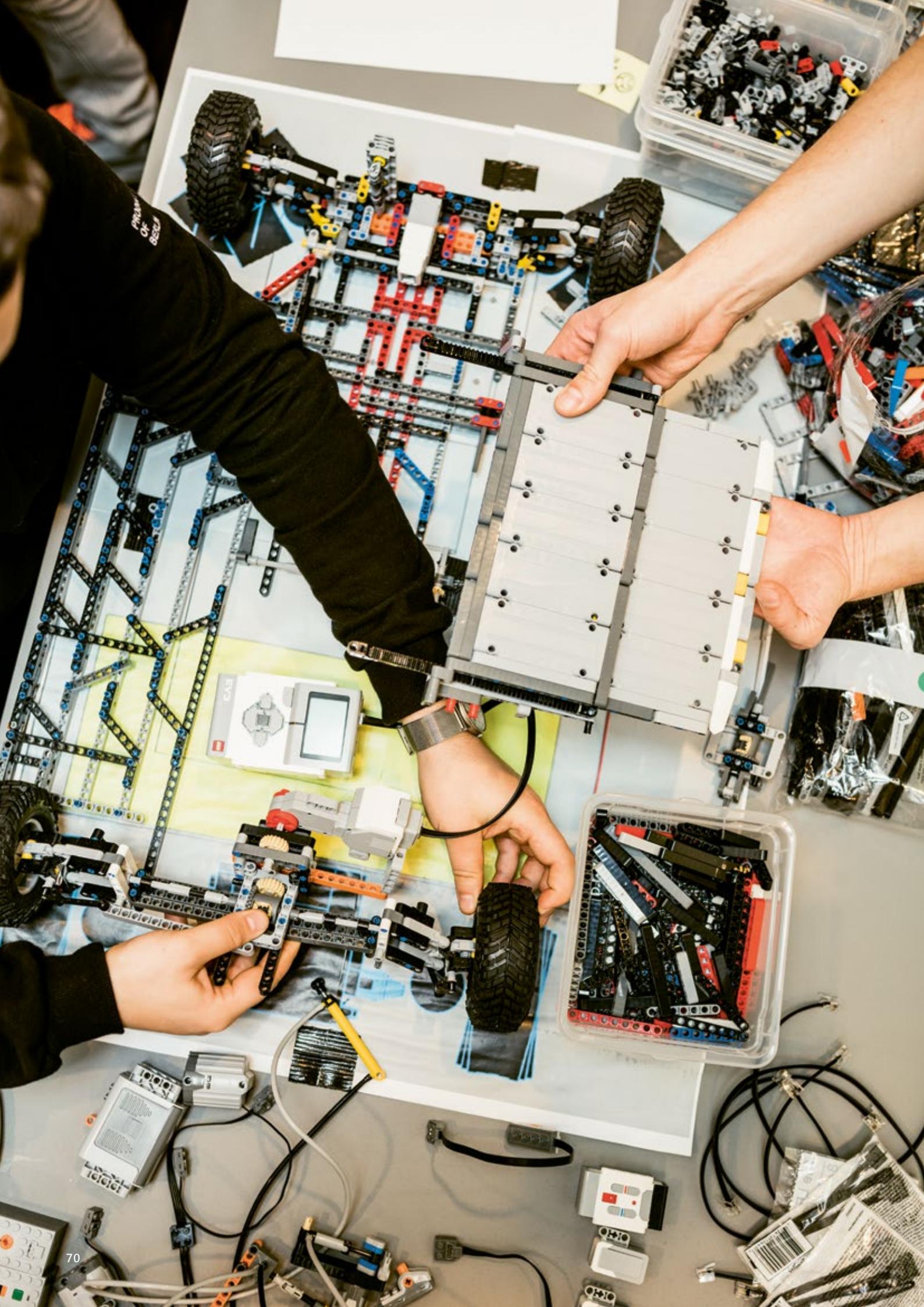
### Take a great leap forward and then follow the trail back to the present:

Working sketch for Vehicle Design at the Volkswagen Group Future Center Europe on the banks of the Tiefen See lake in Potsdam.



solve more customer problems and execute fewer tasks. We work in agile interdisciplinary teams where the hierarchies are flat and there is no room for autocrats. And we take feedback from our users on board as early and as often as possible,” says Alisa Goikhman, UX Design Conceptor for smart interfaces. The trailblazers at the Future Center call this philosophy “human thinking.” There is only one focus: people. Their needs. Their well-being. And what Volkswagen can do to strengthen people’s confidence in new mobility solutions.

Team USP started with two four-week sprints at the end of 2016. Armed with their list of questions, the team members took to the streets and asked Berlin passers-by for answers. Then they got down to evaluating the responses: user journeys took shape in order to better understand



# “We work in agile teams where there is no room for autocrats. And we get as much feedback as possible from our users.”

**Alisa Goikhman**, UX Design Concepter

customer needs during the various stages of life. In the fourth week, the team built its first pod, complete with a wooden chassis and padded seats, in the workshop. “Here at the Future Center, we make most of our stuff ourselves,” says Exterior Designer Marian Hilgers. The center has experts on just about everything, everything is possible, and everything is in motion. At the Volkswagen Design Center Potsdam, the predecessor to the Future Center opened in 2016, demonstration studies had to be practically production-ready models. As far as the Urban Shared Pod is concerned, the provisional character typical of prototypes is the order of the day.

Team USP gets feedback from users at the end of every development step – initially as a digital experience with virtual reality headsets, and later “live” in the Wizard Bus, where testers can try out the USP complete with all services. The bus has a smart way of simulating autonomous driving. The passengers are unaware there is in fact a driver, because what they see is images of the view through the windscreen as taken by a camera and projected on a screen, creating a remarkably realistic sense of what autonomous driving is like.

It did not take the team long to agree on the mobility concept. “Ride hailing is a sharing concept that suits plenty of users,” says Inae Song, UX Design Concepter. The USP is ordered by app, collects users at their pick-up point and lets them ride for as long as they want. During the ride, passengers can order food or “coffee to drive” for delivery to the USP, or they can book concert tickets via the screen. Or they can listen to their favorite kind of music – entertainment, karaoke or meditation.

On our visit, Team USP was in the middle of a sprint to optimize digital apps to suit user needs and develop intelligent payment models and

All their own work: the teams use Lego sets (left) or virtual reality rooms (below) to realize their projects.

networks. The project approach is iterative. Each result is continuously improved. “One of our advantages is that we are able to develop outside the series processes,” says Aaron Post, Interior Designer. “That gives us more flexibility. And possibly more open to unusual impulses.”

The Future Center mindset is evidently catching on. Other centers in Beijing and California have started working on a better understanding and evaluation of customer needs in the key markets of China and North America. And Future Center



# “We are able to develop outside the series processes. That gives us more flexibility. And more openness to unusual impulses.”

Aaron Post, Interior Designer

experts have been criss-crossing markets and continents since 2016, organizing workshops that help others to experience and apply human thinking. Most of the feedback is positive, sometimes even surprising, and always fresh and enriching.

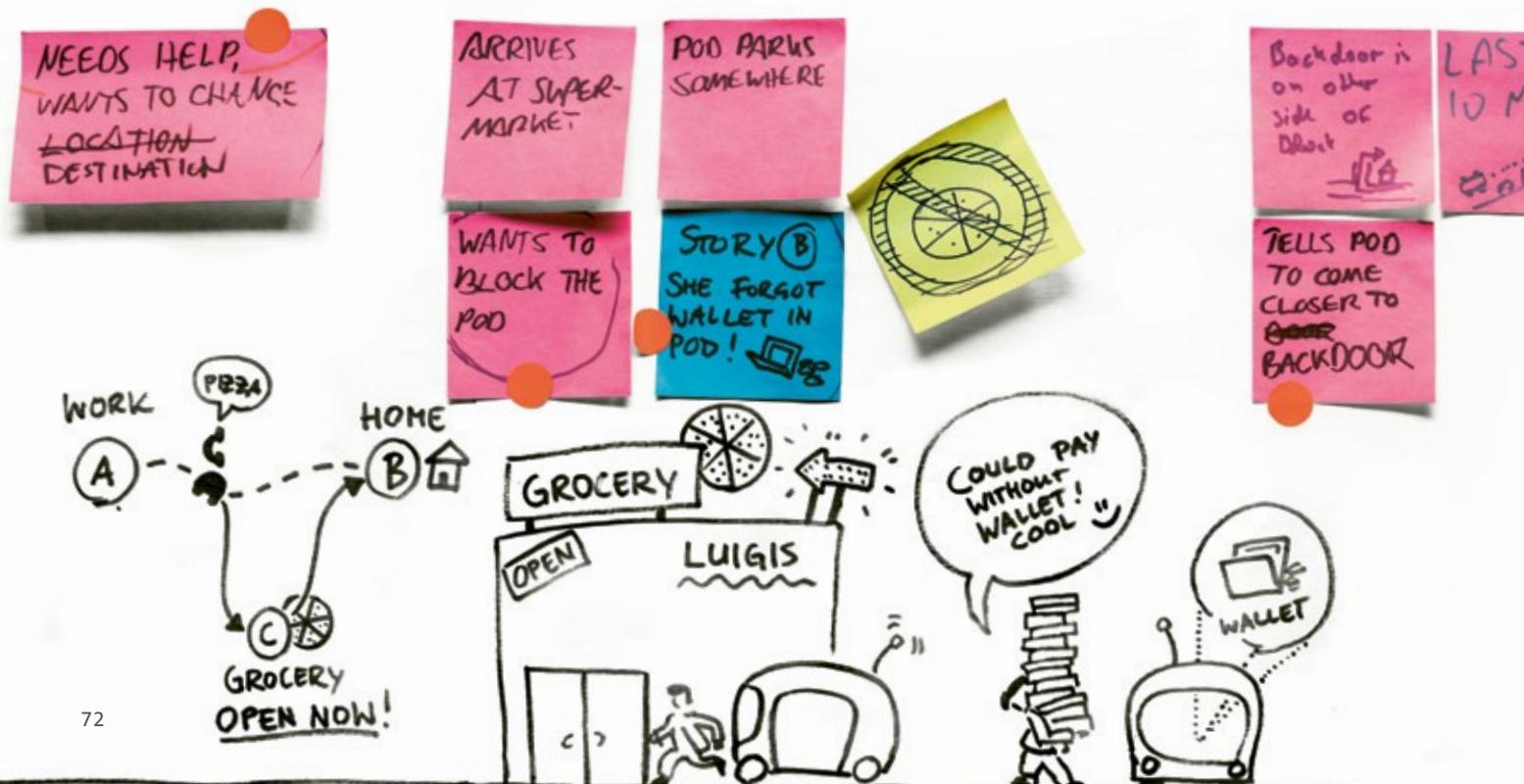
The Future Center also breaks new ground in its recruiting. The majority of employees come from international backgrounds, are highly trained and under 35. Only a few are classic automobile professionals, some do not even have a driver's license. What tempted them to come here? The close proximity to Berlin. The good team play lead by Nanna Nietiedt, Ulrike Müller, and Peter Wouda. A smart work-life balance. But above all, the exhilarating feeling that comes with playing a part in moving a global group forward.

User journey as a working basis: the mobility solutions must be designed to solve concrete everyday problems (below). Team USP and a model of the Urban Shared Pod (right).

And if their work culminates in a cutting-edge product – so much the better. Sedric, a self-driving car with no pedals or steering wheel that was developed in cooperation with Group Research, caused quite a stir at the motor shows in Geneva and Frankfurt in 2017. Users can summon the car at the touch of OneButton, a remote that is smaller than a car key.

Sedric has made people sit up and take notice of the Future Center – not just in the Group, but also across the automotive industry. Since then, hardly a week passes without people from various brands swapping knowledge and ideas about the future – the Potsdam way.

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FACE THE CHANGE

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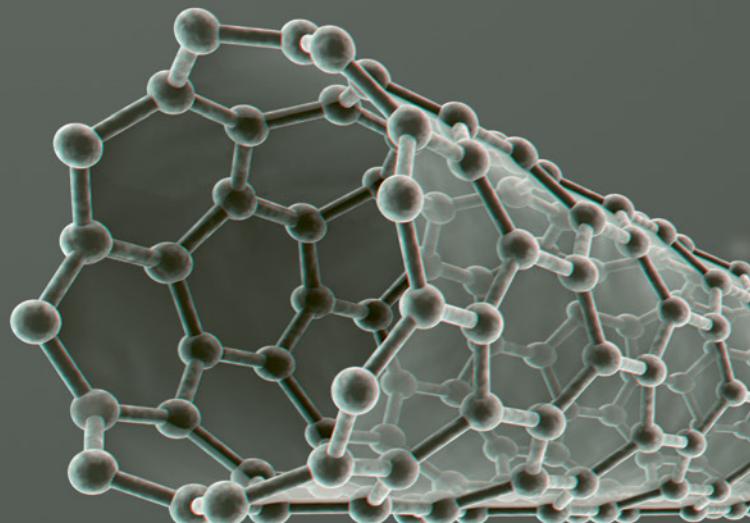
# The fabric of the future.

Carbon fiber is ultra-light, yet extremely robust. And with production costs falling, it could play a key role in the electric vehicle era. Volkswagen Group engineers are carrying out pioneering work in this field.

**Text:** André Boße | **Infographics:** C3 Visual Lab

The 42-centimeter coupling rod feels like a hollow tube: light as a feather, discreetly patterned and otherwise generally unprepossessing. If a traveling showman were to claim that this rod, which tips the scales at a mere 33 grams, could easily bear the weight of a mature dairy cow, the crowd would just laugh at him. But that scorn would very quickly turn into amazement, because the showman would be absolutely right. The carbon fiber rod is three times as strong as a steel profile of the same dimensions, but only one-quarter of the weight. And it is corrosion-resistant.

In the world of materials, carbon fiber – or carbon fiber reinforced polymer (CFRP), to give it its full name – is the one to beat. It outdoes all other materials in terms of its optimal strength-to-weight ratio, flexibility, and stability. That is mainly due to the carbon. No other element in the world has the same ability to form so many stable bonds with different elements – in nature's toolbox, carbon is as versatile as a Swiss Army knife. The fact that natural diamond – the hardest known material on Earth – is nothing other than crystalline carbon testifies to the enormous strength of this all-rounder. Carbon fiber is made from an organic polymer. This feedstock is heated to a high temperature to expel the non-carbon atoms in the form of various gases. This leaves fibers composed of chains of carbon

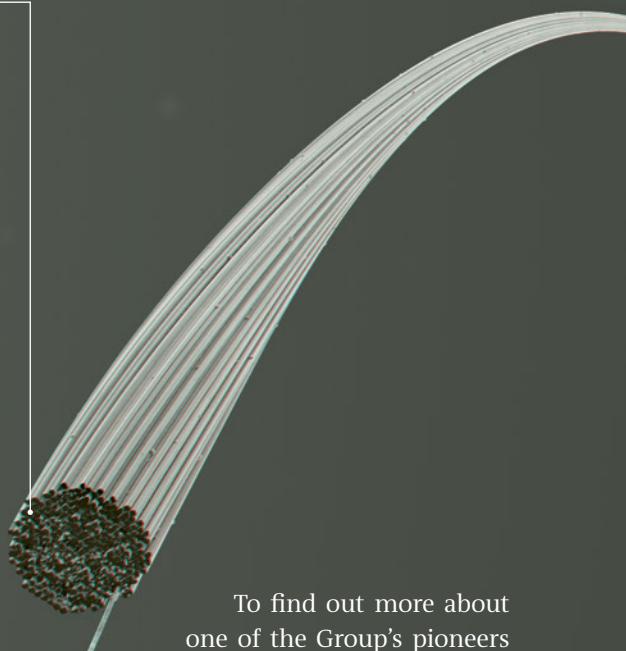
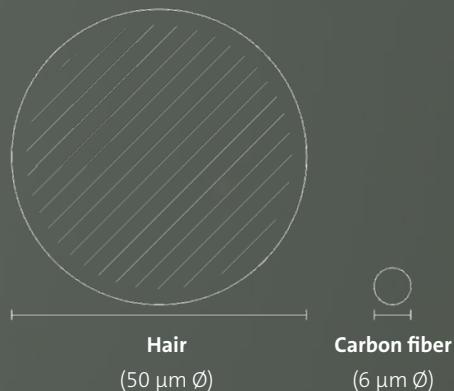


atoms, which are then embedded in a polymer matrix to create this unique material with properties far superior to those of other lightweight materials such as aluminum and titanium.

That is what makes carbon so interesting for materials research. However, quality of this caliber comes at a price. Even today, the development, planning and production of carbon fiber components is still very costly – which is the main reason why carbon fiber components are chiefly to be found in aircraft or golf clubs. In other words, where lightweight material and maximum robustness are essential. And, of course, in sports cars from the Volkswagen Group.

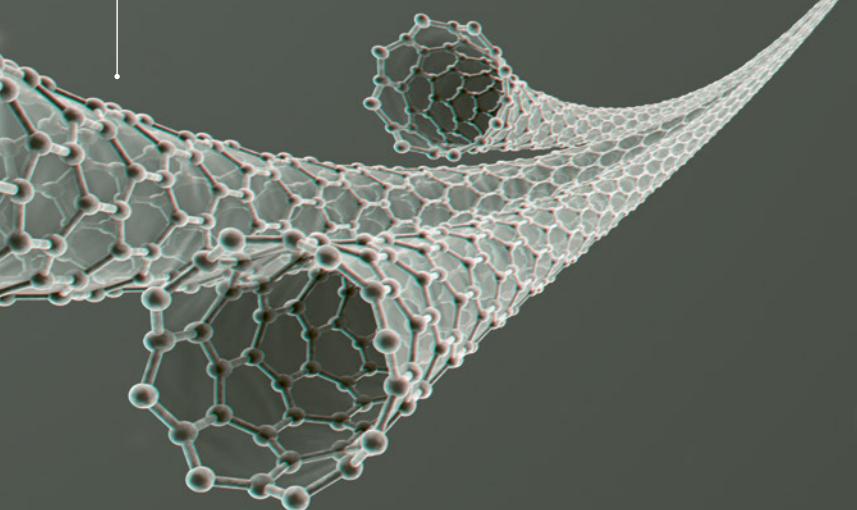
## EIGHT TIMES THINNER THAN A HAIR

Carbon fibers combine enormous tensile strength (max. 6,600 MPa) with a very low weight (approx. 1.8g/cm<sup>3</sup>). For comparison: high-strength steel alloys have a tensile strength of only 1,300 MPa and a weight of 7.85g/cm<sup>3</sup>. The diameter of a single carbon fiber is only approx. 6µm – more than eight times thinner than a blonde hair (50µm).



## → TURNING ATOMS INTO FIBERS

Carbon fibers are produced by pyrolysis of an organic feedstock. This “precursor” is heated to a very high temperature and then drawn into long strands or fibers, stabilizing the atomic structure. The higher the temperature, the higher the share of carbon in the fibers. This share is usually between 96 and 98 mass percent.



**Carbon fiber battery:  
Lamborghini's Terzo  
Millennio e-concept car.**



To find out more about one of the Group's pioneers in carbon fiber research, we travel to Molsheim in Alsace, France. In this idyllic town with a population of just under 10,000, engineers and technicians from the Bugatti super sports car brand have been testing the use of carbon fiber components to meet the most demanding requirements since 2001. Almost the entire monocoque of the Chiron<sup>1</sup>, Bugatti's latest model, is made of carbon fiber – like its predecessor, the Veyron. The same applies for the outer shell.

“We were the first to use tailored fiber placement ultra high-strength RTM components, ultra heat-resistant bismaleimide resins, and UMS carbon fibers in a production car,” explains Frank Götzke, Head of New Technologies, who is also responsible for manufacturing technology development at the brand. “Compared with conventional high-strength steel alloys, carbon fiber has an exceptional ratio of tensile strength and stiffness to density.”

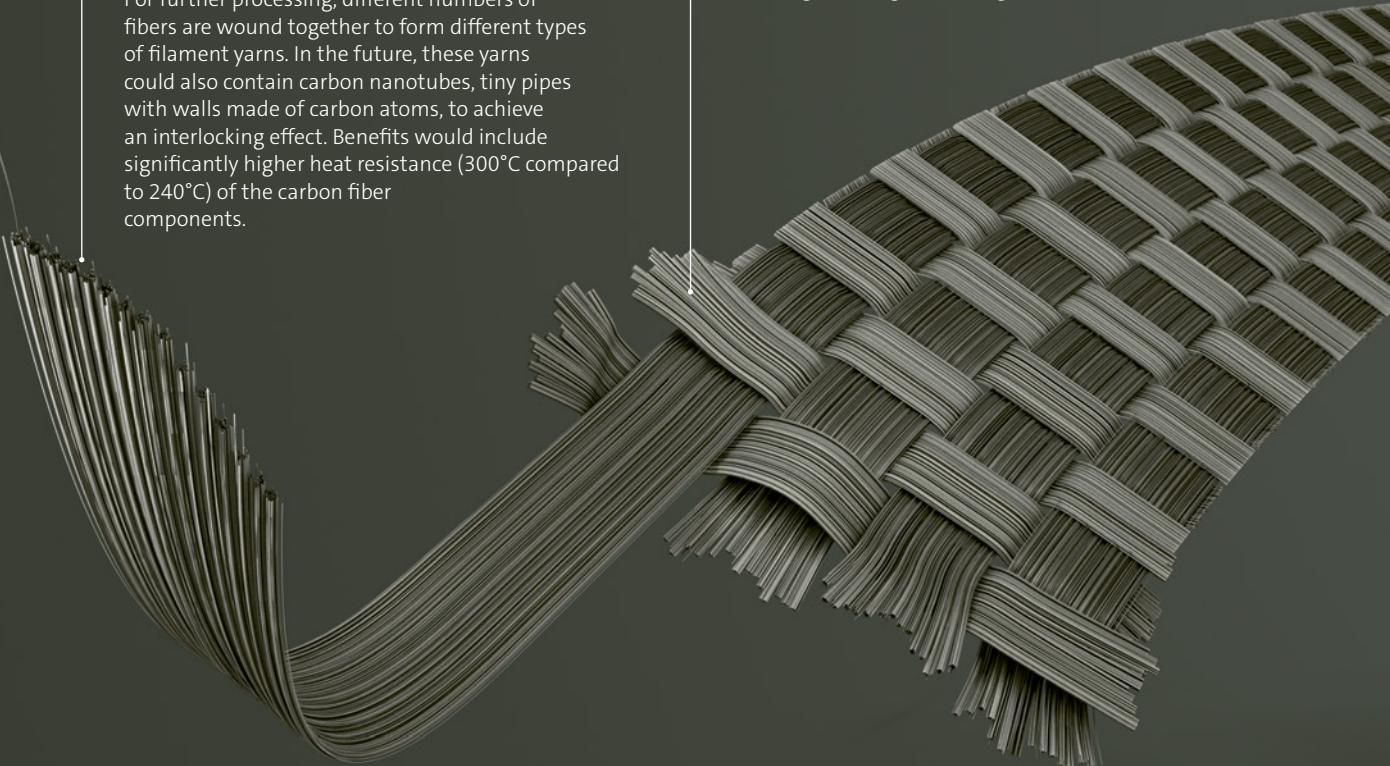
The problem, though, is that carbon fiber only displays this strength and stiffness in the direction of the fibers, and only at a maximum temperature of 240°C. Interweaving the fibers and making them even more heat-resistant is complex, but possible. Several milestones in the history of carbon fiber at Bugatti are on display in Götzke's office. The carbon-ceramic brake discs for the Bugatti Veyron, for example, which were the largest of their kind in 2003, but only weighed half as much as their cast steel counterparts. Or the wiper arm in the new Chiron, which can easily withstand wind pressure even at a speed of 400 kph.

## → YARN

For further processing, different numbers of fibers are wound together to form different types of filament yarns. In the future, these yarns could also contain carbon nanotubes, tiny pipes with walls made of carbon atoms, to achieve an interlocking effect. Benefits would include significantly higher heat resistance (300°C compared to 240°C) of the carbon fiber components.

## → LAY-UP

Carbon fiber has a far higher strength and stiffness in the fiber direction than perpendicular to it. Depending on the component, layers of fibers are therefore arranged in different directions to achieve the desired strength and stiffness in all relevant load-bearing directions. This operation is usually performed by highly sophisticated weaving, braiding or winding machines.



Or carbon fibers reinforced with nanotubes and nanotube yarn, a research project in collaboration with the Leibniz Institute for Solid State and Materials Research in Dresden and the Bremen Fiber Institute. Other Group brands are also currently hard at work on ways to broaden the range of carbon fiber applications. According to Luciano De Oto, Head of the Advanced Composites Structures Development Center at Lamborghini, carbon fiber is today only slightly more expensive to produce than aluminum. The Audi subsidiary in Northern Italy has been one of the worldwide leaders in carbon fiber research since it started using the material on the Countach Quattrovalvole back in 1985. Today, the entire monocoque of the Aventador<sup>2</sup>, for example, is made of carbon fiber – all built in-house. The complete body of the Centenario<sup>3</sup> is, too, while the Sesto Elemento is almost entirely made of the material. Lamborghini processes about 400 tonnes of carbon fiber a year.

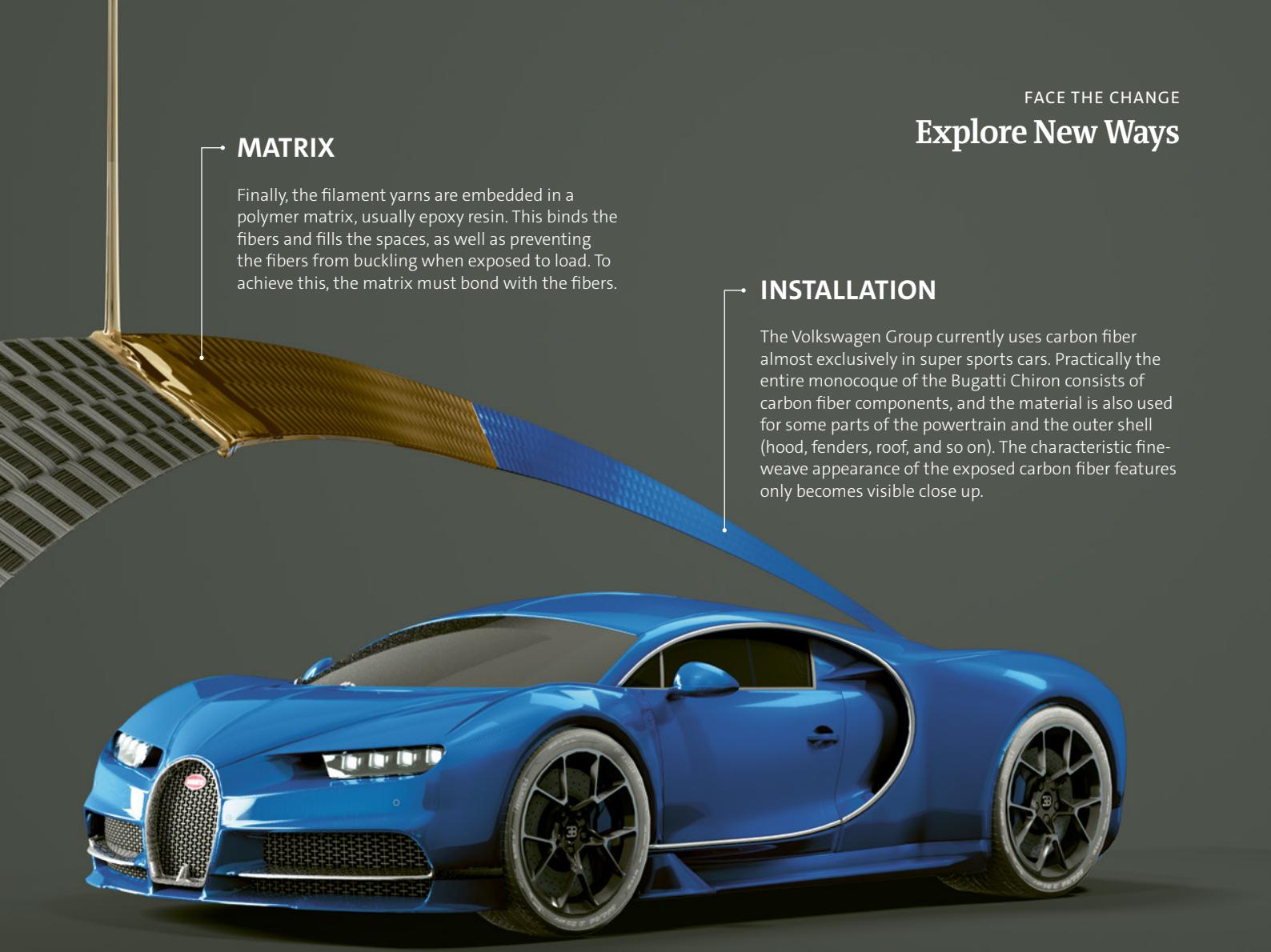
"Over the last five years we have developed technologies that enable us to produce ever larger quantities of increasingly complex parts. It won't be long before we see carbon fiber being used not just in super sports cars," De Oto says.

Take Ducati, for example. The Bologna-based motorcycle manufacturer, also a subsidiary of Audi AG, has been using carbon fiber for many years, and in a growing number of applications. Ducati began by producing carbon fiber fairings and guards, and for a good ten years now the motorcycle manufacturer has also been using the material for structural parts on its machines. This has a positive effect. The motorcycles weigh less, fuel consumption is reduced, and driving pleasure is intensified.

"Making lightweight construction cost-effective is a challenge," says Simone Di Piazza, Head of Vehicle Design and R&D Services at Ducati. "The smart use of carbon fiber helps us to overcome these obstacles." Carbon fiber could even play a key role for the automotive industry in the e-mobility era. Batteries are heavy, so the rest of the vehicle must be as light as possible to enable a long range.

**Carbon fiber frame,  
swingarm and  
wheels: Ducati 1299  
Superleggera.**





## → MATRIX

Finally, the filament yarns are embedded in a polymer matrix, usually epoxy resin. This binds the fibers and fills the spaces, as well as preventing the fibers from buckling when exposed to load. To achieve this, the matrix must bond with the fibers.

## → INSTALLATION

The Volkswagen Group currently uses carbon fiber almost exclusively in super sports cars. Practically the entire monocoque of the Bugatti Chiron consists of carbon fiber components, and the material is also used for some parts of the powertrain and the outer shell (hood, fenders, roof, and so on). The characteristic fine-weave appearance of the exposed carbon fiber features only becomes visible close up.

"We will probably soon be seeing CFRP in the form of organic sheets and pultruded profiles in a Volkswagen e-Golf<sup>4</sup> or other Group models," Bugatti engineer Götzke says. For large components in particular – doors, roofs, hoods or battery boxes – carbon fiber could turn out to be a crucial factor in extending the all-important range of Volkswagen's e-fleet without having any major impact on vehicle weight.

That is one of the reasons why brands such as Bugatti, Lamborghini, and Ducati are currently investing more know-how and financial resources than ever before in research cooperations – such as the collaboration between the University of Washington (Seattle), Lamborghini and Boeing at the Advanced Composite Structures Laboratory in Seattle. Or the cooperation between the Massachusetts Institute of Technology (MIT) and Lamborghini to create the visionary Terzo Millennio sports car. The chassis of this future concept has nanotubes sandwiched between carbon fiber layers to store electric energy. What's more, a monitoring system has the ability to

detect even the tiniest cracks in the bodywork and initiate chemical repair processes.

Carbon fiber has always been ultralight and extremely robust, and now it is smart and can even function as a battery, too – so the material has a bright future in automobile construction. There is also a positive side effect, because other sectors also benefit from the knowledge of the Volkswagen R&D specialists. Take medical technology. For many years, Lamborghini has been giving several clinics in Northern Italy access to its know-how, helping to develop innovative prostheses and implants that are lighter, more compatible and more durable than those currently available. Most recently, Lamborghini announced it is collaborating with the Texas-based Houston Methodist Research Institute, while Bugatti is cooperating with Hannover Medical School. The common goal is to put carbon fiber and nanotechnology to use in biomedicine. Seen from a medium-term perspective, then, carbon fiber research will not only make cars lighter, but also make life easier for upper and lower limb amputees.

<sup>1</sup> Bugatti Chiron: fuel consumption, l/100 km: combined 22.5; CO<sub>2</sub> emissions combined in g/km: 516; efficiency class: G

<sup>2</sup> Lamborghini Aventador: fuel consumption, l/100 km: combined 16.9; CO<sub>2</sub> emissions combined in g/km: 394; efficiency class: G

<sup>3</sup> Lamborghini Centenario: fuel consumption, l/100 km: combined 16.0; CO<sub>2</sub> emissions combined in g/km: 370; efficiency class: G

<sup>4</sup> Volkswagen e-Golf: power consumption in kWh/100 km: combined: 12.7; CO<sub>2</sub> emissions combined in g/km: 0; efficiency class: A+

# “Integrity is everyone’s business.”

What exactly do we mean by integrity? Why is it a fundamental component of our TOGETHER – Strategy 2025? And in what way do credibility and transparency help us to attract the best minds of tomorrow? An essay by Hiltrud Werner, member of the Board of Management for Integrity and Legal Affairs.

**Text:** Hiltrud Werner | **Illustrations:** Mario Wagner



**Hiltrud Werner,**

born in Bad Doberan, Germany, in 1966, is an economics graduate. She became Senior Vice President Corporate Audit at MAN SE in 2011, and was appointed Head of Group Auditing at Volkswagen AG in 2016. She has been member of the Board of Management for Integrity and Legal Affairs since February 1, 2017.

**N**ever in its history has the Volkswagen Group been the focus of public criticism on the scale triggered by the diesel crisis. We are faced with two challenges simultaneously: we must permanently win back lost trust; and at the same time, we must take the radical transformation process in the Group

ushered in by the TOGETHER – Strategy 2025 decisively forward. Integrity plays a key role for both challenges. But what exactly do we mean by integrity? And why exactly is it so vitally important for TOGETHER – Strategy 2025?

The answer is: because integrity is everyone’s business and affects us all. In all brands, regions,





and Group divisions. At all levels in our company. For both colleagues and customers all over the world. Board decisions taken in any company can have far-reaching consequences, and in the event they prove wrong, can pose a direct threat to the company's survival. Indirectly, though, the success and continued existence of a company also depend on whether its employees base their conduct and thus their actions on their own conviction of "right" and "wrong." And finally, a company will only endure if its customers remain convinced that the products are morally acceptable and beneficial to the wider community. If a company and its employees merely restrict themselves to pursuing their own agenda, that eventually takes its toll on customer benefit – one might even say on customer trust.

Internal and external control or sanctioning systems, an effective compliance management system, and easily comprehensible guidelines that employees are familiar with are important. Even more important, though, is our self-perception of our day-to-day actions. Ultimately, it is employees themselves who know whether they have given their very best, or whether they have acted according to their conscience. Integrity is much more than just a word. Integrity does not depend on hierarchy levels. Integrity brings corporate values to life, it makes trustful collaboration possible, and it enables our managers at all levels to answer for their decisions

with a clear conscience. Responsibility practiced at individual level becomes vibrant, long-term responsibility for the company, for colleagues, for the company's customers, and for society.

Clearly, integrity can also make daily business more complicated, given that it could require passing up potential opportunities for income and profit that may be legal, but are no longer legitimate. The voluntary commitment given by a company to forgo certain profit opportunities for ethical reasons expresses a basic attitude. Integrity therefore demands steadfastness. But employees will only demonstrate this quality if they feel they will not suffer any disadvantage by so doing. This is why the conduct of the Board of Management is so crucial. The Board's words – and above all, its actions – must convey that it respects, expects, and encourages integrity. Personnel selection and development must reflect this, too. Only then is there a real likelihood that decisions taken by the company's middle and lower management will be driven by integrity.

However, even that is no guarantee. In the mid-1960s, Ernst-Wolfgang Böckenförde, the prominent philosopher of law, wrote, "The liberal secular state lives on premises that it cannot itself guarantee." This dictum ultimately also holds true for companies, and has not lost its relevance to the present day. To use a word that has sadly gone out of fashion, companies today still depend on the quality of virtue in their employees – in the best sense of the word. And that is exactly what integrity means. Integrity imposes limits on business rationale, at least in the short and medium term. That is why our company's executive management has underscored the central role of integrity by firmly anchoring the mission to become a role model for the environment, safety, and integrity in the Volkswagen Group's TOGETHER – Strategy 2025.

One element of this mission is that our Group takes responsibility for the common good – in other words, that it assumes social responsibility. The crucial factor here is that this corporate social responsibility does not merely find expression in well-meaning but superficial gestures, but is practiced in harmony with our corporate strategy. Only then does CSR become credible

## **"Integrity brings corporate values to life."**

and effective, both internally and externally. And it should be noted that engaging for the common good may indeed also have a positive economic impact. I am firmly convinced that social and economic responsibility are not incompatible if they become a natural part of corporate culture. If a company's social engagement strengthens its reputation and makes it more attractive to customers, investors, and employees, as well as paving the way for new, forward-looking fields of business in an ecologically responsible society, then that is a welcome outcome, albeit not the sole purpose of social engagement.

There are occasions when it is difficult to make a distinction between the commercial and social motives behind the decision for or against a particular social project. In such instances, an outsider's perspective and advice can help. Volkswagen takes this very seriously and has already repeatedly sought advice from the highly competent international experts from politics, science, and research who make up the Sustainability Council.

An open attitude towards the opinions voiced by society, whether these are given by the Sustainability Council or the outcome of discussions with politicians and associations, can in fact encourage a company as a whole to act with integrity. A company's efforts will become even more credible in the eyes of the public if it is able to demonstrate transparency in the application of its principles, both internally and externally,



**“Young talents have greater freedom to base their choice of company on non-economic criteria.”**

and is even prepared to go against the short-term business rationale in specific instances.

And getting it right will also help us to succeed in the increasingly competitive recruitment markets. Where their skills are in demand, young talents have greater freedom to base their choice of company on non-economic criteria. For young people with a clear value system and a sense of social responsibility – in other words, who believe they act with integrity – one criterion for their choice of employer will be whether they perceive that company as advocating integrity and whether there is a high correlation between their personal values and those of the company. Unequivocal integrity therefore helps to secure tomorrow's manpower and business success. More generally, integrity helps a company to preserve its *raison d'être*, its “citizenship,” without which it could hardly exist in the long run, let alone flourish.

We believe that integrity helps to secure the future of a company. Volkswagen AG has recognized this and is acting accordingly. Compliance, culture, integrity – they form the basis for implementing our strategy and are thus the foundation of our corporate success.



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**MAGAZINE FOR THE 2017 FISCAL YEAR OF VOLKSWAGEN AKTIENGESELLSCHAFT**  
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**WE USED  
TO BE  
COMPET-  
ITORS.  
NOW, THE  
VOLKSWAGEN  
BRANDS WORK  
CLOSELY  
TOGETHER AS  
PARTNERS.**

Sven Bohnhorst  
Engineer and test driver,  
Bugatti, Molsheim



# Key Figures

FISCAL YEAR 2017

## VOLKSWAGEN GROUP

	2017	2016	%
<b>Volume Data<sup>1</sup> in thousands</b>			
Deliveries to customers (units)	10,741	10,297	+4.3
Vehicle sales (units)	10,777	10,391	+3.7
Production (units)	10,875	10,405	+4.5
Employees at Dec. 31	642.3	626.7	+2.5
<b>Financial Data (IFRSs), € million</b>			
Sales revenue	230,682	217,267	+6.2
Operating result before special items	17,041	14,623	+16.5
as a percentage of sales revenue	7.4	6.7	
Special items	-3,222	-7,520	-57.1
Operating result	13,818	7,103	+94.5
Operating return on sales (%)	6.0	3.3	
Earnings before tax	13,913	7,292	+90.8
Return on sales before tax (%)	6.0	3.4	
Earnings after tax	11,638	5,379	x
<b>Automotive Division<sup>2</sup></b>			
Total research and development costs	13,135	13,672	-3.9
R&D ratio (%)	6.7	7.3	
Cash flows from operating activities	11,686	20,271	-42.4
Cash flows from investing activities attributable to operating activities <sup>3</sup>	17,636	15,941	+10.6
of which: capex	12,631	12,795	-1.3
capex/sales revenue (%)	6.4	6.9	
Net cash flow	-5,950	4,330	x
Net liquidity at Dec. 31	22,378	27,180	-17.7
Return on investment (ROI) in %	12.1	8.2	
<b>Financial Services Division</b>			
Return on equity before tax <sup>4</sup> (%)	9.8	10.8	

## VOLKSWAGEN AG

	2017	2016	%
<b>Volume Data in thousands</b>			
Employees at Dec. 31	117.4	113.9	+3.1
<b>Financial Data (HGB), € million</b>			
Sales	76,729	75,310	+1.9
Net income for the fiscal year	4,353	2,799	+55.5
Dividends (€)			
per ordinary share	3.90	2.00	
per preferred share	3.96	2.06	

1 Volume data including the unconsolidated Chinese joint ventures. These companies are accounted for using the equity method. 2016 deliveries updated to reflect subsequent statistical trends.

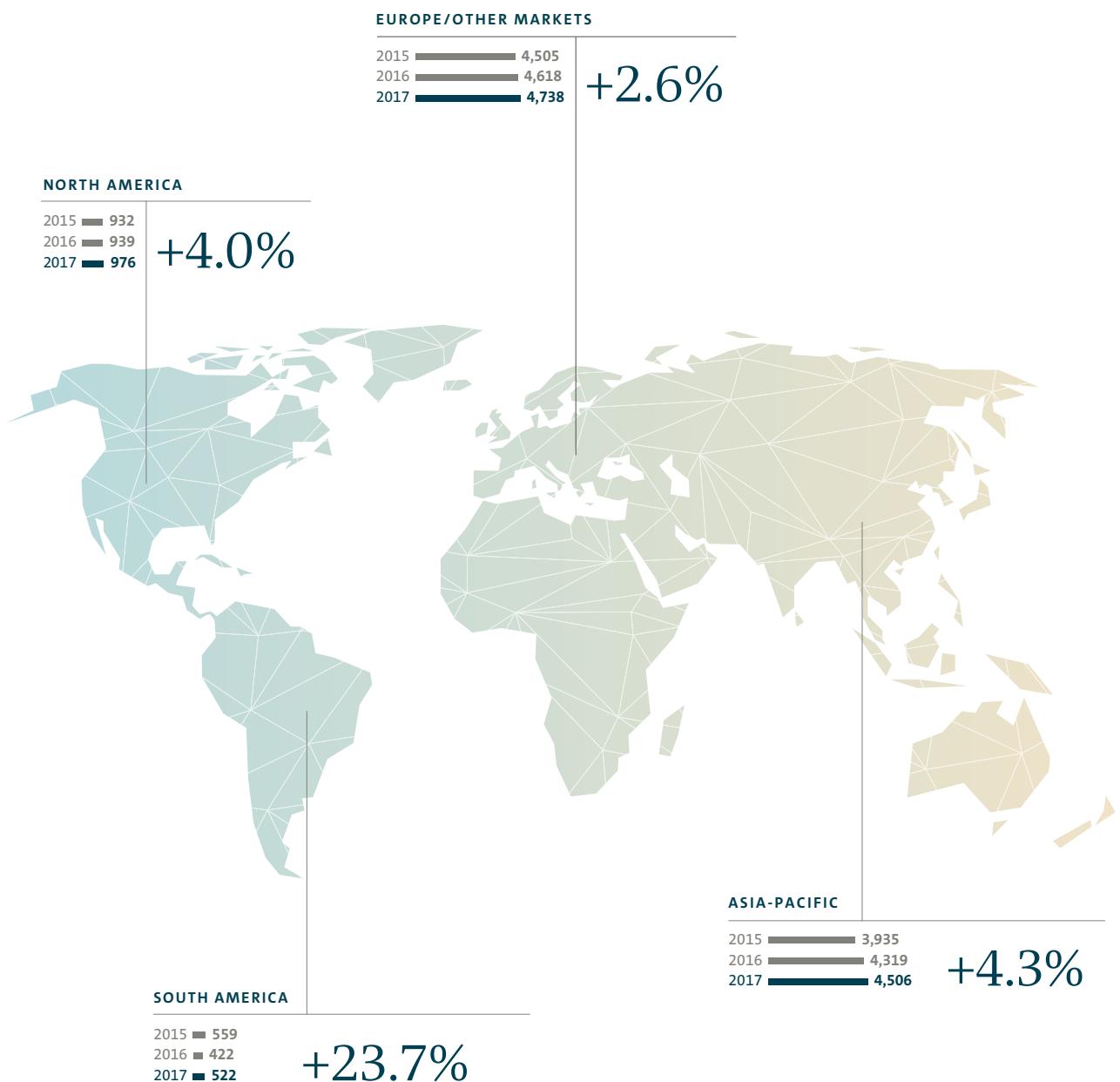
2 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

3 Excluding acquisition and disposal of equity investments: €17,512 (€18,224) million.

4 Earnings before tax as a percentage of average equity.

# Moving Globally

VOLKSWAGEN GROUP deliveries – in thousand units



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