VOLKSWAGEN

AKTIENGESELLSCHAFT

Mobility for generations to come.

ANNUAL REPORT 2019

Key Figures

VOLKSWAGEN GROUP

	2019	2018	%
Volume Data[1] in thousands			
Deliveries to customers (units)	10,975	10,834	+1.3
Vehicle sales (units)	10,956	10,900	+0.5
Production (units)	10,823	11,018	−1.8
Employees at Dec. 31	671.2	664.5	+1.0
Financial Data (IFRSs), € million			
Sales revenue	252,632	235,849	+7.1
Operating result before special items	19,296	17,104	+12.8
Operating return on sales before special items (%)	7.6	7.3	
Special items	−2,336	−3,184	−26.6
Operating result	16,960	13,920	+21.8
Operating return on sales (%)	6.7	5.9	
Earnings before tax	18,356	15,643	+17.3
Return on sales before tax (%)	7.3	6.6	
Earnings after tax	14,029	12,153	+15.4
Automotive Division[2]			
Total research and development costs	14,306	13,640	+4.9
R&D ratio (%)	6.7	6.8	
Cash flows from operating activities	30,733	18,531	+65.8
Cash flows from investing activities attributable to operating activities[3]	19,898	18,837	+5.6
of which: capex	14,007	13,218	+6.0
capex/sales revenue (%)	6.6	6.6	
Net cash flow	10,835	−306	x
Net liquidity at Dec. 31	21,276	19,368	+9.9
Return on investment (ROI) in %	11.2	11.0	
Financial Services Division			
Return on equity before tax[4] (%)	10.8	9.9	

VOLKSWAGEN AG

	2019	2018	%
Volume Data in thousands			
Employees at Dec. 31	119.2	119.4	−0.2
Financial Data (HGB), € million			
Sales	80,621	78,001	+3.4
Net income for the fiscal year	4,958	4,620	+7.3
Dividends (€)			
per ordinary share	6.50	4.80	
per preferred share	6.56	4.86	

1 Volume data including the unconsolidated Chinese joint ventures. These companies are accounted for using the equity method. Prior-year 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: €19,182 (18,242) million.
4 Earnings before tax as a percentage of average equity.

This version of the annual report is a translation of the German original. The German takes precedence. All figures shown in the report are rounded, so minor discrepancies may arise from addition of these amounts. The figures from the previous fiscal year are shown in parentheses directly after the figures for the current reporting period.
Specified vehicle ranges correspond to results obtained through the Worldwide Harmonized Light vehicles Test Procedure (WLTP) on the chassis dynamometer. WLTP value ranges for series-produced vehicles may vary depending on the equipment. The actual range will deviate in practice depending on various other factors.

VOLKSWAGEN
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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 17, 2020.

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To our Shareholders

TO OUR SHAREHOLDERS

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Letter to our Shareholders

Dear Shareholders,

The financial markets are a leading indicator of the far-reaching social and technological upheaval of our times. Sustainability and climate protection are rapidly gaining significance for investors around the world. At the same time, large technology companies are outstripping traditional industrial groups in terms of market capitalization, with valuations focusing on a company's potential rather than its asset base.

Volkswagen is the wisest choice for all those investors who consciously embrace a combination of the two: potential and assets. We have the resources of a strong industrial group and are making good use of these in our efforts to become a technology leader.

Making our core product – the car – the most important internet device of the future is our big opportunity. In a data-based economy, the car has considerable potential to create value. A modern Volkswagen model already boasts ten times more software than a smartphone. In just a few years, this will increase to a factor of 20 to 30. The fully connected car of the future will receive data for a growing number of new digital user applications. At the same time, it will transmit very valuable data about traffic density, air quality, hazardous situations and much more. This will open up new lines of business, which we intend to develop for ourselves.

We are the first automaker to establish a separate Board of Management position for software and to combine all of the Group's digital expertise in a single unit, the Car.Software organization, which started operating in 2019. The new organization brings together some 3,000 IT experts from the Group's interests and subsidiaries, and this number is expected to rise to more than 10,000 digital experts by 2025. They are developing "vw.os", a uniform proprietary operating system that will be installed in all Group vehicles in the future.

Volkswagen is also the first car manufacturer to commit to the targets of the Paris Agreement on climate change. By 2025 we aim to reduce CO_2 emissions in our fleet by 30 percent. We intend to become climate neutral by 2050, which is why we are working flat out to drive the evolution of the automobile toward electric mobility. Electric driving is the only viable alternative to combustion engines, large numbers of which can be produced at reasonable cost. Electric cars offer more utility for customers along with lower running costs and greater driving pleasure. Volkswagen has developed a proprietary platform exclusively for electric driving – the Modular Electric Drive Toolkit (MEB). The Volkswagen brand will bring out its first MEB models (the ID.3 and ID.4) in 2020 as part of its electric campaign. Last year, the Group brands Porsche and Audi successfully demonstrated with the Taycan and the e-tron that electric mobility is able to excite customers in the premium segment too. Experience gained in markets such as the Netherlands and Norway shows that when the infrastructure and the control system are right, customers will switch to electric cars. There can be no doubt that e-mobility will catch on. The question is when and where it will take off first.

Making our core product – the car – the most important internet device of the future is our big opportunity.

– Herbert Diess –

That the car has a bright future ahead of it is just as certain. Cars still fulfill the desire for individual mobility better than any other means of transport. For millions of people, especially in emerging societies, their first car represents a longed for promise of freedom and a symbol of prosperity. Last but not least, cars are losing their negative qualities: they are becoming cleaner, safer, quieter and fully connected.

This is precisely what the Volkswagen Group and its brands work on every day. For this we are mobilizing massive financial resources. In the next five years alone, €60 billion will be invested in topics of future relevance, €33 billion of which has been earmarked for e-mobility and over €14 billion for digitalization.

What is special about Volkswagen is that we have the strength to finance the green and digital transformation from our own resources. We will safeguard the investments in our new technologies through our successful business with our existing technologies. We will maintain this high level especially in the transformation phase. Customers can choose from highly efficient combustion engines, hybrids and completely battery-electric drives. From the ŠKODA Kamiq to the Bentley Bentayga Hybrid, we have attractive and fascinating new models across all segments that impress customers worldwide. Another special highlight for us last year was the launch of the eighth generation of the Volkswagen Golf.

2019 was an extremely successful year for our Group. Despite considerable economic uncertainty, our brands performed exceedingly well around the world. In China, we lifted our market share in a declining market. In South America, we returned to profitability for the first time in many years. Business in Russia is also profitable and continues to pick up speed. And in North America we significantly improved our earnings.

A strategic milestone in 2019 was the IPO of TRATON. With this move, Volkswagen demonstrated that we are in a position to systematically review our portfolio and take decisive action. This includes divesting ourselves of sections of our company to focus more squarely on our core automotive business.

We are also improving the quality of our business. Sales Revenue and profit grew faster than unit sales. Sales Revenue rose to €252.6 billion. Operating profit climbed to €17.0 billion, and before special items to €19.3 billion. At 7.6%, the operating return on sales before special items was slightly above the forecast range. Net cash flow was significantly higher than in 2018 at €10.8 billion. We intend to maintain this course of qualitative growth, which is why we are aligning our business even more closely with our financial core performance indicators.

2019 would not have been so successful without the huge commitment of our 670,000 employees, whom I would like to thank very warmly. This success would also not have been possible without you, our shareholders. Of course you will also benefit from this success. The Board of Management and Supervisory Board are therefore proposing a significant increase in the dividend to €6.50 per ordinary share and €6.56 per preferred share.

In 2020, the main priority will be complying with the new CO_2 fleet limits in the European Union while maintaining the same level of profitability. We will leverage the synergies within the Group much more consistently. By further optimizing our overall brand strategy, we will ensure that the Group as a whole can exploit the profit potential of the market even more efficiently. Further productivity gains are also needed. Cost-cutting programs are underway in all brands. There is considerable potential at the German sites in particular.

There is much to be done. Our industry is changing radically, with us in the driving seat. Volkswagen is on course to become a climate-neutral technology group. I look forward to your continued support on this journey.

Sincerely,

Herbert Diess

The Board of Management

of Volkswagen Aktiengesellschaft

Dr.-Ing. Herbert Diess
Chairman of the Board of Management of Volkswagen Aktiengesellschaft and Chairman of the Brand Board of Management of Volkswagen Passenger Cars,
Volume brand group,
China

Hiltrud Dorothea Werner
Integrity & Legal Affairs

Andreas Renschler
Chairman of the Board of Management of TRATON SE,
Truck & Bus brand group

Gunnar Kilian
Human Resources

Oliver Blume
Chairman of the Board of Management of Dr. Ing. h.c. F. Porsche AG, Sport & Luxury brand group

Frank Witter
Finance & IT

Bram Schot
Chairman of the Board of Management of AUDI AG, Premium brand group

Dr.-Ing. Stefan Sommer
Components & Procurement

Report of the Supervisory Board

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

Ladies and gentlemen,

In fiscal year 2019, the work of the Supervisory Board of Volkswagen AG and its committees focused on the Volkswagen Group's strategic direction. The Supervisory Board regularly deliberated on the Company's position and development 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. Additionally, we discussed strategic considerations with the Board of Management at regular intervals.

The Board of Management complied with its disclosure obligations and provided us with information as promptly and comprehensively as possible both in writing and in person, particularly on all matters of relevance to the Company relating to its strategy, 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 the Supervisory Board of further improvements to the risk and compliance management system. In addition, the Supervisory Board received information about compliance and other topical issues by the Board of Management on an ongoing basis. 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 deviations in performance from the plans and targets previously drawn up were explained in detail by the Board of Management, either in person or in writing. Together with the Board of Management we analyzed the reasons for the deviations so as to enable countermeasures to be derived. At the meetings of the Special Committee on Diesel Engines, the Board of Management presented regular reports on current developments in connection with the diesel issue.

In addition, 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 efforts to address the diesel issue, these included the Volkswagen Group's strategy and planning, its business development, and the risk situation and risk management, including integrity and compliance issues in the Volkswagen Group.

The Supervisory Board held a total of 8 meetings in fiscal year 2019. The average attendance rate was 94.3%. In addition, resolutions on particularly urgent matters were adopted in writing or using electronic communications media. 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.

COMMITTEE ACTIVITIES

In order to discharge the duties entrusted to it, the Supervisory Board has established five committees: the Executive Committee, the Nomination Committee, the Mediation Committee established 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 shareholder representatives on the Executive Committee make up the Nomination 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, 2019 are given on page 91 of this annual report.

The Executive Committee met 14 times in the reporting period. At its meetings, the Executive Committee prepared the resolutions of the Supervisory Board in detail, dealt with the composition of the Board of Management and took decisions on, among other things, contractual issues concerning the Board of Management other than remuneration and on consenting to ancillary activities by members of the Board of Management.

The Nomination Committee is responsible for proposing suitable candidates for the Supervisory Board to recommend for election to the Annual General Meeting. This committee met on one occasion in 2019.

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

The Audit Committee held six meetings in the past fiscal year. It focused on the annual and consolidated financial statements, the risk management system including the effectiveness of the internal control system and the internal audit system, and the work performed by the Company's Compliance organization. In addition, the Audit Committee concerned itself with the Volkswagen 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.

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. This Special Committee 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 2019, the Special Committee on Diesel Engines met on two occasions to discuss, among other things, reports from the Board of Management on the state of affairs with respect to the diesel issue and the administrative fine proceedings conducted against Dr. Ing. h.c. F. Porsche AG that was ended by the administrative fine imposed by the Stuttgart Public Prosecutor.

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

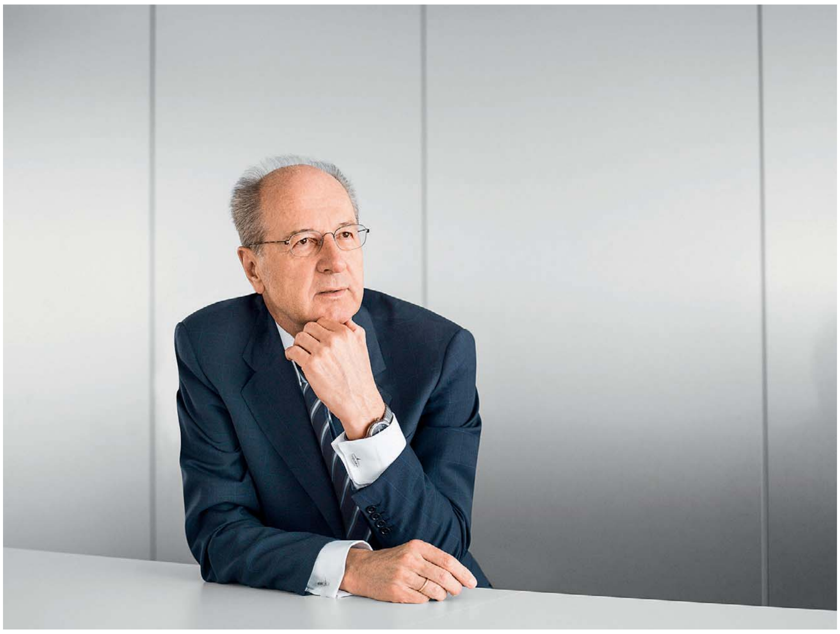
In connection with their seat on the Supervisory Board, members of the Supervisory Board receive support from the Company upon induction as well as with respect to education and training; the Company particularly supports the organization of seminars and bears the costs thereof. Supervisory Board members appointed for the first time are also provided with a detailed introduction to topics that apply specifically to the Supervisory Board of Volkswagen AG.

TOPICS DISCUSSED BY THE SUPERVISORY BOARD

The first Supervisory Board meeting of the reporting year took place on January 11, 2019. At this meeting, we focused on the IPO of TRATON SE (then TRATON AG).

The Supervisory Board next met on February 22, 2019. Following a detailed examination, we approved the consolidated financial statements and the annual financial statements of Volkswagen AG for 2018 prepared by the Board of Management. We examined the combined management report, the combined separate nonfinancial report for 2018 and the Report by the Board of Management on Relationships of Volkswagen AG with Affiliated Companies in accordance with section 312 of the AktG (dependent company report). Upon completion of our examination of the dependent company report, we came to the conclusion that there were no objections to be raised to the concluding declaration by the Board of Management in the dependent company report. Other agenda items included the current state of affairs with respect to the diesel issue, financing measures at the Volkswagen Group and the agenda for the 59th Annual General Meeting of Volkswagen AG, particularly the Supervisory Board's proposed resolutions.

At the Supervisory Board meeting on April 23, 2019, we largely discussed strategic issues relating to the Group.



Hans Dieter Pötsch

The Supervisory Board held another meeting on May 13, 2019. Alongside preparations for the 59th Annual General Meeting of Volkswagen AG on May 14, 2019, the agenda included, among others, the IPO of TRATON SE, the current state of affairs with respect to the diesel issue and monitor's report. We also discussed with the Board of Management factors affecting the decision to build a new production site.

The Supervisory Board meeting on July 11, 2019 centered on fundamental decisions concerning the construction of a new production site and the planned cooperation with Ford.

On September 25, 2019, two meetings took place: In the first meeting, the Supervisory Board discussed the indictments by the public prosecutor's office in Braunschweig against the former chairman of the Volkswagen AG Board of Management Prof. Dr. Martin Winterkorn, the Chairman of the Supervisory Board Mr. Hans Dieter Pötsch and the Chairman of the Board of Management Dr. Herbert Diess, which concerned alleged market manipulation. It was decided unanimously that Dr. Diess and Mr. Pötsch should continue in post. The main topics of the day's second meeting were the creation of a software organization, the agreement of a syndicated line of credit and the current state of affairs with respect to the diesel issue.

At the Supervisory Board meeting on November 15, 2019, we discussed in detail the Volkswagen Group's investment and financial planning for the period from 2020 to 2024. The meeting also focused on changes in the composition of the Board of Management and the creation of a software organization. We also submitted the annual declaration of conformity with the Code together with the Board of Management.

In the reporting period, we voted in writing on matters such as a cooperation with Northvolt AB concerning the building of a battery cell factory.

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. In particular, Mr. Pötsch did not attend the meeting of the Executive Committee on September 24, 2019, and the meeting of the Supervisory Board on September 25, 2019, in which the Executive Committee and the Supervisory Board addressed the indictments by the public prosecutor's office in Braunschweig against the former chairman of the Volkswagen AG Board of Management Prof. Dr. Martin Winterkorn, the Chairman of the Supervisory Board Mr. Pötsch and the Chairman of the Board of Management Dr. Herbert Diess, which concerned alleged market manipulation. Moreover, Mr. Pötsch did not participate in the Supervisory Board's deliberations and decisions insofar as his personal interests were concerned, for example in connection with the reimbursement of his expenses as Chairman of the Supervisory Board.

Starting in autumn 2016, the public prosecutor's office in Braunschweig launched criminal investigations against a number of individuals based on the provisions of the Betriebsverfassungsgesetz (BetrVG – German Works Constitution Act) relating to possibly excessive remuneration granted to the Chairman of the General and Group Works Councils of Volkswagen AG, Mr. Bernd Osterloh, and other works council members. In order to avoid conceivable conflicts of interest, Mr. Osterloh always left the meeting room prior to discussions and resolutions adopted by the Supervisory Board that relate to possibly excessive remuneration granted to him, based on the provisions of the German Works Constitution Act.

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

The following table shows the number of meetings of the Board and the committees as well as the individual participation of the members of the Supervisory Board in 2019:

	Meetings of the full Supervisory Board	Meetings of the Committees
Hans Dieter Pötsch	7 out of 8	13 out of 15
Jörg Hofmann	6 out of 8	12 out of 14
Dr. Hussain Ali Al Abdulla	5 out of 8	–
Dr. Hessa Sultan Al Jaber	8 out of 8	–
Dr. Bernd Althusmann	8 out of 8	2 out of 2
Birgit Dietze (until May 31, 2019)	3 out of 4	2 out of 2
Dr. Hans-Peter Fischer	8 out of 8	–
Marianne Heiß	8 out of 8	5 out of 6
Uwe Hück (until February 8, 2019)	1 out of 1	–
Johan Järvklo	8 out of 8	–
Ulrike Jakob	7 out of 8	–
Dr. Louise Kiesling	8 out of 8	–
Peter Mosch	8 out of 8	15 out of 16
Bertina Murkovic	8 out of 8	2 out of 2
Bernd Osterloh	8 out of 8	22 out of 22
Dr. Hans Michel Piëch	8 out of 8	–
Dr. Ferdinand Oliver Porsche	8 out of 8	8 out of 8
Dr. Wolfgang Porsche	8 out of 8	15 out of 17
Conny Schönhardt (since June 21, 2019)	4 out of 4	3 out of 4
Athanasios Stimoniaris	8 out of 8	–
Stephan Weil	7 out of 8	13 out of 15
Werner Weresch (since February 21, 2019)	7 out of 7	–

CORPORATE GOVERNANCE AND DECLARATION OF CONFORMITY

The Supervisory Board meeting on Friday, November 15, 2019 focused on the implementation of the recommendations and suggestions of the Code in the Volkswagen Group. We discussed in detail the currently applicable version of the Code dated February 7, 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. In addition, we addressed the recommenddations in the draft amendment of the Code, which was published by the government commission on May 9, 2019, as well as measures pertaining to the implementation thereof.

The joint declarations of conformity by the Board of Management and the Supervisory Board are permanently available at www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html. Additional information on the implementation of the recommendations and suggestions of the Code can be found in the corporate governance report starting on page 60 and in the notes to the consolidated financial statements on page 334 of this annual report.

MEMBERS OF THE SUPERVISORY BOARD AND BOARD OF MANAGEMENT

Effective February 8, 2019, Mr. Uwe Hück stepped down as a member of the Volkswagen AG Supervisory Board. At the request of the Chairman of the Supervisory Board and in accordance with section 104 of the AktG, the Braunschweig Registry Court appointed Mr. Werner Weresch to succeed him as a member of the Volkswagen AG Supervisory Board with effect from February 21, 2019.

The terms of office of Dr. Hessa Sultan Al Jaber, Dr. Hans Michel Piëch and Dr. Ferdinand Oliver Porsche on the Supervisory Board of Volkswagen AG duly ended at the close of the 59th Annual General Meeting. On May 14, 2019, the Annual General Meeting re-elected all three for a further full term of office on the Supervisory Board.

Effective May 31, 2019, Ms. Birgit Dietze stepped down as a member of the Supervisory Board of Volkswagen AG. At the request of the Chairman of the Supervisory Board and in accordance with section 104 of the AktG, the Braunschweig Registry Court appointed Ms. Conny Schönhardt, Union Secretary to the board of IG Metall, to succeed her as a member of the Volkswagen AG Supervisory Board with effect from June 21, 2019. On July 11, 2019, the Supervisory Board elected Ms. Schönhardt as a member of the Audit Committee.

Prof. Jochem Heizmann retired from the Board of Management of Volkswagen AG with effect from January 10, 2019 under a retirement program. His Board responsibility for the China division was transferred to Dr. Herbert Diess with effect from January 11, 2019.

Mr. Abraham Schot will step down from the Board of Management of Volkswagen AG by mutual agreement with effect from March 31, 2020. On November 15, 2019, the Supervisory Board appointed Mr. Markus Duesmann to succeed Mr. Schot as a member of the Board of Management with effect from April 1, 2020. Mr. Duesmann will especially be responsible for the Premium brand group and for the Group Research and Development division on the Board of Management of Volkswagen AG. Dr. Herbert Diess will take over the Group Sales division with effect from April 1, 2020.

Our sincere thanks go to all of the departing members of the Supervisory Board and the Board of Management for their work.

On August 25, 2019, the long-time Chairman of the Board of Management and Supervisory Board of Volkswagen AG, Prof. Dr. Ferdinand K. Piëch, died at the age of 82. During his career, Prof. Dr. Piëch was instrumental in the development of the automobile and of the automotive industry, and especially in the growth of Volkswagen to become a global mobility group. The Company and everyone who works for it have enormous gratitude and respect for his services. We will always remember him and his life's work.

On January 3, 2020, Dr. Werner P. Schmidt, former member of the Volkswagen AG Board of Management, died at the age of 87. Dr. Schmidt belonged to the Board of Management from 1975 to 1994 and demonstrated tireless commitment throughout this period, during which he made an important contribution to shaping our company. We will fondly remember his accomplishments.

AUDIT OF THE ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS

In line with our proposal, the Annual General Meeting of Volkswagen AG on May 14, 2019 elected PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft (PwC) as auditors for fiscal year 2019. 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 to conduct an external content-related audit of the combined separate nonfinancial report for 2019.

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 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, 2019 (dependent company report) submitted by the Board of Management was also audited 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.”

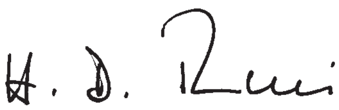
The members of the Audit Committee and the members of the Supervisory Board were provided with the documenttation relating to the annual and consolidated financial statements, including the dependent company report, the documentation relating to the combined management report, and also the audit reports prepared by the auditors and the report from PwC on the external content-related audit of the combined separate nonfinancial report for 2019 in good time for their meetings on February 27 and February 28, 2020 respectively. 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 and the combined separate nonfinancial report for 2019, and reported on these at the Supervisory Board meeting on February 28, 2020. Following this, the Audit Committee recommended that the Supervisory Board approve the annual and consolidated 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 the documents 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 combined management report corresponds to the assessment by the Supervisory Board.

We therefore concurred with the auditors’ findings and approved the annual financial statements and the consolidated financial statements prepared by the Board of Management at our meeting on February 28, 2020, which the auditors also attended for the agenda items relating to the annual and consolidated financial statements, the dependent company report and the combined management report. The annual financial statements are thus adopted. Upon completion of our examination of the dependent company report, there are no objections to be raised to the concluding declaration by the Board of Management in the dependent company report. 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 2019 to attain limited assurance and issued an unqualified report. At our meeting on February 28, 2020, PwC also took part in the discussions on the agenda items relating to the combined separate nonfinancial report for 2019. Upon completion of its own independent examination of the combined separate nonfinancial report for 2019, the Supervisory Board did not have any objections.

We would like to express our thanks and particular appreciation to the Board of Management, the Works Council, the management teams and all the employees of Volkswagen AG and its affiliated companies for their work in 2019. With their immense personal commitment, great loyalty and readiness to support the changes that have been introduced, they have all made a decisive contribution in helping to make 2019 a successful year for the Volkswagen Group in spite of the many challenges presented.

Wolfsburg, February 28, 2020



Hans Dieter Pötsch
Chairman of the Supervisory Board

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Divisions

DIVISIONS

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26 Audi
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30 SEAT
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42 MAN
44 Volkswagen Group China
46 Volkswagen Financial Services

Brands and Business Fields

The Volkswagen Group increased unit sales, sales revenue and profit in fiscal year 2019 amid a persistently challenging market environment. The diesel issue resulted in special items that had an adverse effect on 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. Activities of the Automotive Division comprise in particular the development of vehicles and engines, the production and sale of passenger cars, light commercial vehicles, trucks, buses and motorcycles, as well as genuine parts, large-bore diesel engines, turbomachinery, special gear units, propulsion components and testing systems businesses. Mobility solutions are gradually being added to the range. The Ducati brand is allocated to the Audi brand and thus to the Passenger Cars Business Area. The activities of the Financial Services Division comprise dealer and customer financing, vehicle leasing, direct banking and insurance activities, fleet management and mobility offerings.

VOLKSWAGEN GROUP REPORTING STRUCTURE

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

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 vehicle brand 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.

KEY FIGURES BY MARKET

The Volkswagen Group generated an operating profit before special items of €19.3 (17.1) billion in fiscal year 2019. Special items which resulted from the diesel issue weighed on the operating profit in the amount of €–2.3 (–3.2) billion.

Unit sales by the Volkswagen Group rose to 11.0 (10.9) million vehicles in 2019 – a new record despite a challenging and highly competitive market environment. Sales revenue rose by 7.1% to €252.6 billion.

At 4.9 million vehicles, unit sales in the Europe/Other markets region were up 2.5% compared with the previous year. Sales revenue increased to €154.0 (143.1) billion due to volume and mix effects.

In North America, we increased unit sales by 3.4% to 1.0 million vehicles. Sales revenue amounted to €43.4 (37.7) billion, primarily due to the increase in volumes as well as positive exchange rate effects.

In the markets of the South America region, we sold 0.6 million vehicles in the reporting year. This was 1.9% more than in the previous year. Despite unfavorable exchange rate trends, sales revenue improved by 8.6% to €11.3 billion due to positive mix effects.

In the Asia-Pacific region, the Volkswagen Group's unit sales – including those of the Chinese joint ventures – amounted to a total of 4.5 (4.6) million vehicles. At €44.0 (43.2) billion, sales revenue exceeded the prior-year level thanks to the improved mix and positive exchange rate effects. This figure does not include the sales revenue of our equity-accounted Chinese joint ventures.

Hedging transactions relating to sales revenue in foreign currency increased the sales revenue of the Volkswagen Group by €11 million in the reporting year. In the previous year, they increased sales revenue by €1.5 billion.

KEY FIGURES BY BRAND AND BUSINESS FIELD

Thousand vehicles/€ million	VEHICLE SALES		SALES REVENUE		OPERATING RESULT	
	2019	2018	2019	2018	2019	2018
Volkswagen Passenger Cars	3,677	3,715	88,407	84,585	3,785	3,239
Audi[1]	1,200	1,467	55,680	59,248	4,509	4,705
ŠKODA[1]	1,062	957	19,806	17,293	1,660	1,377
SEAT	667	608	11,496	10,202	445	254
Bentley	12	10	2,092	1,548	65	–288
Porsche Automotive[2]	277	253	26,060	23,668	4,210	4,110
Volkswagen Commercial Vehicles	456	469	11,473	11,875	510	780
Scania Vehicles and Services[3]	101	97	13,934	12,981	1,506	1,207
MAN Commercial Vehicles	143	137	12,663	12,104	402	332
Power Engineering	–	–	3,997	3,608	159	193
VW China[4]	4,048	4,101	–	–	–	–
Other[5]	–685	–912	–30,931	–34,029	–917	–1,418
Volkswagen Financial Services	–	–	37,957	32,764	2,960	2,612
Volkswagen Group before special items	**–**	**–**	**–**	**–**	**19,296**	**17,104**
Special items	–	–	–	–	–2,336	–3,184
Volkswagen Group	**10,956**	**10,900**	**252,632**	**235,849**	**16,960**	**13,920**
Automotive Division[6]	10,956	10,900	212,473	201,067	13,748	11,127
of which: Passenger Cars Business Area[7]	10,713	10,666	182,031	172,678	12,188	10,000
Commercial Vehicles Business Area[7]	243	234	26,444	24,781	1,653	1,191
Power Engineering Business Area	–	–	3,997	3,608	–93	–64
Financial Services Division	–	–	40,160	34,782	3,212	2,793

1 2019 in line with the reallocation of companies; the prior-year figures have not been adjusted.
2 Porsche (including Financial Services): sales revenue €28,518 (25,784) million, operating profit before special items €4,396 (4,291) million.
3 Scania (including Financial Services): sales revenue €14,391 (13,360) million, operating profit €1,648 (1,346) million.
4 The sales revenues 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 €4,425 (4,627) million.
5 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, as well as companies not allocated to the brands.
6 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.
7 The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

KEY FIGURES BY MARKET

Thousand vehicles/€ million	VEHICLE SALES		SALES REVENUE	
	2019	2018	2019	2018
Europe/Other markets	4,856	4,739	153,999	143,089
North America	956	925	43,351	37,656
South America	607	596	11,297	10,405
Asia-Pacific[1]	4,538	4,640	43,974	43,166
Hedges on sales revenue	–	–	11	1,535
Volkswagen Group[1]	**10,956**	**10,900**	**252,632**	**235,849**

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

Volkswagen Passenger Cars enters a new era and presents a more modern, more human and more authentic image. The eighth generation of the Golf launches and the all-electric ID.3 celebrates its world premiere.

BUSINESS DEVELOPMENT

The Volkswagen Passenger Cars brand aims to move you. 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.

At the International Motor Show (IAA) in Frankfurt, the Volkswagen Passenger Cars brand unveiled its new brand design which creates a new global brand experience. This focuses on the new logo, which has a flat two-dimensional design and is reduced to its essential elements for more flexible use in digital applications. With its new brand design, Volkswagen is presenting itself as more modern, more human and more authentic. This marks the start of a new era for Volkswagen, the product aspect of which is represented by the all-electric ID.3. As the first model in the ID. product line, this highly efficient and fully connected zero emissions car is based on the Modular Electric Drive Toolkit (MEB) and will be on the road from 2020. Volkswagen announced in 2019 that it wants also make its MEB available for other manufacturers. The lifestyle-oriented T-Roc Cabriolet expanded this popular crossover model range in the reporting year. For more than four decades, the Golf has been the most successful European car. The eighth generation of the bestseller launched at the end of the reporting year: digitalized, connected and intuitive to operate. No fewer than five hybrid versions are electrifying the compact class. Assisted driving is available up to a speed of 210 km/h.

The Volkswagen Passenger Cars brand delivered 6.3 million (+0.5%) vehicles worldwide in fiscal year 2019. Delivery figures were up in Italy (+8.7%), France (+6.8%), Germany (+5.3%), the USA (+2.6%) and Brazil (+16.7%). The T-Cross, T-Roc, Tiguan, Touareg and Atlas models were particularly popular.

The Volkswagen Passenger Cars brand sold 3.7 (3.7) million vehicles in the reporting year. 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 the companies in the Volkswagen Passenger Cars brand.

The Volkswagen Passenger Cars brand produced 6.2 (6.3) million vehicles worldwide in 2019. At the Wolfsburg plant, the five millionth Tiguan rolled off the assembly line. In Emden, the thirty millionth Passat was manufactured; this makes it the Group's most-produced mid-range model.

SALES REVENUE AND EARNINGS

At €88.4 billion, the Volkswagen Passenger Cars brand's sales revenue in 2019 was 4.5% higher than in the previous year. Operating profit before special items increased to €3.8 (3.2) billion. Particularly improvements in the mix and price positioning compensated for lower sales of the models from Volkswagen Passenger Cars and for launch costs and negative exchange rate effects. The operating return on sales before special items increased to 4.3 (3.8)%. The diesel issue gave rise to special items of €–1.9 (–1.9) billion.

30 million

Passats manufactured

PRODUCTION

Units	2019	2018
Tiguan	910,926	861,331
Polo/Virtus	706,052	855,179
Golf	679,351	805,752
Jetta/Sagitar	610,327	770,447
Passat/Magotan	543,706	656,249
Lavida	514,698	513,556
Bora	345,077	269,390
T-Roc	328,069	236,977
T-Cross	274,071	–
Santana	244,132	272,080
Atlas/Teramont	183,648	166,034
Gol	151,241	156,410
Tharu	136,899	26,986
up!	108,676	136,512
Lamando	92,903	141,076
Touran	90,366	130,417
Saveiro	54,941	59,233
Touareg	52,859	40,387
Arteon/CC	51,868	49,735
Fox	43,675	40,596
Sharan	25,681	30,459
Beetle	20,580	37,846
Phideon	13,750	24,102
Suran	600	16,356
ID.3	50	–
	6,184,146	**6,297,110**

VOLKSWAGEN PASSENGER CARS BRAND

	2019	2018	%
Deliveries (thousand units)	6,278	6,245	+0.5
Vehicle sales	3,677	3,715	–1.0
Production	6,184	6,297	–1.8
Sales revenue (€ million)	88,407	84,585	+4.5
Operating result before special items	3,785	3,239	+16.9
Operating return on sales (%)	4.3	3.8	

T-Cross

DELIVERIES BY MARKET

in percent

Europe/Other markets 30.4 %
North America 9.0 %
South America 7.8 %
Asia-Pacific 52.7 %

FURTHER INFORMATION www.volkswagen.com

Audi

Audi is following its strategic focus and consistently pursuing sustainable premium mobility. The electric-powered e-tron is the highlight of the 2019 product offensive.

BUSINESS DEVELOPMENT

"Vorsprung" is Audi's active brand promise that is delivered throughout the world and that is currently being redefined by the brand with the four rings, as it moves away from the narrow focus on technical feasibility and towards a new approach, where the customer is at the center. In 2019, Audi expanded its vehicle range and celebrated over 20 market launches. The highlight of the year was the market introduction of the Audi e-tron. The all-electric SUV was rolled out in Europe, China and the USA. The vehicle stands out with a high-quality interior and is packed with technological highlights. The all-electric Q2L e-tron debuted on the Chinese market. With concept vehicles such as the e-tron GT concept, Q4 e-tron concept, AI:TRAIL, AI:ME and others, Audi showcased further potential in e-mobility and artificial intelligence. By 2025, Audi plans to bring more than 30 electrified models to market, including 20 with pure electric drive. Audi is thereby following its strategic focus and consistently pursuing sustainable premium mobility. Alongside the electrified models, the vehicles Audi presented in 2019 included the fourth generation of the bestselling A6 and the dynamic RS 7 Sportback.

The difficult market environment and the WLTP test procedure posed challenges for Audi particularly in the first half of 2019. Nevertheless, the Audi brand delivered a total of 1.9 million vehicles to customers (+1.8%). Deliveries rose especially in Western Europe (+4.0%) and China (+4.1%).

Audi sold 1.2 (1.5) million vehicles in the reporting year. Unit sales by the Chinese joint venture FAW-Volkswagen amounted to a further 620 (620) thousand Audi vehicles. The Q2, e-tron and Q8 models were in especially high demand. Unit sales at Automobili Lamborghini S.p.A. amounted to 8,290 (6,333) vehicles. The increase was mainly due to high demand for the Urus.

In the reporting year, Audi produced 1.8 (1.9) million units worldwide. Lamborghini manufactured a total of 8,664 (6,571) vehicles in 2019.

SALES REVENUE AND EARNINGS

As of 2019, the multibrand sales companies have been separated from the Audi brand and are reported in the Other category to increase overall transparency and comparability. As a result, the Audi brand's sales revenue declined to €55.7 (59.2) billion in fiscal year 2019. The operating result (previous year's figure excludes special items) stood at €4.5 (4.7) billion. Mix and product cost improvements offset negative effects from model start-ups and phase-outs, higher upfront expenditure for new products and technologies, an unfavorable exchange rate trend and personnel cost increases. The operating return on sales (previous year's figure excludes special items) was 8.1 (7.9)%. The financial key performance indicators for the Lamborghini and Ducati brands are included in the financial figures for the Audi brand.

1.9 million

Vehicles delivered in 2019

PRODUCTION

Units	2019	2018
Audi		
A4	323,387	344,623
Q5	286,365	298,645
A3	240,795	304,903
A6	232,569	254,705
Q3	195,566	167,707
Q2	130,225	108,386
A5	93,077	111,544
A1	81,287	80,387
Q7	63,633	110,593
Q8	44,727	22,414
e-tron	43,376	2,425
A8	23,826	24,541
A7	17,068	20,058
TT	14,999	12,118
R8	2,121	1,764
	1,793,021	**1,864,813**
Lamborghini		
Urus	5,233	2,565
Huracán Coupé	1,495	1,669
Huracán Spyder	931	1,121
Aventador Coupé	786	578
Aventador Roadster	219	638
	8,664	**6,571**
Audi brand	**1,801,685**	**1,871,384**
Ducati, motorcycles	51,723	53,320

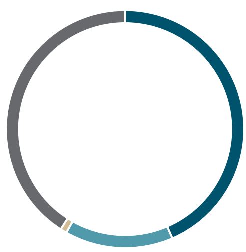
AUDI BRAND

	2019	2018	%
Deliveries (thousand units)	1,854	1,818	+2.0
Audi	1,846	1,812	+1.8
Lamborghini	8	6	+42.7
Vehicle sales	1,200	1,467	–18.2
Production	1,802	1,871	–3.7
Sales revenue (€ million)	55,680	59,248	–6.0
Operating result before special items	4,509	4,705	–4.2
Operating return on sales (%)	8.1	7.9	

e-tron

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.audi.com

ŠKODA presented new vehicles with alternative drives in 2019, including the G-Tec CNG models. With the Citigo^{e} iV, the first all-electric production model, ŠKODA is entering the era of e-mobility.

BUSINESS DEVELOPMENT

The ŠKODA models are synonymous with smart understatement, featuring a superior spacious interior, the highest standards of functionality, excellent value for money and a distinct design. Added to that are a number of “Simply Clever” ideas and new digital services, all aimed at making customers’ lives easier. ŠKODA presented the CNG-powered Scala G-Tec and Kamiq G-Tec in 2019, expanding the range of particularly environmentally conscious and efficient natural gas models. ŠKODA also presented the successor to the successful Octavia, and the Kamiq city SUV for the European market. In addition, ŠKODA entered the era of e-mobility in 2019. For the future, ŠKODA is combining the establishment of its electric product family and an integrated networked ecosystem for mobility solutions under the iV sub-brand. The ŠKODA Citigo^{e} iV is the Czech brand’s first all-electric vehicle. Another electric car also celebrated its debut in 2019: the Superb^{e} iV is ŠKODA’S first production model with plug-in hybrid drive. ŠKODA gave a foretaste of this in the reporting year with the presentation of the all-electric Vision iV concept study. With a sporty, emotive design, this is the first vehicle from ŠKODA to be based on the Modular Electric Drive Toolkit (MEB).

The ŠKODA brand delivered 1.2 (1.3) million vehicles worldwide in 2019. China remained the largest individual market. However, deliveries there fell by 17.3%. Meanwhile, in Western Europe (+7.0%) and in Central and Eastern Europe (+4.1%), an increase in deliveries was achieved.

ŠKODA sold 1.1 (1.0) million vehicles in the reporting period. The gain was due particularly to the initial consolidation following the assumption of regional responsibility for India. The Karoq and Kodiaq models were in particularly high demand. 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.

The ŠKODA brand produced 1.2 (1.3) million vehicles worldwide in 2019. The 22 millionth vehicle rolled off the assembly line in mid-April 2019. It was produced by the SAIC VOLKSWAGEN joint venture’s plant in Changsha.

SALES REVENUE AND EARNINGS

Sales revenue at the ŠKODA brand increased by 14.5% in 2019 to €19.8 billion, particularly due to initial consolidation following the assumption of regional responsibility for India. The operating profit improved by €0.3 billion to €1.7 billion in the reporting period. Volume increases, mix optimizations and pricing measures more than compensated for negative effects resulting from cost increases and higher upfront expenditure for new products. The operating return on sales stood at 8.4%, compared to 8.0% in the previous year.

22 million

Vehicles produced by the ŠKODA brand

PRODUCTION

Units	2019	2018
Octavia	358,356	400,210
Rapid/Scala	207,724	195,270
Karoq/Kamiq/Yeti	203,688	173,816
Kodiaq	177,163	155,499
Fabia	166,237	186,213
Superb	102,592	136,985
Citigo	27,306	37,095
	1,243,066	**1,285,088**

ŠKODA BRAND

	2019	2018	%
Deliveries (thousand units)	1,243	1,254	–0.9
Vehicle sales	1,062	957	+11.0
Production	1,243	1,285	–3.3
Sales revenue (€ million)	19,806	17,293	+14.5
Operating result	1,660	1,377	+20.6
Operating return on sales (%)	8.4	8.0	

Scala G-Tec

DELIVERIES BY MARKET

in percent

FURTHER INFORMATION www.skoda-auto.com

SEAT can look back on a successful year in which it presented its first all-electric production model, the Mii electric. A vehicle based on the MEB is already in the starting blocks.

BUSINESS DEVELOPMENT

SEAT delivers solutions “Created in Barcelona” to make mobility easy. At SEAT, the year 2019 was all about the electrification of the model range: the Spanish brand brought its first all-electric production model, the Mii electric, onto the market in the reporting period. Powered by a 61 kW (83 PS) electric motor, the model is ideally suited to city traffic with its dynamic performance and fresh design. The battery has a range of up to 260 km. SEAT gave a foretaste of another all-electric vehicle with its el-Born concept car. Based on the Modular Electric Drive Toolkit, this model impresses with a generous interior, offering both practicality and functionality, as well as a range of up to 420 km. The Tarraco FR, also presented in 2019, is the most powerful vehicle in the model range with a modern powertrain comprising a 1.4 TSI petrol engine producing 110 kW (150 PS) and an 85 kW (115 PS) electric motor. The system’s total output is 180 kW (245 PS). The body exudes confidence and is truly dynamic thanks to wider wheel housings, a sporty rear spoiler, a front FR radiator grille and 19-inch alloy wheels. The company’s CUPRA brand presented the Formentor, the first model specially developed for the brand, which is due to launch on the market in 2020. CUPRA also presented the Tavascan, its vision of an all-electric SUV coupé. This concept car combines state-of-the-art drive technology with the elegant, sporty and expressive design of a four-door crossover SUV.

The SEAT brand’s deliveries to customers rose by 10.9% in fiscal year 2019 to 574 thousand vehicles. Almost all markets contributed to this rise, with the brand achieving the most significant increases in Italy (+30.8%), France (+19.0%), Germany (+16.1%) and the United Kingdom (+9.5%). The company’s CUPRA brand recorded an increase of 71.8% to 25 thousand vehicles.

At 667 thousand units, the SEAT brand’s sales in the reporting period were up by 9.8% on the prior-year figure. This figure includes the A1 manufactured for Audi. The A-SUV models Arona and Ateca were in high demand.

SEAT manufactured 592 thousand vehicles during the past fiscal year, an increase of 12.1% on 2018.

SALES REVENUE AND EARNINGS

SEAT continued its upward trend in the reporting year: sales revenue amounted to €11.5 billion, exceeding the previous year’s record figure by 12.7%. Operating profit rose to €445 (254) million, which was also a new record. Particularly volume and mix effects had a positive impact. The SEAT brand’s operating return on sales increased to 3.9 (2.5)%.

€445 million

Operating profit for 2019

PRODUCTION

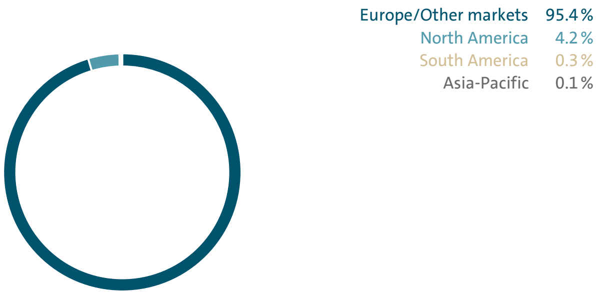
Units	2019	2018
Leon	153,837	159,486
Arona	134,611	110,926
Ibiza	130,243	120,287
Ateca	98,397	90,824
Tarraco	38,721	2,398
Alhambra	23,015	19,588
Mii	11,479	14,369
Toledo	1,506	10,151
	591,809	**528,029**

SEAT BRAND

	2019	2018	%
Deliveries (thousand units)	574	518	+10.9
Vehicle sales	667	608	+9.8
Production	592	528	+12.1
Sales revenue (€ million)	11,496	10,202	+12.7
Operating result	445	254	+74.7
Operating return on sales (%)	3.9	2.5	

Mii electric

DELIVERIES BY MARKET
in percent



FURTHER INFORMATION www.seat.com

BENTLEY

Bentley celebrated a special occasion in 2019: the brand's 100th anniversary. The record deliveries achieved in the anniversary year were partly attributable to the popularity of the Bentayga.

BUSINESS DEVELOPMENT

The Bentley brand is defined by exclusivity, elegance and power. For Bentley, 2019 was all about the brand's 100th anniversary. Bentley celebrated this special occasion with a range of special models, including the Continental GT Number 9 Edition by Mulliner, of which only 100 vehicles were produced. Bentley also debuted the 467 kW (635 PS) powerful Continental GT Convertible in 2019, which sprints from 0 to 100 km/h in just 3.8 seconds. Furthermore the Bentley brand also presented the new generation of the Flying Spur. This luxurious grand tourer has been completely revamped and sets new standards in innovation, connectivity, comfort and driving pleasure. It impresses with both the maneuverability of a sports saloon and the finesse of a luxury vehicle. The Flying Spur is the first Bentley model to come with electronic all-wheel steering, which combined with the active all-wheel drive and the Bentley Dynamic Ride system provides for an agile handling and driving experience. The Bentayga range was very popular with customers in the reporting year. The 467 kW (635 PS) Bentayga Speed and a Bentayga hybrid were added in 2019. With combined CO_2 emissions of just 75 g/km, the hybrid is making a powerful statement about efficiency in the luxury segment.

Sales by the Bentley brand in 2019 increased to 11,006 (10,494) vehicles, thereby hitting a new record. Bentley recorded increased deliveries in almost all markets. However, there was a decline of 9.4% in Asia-Pacific.

Bentley sold 11,631 (9,559) vehicles globally in the reporting year. The increase was primarily due to the availability of the new Continental GT and GTC models and the popularity of the Bentayga.

In fiscal year 2019, the Bentley brand manufactured 12,430 vehicles. This was an increase of 36.4% year-on-year.

SALES REVENUE AND EARNINGS

The Bentley brand generated sales revenue of €2.1 billion in 2019, exceeding the equivalent prior-year figure by 35.1%. Operating profit increased to €65 (–288) million driven by higher volumes, as well as by cost savings in connection with the ongoing efficiency program together with mix effects and exchange rate trends. The operating return on sales rose to 3.1 (–18.6)%.

100 years

Bentley brand

PRODUCTION

Units	2019	2018
Bentayga	5,232	4,072
Continental GT Coupé	3,903	2,841
Mulsanne	443	547
Flying Spur	102	1,627
Continental GT Convertible	2,750	28
	12,430	**9,115**

BENTLEY BRAND

	2019	2018	%
Deliveries (units)	11,006	10,494	+4.9
Vehicle sales	11,631	9,559	+21.7
Production	12,430	9,115	+36.4
Sales revenue (€ million)	2,092	1,548	+35.1
Operating result	65	–288	x
Operating return on sales (%)	3.1	–18.6	

Flying Spur

DELIVERIES BY MARKET

in percent

FURTHER INFORMATION www.bentleymotors.com

Porsche is electrifying – the all-electric Taycan marks the beginning of a new era for the sports car manufacturer. With the new 911 Cabriolet, Porsche is celebrating open-top driving.

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. The highlight in fiscal year 2019 was the presentation of the Taycan. With a spectacular world premiere taking place simultaneously on three continents, Porsche presented its first all-electric sports car to the audience. The four-door sports saloon impressively combines typical Porsche performance and connectivity with everyday usability and is setting new benchmarks for sustainability and digitalization. The vehicle is produced carbon-neutrally in Zuffenhausen. The Taycan Turbo S, Taycan Turbo and Taycan 4S models in the new series are at the cutting edge of Porsche E-Performance and are among the sports car manufacturer's most powerful production models. The Taycan's top version Turbo S can generate up to 560 kW (761 PS). It accelerates from 0 to 100 km/h in just 2.8 seconds and has a range of up to 412 km. Porsche also presented the new 911 Cabriolet in 2019, continuing the tradition of open-top driving. The 331 kW (450 PS) twin-turbo engine delivers top speeds of over 300 km/h, and acceleration of 0 to 100 km/h in less than 4 seconds. There was a new member of the Cayenne range in 2019: the Cayenne Coupé. The new derivative includes all the technical highlights of the third Cayenne generation, but is more progressive, more athletic and more emotional thanks to its custom design elements with a roof line that falls away more dramatically to the rear. Other new products comprised the 718 Touring versions of the Boxster and Cayman as well as the Macan S and the Macan Turbo.

Porsche increased its deliveries to customers by 9.6% in fiscal year 2019 to 281 thousand sports cars. China, where Porsche sold 87 thousand vehicles (+8.3%), remained the largest individual market. Deliveries rose by 15.2% in Europe and 6.5% in North America.

Porsche's unit sales amounted to 277 thousand vehicles in 2019. This was 9.6% more than in the previous year. The Macan and Cayenne models in particular achieved considerable growth.

Porsche produced 274 thousand vehicles in the reporting year, an increase by 2.2% year-on-year.

SALES REVENUE AND EARNINGS

Porsche Automotive's sales revenue rose by 10.1% to €26.1 (23.7) billion in fiscal year 2019. Operating profit before special items improved by 2.4% year-on-year to €4.2 billion. Volume and mix improvements and product cost optimization compensated for negative exchange rate effects and cost increases. The operating return on sales before special items was 16.2 (17.4)%. The diesel issue gave rise to special items of €–0.5 billion in the reporting period.

9.6%

Increase in unit sales in 2019

PRODUCTION

Units	2019	2018
Cayenne	95,293	79,111
Macan	89,744	93,953
911 Coupé/Cabriolet	37,585	36,236
Panamera	31,192	35,493
718 Boxster/Cayman	19,263	23,658
Taycan	1,386	–
	274,463	**268,451**

PORSCHE AUTOMOTIVE[1]

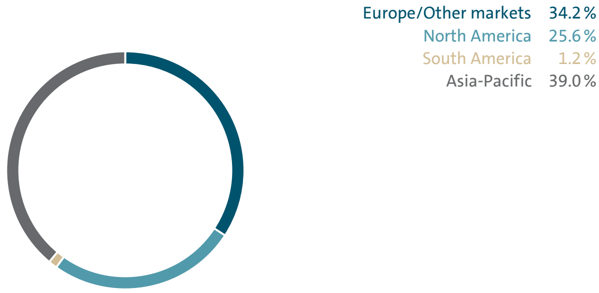
	2019	2018	%
Deliveries (thousand units)	281	256	+9.6
Vehicle sales	277	253	+9.6
Production	274	268	+2.2
Sales revenue (€ million)	26,060	23,668	+10.1
Operating result before special items	4,210	4,110	+2.4
Operating return on sales (%)	16.2	17.4	

1 Porsche (Automotive and Financial Services): sales revenue €28,518 (25,784) million, operating profit before special items €4,396 (4,291) million.

Taycan

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.porsche.com

Commercial Vehicles

The Transporter 6.1 – a technically redesigned version of the bestselling van – was launched on the market in 2019. Volkswagen Commercial Vehicles will be the Group's leading brand for autonomous driving.

BUSINESS DEVELOPMENT

As a leading manufacturer of light commercial vehicles, Volkswagen Commercial Vehicles is making fundamental and sustainable changes to the way goods and services are distributed in cities in order to improve quality of life, especially in inner city areas. The brand is also the Volkswagen Group's leader in autonomous driving as well as in services such as Mobility-as-a-Service and Transport-as-a-Service. For these solutions, Volkswagen Commercial Vehicles plans to develop special-purpose vehicles such as robo-taxis and robo-vans to keep the world of tomorrow moving with all its requirements for a clean, intelligent and sustainable mobility.

In the reporting year, Volkswagen Commercial Vehicles introduced its extensive technically redesigned bestselling van, the Multivan/Transporter 6.1. Thanks to the switch from hydraulic to electro-mechanical power steering, the Transporter now has an extended range of driver assist systems, which significantly increase safety and comfort. The new assist systems include technologies such as Lane Assist, Park Assist and Trailer Assist. In addition, the vehicle has been tailored to the requirements of the digital world: now available as an option is the third generation of the Modular Infotainment Toolkit, which enables the use of new applications and online services with an integrated SIM card. The popular Campervan California has also been upgraded. Like its predecessor, the California 6.1 is available in three equipment versions: Beach, Coast and Ocean.

Deliveries by Volkswagen Commercial Vehicles in fiscal year 2019 stood at 492 thousand units and were slightly down on the previous year (–1.6%). While sales in Europe increased by 1.4%, they declined in South America by 14.5%.

Unit sales fell by 2.8% to 456 thousand vehicles in the reporting year. Increases were recorded for the Crafter.

The Volkswagen Commercial Vehicles brand produced 477 thousand vehicles in the reporting period. This was 8.0% less than in the previous year. The decline was due to the model change in the T series and the WLTP test procedure applicable to light commercial vehicles since September 1, 2019. The two millionth Caddy rolled off the assembly line at Volkswagen Poznan in March. The main plant in Hanover celebrated a special anniversary in 2019: the ten millionth vehicle rolled off its assembly line in early March. The Hanover plant began producing the T series in 1956.

SALES REVENUE AND EARNINGS

Sales revenue by Volkswagen Commercial Vehicles in 2019 was almost on a level with the previous year, at €11.5 (11.9) billion. In particular, increased fixed and development costs for new products reduced operating profit to €510 (780) million. Improved product costs had a positive effect. The operating return on sales amounted to 4.4 (6.6)%.

10 million

Vehicles produced in Hanover

PRODUCTION

Units	2019	2018
Caravelle/Multivan, Kombi	96,533	115,525
Transporter	91,585	86,286
Caddy Kombi	81,466	89,154
Crafter	72,906	67,151
Amarok	68,010	88,950
Caddy	66,780	71,881
	477,280	**518,947**

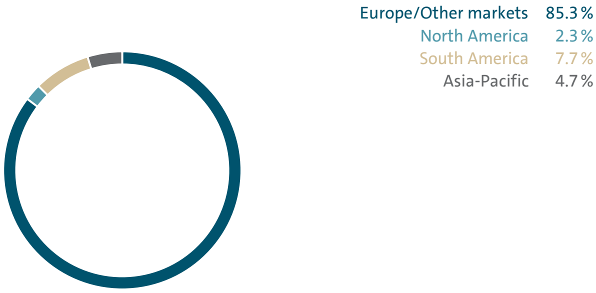
VOLKSWAGEN COMMERCIAL VEHICLES BRAND

	2019	2018	%
Deliveries (thousand units)	492	500	–1.6
Vehicle sales	456	469	–2.8
Production	477	519	–8.0
Sales revenue (€ million)	11,473	11,875	–3.4
Operating result	510	780	–34.6
Operating return on sales (%)	4.4	6.6	

Multivan 6.1

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.volkswagen-commercial-vehicles.com

In 2019, the TRATON GROUP consistently pursued its goal of becoming a global champion of the commercial vehicle industry. In addition to the IPO, sales successes and strategic partnerships contributed to this.

BUSINESS DEVELOPMENT

With its MAN, Scania, Volkswagen Caminhões e Ônibus and RIO brands, TRATON SE aims to become a global champion of the commercial vehicle industry and drive the transformation of the logistics sector. Its mission is to reinvent transport for future generations: “Transforming Transportation”.

2019 was a year that set the direction of travel at the TRATON GROUP. The change in legal form in January from a German stock corporation (AG) to a European Company (Societas Europaea, SE) reinforced the Group’s international identity. The company now operates under the name TRATON SE.

The reporting year 2019, especially the first half of the year, was dominated by the company’s IPO. It is increasing the company’s financial flexibility and opening up direct access to the capital markets. June 28, 2019 marked the first day of trading for TRATON shares and was an important milestone in its corporate history. The successful dual listing on the Frankfurt Stock Exchange in Germany and Nasdaq Stockholm in Sweden underscores the TRATON GROUP’s international orientation.

At the Innovation Day in Södertälje, Sweden, in October, the TRATON GROUP presented itself as a forward-looking company and announced investments in e-mobility and digitalization.

As part of the strategic partnership with the Japanese company Hino Motors, Ltd., a procurement joint venture was created in October under the name HINO & TRATON Global Procurement GmbH. Cooperation on mining vehicles for the Canadian market was agreed between Navistar and Scania under the umbrella of the TRATON alliance with Navistar. In 2020, Scania will deliver heavy-duty trucks for initial tests by selected operators.

The TRATON GROUP takes sustainability and environmental awareness very seriously. In the first half of 2019, to fulfill the Paris Climate Agreement, the institutions of the European Union set the first CO_2 emission standards for heavy trucks weighing over 16 tonnes. Heavy vehicle manufacturers must reduce the CO_2 emissions of their new vehicle fleet in the EU by 15% by 2025. By 2030, the new rules call for a reduction of 30%. The reference period for all reduction targets runs from July 1, 2019 to June 30, 2020. The TRATON GROUP is fully committed to further reducing the greenhouse gas emissions caused by commercial vehicles.

June 28, 2019

First day of trading for TRATON shares

PRODUCTION

Units	2019	2018
Trucks	201,115	207,235
Buses	21,387	23,141
Light Commercial Vehicles	15,903	9,043
	238,405	**239,419**

DELIVERIES

Units	2019	2018
Trucks	205,936	202,494
Buses	21,496	22,629
Light Commercial Vehicles	14,789	7,871
	242,221	**232,994**

Strong brands

DELIVERIES BY MARKET

in percent

FURTHER INFORMATION www.traton.com

Scania presented innovative and sustainable solutions for public transport in 2019. The R 450 won the “Green Truck 2019” award. Sales revenue and earnings increased year-on-year.

BUSINESS DEVELOPMENT

The Swedish brand Scania follows its values “Customer first”, “Respect for the individual”, “Elimination of waste”, “Determination”, “Team Spirit” and “Integrity”. In 2019, Scania’s R 450 truck won the “Green Truck 2019” award as the most fuel-efficient and environmentally friendly commercial vehicle in its class. At the UITP 2019 Global Public Transport Summit, Scania presented sustainable solutions for public transport, particularly to address the future challenges in major cities. It revealed initial realizations of innovative transport solutions that included the use of autonomous shuttle buses in public spaces. In keeping with this, it also presented the new battery-electric, self-driving urban concept vehicle NXT. The NXT offers a high degree of flexibility and is able to shift from delivering goods during the day to collecting refuse at night, for example. The autonomous concept vehicle AXL is another forward-looking solution for use in mines. In October, at the international trade fair FENATRAN in Brazil, Scania won the “Truck of the Year” prize for the Latin American market. The new Scania Citywide, the first all-electric urban bus in series production, won an award at Busworld.

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

Incoming orders at the Scania brand fell by 8.2% year-on-year to 89 thousand vehicles due to a cooling down the market for trucks in Europe during the course of the year in 2019. In 2019, the Scania brand increased its deliveries to 99 (96) thousand vehicles worldwide. Scania recorded increases especially in Europe and Brazil. The number of buses delivered in 2019 stood at 8 (8) thousand units. Demand for services and replacement parts as well as for Scania Financial Services was again higher in the reporting period than in the previous year.

Scania manufactured 97 (101) thousand commercial vehicles in fiscal year 2019, of which 8 (9) thousand were buses. The successful introduction of the new generation of Scania trucks in Latin America and Asia completed the changeover of production to the new series.

SALES REVENUE AND EARNINGS

Scania Vehicles and Services generated sales revenue of €13.9 (13.0) billion in fiscal year 2019. Operating profit increased by 24.8% to €1.5 billion. In addition to higher vehicles sales and a stronger genuine parts and service business, improvements in the mix as well as exchange rate effects had a positive impact on profit. The operating return on sales amounted to 10.8 (9.3)% in the reporting period.

10.8%

Operating return on sales in 2019

PRODUCTION

Units	2019	2018
Trucks	89,276	92,679
Buses	7,719	8,696
	96,995	**101,375**

SCANIA VEHICLES AND SERVICES[1]

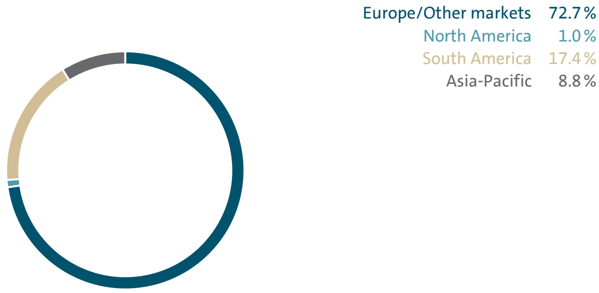
	2019	2018	%
Orders received (thousand units)	89	97	–8.2
Deliveries	99	96	+3.1
Vehicle sales	101	97	+3.2
Production	97	101	–4.3
Sales revenue (€ million)	13,934	12,981	+7.3
Operating result	1,506	1,207	+24.8
Operating return on sales (%)	10.8	9.3	

1 Scania (including Financial Services): sales revenue €14,391 (13,360) million, operating profit €1,648 (1,346) million.

R 450

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.scania.com

MAN continued to work intensively on digital solutions for the transport industry in 2019. In South America, further improving conditions led to a considerable increase in deliveries.

BUSINESS DEVELOPMENT

Customer focus, enthusiasm for the product, and efficiency are the core values at MAN. MAN, DB Schenker and the Fresenius University of Applied Sciences presented the successful results of the platooning project in real logistics operations in the reporting year. The findings: operating digitally networked trucks on German motorways is safe, technically reliable and easily applicable in the day-to-day operations of a logistics company. In addition, the technology also saves fuel. As part of a research project sponsored by the Federal Ministry of Transport and Digital Infrastructure (BMVI), truck drivers praised the driving comfort and general feeling of safety. MAN worked intensively in 2019 on the successful launch of its new generation of trucks, which took place in February 2020. The MAN Lion's City was the winner in the "Safety Label Bus" category at the Busworld Awards 2019.

In South America, MAN Commercial Vehicles was recognized in 2019 as one of Brazil's best employers with its Volkswagen Caminhões e Ônibus brand. Since the new Delivery range launched in 2017, over 25,000 vehicles have already been produced. Production of the Constellation truck passed the 240,000-vehicle mark in 2019. In bus production too, Volkswagen Caminhões e Ônibus is underscoring its strong position, with more than 3,400 Volksbuses being delivered as part of the "Caminho da Escola" (route to school) program. A further 430 buses are being provided to support social projects. Following the successful introduction of our digital brand RIO in 2019, Volkswagen Caminhões e Ônibus has already connected 1,000 vehicles. With the "e-Consortium", the company is also driving the introduction of electric trucks in Brazil.

Due to the slowing European market for trucks in 2019, incoming orders at MAN fell by 5.3% in the reporting year to 139 thousand vehicles. A total of 143 (137) thousand commercial vehicles were delivered to customers, of which 14 (14) thousand were buses. In South America, MAN Commercial Vehicles recorded rising demand with its Volkswagen Caminhões e Ônibus brand as a result of the further improving economic environment in Brazil.

In 2019, MAN produced a total of 141 (138) thousand commercial vehicles, including 14 (14) thousand buses.

SALES REVENUE AND EARNINGS

Driven by higher volumes, sales revenue at MAN Commercial Vehicles climbed to €12.7 billion in 2019, exceeding the prior-year figure by 4.6%. Operating profit was up on the prior-year period at €402 (332) million, which was negatively impacted by expenses incurred in connection with the restructuring of activities in India. The operating return on sales was 3.2 (2.7)%.

21.2%

Increase in profit in 2019

PRODUCTION

Units	2019	2018
Trucks	111,839	114,556
Buses	13,668	14,445
Light Commercial Vehicles	15,903	9,043
	141,410	**138,044**

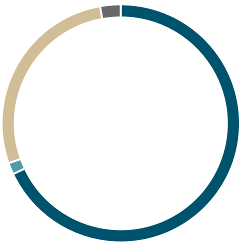
MAN COMMERCIAL VEHICLES

	2019	2018	%
Orders received (thousand units)	139	146	–5.3
Deliveries	143	137	+4.6
Vehicle sales	143	137	+4.6
Production	141	138	+2.4
Sales revenue (€ million)	12,663	12,104	+4.6
Operating result	402	332	+21.2
Operating return on sales (%)	3.2	2.7	

Lion's Coach

DELIVERIES BY MARKET

in percent



Europe/Other markets 68.0 %
North America 1.6 %
South America 27.7 %
Asia-Pacific 2.8 %

FURTHER INFORMATION www.man.eu

Volkswagen Group China

The Chinese automotive market is centrally important to Volkswagen’s electric campaign. With intensified local development work and expansion of the product portfolio, for example with the new JETTA brand from Volkswagen Passenger Cars, we want to confirm our strong position in the world’s largest individual market.

BUSINESS DEVELOPMENT

In China, its largest individual market, Volkswagen stood its ground in 2019 amid a sluggish overall market. Together with our joint ventures, we held deliveries stable and gained market share. This was particularly thanks to a successful SUV campaign: with the Teramont, Tacqua, Tayron and Tharu models, the Volkswagen Passenger Cars brand offers a large selection of locally produced SUVs, which are supplemented by imported SUV products such as the Touareg. Other vehicles such as the Audi Q2 L e-tron, Q5 and Q7 models as well as the ŠKODA Kamiq and Porsche Macan augmented the attractive SUV range.

In 2019, Volkswagen established its sub-brand JETTA in the Chinese market, thereby increasing its market coverage. JETTA has its own model family and dealer network. The JETTA brand is focusing particularly on young Chinese customers striving for individual mobility - their first own car. JETTA launched very successfully in the reporting year with the VS5 SUV and VA3 saloon.

As a global driver of mobility, the Chinese automotive market is centrally important to Volkswagen’s electric campaign. Pre-production of an ID. model started at a new SAIC VOLKSWAGEN plant in Anting in the reporting year. This plant was built exclusively to produce all-electric vehicles based on the Modular Electric Drive Toolkit (MEB). Series production with an annual capacity of 300,000 vehicles is due to begin in October 2020. Together with the FAW-Volkswagen plant in Foshan, this will take future production capacity to approximately 600,000 MEB-based all-electric vehicles a year. By 2025, it is planned to increase local production in China to 15 MEB models from various brands. In the reporting year, Volkswagen Group China was already able to offer its Chinese customers 14 electrified models.

In 2019, we combined the Chinese research and development capacity of the Volkswagen and Audi brands and of the Group in a new structure. This will generate synergy effects, intensify cooperation between the brands and strengthen the local development of technologies. More than 4,500 employees in China are working in research and development on mobility solutions for the future.

On the Chinese market, the Volkswagen Group offers more than 180 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 (4.2) million vehicles (including imports) to customers in China in the reporting period. The T-Cross, Tayron, T-Roc, Tharu, Bora, Passat, Audi Q2, Audi Q5, ŠKODA Kamiq, ŠKODA Karoq and Porsche Macan models were especially popular.

4,500

Engineers for future technologies

Thousand units	2019	2018	%
Deliveries	4,234	4,207	+0.6
Vehicle sales[1]	4,048	4,101	–1.3
Production	3,948	4,116	–4.1

1 Produced locally.

EARNINGS

€ million	2019	2018
Operating result (100%)	11,110	11,427
Operating result (proportionate)	4,425	4,627

Our joint ventures produced a total of 3.9 (4.1) million vehicles in fiscal year 2019. The joint ventures produce both established Group models and those specially modified for Chinese customers (e.g. with extended 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).

The proportionate operating result of the joint ventures in the reporting year stood at €4.4 billion. The negative impacts of more intense market competition and higher research and development costs were offset by improvements in the mix 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.

JETTA VS5

LOCAL PRODUCTION

Units	2019	2018
Volkswagen Passenger Cars	3,066,807	3,145,141
Audi	614,753	617,472
ŠKODA	266,377	353,829
Total	**3,947,937**	**4,116,442**

VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY

Volkswagen Financial Services continued its successful course in 2019, achieving growth in contract volume and earnings. This was thanks to its international presence combined with a diverse product portfolio.

STRUCTURE OF VOLKSWAGEN FINANCIAL SERVICES

Volkswagen Financial Services comprises dealer and customer financing, leasing, direct banking and insurance activities, fleet management and mobility services in 48 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.

BUSINESS DEVELOPMENT

In 2019, Volkswagen Financial Services and the Nature And Biodiversity Conservation Union (NABU) launched the "Blaue Flotte" (Blue Fleet), an e-mobility program for fleet customers. The initiative centers on investment in climate-relevant bog protection projects. One of the major focuses is on renaturation of the Sulinger Moor in Lower Saxony. In future, the "Blaue Flotte" label will bring together all e-mobility offerings from Volkswagen Financial Services in Germany.

The international fleet business has been further strengthened with a majority shareholding in FleetLogistics. The other shareholder is TÜV SÜD Auto Service GmbH. This strategic partnership will combine and further develop mobility services for fleet customers.

The online used vehicle platform heycar from Volkswagen Financial Services is expanding: after the positive performance in Germany, where heycar launched in October 2017, the platform is now also serving dealers and customers in the United Kingdom in the first step of its international expansion. Since the reporting year, they have been able to use the internet platform to find high-quality used vehicles with warranties.

Volkswagen Financial Services is further expanding its involvement in the mobility business and acquired 100% of the shares in LogPay Financial Services GmbH (LPFS) in the reporting year. LPFS owns LogPay Mobility Services, a leading payment services provider for local public transport in Germany. With the takeover of LPFS, Volkswagen Financial Services is able to centralize its fuel card business and become one of the leading fuel and road toll service providers in Europe.

To further expand the strategic business area related to parking, Volkswagen Financial Services acquired 75.1% of the shares in PTV Truckparking B.V. from PTV Planung Transport Verkehr AG from Karlsruhe. Based in Utrecht (Netherlands), the company operates the web platform and smartphone app Truck Parking Europe. A popular service aimed at truck drivers, this helps users find and reserve truck parking spaces along motorways.

The new "Ubility" hub from Volkswagen Financial Services encourages cooperation between business, researchers, universities and start-ups. The hub aims to develop brand-independent services and products from Volkswagen Financial Services and make them market-ready.

21.5 million

Total number of contracts at the end of 2019

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

In April 2019, Volkswagen Financial Services AG issued three bonds with different terms and a total volume of €2.75 billion. In June 2019, Volkswagen Leasing GmbH placed two bonds with terms of three and seven years and a total volume of €1.75 billion. In January 2019, Volkswagen Bank GmbH placed four bonds with a broad range of maturities, incorporating a variable-interest tranche. The transaction had a total volume of €2.5 billion.

Numerous notes transactions were conducted internationally too. In the US capital market, a bond with a total volume of USD 3.0 billion was placed with investors in five tranches. Notes with a volume of around CAD 1.5 billion were issued in the Canadian refinancing market. Other notes transactions were conducted in the UK, Australia, Brazil and Norway. In addition to this, private placements were issued in various currencies.

Volkswagen Leasing GmbH was active on the market again in 2019 with its ABS transactions. The "Volkswagen Car Lease 28" transaction, consisting of securitized German leasing receivables, had a volume of approximately €1.0 billion and was the first European securitization transaction under the STS standard for high-quality securitizations. Approximately €1.0 billion of receivables were also securitized in the 29th ABS transaction, "Volkswagen Car Lease 29".

Outside Germany, Volkswagen Financial Services issued a total of seven ABS transactions in the United States, China, Australia, Japan and Brazil. In Japan, the eighth ABS transaction was successfully placed in "Driver Japan". The "Driver China nine" ABS transaction was the highest-volume issue to date by Volkswagen Financial Services in China.

LogPay

The number of new financing, leasing, service and insurance contracts signed in fiscal year 2019 was 8.5 million, making it 5.7% higher than in the previous year. As of December 31, 2019, the total number of contracts was 21.5 million, up 5.9% from the year before. The number of contracts in the Customer Financing/Leasing area rose by 4.4% to 11.2 million. There were 10.3 million contracts in the Service/Insurance area, 7.7% more than in the previous year. 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 34.2 (33.9)%.

As of the end of the reporting period, Volkswagen Bank GmbH managed 1.3 (1.4) million deposit accounts. As of year-end 2019, Volkswagen Financial Services employed 14,394 people worldwide, including 7,414 in Germany.

SALES REVENUE AND EARNINGS

The sales revenue of Volkswagen Financial Services in the reporting year amounted to €38.0 billion, an increase of 15.8% on the previous year. The operating result rose by 13.3% and hit a new record of €3.0 billion. The increase was mainly attributable to business growth.

VOLKSWAGEN FINANCIAL SERVICES

		2019	2018	%
Number of contracts[1]	thousands	21,498	20,291	+5.9
Customer financing		6,585	6,387	+3.1
Leasing		4,616	4,341	+6.3
Service/Insurance		10,297	9,563	+7.7
Lease assets	€ million	47,222	40,317	+17.1
Receivables from	€ million			
Customer financing		68,517	63,690	+7.6
Dealer financing		23,093	20,529	+12.5
Leasing agreements[1]		46,276	41,838	+10.6
Direct banking deposits	€ million	31,330	28,926	+8.3
Total assets	€ million	223,536	207,629	+7.7
Equity	€ million	28,428	26,298	+8.1
Liabilities[2]	€ million	187,092	174,255	+7.4
Equity ratio	%	12.7	12.7	
Return on equity before tax[3]	%	10.8	10.0	
Leverage[4]		6.6	6.6	
Operating result	€ million	2,960	2,612	+13.3
Earnings before tax	€ million	2,968	2,600	+14.2
Employees at Dec. 31		14,394	14,048	+2.5

1 Includes our international joint ventures since January 1, 2019. Prior-year figures adjusted.
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.

ADDITIONAL INFORMATION
www.vwfsag.com

3

Group Management Report

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

GROUP MANAGEMENT REPORT

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Goals and Strategies

With the enhanced TOGETHER 2025+ strategy, we aim to step up the pace, sharpen the focus of our strategic projects and follow through on implementation even more systematically. In so doing, we aim to make the future of mobility even more sustainable – for present and future generations.

With the future-oriented program TOGETHER – Strategy 2025 announced in 2016, we are seeking to make the Volkswagen Group more focused, efficient, innovative, customer-oriented and sustainable, and systematically geared toward generating profitable growth.

We at the Volkswagen Group have set ourselves the goal of continuing to excite our customers in future and meeting their diverse needs with an appealing product portfolio of impressive vehicles and forward-looking, tailor-made mobility solutions. Every day, we actively assume and exercise responsibility in relation to the environment, safety and society, and we aim to be a role model in these areas. Integrity, reliability, quality and passion thus form the basis for our work. Using this approach, we aim for technological leadership in the industry and competitive profitability while also striving to be an excellent employer.

In summer 2019, we further enhanced our program for the future with TOGETHER 2025+. We are increasing the momentum for achieving our strategic targets and sharpening our focus. To this end, the strategic vision of the Volkswagen Group was also revised. By "Shaping mobility – for generations to come", we aim to more actively shape the future of mobility while safeguarding it sustainably – for present and future generations.

With electric drives, digital connectivity and autonomous driving, we want to make the automobile cleaner, quieter, more intelligent and safer. At the same time, our core product will become more emotive and offer a completely new driving experience. In this way, the car can continue to be a cornerstone of sustainable, individual and affordable mobility in the future. In addition, we are committed to the Paris Agreement on climate protection and are one of the first companies in our industry to commit ourselves to the zero-emissions target by 2050 at the latest.

The automotive industry is being shaped particularly by the transformation to e-mobility and digitalization. We have positioned ourselves to successfully tackle this radical change: the strategies of our brands and regions as well as those of our functional areas are consistently aligned with the TOGETHER 2025+ Group strategy.

Under the umbrella of the TOGETHER 2025+ Group strategy, we have defined five central modules that incorporate many of our existing Group initiatives. With this change, we are putting the focus on corporate governance, improved performance, increased brand values, software and excellence in employee management.

Our Code of Collaboration, along with our integrity and compliance program Together4Integrity (T4I), is a central pillar of the Group strategy. 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". T4I brings together all activities relating to integrity, culture, compliance, risk management and human resources, creating a common path toward a new corporate culture.

FIVE MODULES OF THE TOGETHER 2025+ STRATEGY

Our enhanced TOGETHER 2025+ Group strategy comprises consistent strategic decisions and specific modules aimed at safeguarding the long-term future of the Group and generating profitable growth.

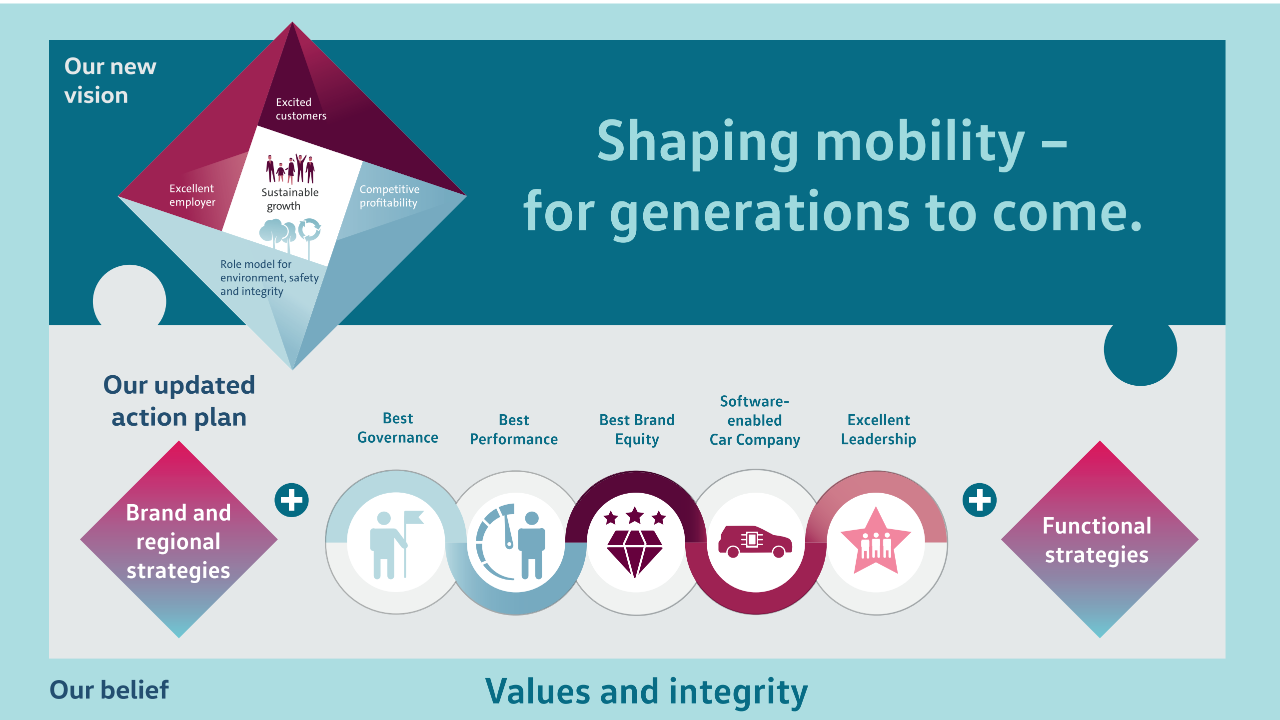
These modules are namely Best Governance, Best Performance, Best Brand Equity, Software-enabled Car Company and Excellent Leadership. We continuously review the status and progress of these initiatives in order to analyze the target achievement, importance and suitability of the measures defined. This enables us to tailor these modules to the transformation underway within our company. In the Best Governance module, we are working to create a focused, streamlined corporate structure to manage the brands, continually leverage synergies and accelerate decision-making processes. We want the Group to be perceived as efficiently managed, trustworthy, sustainable and transparent. To this end, we are intensifying the dialog with our key stakeholders and systematically reviewing whether we are still the best owner for our various brands and companies. We also want our CO_2 targets to be measurable and our progress toward CO_2 neutrality in 2050 to be transparent.

The aim of the Best Performance module is to achieve a sustainable increase in our enterprise value by increasing efficiency, productivity and profitability. As a global company, our size enables us to make even more efficient use of economies of scale. We remain firmly committed to our ambitious targets, work consistently on achieving them and strive to exceed them. This will lay the foundations for extensive investment in our Company, in our employees and in mobility for present and future generations.

In the Best Brand Equity module, the focus is on realigning and refining the brand portfolio, making a significant increase in the value of our Group brands possible by 2025. The profile and mission of each brand are being optimized and overlaps in market positioning reduced. Based on these optimizations, we will decide on the future design, product portfolio and services of each Group brand – using the needs of our customers as a starting point.

In the Software-enabled Car Company module, we are working to make software development one of the Volkswagen Group's core competencies. To achieve this, we are pooling existing expertise, substantially strengthening our resources and establishing a dedicated organizational unit. By 2025, all new vehicle models across the Group will be based on our own cross-brand software platform. This approach will enable us to leverage synergies between the individual brands and vehicle projects. The aim is that the Volkswagen Group and its brands will stand not only for the best vehicles but in equal measure for exciting digital products and services.

The Excellent Leadership module will accelerate the transformation to a more open, more partnership-based and more value-based leadership. We will completely restructure management development and training and take an even more systematic approach to succession planning so that, at our Group, the right talent is always in the right position at the right time. We are also defining clear expectations for the



Group's managers. These involve greater customer focus, more corporate responsibility, greater effectiveness and focus on results as well as a culture of constructive dissent and a positive approach in dealing with mistakes. Volkswagen also wants to increase diversity at all levels of the company and is pursuing clear, measurable targets for raising the proportion of female and international managers.

GOALS AND KEY PERFORMANCE INDICATORS OF THE GROUP'S STRATEGY

The five strategic modules describe how we want to achieve our vision of sustainable mobility for present and future generations. We are managing our project using four target dimensions, which are also reflected in the Volkswagen strategy rhombus. The four target dimensions are as follows: excited customers, excellent employer, role model for environment, safety and integrity, and competitive profitability. We want to grow sustainably by consistently pursuing these objectives.

The target dimensions apply throughout the whole Group. The strategic KPIs that we use to measure how well we have implemented our Group strategy are dependent on the respective business model. After all, the business model for our passenger car-producing brands is different from the business model for trucks and buses and also differs from the business model for our Power Engineering Business Area and our services business.

The strategic KPIs of the competitive profitability target dimension have been defined and standardized. As the Group strategy is currently being revised and specified in detail, the content of some strategic KPIs in the other target dimensions is still being determined. The relevance of the KPIs is reviewed at Group level and their focus is continuously monitored and adjusted as necessary. We report on the defined non-financial 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, thus generating maximum customer benefit. This requires not only the best products, the most efficient solutions and the best service, but also 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 conquest rate and KPIs pertaining to loyalty, customer satisfaction and quality.

Target dimension: excellent employer

To achieve sustainable success, we need skilled and dedicated employees. We aim to foster their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, and a forward-looking organization of work. An exemplary leadership and corporate culture forms the basis for this, allowing us to retain our core workforce and attract new talents.

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 the diversity index.

Target dimension: role model for environment, safety and integrity

Every day, we at the Volkswagen Group assume and exercise responsibility in issues relating to the environment, safety and society. This is reflected both in our thoughts and actions and in all our decisions. 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 innovations and outstanding quality, we aim for maximum product safety.

Our primary objectives in this process include complying with laws and regulations, establishing 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 consist of the decarbonization index and fleet CO_2 emissions figures, compliance, a culture of dealing openly with mistakes, and integrity.

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 in the future 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[1]	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	>€10 billion
Payout ratio	negative	≥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%	>14%[2]

1 2015 before special items.
2 Taking into account the new IFRS 16.

Internal Management System and Key Performance Indicators

This chapter describes how the Volkswagen Group is managed on the basis of the Group strategy 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 Best Performance module of our enhanced TOGETHER 2025+ Group strategy, we want to improve these indicators across all areas and along the entire value chain. In so doing, we aim to sustainably increase the Company's value and raise our efficiency, productivity and profitability.

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

Consistent, close integration of the Group and brand strategies with the operational planning process ensures transparency at the Volkswagen Group when it comes to the financial assessment and evaluation of strategic decisions. The operational medium-term 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 target achievement level. 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:

> Deliveries to customers
> Sales revenue
> Operating result
> Operating return on sales
> Research and development ratio (R&D ratio) in the Automotive Division
> Capex/sales revenue in the Automotive Division
> Net cash flow in the Automotive Division
> Net liquidity in the Automotive Division
> 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 the various markets. Deliveries are closely related to our targets of exciting our customers, being a role model for 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, digitalization and new technologies. The R&D ratio reflects our activities undertaken to safeguard the Company's future viability.

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, expanding, electrifying and digitalizing our product range and for environmentally friendly drivetrains, as well as for adjusting production capacities 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 100 to 106 and on pages 113 to 128, 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 133 of this annual report. Nonfinancial key performance indicators related to compliance are described in the "Corporate Governance Report" on page 67.

Structure and Business Activities

This chapter describes the legal and organizational structure of the Volkswagen Group and explains the material changes in 2019 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 direct or indirect interests in AUDI AG, SEAT S.A., ŠKODA AUTO a.s., Dr. Ing. h.c. F. Porsche AG, TRATON SE, Volkswagen Financial Services AG, Volkswagen Bank GmbH and a large number of other companies in Germany and abroad. More detailed disclosures are contained in the list of shareholdings in accordance with sections 285 and 313 of the Handelsgesetzbuch (HGB – German Commercial Code), which can be accessed at www.volkswagenag.com/en/InvestorRelations.html 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 as a Group with subsidiaries.

The Volkswagen AG Board of Management has sole responsibility for managing the Company. The Supervisory Board appoints, monitors and advises the Board of Management; it is consulted directly on decisions 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 and the Volkswagen Commercial Vehicles brand. Activities focus on the development of vehicles and engines, the production and sale of passenger cars and light commercial vehicles, and the genuine parts business. The product portfolio ranges from compact cars to luxury vehicles and also includes motorcycles, and will gradually be supplemented by mobility solutions.

The Commercial Vehicles Business Area primarily comprises the development, production and sale of trucks and buses from the Scania and MAN brands, the corresponding genuine parts business and related services. The commercial vehicles portfolio ranges from light vans to heavy trucks and buses. The collaboration between the two commercial vehicle brands is coordinated in TRATON SE, which has been listed on the stock exchange since mid-2019.

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, direct 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 key sales markets currently include Western Europe, China, the USA, Brazil, Russia, Mexico and Poland.

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

In addition to the Finance & IT, Human Resources and Integrity & Legal Affairs divisions, the Volkswagen Group collaborates across six operating units and the China region, these being the "Volume", "Premium", "Sport & Luxury", "Truck & Bus" brand groups, as well as the Components & Procurement and Financial Services operating units. The "Volume" brand group comprises the Volkswagen Passenger Cars, SEAT, ŠKODA and Volkswagen Commercial Vehicles brands. The Audi, Lamborghini and Ducati brands are brought together in the "Premium" brand group. "Sport & Luxury" is comprised of the Porsche, Bentley and Bugatti brands. The "Truck & Bus" brand group is the umbrella for the Scania and MAN brands. Components & Procurement will function as one unit spanning all of the brands and supporting them. The Financial Services business has been combined into a single unit. We are convinced that this management model will allow better use of existing expertise and economies of scale, boost synergy effects more systematically and accelerate decision making. In addition, it will prepare the Volkswagen Group for a management structure that is simpler, leaner and more effective, and strengthen the brands, giving them more autonomy. In line with the principle of subsidiarity, decisions will be taken at the lowest competent level, close to business operations.

At the same time, spreading the Group's management duties more broadly means that responsibility is assigned more clearly and definitively. Every member of the Board of Management has assumed additional higher-level duties for the Group. At the same time, the members of the Board of Management of Volkswagen AG have responsibility for a brand group or operating unit, improving collaboration between the brands and the Group as a whole and ensuring that management of the Group is a shared undertaking.

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

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

At Group level, committees also address key strategic issues, for example relating to product planning, investments, risks management and management issues. Some of the committees were optimized in the reporting year in order to improve the efficiency of their decision making. This has reduced complexity and reinforced governance within the Group.

The Best Governance module of our future program TOGETHER 2025+, which was enhanced over the course of the fiscal year, is fostering our Company's transformation. One of its aims is to further improve manageability of the Group and to make even better use of synergy effects.

MATERIAL CHANGES IN EQUITY INVESTMENTS

The control and profit and loss transfer agreement between MAN SE, as the controlled company, and TRATON SE (at that time Truck & Bus GmbH), a subsidiary of Volkswagen AG, as the controlling company, came into force upon its entry in the commercial register on July 16, 2013. In summer 2018, the Higher Regional Court in Munich made a final decision in the award proceedings on an increase in the cash settlement and the compensation rights per share for the noncontrolling interest shareholders of MAN SE. This decision resulted in a significant increase in the annual compensation to be paid to noncontrolling interest shareholders of MAN SE. In the opinion of the Board of Management at TRATON SE (at that time TRATON AG), this was no longer proportionate to the profit transfer from MAN SE and other benefits stipulated in the control and profit and loss transfer agreement; TRATON SE therefore exercised its right to extraordinary termination in accordance with section 304(4) of the Aktiengesetz (AktG – German Stock Corporation Act) in August 2018 and terminated the control and profit and loss transfer agreement effective January 1, 2019. Following the announcement of the termination of the control and profit and loss transfer agreement and the recording thereof in the commercial register on January 3, 2019, the noncontrolling shareholders of MAN SE once again had the right to tender their shares to TRATON SE, pursuant to the provisions of the control and profit and loss transfer agreement, within a two-month period at a cash settlement price of €90.29. As of year-end 2019, TRATON SE held 94.68 (87.04)% of the ordinary shares and 86.85 (83.05)% of the preferred shares in MAN SE.

Since the end of June 2019, shares of TRATON SE have been traded on the regulated market of the Frankfurt Stock Exchange and the Nasdaq Stockholm exchange. These no-par value bearer shares were placed with investors from Volkswagen AG's shareholding. Volkswagen remains an involved majority shareholder and held 89.72% of the share capital in TRATON SE at the end of the reporting year. The control and profit and loss transfer agreement between Volkswagen AG and TRATON SE ended in accordance with section 307 of the German Stock Corporation Act on December 31, 2019.

LEGAL FACTORS INFLUENCING BUSINESS

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

VOLKSWAGEN AG SHAREHOLDINGS
www.volkswagenag.com/en/InvestorRelations.html

Corporate Governance Report

Corporate governance is defined as responsible, transparent corporate management and supervision that aim 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 enables us to meet the steadily increasing demand for information from national and international stakeholders.

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

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) on November 15, 2019 with the following wording:

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

The recommendations of the Government Commission of the German Corporate Governance Code in the version dated 7 February 2017 (the Code) that was published by the German Ministry of Justice in the official section of the Federal Gazette (Bundesanzeiger) on 24 April 2017 was complied with in the period from the last Declaration of Conformity dated 16 November 2018 and will continue to be complied with, with the exception of the numbers listed below and their stated reasons and periods listed below.

- a) 4.2.3(4) (severance payment cap)
  A severance payment cap will be included in new contracts concluded with members of the Board of Management, but was not stipulated 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 were applied in this respect. This recommendation has been complied with in full since June 2019, because there are no longer any contracts containing grandfather clauses.
- b) 5.3.2(3) sentence 2 (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(3) sentence 2 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, it is our opinion that these relationships do not constitute a conflict of interest nor do they interfere with his duties as the Chairman of the Audit Committee. This deviation is therefore being declared purely as a precautionary measure.
- c) 5.4.1(6 to 8) (disclosure regarding election recommendations)
  With regard to the recommendation in number 5.4.1(6-8) of the Code stating that certain circumstances 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, we 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) 5.4.5 sentence 2 (a maximum of three supervisory board mandates in non-group listed corporations or comparable companies)
  On 28 June 2019, TRATON SE shares commenced trading on the regulated market of the Frankfurt Stock Exchange and the Nasdaq in Stockholm. The Chairman of the Supervisory Board has been on the supervisory boards of three listed companies since that date, namely VOLKSWAGEN AG, AUDI AG and TRATON SE, as well as on the Supervisory Board of Bertelsmann SE & Co. KGaA. He is also Chairman of the Executive Board of Porsche Automobil Holding SE. Porsche Automobil Holding SE is not part of the same group as AUDI AG, VOLKSWAGEN AG and TRATON SE. As it cannot be ruled out that the supervisory board mandate at Bertelsmann SE & Co. KGaA involves similar requirements to those of a supervisory mandate in a listed company, and as the precise method of counting the mandates is unclear, we declare a deviation from section 5.4.5 sentence 2 of the Code as a precautionary measure. We are, however, confident that the Chairman of the Supervisory Board of VOLKSWAGEN AG has sufficient time at his disposal to fulfill the duties related to his mandate in the VOLKSWAGEN Group."

The current declaration of conformity is also published on our website http://www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html.

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 version of the Code as amended on February 7, 2017 have been complied with. The general compensation clauses in the contracts with members of the Board of Management may, if applied accordingly, result in early disbursement of multi-year variable remuneration components. 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 2019 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 2019 Annual General Meeting so that the introductory remarks and the speech 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, TRATON SE, MAN SE and RENK AG have also each issued declarations of conformity with the German Corporate Governance Code. The declarations of conformity by our listed subsidiaries can be accessed on 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 the 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.

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 88 to 91.

DECLARATION OF CONFORMITY OF VOLKSWAGEN AG
www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html

DECLARATION OF CONFORMITY OF AUDI AG
www.audi.com/cgk-declaration

DECLARATION OF CONFORMITY OF TRATON SE
https://ir.traton.com/websites/traton/English/5000/corporate-governance.html

DECLARATION OF CONFORMITY OF MAN SE
https://www.corporate.man.eu/en/investor-relations/corporate-governance/corporate-governance-at-man/Corporate-Governance-at-MAN.html

DECLARATION OF CONFORMITY OF RENK AG
https://www.renk-ag.com/en/investor-relations/financial-reports/

OBJECTIVES FOR THE COMPOSITION OF THE SUPERVISORY BOARD AND BOARD OF MANAGEMENT AS WELL AS THE 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 members of the Supervisory Board should be shareholder representatives with no 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 on the Supervisory Board must be persons who are independent as defined in number 5.4.2 of the 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. After thorough deliberation, the Supervisory Board decided to propose Mr. Hans Michel Piëch to the 2019 Annual General Meeting for re-election to the Supervisory Board, despite him exceeding the regular age limit of 75 (in accordance with the Supervisory Board rules of procedure) at the time of election. Mr. Hans Michel Piëch is indirectly the largest individual shareholder in Volkswagen AG and – thanks in part to his many years of work for numerous other companies in the Volkswagen Group – has a particular wealth of experience and expertise in the Company’s business areas. The Supervisory Board is confident that he will continue to contribute this in the Company’s best interests in the future. The independent members of the Supervisory Board within the meaning of number 5.4.2 of the Code are, at the present time in any case, Ms. Hessa Sultan Al-Jaber and Ms. Louise Kiesling, Mr. Hussain Ali Al-Abdulla, Mr. Bernd Althusmann and Mr. Stephan Weil.

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 conducted by the company. 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 curriculum vitae of the members of the Supervisory Board are available online at www.volkswagenag.com/en/group/executive-bodies. html.

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 (Führpos-GleichberG – German 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 56th Annual General Meeting on June 22, 2016. The employee representatives have met the quota since the end of the 57th Annual General Meeting on May 10, 2017. Both the shareholder and the employee representatives fulfilled the quota on December 31, 2019.

The Supervisory Board set a target quota of 11.1% for the period after December 31, 2016 for the proportion of female members on the Board of Management as required in accordance with the FührposGleichberG. The new deadline set for achievement of this target is December 31, 2021. The proportion of female members on the Board of Management

TOGETHER4INTEGRITY

of Volkswagen AG as of December 31, 2019 was 12.5%, thus meeting the target quota.

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, 2019, the proportion of women in the active workforce at the first level of management was 11.4 (10.7)% and at the second level of management it was 16.4 (15.4)%.

REMUNERATION REPORT

Extensive explanations of the remuneration system and the individual remuneration of the members of the Board of Management and Supervisory Board can be found in the Remuneration Report starting on page 70 of the combined management report, in the notes to Volkswagen's consolidated financial statements on page 334, and on page 65 of the notes to the annual financial statements of Volkswagen AG.

The Corporate Governance Report according to number 3.10 of the Code in the version dated February 7, 2017 ends here.

GROUP CORPORATE GOVERNANCE DECLARATION

The Group corporate governance declaration forms part of the combined management report and is permanently available at www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html. 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/en/InvestorRelations/corporate-governance/declaration-of-conformity.html

INTEGRITY

With the Group strategy that was enhanced in 2019 – TOGETHER 2025+ – Volkswagen has made becoming a role model in the areas of integrity and compliance one of its key objectives.

With the Board of Management position for Integrity and Legal Affairs, the Group has put in place the organizational prerequisites for centralized integrity management. This Group function is responsible for planning, preparing and implementing programs and projects aimed at raising awareness, providing information and reinforcing a shared awareness of integrity.

Integrity at Volkswagen is defined as acting out of conviction, with responsibility and steadfastness. Integrity is an inner disposition that acts as an internal moral compass for doing the right thing in gray areas, in the absence of explicit rules or in the event of conflicting objectives. This means complying with our Group principles and the ethical principles established therein and behaving correctly in accordance with the rules. It also includes the steadfastness needed to adhere to these principles – regardless of economic and social pressure.

A comprehensive integrity program has been in place since 2016 with information campaigns, opportunities for dialog and initiatives aimed at all employees. This encompasses measures such as international get-togethers for managers and so-called integrity workshops for team spokespeople in production. In addition, we have launched an ambassador program that helps multipliers to make integrity a visible and practical part of everyday working life. The reporting year also saw us launch the integrity index as a pilot project in the Volkswagen Passenger Cars and Audi brands' German locations. The index was developed in collaboration with the Technical University of Munich and is designed to give a comprehensive picture of an organization's integrity. In future, we will use it as a performance indicator to measure our progress toward our strategic goal of being a role model for integrity. With the integrity index, we are setting a benchmark for measuring integrity at an international level. The index can be used across industries and is geared toward global use. It has strong scientific validity and incorporates established frameworks such as the Ethics & Compliance Initiative (ECI) and Global Reporting Initiative (GRI). Its intention is to reveal possible weaknesses in integrity and compliance matters and make visible the changing mindset and behavior of managers and employees.

Together4Integrity: Establishing processes and engaging with people

As a central part of achieving the goal of becoming a role model for integrity and compliance, Volkswagen has launched Together4Integrity (T4I) – one of the largest strategic programs of transformation in the Group's history.

We firmly believe that only with lasting and dependable integrity will our Company be able to gain and boost the trust of its customers, staff, shareholders, business partners and the general public. With T4I, integrity and compliance are given the same priority as other parameters such as economic targets, sales figures and product quality. T4I strengthens corporate governance in a lasting way. As a Group-wide program, it has been bringing together all integrity- and compliance-related initiatives from 15 different departments under a common umbrella since 2018. The departments involved include Research and Development, Compliance, HR and Integrity.

T4I is based on the five principles of the internationally recognized ECI, which relate to strategy, risk management, a culture of integrity, a speak-up environment and resolute accountability. They are codified as the Group's aspiration level and are implemented through T4I. The Board of Management positions for Integrity & Legal Affairs and for Human Resources are responsible for the program. The other Board of Management positions act as sponsors, thus ensuring that T4I is successfully implemented in their area of responsibility.

The program serves to implement processes and structures that create a regulatory framework for acting with integrity and in accordance with the law. Furthermore, T4I aims to engage with people, creating a corporate culture that enables them to work together as equals, opens up space for creativity, allows diversity to flourish and encourages people to act in line with their values.

The program will be rolled out to all Group companies by 2025. Since launching in 2018, it has been introduced to over 200 companies (as of year-end 2019) that were prioritized based on the level of risk. In total, these employ approximately 430,000 people or around two-thirds of the Group's total workforce. From 2020, the program will be introduced to more and more of the smaller companies in the Group.

There are over 100 packages of measures that make up the core content of T4I, and each Group company is responsible for implementing these itself. Every functional area must put comprehensive and robust systems and processes into effect to mitigate compliance and integrity risks, thereby eliminating the factors that have contributed to serious wrongdoing in the past. The packages of measures have been grouped together into eleven key initiatives; for example, product compliance, HR compliance and HR processes, the whistleblower system, and business partner due diligence. Both compliance and integrity are embedded in the processes for every key initiative.

Employees and managers are engaged in T4I through the use of emotive and interactive formats, making them players in the process of change. They become aware of the fact that successful change relies first and foremost on their hard work and that Volkswagen values their efforts. Events such as the T4I kick-off and T4I perception workshops bring together employees and managers regardless of the different hierarchies. They convey a sense of community and strengthen awareness of the role of each individual. They also provide an opportunity to openly ask critical questions and address problems. Both events take place at every Group company in which T4I is rolled out.

T4I not only has an internal impact; it is also felt outside the Group. New processes, for example, such as the implementation of the Business Partner Code of Conduct, ensure that our suppliers and sales partners are committed to the principles of integrity and compliance and are trained accordingly. In addition, our increasing focus on integrity and compliance shapes the manner in which employees interact with customers, representatives from civil society, governments and other stakeholders, particularly as a result of the requirements and examples set out in the Code of Conduct. In this way, we also convey our understanding of integrity and compliance and the subsequent necessary changes beyond the company.

Through T4I, corporate governance will be geared towards comprehensive and sustainable integrity and compliance across the entire Volkswagen Group. This will provide a stable framework within which the whole workforce can act responsibly and with purpose and entrepreneurial spirit, and will help to establish Volkswagen as a reputable company that embodies integrity.

COMPLIANCE

Acting with integrity, compliance and honesty is an essential prerequisite 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 most important principles. We are striving to strengthen the trust of our customers, our business partners and other stakeholders in our Group by treating each other fairly. 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 is to further enhance awareness of this.

Commitment to compliance at the highest level

In September 2019, Herbert Diess, Chairman of the Board of Management of Volkswagen AG, wrote in the social network LinkedIn: "Ethics, integrity, and compliance are crucial to me and the entire Board of Management to our success. This is the foundation for our future business."

Compliance organization

The Group Compliance Committee met regularly in the reporting year. It is a top-management level body that is chaired by the member of the Board of Management responsible for Integrity & Legal Affairs. The committee ensures that compliance and integrity standards are uniformly developed, applied and communicated across the divisions and brands.

The Group Chief Compliance Officer reports directly to the member of the Board of Management responsible for Integrity & Legal Affairs. In the reporting period, there was direct communication on compliance issues at meetings of the Board of Management, the Audit Committee of the Supervisory Board and the Works Council, particularly by the member of the Board of Management responsible for Integrity & Legal Affairs and the Group Chief Compliance Officer.

Central divisions within the Group are supported and advised by their own compliance contacts. Additional centers of competence are responsible for the overall direction of compliance work and develop compliance instruments and program components with which the companies can implement the compliance requirements themselves across the Group. During the reporting period, additional resources were set aside for these tasks.

The global compliance organization at the Volkswagen Group comprises divisional and regional compliance offices. These support and advise the compliance officers and managers of the respective Group and brand companies with an effective, risk-based, Group-wide compliance management system, helping them to conduct their business activities in accordance with the rules and to be consistent in adhering to relevant laws and internal regulations. They also help companies to identify, evaluate, manage and monitor potential compliance risks. Additional compliance resources were provided on a risk-oriented basis in the reporting year. Higher levels of the compliance organization are involved in the appointment of new compliance officers and conduct a standardized training process.

The heads of the centers of competence report to the Group Chief Compliance Officer on disciplinary and functional matters. The Divisional Compliance Officers and the Regional Compliance Officer China report generally to the Group Chief Compliance Officer on functional matters. Meetings and conferences ensure that those responsible for compliance at Group and brand level are connected and communicate regularly.

Compliance management system

Our compliance management system is aligned with national and international laws and standards. Its objective is to encourage, reinforce and ensure compliant behavior in the Company in a lasting manner. The focus of our compliance organization is on preventing corruption, breaches of trust and money laundering and thereby on reducing the risk of unlawful actions. In the reporting year, we also conducted an analysis of fraud prevention for all relevant risks at the second line of defense in the risk management and internal control system.

Where laws and regulations have been violated, our whistleblower system is a suitable tool for taking appropriate action. Members of management are obligated to report every indication of serious rule-breaking. Failure to do so is itself a serious infringement. The accessibility of the whistleblower system has been further improved with a 24-hour hotline.

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

Compliance work in the Volkswagen Group is based on a systematic process of risk identification and reporting in accordance with the IDW standard AsS 980. We used 2019 to conduct a Group-wide compliance risk analysis. The reporting year also saw us begin the global roll-out of our new standardized, IT-based process for selecting business partners. This will be used to regularly review the integrity of existing and new business partners through a risk-based approach and will be conducted every one to six years, depending on the degree of risk exposure. 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's Code of Conduct is established throughout the Group. It is the main tool for reinforcing awareness of good conduct among the workforce, providing assistance to employees and finding suitable contacts in cases of uncertainty. The framework is available to all employees on the intranet and also to third parties on the internet and is continually communicated within the Company via digital and print media and at events.

Employees at all levels of the hierarchy receive regular training on the Code of Conduct, and the Code is also a fixed part of our operational HR processes. New employees receive a copy of it as part of the recruitment process. A reference to the Code of Conduct and the obligation to comply with it are a fixed part of employment contracts. In the reporting year, the Code of Conduct formed part of the employees' annual reviews and was thus taken into account when calculating their variable, performance-related remuneration. As of 2019, employees at senior management levels are required to undergo annual Code of Conduct certification process.

In addition to the Volkswagen Group Code of Conduct, Group Compliance prepares Group policies and guidelines on specific compliance issues, which are incorporated into the relevant rules of the brand and Group companies throughout the entire Group. In the reporting year, for example, uniform rules for dealing with gifts, avoiding corruption and conflicts of interest were set out in a Group policy for the first time. In addition, a revised version of the guidelines on whistleblowing reinforced the role of the Volkswagen whistleblower system as the central point of contact for cases of serious rule-breaking. Group policies on business partner due diligence, on prevention of money laundering and on mergers & acquisitions were also implemented.

There was a new guideline on "Governance and Integrity, Risk Management, Compliance and Legal Affairs" which describes the organization, structure and functions relating to the Compliance, Integrity, Risk Management and Legal departments. Employees have access to the compliance rules and regulations in particular via the compliance pages on the Company intranet.

CODE OF CONDUCT OF THE VOLKSWAGEN GROUP
https://www.volkswagenag.com/presence/konzern/documents/Verhaltensgrundsätze_Group_EN_V2019.pdf

CODE OF CONDUCT FOR BUSINESS PARTNERS
www. volkswagenag.com/presence/nachhaltigkeit/documents/policy-intern/2019_Code_of_Conduct_for_Business_Partners-DE-EN.pdf

The Code of Conduct for Business Partners was extensively revised in the reporting year and the new version was enacted throughout the Group. The Code of Conduct for Business Partners defines our minimum standards concerning the compliance matters described therein and is permanently available to third parties via the internet. Business partners can also take part in online training that covers the Code's content.

Whistleblower system

The Volkswagen whistleblower system is the central point of contact for reporting potential cases of serious rule-breaking in the Volkswagen Group. It focuses on investigating serious infringements that could cause major damage to the Company's reputation or financial interests or that involve major breaches of the Volkswagen Group's ethical principles. Examples of matters generally involving serious rule-breaking include economic, corruption-related, tax and environmental offenses, breaches of human rights, infringements of antitrust and competition law, money laundering and terrorist financing, infringements of rules on product safety and approval, and serious data protection breaches.

The aim of the whistleblower system is to protect Volkswagen and its employees through the use of binding principles and a clearly governed process. The experience gained from reported violations of regulations helps us to improve compliance management and prevent similar incidents in the future. The whistleblower system is designed to provide maximum protection for whistleblowers and affected parties. An investigation is only initiated after the information received has undergone a thorough examination and the latter has identified concrete indications of rule-breaking. The presumption of innocence applies to the parties affected until rule-breaking has been proven. Strict confidentiality and secrecy apply throughout the investigation process. Reports are investigated fairly, swiftly and sensitively. Whistleblowers are also protected. Their statements are treated confidentially. If they wish, and provided the law allows, their identity is not disclosed. Discriminating against whistleblowers is a serious violation of the rules and is not tolerated. Appropriate sanctions are applied where misconduct is proven.

Information on misconduct by Volkswagen Group employees can be reported through a wide range of channels, including anonymously if preferred. Options for anonymous reporting include a specially protected online reporting channel, which allows users to communicate under an alias, and a 24-hour telephone hotline through which reports can be submitted in various languages. In addition to the staff in the Investigation Office, there are two external lawyers (ombudspersons) available for confidential discussions. The ombudspersons can receive reports and forward them to the Investigation Office.

The whistleblower system is coordinated by the Central Investigation Office in Wolfsburg. This office is also responsible for dealing with reports concerning Volkswagen AG and its subsidiaries. AUDI AG, Dr. Ing. h.c. F. Porsche AG and TRATON SE each operate their own investigation office that also covers their subsidiaries.

Group-wide, 3,174 reports (excluding China) were registered at the four Investigation Offices in 2019 (2018: 1,560). This shows that staff are familiar with the whistleblower system and the underlying processes. It is also proof that employees are motivated by a speak-up culture to take action against misconduct.

Communication, training and advice

We further expanded training and communication activities relating to compliance in the reporting year. Training on the Code of Conduct is mandatory for all employee groups and forms the basis for the understanding of compliance in the Group. It takes place in both face-to-face and online training sessions. The training is regularly repeated with new and expanded content and documented in employees' training history.

In addition, Volkswagen introduced a mandatory anticorruption training in the reporting year, which is also being rolled out Group-wide. For the first time, training and raising awareness on this issue is aimed not only at specific groups within the Company, but also at business partners from sales and procurement departments based on the level of risk.

Following the risk-based approach, compliance training – some of which is mandatory – continues to take place on topics including the prevention of money laundering. Compliance content is also communicated through personal development programs, in various dialog formats and at presentations and events, for example on the topic of anticorruption measures and the whistleblower system.

Employees can also use special e-mail addresses to solicit advice on compliance issues. They can also contact advisory services within the compliance organization, such as the compliance Infopoint at Volkswagen.

Compliance key performance indicator

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

> Compliance, a culture of error management and behaving with integrity. This is based on an evaluation of the answers to three questions in the opinion survey relating to compliance with regulations and processes, dealing with risks and errors and behaving with integrity. In the case of negative deviations, the affected departments develop and implement measures. In the reporting year, the key performance indicator further improved on the previous good figure.

Strengthening compliance in company processes

The act implementing the Fourth EU Money Laundering Directive into German law presented new requirements 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). The Group policy adopted and published in this context by the Board of Management in 2018 defines the minimum standard to be implemented by all Group companies.

In 2018, we designed and developed a new IT tool for a risk-based business partner selection process at the Volkswagen Group. We began pilot testing the tool at the end of 2018. The Group has been gradually introducing this business partner selection process since 2019. A key objective of the new process is the creation of transparency within the Volkswagen Group to prevent Group companies from entering into business relationships with business partners that other Group companies have previously classified as not acting with integrity.

New business models are constantly being considered in the Volkswagen Group as part of the enhanced Group strategy TOGETHER 2025⁺. These business models focus particularly on digitalization, automation and electrification, but also on the development of and involvement in mobility concepts. The compliance organization 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 more firmly embedded in mergers & acquisitions and real estate transactions.

WHISTLEBLOWER SYSTEM
www.volkswagenag.com/en/group/compliance-and-risk-management/whistleblowersystem.html
Phone: + 49 5361 9 46300
E-Mail: io@volkswagen.de

Effectiveness review

Independent reviews by Group Internal Audit in 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 2019.

INDEPENDENT MONITOR

In June 2017, in connection with the diesel issue, 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 also works as Independent Compliance Auditor under the Third Partial Consent Decree concluded separately with the US Department of Justice and the US Environmental Protection Agency (EPA) and the Third California Partial Consent Decree agreed with the US 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 179). Mr. Thompson will perform his duties under the Plea Agreement and Third Partial Consent Decrees for a period of three years, which also includes taking measures to further strengthen the Company's compliance and its reporting and monitoring mechanisms, as well as the implementation of an enhanced compliance and ethics program.

In his capacity as the Independent Compliance Monitor on the basis of the Plea Agreement, Mr. Thompson submitted three reports: on March 30, 2018, February 8, 2019, and November 5, 2019; in accordance with the provisions of the Plea Agreement, the reports will not be published. In addition, in his capacity as the Independent Compliance Auditor under the terms of the Third Partial Consent Decrees, Mr. Thompson prepared two annual reports, published on August 27, 2018, and September 4, 2019.

Volkswagen announced on October 17, 2019, that the US Department of Justice and the monitor had granted a 90-day extension to the monitorship to be able to demonstrate that Volkswagen had fulfilled its obligations pursuant to the Plea Agreement. Thanks to this agreement, Volkswagen has 90 more days to fully test and, where necessary, adjust the measures that the Group and its brands have put in place, including the monitor's recommendations, so that Mr. Thompson is able to submit his certification report on the Company's integrity and compliance programs.

On September 2, 2019, Volkswagen also announced that the Company had concluded a settlement agreement with the US Environmental Protection Agency, which had been the reason for commissioning a second auditor for the Volkswagen Group. This agreement was concluded by Volkswagen to prevent it from being excluded from public contracts in the United States. This second auditorship is planned to last three years.

RISK MANAGEMENT, AUDIT

Carefully managing potential risks to the Company is a key component of our daily work. The 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 the 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. It also discusses the annual audit planning, the determination of 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/en/InvestorRelations.html. 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 countermotions 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 and the speeches of the Chairman of the Supervisory Board and the Chairman of the Board of Management on the internet.

In addition, news and information on the Volkswagen Group are available on this 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 “Financial News, Ad-hoc Releases & Publications”.

We publish managers’ transactions pursuant to Article 19 of the Market Abuse Regulation (Marktmissbrauchsverordnung) or – for previous fiscal years – in accordance with section 15a of the Wertpapierhandelsgesetz (WpHG – German Securities Trading Act) (old version) under the heading “Corporate Governance”, menu item “Managers’ Transactions”. On the same web page – under the heading “Financial News, Ad-hoc Releases & Publications”, menu item “Voting Rights” – you can also access details of the notifications filed in the reporting period in compliance with sections 33 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 88 to 91 of this annual report. The shareholder structure is presented on page 109.

MANDATORY PUBLICATIONS OF VOLKSWAGEN AG
www.volkswagenag.com/en/InvestorRelations/news-and-publications.html

Remuneration Report

This chapter describes the main elements of the remuneration system for the Board of Management. In addition, 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.

PRINCIPLES OF BOARD OF MANAGEMENT REMUNERATION

Matters involving the remuneration system and the total remuneration of each individual member of the Volkswagen AG Board of Management are decided on by the Supervisory Board 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 the version dated February 7, 2017. 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 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 Group strategy.

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, and 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 Board of Management's remuneration system before going into the components of the remuneration for the reporting period.

Overview of the remuneration system

The 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 best 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 targets agreed with each of the members of the Board of Management are achieved, the annual target remuneration for each member will amount to a total of €4,500,000 (corresponding to a fixed 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 (fixed 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 fixed remuneration, annual bonus, LTI and any special payments) was contractually agreed with Mr. Sommer.

Non-performance-related remuneration

The non-performance-related remuneration comprises fixed remuneration and fringe benefits. Since 2018, separate remuneration is no longer provided for appointments assumed at Group companies, but is covered by the fixed remuneration. 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 fixed 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 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 are only payable if certain thresholds are reached or exceeded.

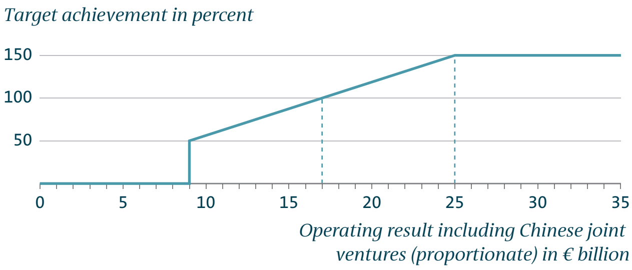
The calculated payment amount may be individually reduced by up to 20% (multiplier of 0.8) or increased by up to 20% (multiplier of 1.2) by the Supervisory Board, taking into account the degree of achievement of individual targets agreed between the Supervisory Board and the respective member of the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

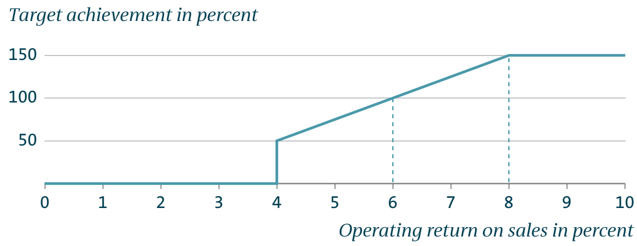
CALCULATION OF THE PAYMENT AMOUNT FOR THE ANNUAL BONUS

TARGET	×	TARGET ACHIEVEMENT			=	ANNUAL BONUS
		Company bonus Operational KPIs (0 – 150 % target achievement)	×	**Performance factor** Multiplier (0.8 – 1.2)		**Payment amount**

50 PERCENT COMPONENT 1



50 PERCENT COMPONENT 2



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

€ billion	2018	2019
Maximum threshold	25.0	25.0
100% level of target	17.0	17.0
Minimum threshold	9.0	9.0
Actual	18.5	21.4
Target achievement (in %)	110	127

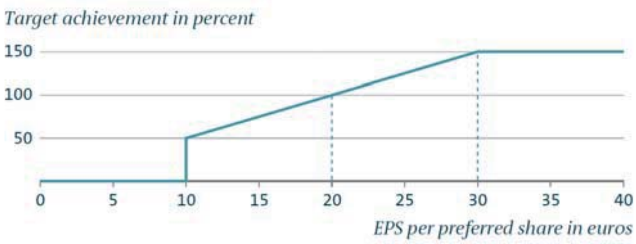
COMPONENT 2: OPERATING RETURN ON SALES

%	2018	2019
Maximum threshold	8.0	8.0
100% level of target	6.0	6.0
Minimum threshold	4.0	4.0
Actual	5.9	6.7
Target achievement (in %)	98	118

Performance share plan – long-term incentive (LTI)

The LTI is granted to the Board of Management annually 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.

EPS PERFORMANCE MEASUREMENT



PERFORMANCE PERIOD 2017–2019

€	2017	2018	2019
Maximum threshold	30.0	30.0	30.0
100% level of target	20.0	20.0	20.0
Minimum threshold	10.0	10.0	10.0
Actual	22.69	23.63	26.66
Target achievement (in %)	113	118	133

PERFORMANCE PERIOD 2018–2020

€	2018	2019
Maximum threshold	30.0	30.0
100% level of target	20.0	20.0
Minimum threshold	10.0	10.0
Actual	23.63	26.66
Target achievement (in %)	118	133

PERFORMANCE PERIOD 2019–2021

€	2019
Maximum threshold	30.0
100% level of target	20.0
Minimum threshold	10.0
Actual	26.66
Target achievement (in %)	133

After the end of the three-year term of the performance share plan, a cash settlement takes place. 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. The dividend equivalent corresponds to the dividends distributed during the holding period on a genuine Volkswagen preferred share.

	PERFORMANCE PERIOD		
	2017–2019	2018–2020	2019–2021
Initial reference price	127.84	169.42	147.08
Closing reference price	177.44	–[1]	–[1]
Dividend equivalent			
2017	2.06	–	–
2018	3.96	3.96	–
2019	4.86	4.86	4.86

1 Determined at the end of the performance period.

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

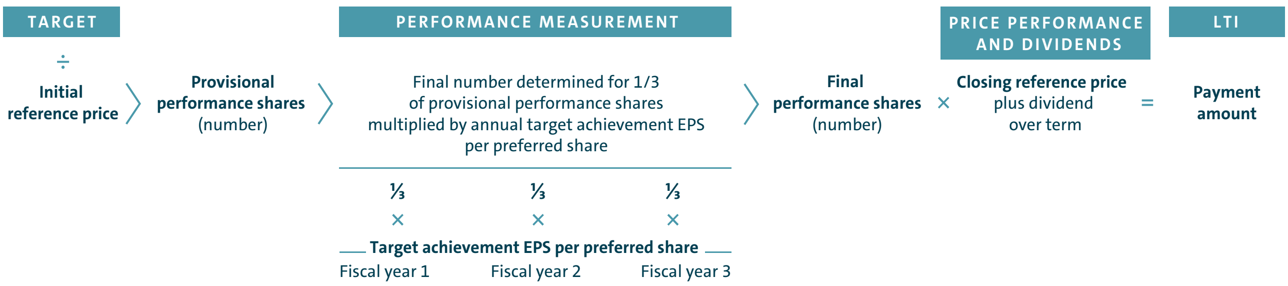
If the employment contract of a member of the Board of Management concludes prior to the end of the performance period due to extraordinary termination based on good cause, or if the member of the Board of Management starts working for a competitor (also referred to as “bad-leaver cases”), the unpaid 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 reappointment or new appointment.

In connection with the appointment of the Chairman of the Board of Management, the employment contract of Mr. Diess was terminated by mutual agreement in 2018 and a new employment contract was entered into, whereby the expiry rule described above applies from the 2018–2020 performance period onwards.

Ms. Werner was appointed as a member of the Board of Management in 2017. Mr. Blume, Mr. Kilian and Mr. Sommer were newly appointed to the Board of Management in 2018, followed by Mr. Schot in 2019.

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 generally receive advances of 80% of their target amount. Mr. Blume will receive corresponding advances for the performance periods 2018–2020 (proportionate) and 2019–2021. The two advances will each be paid after the first year of the performance period. Final settlement is based on actual achievement of targets at the end of the relevant three-year performance period.

CALCULATION OF THE PAYMENT AMOUNT FROM THE PERFORMANCE SHARE PLAN



INFORMATION ON THE PERFORMANCE SHARES

€	Performance period 2017–2019		Performance period 2018–2020		Performance period 2019–2021	
	Number of performance shares allocated at the grant date	Fair value at the grant date	Number of performance shares allocated at the grant date	Fair value at the grant date	Number of performance shares allocated at the grant date	Fair value at the grant date
Herbert Diess	14,080	2,048,640	19,212	2,840,468	26,040	3,350,046
Oliver Blume (since April 13, 2018)	–	–	7,614	1,349,810	12,238	1,574,419
Jochem Heizmann (until January 10, 2019)	14,080	2,031,040	10,624	1,799,918	335	43,098
Gunnar Kilian (since April 13, 2018)	–	–	7,614	1,349,810	12,238	1,574,419
Andreas Renschler	14,080	1,891,648	10,624	1,799,918	12,238	1,574,419
Abraham Schot (since January 1, 2019)	–	–	–	–	12,238	1,574,419
Stefan Sommer (since September 1, 2018)	–	–	3,541	488,446	12,238	1,574,419
Hiltrud Dorothea Werner	12,907	1,856,672	10,624	1,799,918	12,238	1,574,419
Frank Witter	14,080	2,025,408	10,624	1,799,918	12,238	1,574,419
Total	**69,227**	**9,853,408**	**80,477**	**13,228,206**	**112,041**	**14,414,075**

€	Provision as of Dec. 31, 2019	Intrinsic value as of Dec. 31, 2019	Comprehensive income 2019 arising from performance shares	Provision as of Dec. 31, 2018	Intrinsic value as of Dec. 31, 2018[1]	Comprehensive income 2018 arising from performance shares
Herbert Diess	3,504,374	3,687,200	3,490,713	2,617,527	1,616,319	1,547,771
Oliver Blume (since April 13, 2018)	984,260	–	1,614,937	401,323	–	401,323
Jochem Heizmann (until January 10, 2019)	2,934,421	1,767,329	951,793	3,422,628	2,362,898	759,638
Gunnar Kilian (since April 13, 2018)	2,016,260	–	1,614,937	401,323	–	401,323
Andreas Renschler	5,572,774	3,879,394	1,713,961	5,298,813	2,362,898	1,991,565
Abraham Schot (since January 1, 2019)	3,925,694	–	3,925,694	–	–	–
Stefan Sommer (since September 1, 2018)	1,415,440	–	1,317,674	97,766	–	97,766
Hiltrud Dorothea Werner	5,019,403	2,782,969	2,852,956	2,166,448	–	1,542,922
Frank Witter	6,981,087	3,879,394	2,054,256	6,366,831	2,362,898	2,678,125
Total	**32,353,713**	**15,996,286**	**19,536,920**	**20,772,660**	**8,705,012**	**9,420,432**

1 Adjusted

The number of performance shares equals 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.

To determine their 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 periods 2017–2019, 2018–2020 and 2019–2021. The amount therefore depends on the individual contract term and the relevant vesting arrangements for the performance shares. 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, 2019. 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 last 30 trading days (Xetra closing prices of Volkswagen's preferred shares) preceding December 31, 2019, 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 2019 is recorded in "Comprehensive income 2019 arising from performance shares" according to the IFRSs.

Phantom preferred shares

The phantom preferred shares for the remuneration withheld for 2015 formed part of the Board of Management remuneration until they were 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 fixed 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 €5,500,000 for each member of the Board of Management. If the total remuneration cap 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 ⅔% 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 was 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 holders of phantom preferred shares were entitled to dividend equivalents in the amount of the dividends paid on real preferred shares.

The shares were generally reconverted and paid out when the three-year holding period had expired or – in the event that members retired from office early – at the time they did 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 the date on which members left the company, was calculated (closing reference price). The difference between the target reference price and the initial reference price was deducted from the closing reference price, and the dividends distributed on one real Volkswagen preferred share during the holding period (dividend equivalent) were added to the closing reference price. The figure thus calculated was multiplied by the number of phantom preferred shares so as to calculate the amount to be paid to each Board of Management member. This ensured that – excluding the dividend equivalents accrued – the amount withheld was only paid out in full if the initial reference price of the preferred share increased by at least 25%.

In January of fiscal year 2019, Mr. Heizmann retired from the Board of Management as per contract.

The number of phantom preferred shares granted on April 22, 2016 to members of the Board of Management who were in office at the time did not change in fiscal year 2019 (as of settlement in April 2019). In the year under review, the change in fair value of the phantom shares led to the recognition of an expense of €0.1 million (previous year: total income of €0.6 million).

INFORMATION ON THE PHANTOM PREFERRED SHARES HELD IN 2019

€	Number of phantom shares	Provision Dec. 31, 2019	Provision Dec. 31, 2018	Intrinsic value Dec. 31, 2019	Intrinsic value Dec. 31, 2018	Comprehensive income 2019 arising from phantom preferred shares	Comprehensive income 2018 arising from phantom preferred shares
Herbert Diess	4,317	–	512,740	–	540,704	27,705	−83,688
Jochem Heizmann (until January 10, 2019)	8,633	–	1,025,361	–	1,081,283	43,232	−167,356
Andreas Renschler	7,914	–	939,964	–	991,229	50,791	−153,418
Frank Witter	1,990	–	236,357	–	249,248	12,771	−38,577
Total	**22,854**	**–**	**2,714,422**	**–**	**2,862,464**	**134,499**	**−443,040**

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

	2019				2018
€	Non-performance-related component	Performance-related component	Long-term incentive component	Total remuneration	Total remuneration
Herbert Diess	2,212,694	4,288,002	3,350,046	9,850,742	7,877,832
Oliver Blume (since April 13, 2018)	1,418,936	1,901,085	1,574,419	4,894,440	3,515,815
Jochem Heizmann (until January 10, 2019)	71,391	52,085	43,098	166,574	5,013,141
Gunnar Kilian (since April 13, 2018)	1,462,701	1,901,085	1,574,419	4,938,205	3,529,523
Andreas Renschler	1,609,755	1,901,085	1,574,419	5,085,259	5,004,370
Abraham Schot (since January 1, 2019)	1,810,079	1,901,085	1,574,419	5,285,583	–
Stefan Sommer (since September 1, 2018)	1,869,019	1,901,085	1,574,419	5,344,523	1,603,515
Hiltrud Dorothea Werner	1,465,159	1,901,085	1,574,419	4,940,663	4,930,160
Frank Witter	1,412,781	1,901,085	1,574,419	4,888,285	4,821,428
Members of the Board of Management who left in the previous year	–	–	–	–	14,040,526
Total	**13,332,515**	**17,647,682**	**14,414,075**	**45,394,271**	**50,336,310**

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), members of the Board of Management who were Board members as of December 31, 2016 generally received advances on the target amount, which in accordance with the Code are reported in the tables as benefits received for the fiscal year in which the performance shares under the plan were allocated. Mr. Blume will receive corresponding advances for the performance period 2018–2020 (proportionate) and 2019–2021.

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.

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 Board of Management of Volkswagen AG, Chairman of the Brand Board of Management of Volkswagen Passenger Cars, Volume brand group, China					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	2,125,000	1,905,414	1,905,414	2,125,000	2,125,000	2,125,000
Fringe benefits	87,694	76,768	76,768	87,694	87,694	87,694
Total	**2,212,694**	**1,982,182**	**1,982,182**	**2,212,694**	**2,212,694**	**2,212,694**
One-year performance-related remuneration	4,288,002	3,055,182	2,564,750	3,045,000	–	5,481,000
Multiyear performance-related remuneration	540,445	2,603,867	2,840,468	3,350,046	–	7,660,000
LTI (performance share plan 2017–2019)	–	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	2,603,867	2,840,468	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	3,350,046	–	7,660,000
Phanton shares	540,445	–	–	–	–	–
Total[1]	**7,041,141**	**7,641,230**	**7,387,400**	**8,607,740**	**2,212,694**	**15,353,694**
Pension expense	1,354,053	850,620	850,620	1,354,053	1,354,053	1,354,053
Total remuneration	**8,395,194**	**8,491,850**	**8,238,020**	**9,961,793**	**3,566,747**	**16,707,747**

1 The fixed remuneration agreed with Mr. Diess for fiscal year 2018 is €1,905,414 (prorated for the term of office as a full member of the Board of Management up until April 12, 2018 and for the term of office as Chairman of the Board of Management starting April 13, 2018).

	OLIVER BLUME Chairman of the Board of Management of Dr. Ing. h.c. F. Porsche AG, Sport & Luxury brand group Joined: April 13, 2018					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	967,500	967,500	1,350,000	1,350,000	1,350,000
Fringe benefits	68,936	45,999	45,999	68,936	68,936	68,936
Total	**1,418,936**	**1,013,499**	**1,013,499**	**1,418,936**	**1,418,936**	**1,418,936**
One-year performance-related remuneration	1,901,085	1,152,506	967,500	1,500,000[1]	–	2,580,000
Multiyear performance-related remuneration	1,440,000	1,032,000	1,349,810	1,574,419	–	3,600,000
LTI (performance share plan 2018–2020)	–	1,032,000	1,349,810	–	–	–
LTI (performance share plan 2019–2021)	1,440,000	–	–	1,574,419	–	3,600,000
Total	**4,760,021**	**3,198,005**	**3,330,809**	**4,493,355**	**1,418,936**	**7,598,936**
Pension expense	808,544	588,354	588,354	808,544	808,544	808,544
Total remuneration	**5,568,565**	**3,786,359**	**3,919,163**	**5,301,899**	**2,227,480**	**8,407,480**

1 In 2019, Mr. Blume was granted a maximum performance-related bonus payment by Porsche AG in the amount of €150,000 which is not taken into consideration in the remuneration from Volkswagen AG.

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

	JOCHEM HEIZMANN					
	China					
	Left: January 10, 2019					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	36,986	1,350,000	1,350,000	36,986	36,986	36,986
Fringe benefits	34,405	255,076	255,076	34,405	34,405	34,405
Total	**71,391**	**1,605,076**	**1,605,076**	**71,391**	**71,391**	**71,391**
One-year performance-related remuneration	52,085	1,608,147	1,350,000	36,986	–	66,575
Multiyear performance-related remuneration	1,068,593	1,440,000	1,799,918	43,098	–	98,630
LTI (performance share plan 2017–2019)	–	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	1,440,000	1,799,918	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	43,098	–	98,630
Phantom shares	1,068,593	–	–	–	–	–
Total	**1,192,069**	**4,653,223**	**4,754,994**	**151,475**	**71,391**	**236,597**
Pension expense	–	–	–	–	–	–
Total remuneration	**1,192,069**	**4,653,223**	**4,754,994**	**151,475**	**71,391**	**236,597**

	GUNNAR KILIAN					
	Human Resources					
	Joined: April 13, 2018					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	967,500	967,500	1,350,000	1,350,000	1,350,000
Fringe benefits	112,701	59,707	59,707	112,701	112,701	112,701
Total	**1,462,701**	**1,027,207**	**1,027,207**	**1,462,701**	**1,462,701**	**1,462,701**
One-year performance-related remuneration	1,901,085	1,152,506	967,500	1,350,000	–	2,430,000
Multiyear performance-related remuneration	–	–	1,349,810	1,574,419	–	3,600,000
LTI (performance share plan 2018–2020)	–	–	1,349,810	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	1,574,419	–	3,600,000
Total	**3,363,786**	**2,179,713**	**3,344,517**	**4,387,120**	**1,462,701**	**7,492,701**
Pension expense	886,559	703,228	703,228	886,559	886,559	886,559
Total remuneration	**4,250,345**	**2,882,941**	**4,047,745**	**5,273,679**	**2,349,260**	**8,379,260**

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

	ANDREAS RENSCHLER Chairman of the Board of Management of TRATON SE, Truck & Bus brand group					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	259,755	246,305	246,305	259,755	259,755	259,755
Total	**1,609,755**	**1,596,305**	**1,596,305**	**1,609,755**	**1,609,755**	**1,609,755**
One-year performance-related remuneration	1,901,085	1,608,147	1,350,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	990,754	1,440,000	1,799,918	1,574,419	–	3,600,000
LTI (performance share plan 2017–2019)	–	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	1,440,000	1,799,918	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	1,574,419	–	3,600,000
Phanton shares	990,754	–	–	–	–	–
Total	**4,501,594**	**4,644,452**	**4,746,223**	**4,534,174**	**1,609,755**	**7,639,755**
Pension expense	5,025,570	5,249,526	5,249,526	5,025,570	5,025,570	5,025,570
Total remuneration	**9,527,164**	**9,893,978**	**9,995,749**	**9,559,744**	**6,635,325**	**12,665,325**

	ABRAHAM SCHOT Chairman of the Board of Management of AUDI AG, Premium brand group Joined: January 1, 2019					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	–	–	1,350,000	1,350,000	1,350,000
Fringe benefits	460,079	–	–	460,079	460,079	460,079
Total	**1,810,079**	**–**	**–**	**1,810,079**	**1,810,079**	**1,810,079**
One-year performance-related remuneration	1,901,085	–	–	1,350,000	–	2,430,000
Multiyear performance-related remuneration	–	–	–	1,574,419	–	3,600,000
LTI (performance share plan 2019–2021)	–	–	–	1,574,419	–	3,600,000
Total	**3,711,164**	**–**	**–**	**4,734,498**	**1,810,079**	**7,840,079**
Pension expense	2,222,572	–	–	2,222,572	2,222,572	2,222,572
Total remuneration	**5,933,736**	**–**	**–**	**6,957,070**	**4,032,651**	**10,062,651**

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

	STEFAN SOMMER					
	Components & Procurement					
	Joined: September 1, 2018					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	450,000	450,000	1,350,000	1,350,000	1,350,000
Fringe benefits	519,019	129,020	129,020	519,019	519,019	519,019
Total	**1,869,019**	**579,020**	**579,020**	**1,869,019**	**1,869,019**	**1,869,019**
One-year performance-related remuneration	1,901,085	536,049	450,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	–	–	488,446	1,574,419	–	3,600,000
LTI (performance share plan 2018–2020)	–	–	488,446	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	1,574,419	–	3,600,000
Total[1]	**4,019,019**	**1,295,687**	**1,517,466**	**4,793,438**	**4,019,019**	**7,899,019**
Pension expense	761,437	270,997	270,997	761,437	761,437	761,437
Total remuneration	**4,780,456**	**1,566,684**	**1,788,463**	**5,554,875**	**4,780,456**	**8,660,456**

1 Benefits received and the minimum amount for 2019 and benefits received for 2018 (prorated) include a top-up amount on the minimum remuneration of €3.5 million.

	HILTRUD DOROTHEA WERNER					
	Integrity & Legal Affairs					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	115,159	172,095	172,095	115,159	115,159	115,159
Total	**1,465,159**	**1,522,095**	**1,522,095**	**1,465,159**	**1,465,159**	**1,465,159**
One-year performance-related remuneration	1,901,085	1,608,147	1,350,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	–	–	1,799,918	1,574,419	–	3,600,000
LTI (performance share plan 2017–2019)	–	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	–	1,799,918	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	1,574,419	–	3,600,000
Total	**3,366,244**	**3,130,242**	**4,672,013**	**4,389,578**	**1,465,159**	**7,495,159**
Pension expense	956,364	953,404	953,404	956,364	956,364	956,364
Total remuneration	**4,322,608**	**4,083,646**	**5,625,417**	**5,345,942**	**2,421,523**	**8,451,523**

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

	FRANK WITTER					
	Finance & IT					
	Benefits received		Benefits granted			
€	2019	2018	2018	2019	2019 (minimum)	2019 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	62,781	63,363	63,363	62,781	62,781	62,781
Total	**1,412,781**	**1,413,363**	**1,413,363**	**1,412,781**	**1,412,781**	**1,412,781**
One-year performance-related remuneration	1,901,085	1,608,147	1,350,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	249,128	1,440,000	1,799,918	1,574,419	–	3,600,000
LTI (performance share plan 2017–2019)	–	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	1,440,000	1,799,918	–	–	–
LTI (performance share plan 2019–2021)	–	–	–	1,574,419	–	3,600,000
Phanton shares	249,128	–	–	–	–	–
Total	**3,562,994**	**4,461,510**	**4,563,281**	**4,337,200**	**1,412,781**	**7,442,781**
Pension expense	886,120	849,556	849,556	886,120	886,120	886,120
Total remuneration	**4,449,114**	**5,311,066**	**5,412,837**	**5,223,320**	**2,298,901**	**8,328,901**

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 provision for members of the Board of Management with a pension commitment based on final remuneration is calculated as a percentage of the fixed remuneration, starting from 50%. For Mr. Heizmann and Mr. Renschler the individual percentages rise by two percentage points for every year of service. 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 fixed 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. Renschler reached a retirement pension entitlement of 70% of his fixed level of remuneration at the end of 2019. The increase in the fixed remuneration as a consequence of the remuneration system in place from fiscal year 2017 is therefore not taken into account for Mr. Heizmann and Mr. Renschler because their final salary pension commitment is based on a previous pension scheme. 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.

For the members of the Board of Management of Volkswagen AG appointed before February 24, 2017 with a defined contribution pension scheme, a contribution rate of 50% of the fixed remuneration applies. For the members of the Board of Management of Volkswagen AG appointed after February 24, 2017 with a defined contribution pension scheme, a contribution rate of 40% of the fixed remuneration applies. The resulting amount will be credited to the pension account.

Ms. Werner, Mr. Blume, Mr. Diess, Mr. Kilian, Mr. Schot, Mr. Sommer 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 contribution in the amount of 50% of the fixed level of remuneration for Ms. Werner, Mr. Diess and Mr. Witter and in the amount of 40% of the fixed level of remuneration for Mr. Blume, Mr. Kilian, Mr. Schott and Mr. Sommer 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, 2019, the pension obligations for members of the Board of Management in accordance with IAS 19 amounted to €60.5 (55.8) million. €13.7 (11.9) 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 €44.8 (45.9) million. Measured in accordance with German GAAP, €14.5 (9.5) million was added to the provision in the reporting period.

Retired members of the Board of Management and their surviving dependents received €32.7 (44.0) million, or €32.7 (44.0) 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 €373.7 (324.0) million, or €300.5 (276.2) million measured in accordance with German GAAP.

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).

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 2019.

PENSIONS OF THE MEMBERS OF THE BOARD OF MANAGEMENT IN 2019 (PRIOR-YEAR FIGURES IN BRACKETS)

€	Pension expense	Present values as of December 31[1]
Herbert Diess	1,354,053	5,592,969
	(850,620)	(3,410,933)
Oliver Blume (since April 13, 2018)	808,544	1,743,034
	(588,354)	(588,354)
Jochem Heizmann (until January 10, 2019)	–	–
	–	(18,098,438)
Gunnar Kilian (since April 13, 2018)	886,559	2,102,717
	(703,228)	(703,228)
Andreas Renschler	5,025,570	29,609,167
	(5,249,526)	(20,109,236)
Abraham Schot (since January 1, 2019)	2,222,572	2,222,572
	–	–
Stefan Sommer (since September 1, 2018)	761,437	1,228,940
	(270,997)	(270,997)
Hiltrud Dorothea Werner	956,364	3,482,194
	(953,404)	(1,872,035)
Frank Witter	886,120	14,474,204
	(849,556)	(10,765,942)
	–	–
Members of the Board of Management who left in the previous year	(1,053,684)	–
Total	**12,901,219**	**60,455,797**
	(10,519,369)	**(55,819,163)**

1 The amount is reported in the total amount for defined benefit plans recognized 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 is comprised entirely of non-performance-related remuneration components. 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 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 (MitbestG – 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 previously.
> 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 2019, the members of the Supervisory Board received €5,327,155 (4,538,986). Of this figure, €2,290,833 related to the work of the Supervisory Board and €944,444 related to the work in the committees.

REMUNERATION OF THE MEMBERS OF THE SUPERVISORY BOARD

€	FIXED REMUNERATION	WORK IN THE COMMITTEES	OTHER[1]	TOTAL 2019	TOTAL 2018
Hans Dieter Pötsch	300,000	100,000	525,500	925,500	584,500
Jörg Hofmann[2]	200,000	75,000	14,000	289,000	294,000
Hussain Ali Al Abdulla	100,000	–	5,000	105,000	108,000
Hessa Sultan Al Jaber	100,000	–	7,000	107,000	111,000
Bernd Althusmann[3]	100,000	50,000	7,000	157,000	155,194
Birgit Dietze[2] (until May 31, 2019)	41,667	20,833	5,000	67,500	167,000
Hans-Peter Fischer[2]	100,000	–	7,000	107,000	114,000
Marianne Heiß (since February 14, 2018)	100,000	50,000	100,500	250,500	198,300
Uwe Hück[2] (until February 8, 2019)	10,278	–	4,596	14,874	184,500
Johan Järvklo[2]	100,000	–	7,000	107,000	114,000
Ulrike Jakob[2]	100,000	–	6,000	106,000	112,000
Louise Kiesling	100,000	–	7,000	107,000	111,000
Peter Mosch[2]	100,000	100,000	190,500	390,500	346,589
Bertina Murkovic[2]	100,000	50,000	7,000	157,000	164,000
Bernd Osterloh[2]	100,000	125,000	162,000	387,000	264,233
Hans Michel Piëch	100,000	–	189,000	289,000	272,000
Ferdinand Oliver Porsche	100,000	150,000	185,000	435,000	412,500
Wolfgang Porsche	100,000	150,000	183,500	433,500	422,500
Conny Schönhardt[2] (since June 21, 2019)	52,778	23,611	5,000	81,389	–
Athanasios Stimoniaris[2]	100,000	–	382,040	482,040	230,225
Stephan Weil[3]	100,000	50,000	13,000	163,000	164,000
Werner Weresch[2] (since February 21, 2019)	86,111	–	79,241	165,352	–
Members of the Supervisory Board who left in the previous year	9,444	–	–	–	9,444
Total	**2,290,833**	**944,444**	**2,091,877**	**5,327,155**	**4,538,985**

1 Attendance fees, membership of other Group bodies (non-performance-related: €790,810; performance-related: €779,967).
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 (German 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 in so far as it exceeds €6,200 per annum. Remuneration is defined for this purpose as Supervisory Board remuneration and attendance fees exceeding the amount of €200.

Executive Bodies

Members of the Board of Management and their appointments

Appointments: as of December 31, 2019 or the leaving date from the Board of Management of Volkswagen AG

DR.-ING. HERBERT DIESS (*1958)
Chairman (since April 13, 2018),
Chairman of the Brand Board of Management
of Volkswagen Passenger Cars,
Volume brand group,
China (since January 11, 2019)
July 1, 2015[1], appointed until 2023
Nationality: Austrian
Appointments:
○ FC Bayern München AG, Munich
○ Infineon Technologies AG, Neubiberg

OLIVER BLUME (*1968)
Chairman of the Executive Board of
Dr. Ing. h.c. F. Porsche AG,
Sport & Luxury brand group
April 13, 2018[1], appointed until 2023
Nationality: German

**PROF. DR. RER. POL. DR.-ING. E.H.
JOCHEM HEIZMANN (*1952)**
China
January 11, 2007 – January 10, 2019[1]
Nationality: German
Appointments (as of January 10, 2019):
○ Lufthansa Technik AG, Hamburg
⦿ OBO Bettermann Holding GmbH Co. KG, Menden

GUNNAR KILIAN (*1975)
Human Resources
April 13, 2018[1], appointed until 2023
Nationality: German
APPOINTMENTS:
○ Wolfsburg AG, Wolfsburg

ANDREAS RENSCHLER (*1958)
Chairman of the Board of Management of
TRATON SE, Truck & Bus brand group
February 1, 2015[1], appointed until 2024
Nationality: German
Appointments:
○ Deutsche Messe AG, Hanover

ABRAHAM SCHOT (*1961)
Chairman of the Board of Management of AUDI AG,
Premium brand group
January 1, 2019[1], appointed until 2020
Nationality: Dutch

DR.-ING. STEFAN SOMMER (*1963)
Components & Procurement
Nationality: German
September 1, 2018[1], appointed until 2021

HILTRUD DOROTHEA WERNER (*1966)
Integrity & Legal Affairs
February 1, 2017[1], appointed until 2022
Nationality: German

FRANK WITTER (*1959)
Finance & IT
October 7, 2015[1], appointed until 2021
Nationality: German

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.

1 Beginning or period of membership of the Board of Management.

Members of the Supervisory Board and their appointments

Appointments: as of December 31, 2019 or the leaving date from the Supervisory Board of Volkswagen AG

HANS DIETER PÖTSCH (*1951)
Chairman (since October 7, 2015),
Chairman of the Executive Board and
Chief Financial Officer of Porsche Automobil
Holding SE
October 7, 2015[1], elected until 2021
Nationality: Austrian
Appointments:
○ AUDI AG, Ingolstadt
○ Autostadt GmbH, Wolfsburg
○ Bertelsmann Management SE, Gütersloh
○ Bertelsmann SE & Co. KGaA, Gütersloh
○ Dr. Ing. h.c. F. Porsche AG, Stuttgart
○ TRATON SE, Munich (Chairman)
○ 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)

JÖRG HOFMANN (*1955)
Deputy Chairman (since November 20, 2015),
First Chairman of IG Metall
November 20, 2015[1], appointed until 2022
Nationality: German
Appointments:
○ Robert Bosch GmbH, Stuttgart

DR. HUSSAIN ALI AL ABDULLA (*1957)
Minister of State, Qatar
April 22, 2010[1], elected until 2020
Nationality: Qatari
Appointments:
⊙ Gulf Investment Corporation, Safat/Kuwait (Board member)
⊙ Masraf Al Rayan, Doha (Chairman and Managing Director)
⊙ Qatar Investment Authority, Doha (Board member)
⊙ Qatar Supreme Council for Economic Affairs and Investment, Doha (Board member)

DR. HESSA SULTAN AL JABER (*1959)
Member of the Consultative Assembly
(Shura Council) of the state of Qatar, Doha
Ex-Minister of Information and Communications
Technology, Qatar
June 22, 2016[1], elected until 2024
Nationality: Qatari
Appointments:
⊙ Malomatia, Doha (Chairwoman)
⊙ MEEZA, Doha
⊙ Qatar Satellite Company (Es'hailSat), Doha (Chairwoman)
⊙ Trio Investment, Doha (Chairwoman)

DR. BERND ALTHUSMANN (*1966)
Minister of Economic Affairs, Labor, Transport and
Digitalization for the Federal State of Lower Saxony
December 14, 2017[1], delegated until 2022
Nationality: German
Appointments:
○ Deutsche Messe AG, Hanover (Deputy Chairman)
⊙ Container Terminal Wilhelmshaven JadeWeserPort-Marketing GmbH & Co. KG, Wilhelmshaven (Chairman)
⊙ JadeWeserPort Realisierungs GmbH & Co. KG, Wilhelmshaven (Chairman)
⊙ JadeWeserPort Realisierungs-Beteiligungs GmbH, Wilhelmshaven (Chairman)
⊙ Niedersachsen Ports GmbH & Co. KG, Oldenburg (Chairman)

BIRGIT DIETZE (*1973)
First authorized representative of IG Metall Berlin
June 1, 2016 – May 31, 2019[1]
Nationality: German
Appointments (as of May 31, 2019):
○ Volkswagen Bank GmbH, Braunschweig

DR. JUR. HANS-PETER FISCHER (*1959)
Chairman of the Board of Management of
Volkswagen Management Association e.V.
January 1, 2013[1], appointed until 2022
Nationality: German
Appointments:
⊙ Volkswagen Pension Trust e.V., Wolfsburg

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

1 Beginning or period of membership of the Supervisory Board.

MARIANNE HEIß (*1972)
Chief Executive Officer of BBDO Group Germany GmbH, Düsseldorf
February 14, 2018[1], elected until 2023
Nationality: Austrian
Appointments:
○ AUDI AG, Ingolstadt
○ Porsche Automobil Holding SE, Stuttgart

UWE HÜCK (*1962)
Chairman of the General and Group Works Councils of Dr. Ing. h.c. F. Porsche AG
July 1, 2015 – February 8, 2019[1]
Nationality: German
Appointments (as of February 8, 2019):
○ Dr. Ing. h.c. F. Porsche AG, Stuttgart (Deputy Chairman)

JOHAN JÄRVKLO (*1973)
Secretary-General of the European and Global Group Works Council of Volkswagen AG
November 22, 2015[1], appointed until 2022
Nationality: Swedish

ULRIKE JAKOB (*1960)
Deputy Chairwoman of the Works Council of Volkswagen AG, Kassel plant
May 10, 2017[1], appointed until 2022
Nationality: German

DR. LOUISE KIESLING (*1957)
Businesswoman
April 30, 2015[1], elected until 2021
Nationality: Austrian

PETER MOSCH (*1972)
Chairman of the General Works Council of AUDI AG
January 18, 2006[1], appointed until 2022
Nationality: German
Appointments:
○ AUDI AG, Ingolstadt (Deputy Chairman)
○ Audi Pensionskasse – Altersversorgung der AUTO UNION GmbH, VVaG, Ingolstadt
⊙ Audi Stiftung für Umwelt GmbH, Ingolstadt

BERTINA MURKOVIC (*1957)
Chairwoman of the Works Council of Volkswagen Commercial Vehicles
May 10, 2017[1], appointed until 2022
Nationality: German
Appointments:
⊙ MOIA GmbH, Berlin

BERND OSTERLOH (*1956)
Chairman of the General and Group Works Councils of Volkswagen AG
January 1, 2005[1], appointed until 2022
Nationality: German
Appointments:
○ Autostadt GmbH, Wolfsburg
○ TRATON SE, Munich
○ 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

DR. JUR. HANS MICHEL PIËCH (*1942)
Lawyer in private practice
August 7, 2009[1], elected until 2024
Nationality: Austrian
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 Greater China, consisting of:
Porsche (China) Motors Limited, Shanghai
Porsche Hong Kong Limited, Hong Kong
⊙ Porsche Holding Gesellschaft m.b.H., Salzburg
⊙ Schmittenhöhebahn AG, Zell am See
⊙ Volksoper Wien GmbH, Vienna

DR. JUR. FERDINAND OLIVER PORSCHE (*1961)
Member of the Board of Management of Familie Porsche AG Beteiligungsgesellschaft
August 7, 2009[1], elected until 2024
Nationality: Austrian
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

DR. RER. COMM. WOLFGANG PORSCHE (*1943)
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[1], elected until 2023
Nationality: Austrian
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 Greater China, consisting of:
Porsche (China) Motors Limited, Shanghai
Porsche Hong Kong Limited, Hong Kong
⊙ Porsche Holding Gesellschaft m.b.H., Salzburg
⊙ Schmittenhöhebahn AG, Zell am See

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

1 Beginning or period of membership of the Supervisory Board.

CONNY SCHÖNHARDT (*1978)
Union Secretary to the board of IG Metall
June 21, 2019[1], appointed until 2022
Nationality: German

ATHANASIOS STIMONIARIS (*1971)
Chairman of the Group Works Council of MAN SE and of the SE Works Council
May 10, 2017[1], appointed until 2022
Nationality: German
Appointments:
- ○ MAN SE, Munich
- ○ MAN Truck & Bus SE, Munich
- ○ Rheinmetall MAN Military Vehicles GmbH, Munich
- ○ TRATON SE, Munich (Deputy Chairman)

STEPHAN WEIL (*1958)
Minister-President of the Federal State of Lower Saxony
February 19, 2013[1], delegated until 2022
Nationality: German

WERNER WERESCH (*1961)
Chairman of the General and Group Works Councils of Dr. Ing. h.c. F. Porsche AG
February 21, 2019[1], appointed until 2022
Nationality: German
Appointments:
- ○ Dr. Ing. h.c. F. Porsche AG, Stuttgart

COMMITTEES OF THE SUPERVISORY BOARD AS OF DECEMBER 31, 2019

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)
Marianne Heiß
Conny Schönhardt

Members of the Nomination Committee
Hans Dieter Pötsch (Chairman)
Dr. Wolfgang Porsche
Stephan Weil

Special Committee on Diesel Engines
Dr. Wolfgang Porsche (Chairman)
Dr. Bernd Althusmann
Peter Mosch
Bertina Murkovic
Bernd Osterloh
Dr. Ferdinand Oliver Porsche

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

1 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 289a(1) and 315a(1) of the HGB.

CAPITAL STRUCTURE

Volkswagen AG's share capital amounted to €1,283,315,873.28 (€1,283,315,873.28) on December 31, 2019. 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 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 https://www.volkswagenag.com/en/InvestorRelations.html. The current notifications regarding 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 62 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 89 to 91 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.

At the Annual General Meeting on May 14, 2019, 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 13, 2024 by issuing new nonvoting preferred shares against cash contributions. This replaced the authorization dating from 2015.

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 259.

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

At the end of fiscal year 2019, a banking syndicate granted Volkswagen AG a syndicated line of credit amounting to €10.0 billion that initially runs until December 2024. It replaces the previous line of credit amounting to €5.0 billion that would have expired in April 2020. With the new line of credit the syndicate members were granted the right to call their portion of the syndicated line of credit in two cases. A call right exists if one individual or several individuals acting jointly who as of the date of this agreement exercise control over the Company have legal or economic ownership of shares that together make up more than 90% of the voting rights of the Company. However, a call right also exists if one individual or several individuals acting jointly who as of the date of this agreement do not exercise control over the Company obtain control over the Company. Such a call right does not exist, however, if one shareholder or several shareholders of Porsche Automobil Holding SE or one or several legal entities from the Porsche or Piëch family directly or indirectly obtains control over the Company.

The Volkswagen AG and Ford Motor Company entered into a Master Collaboration Agreement on January 14, 2019. This agreement sets out a framework of obligations, which are to apply to each and every co-operation agreement to be entered into between the Volkswagen AG and Ford Motor Company, including the Development Agreement entered into in January 2019 for the development of the next generation Amarok. The Master Collaboration Agreement provides for a right of termination with immediate effect in the event of a Change of Control. A Change of Control has been defined to mean a change affecting more than 50% of the voting rights of one of the companies or a change in the ability to directly or indirectly control the management of one company through its decision making bodies. The right of termination must be exercised within 90 days of the company becoming aware of a Change of Control.

Business Development

The robust growth of the global economy continued in fiscal year 2019 with a decrease in momentum. Global demand for vehicles was lower than in the previous year. Amid persistently challenging market conditions, the Volkswagen Group delivered 10.97 million vehicles to customers.

DEVELOPMENTS IN THE GLOBAL ECONOMY

The global economy sustained its robust growth in 2019 with a decrease in momentum: global gross domestic product (GDP) rose by 2.6 (3.2)%. Economic momentum weakened compared with the previous year, both in advanced economies and emerging markets. With interest rates remaining comparatively low and prices for energy and other commodities falling year-on-year on the whole, consumer prices also declined worldwide. Growing upheaval in trade policy at international level and continuing geopolitical tensions led to much greater economic uncertainty and resulted in a wane in the international trade of goods.

Europe/Other Markets

GDP growth in Western Europe slowed to 1.2 (1.8)% as the year went on. The rate of change in nearly all countries in northern and southern Europe declined compared with the previous year. The uncertain outcome of the Brexit negotiations between the United Kingdom and the European Union (EU) continued to generate uncertainty, as did the related 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 7.5 (8.1)%, though rates remained considerably higher – albeit declining – in Greece and Spain.

At 2.3 (3.3)%, the Central and Eastern Europe region also recorded a slower growth rate in the reporting period than in the previous year. In Central Europe, GDP growth tapered off at a relatively high level. Economic growth in Eastern Europe was also weaker. Lower prices for energy and other commodities led to a deterioration in the economic situation of the individual countries from this region that export raw materials. At 1.1 (2.2)%, the growth of the Russian economy, the region's largest economy, halved compared with the previous year.

The Turkish economy showed a slightly positive rate of change of 0.5 (2.9)%. Increased tariffs along with the depreciation of the Turkish lira, which was accompanied by very high inflation, led to a decline in purchasing power. South Africa's GDP rose by just 0.2 (0.8)% in the reporting period, down further on the already low figure for the prior period. Ongoing structural deficits, social unrest and political challenges weighed on the economy.

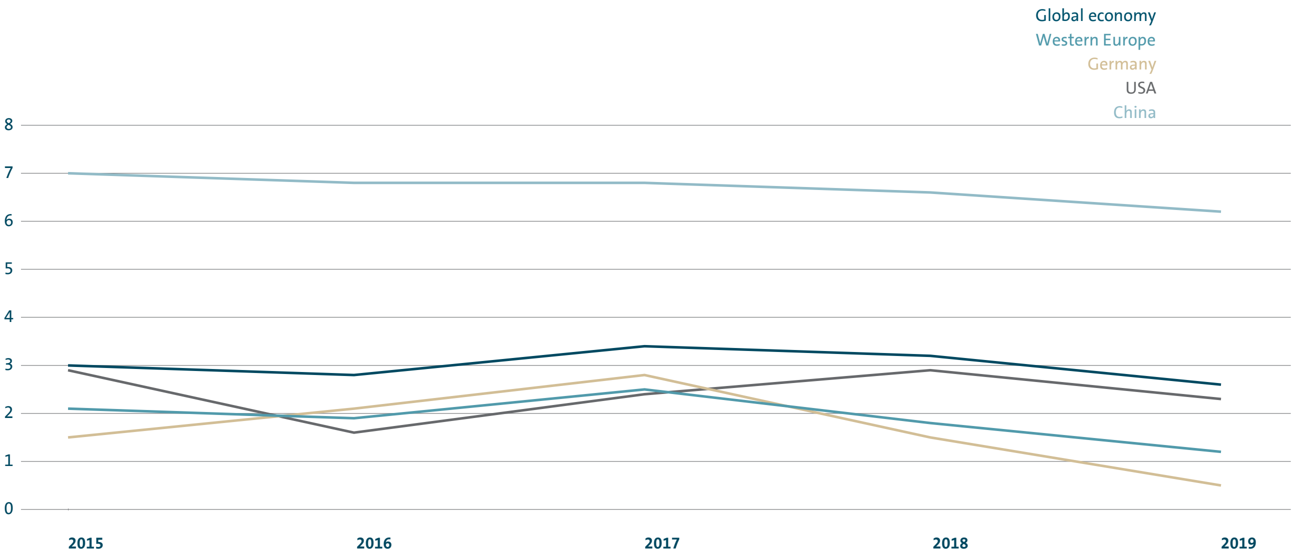
Germany

Germany's GDP continued to grow in 2019 on the back of the strong labor market, though momentum diminished markedly year-on-year to 0.5 (1.5)%. Both business and consumer sentiment darkened further as the year progressed.

North America

Economic growth in the USA declined in the reporting period, reaching 2.3 (2.9)%. The economy was supported mainly by domestic consumer demand. The unemployment rate in the United States was at 3.7 (3.9)%. Given the global uncertainty, the US Federal Reserve lowered its key rate amid relatively steady inflation, thus reversing the tightening of monetary policy it had initiated in the meantime. The US dollar gained strength against the euro in the course of the year. Growth in Canada decreased to 1.6 (2.0)%, while the Mexican economy stagnated at a rate of 0.1 (2.1)%.

ECONOMIC GROWTH
Percentage change in GDP



South America

Brazil's economy once again recorded only slight growth, at 1.1 (1.3)%. The situation in South America's largest economy remained tense due to political uncertainty, among other factors. The economic situation in Argentina deteriorated further as the year went on. Amid continuing high inflation and at the same time considerable devaluation of the local currency, the country remained in recession, with GDP falling by 2.6 (–2.5)%.

Asia-Pacific

At 6.2 (6.6)%, China's economy recorded a growth rate at a high level in 2019, but its rate of expansion was slightly lower than in the previous year. Government support provided in response to the trade policy dispute between China and the US continued in the course of 2019. The Indian economy saw growth of 4.8 (6.8)% in the reporting period. Japan's GDP grew by only 1.1 (0.3)%.

TRENDS IN THE MARKETS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

In fiscal year 2019, the global market volume of passenger cars fell below the prior-year level for the second year in a row, decreasing to 79.6 million vehicles (–4.0%). While new registrations in Western Europe and in Central and Eastern Europe exceeded the prior-year figure, the overall markets in the Middle East, North America, South America and especially Asia-Pacific recorded a dip in demand.

Global demand for light commercial vehicles in the reporting period was down moderately on the previous year.

Sector-specific environment

The sector-specific environment was influenced significantly by fiscal policy measures, which contributed considerably to the mixed trends in sales volumes in the markets last year. These measures included 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.

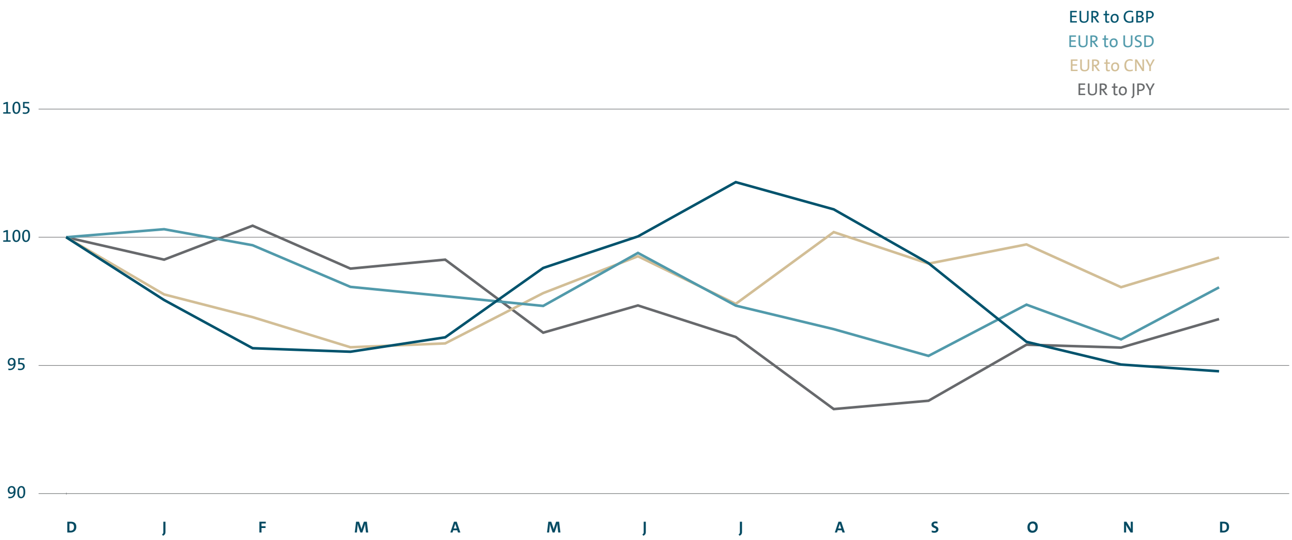
Europe/Other Markets

In Western Europe, the number of new passenger car registrations in the reporting period was up 0.6% on the prior-year figure, at 14.4 million. New vehicle registrations were mixed in the largest single markets. France (+1.6%) slightly exceeded the previous year's figure. While Italy stagnated (+0.3%), Spain recorded a moderate (–4.7%) decline. The UK passenger car market saw a weaker continuation of the negative trend from the previous years (–2.4%). This was due, among other things, to the uncertain outcome of the Brexit negotiations with the EU. The share of diesel vehicles (passenger cars) in Western Europe slipped to 32.0 (36.4)% in the reporting year.

Despite the uncertain outcome of the Brexit negotiations between the EU and UK, new light commercial vehicle registrations in Western Europe in the reporting period slightly exceeded the prior-year level; WLTP-related pull-forward effects provided a degree of stimulus.

EXCHANGE RATE MOVEMENTS FROM DECEMBER 2018 TO DECEMBER 2019

Index based on month-end prices: as of December 31, 2018 = 100



In the Central and Eastern Europe region, the market volume of passenger cars in fiscal year 2019 rose slightly by 2.7% year-on-year to 3.6 million vehicles. New passenger car registrations in the EU member states of Central Europe increased further by 5.8% to 1.5 million units. In Eastern Europe, passenger car sales matched the level of the previous year (+0.2%). Following a solid start in spite of the value-added tax increase as of January 1, 2019, the Russian passenger car market weakened as the year went on and was down on the prior-year figure at the end of the reporting period (–2.2%).

Registration volumes of light commercial vehicles in Central and Eastern Europe were at the same level as the previous year, while the number of vehicles sold in Russia in the reporting period was distinctly lower than in the prior year.

The Turkish passenger car market recorded a substantial drop in demand of 20.4%, largely due to the deteriorating macroeconomic situation. In South Africa (–2.7%), the number of new passenger car registrations in the reporting period was below the comparatively low level seen in recent years, also due to slow macroeconomic momentum.

Germany

New passenger car registrations in Germany in the reporting period exceeded the previous year's high level, rising to 3.6 million units (+5.0%). In addition to the strong labor market and the rise in commercial demand, sales incentives, particularly in the form of an environmental bonus, underpinned the positive trend.

However, domestic production and exports once again fell short of the comparable prior-year figures in 2019: passenger car production decreased by 9.0% to 4.7 million vehicles, mainly due to the 12.8% drop in passenger car exports to 3.5 million units. This was primarily a result of the slowdown in global market growth and markedly lower exports of passenger cars fitted with diesel engines.

Demand for light commercial vehicles in Germany in the reporting period was perceptibly higher than in 2018.

North America

At 20.2 million vehicles, sales of passenger cars and light commercial vehicles (up to 6.35 tonnes) in the North America region in fiscal year 2019 were down slightly on the prior-year figure (–2.3%). The market volume in the USA also fell somewhat short of the level in 2018 at 17.0 million units (–1.6%). The shift in demand from traditional passenger cars (–10.1%) to light commercial vehicles such as SUVs and pickup models (+2.6%) also continued in the reporting period. In the Canadian automotive market, the downward trend that had begun in the previous year continued during the reporting period (–4.3%). In Mexico, sales of passenger cars and light commercial vehicles fell short of the prior-year figure (–8.2%) for the third year in a row.

South America

In the markets of the South America region, new registrations for passenger cars and light commercial vehicles decreased on the whole in 2019 to 4.3 million units (–5.0%). While in Brazil the recovery in the demand for automobiles continued, providing for a growth rate of 7.7%, new registrations, at 2.7 million, remained much lower than the record level achieved in 2012. Exports of vehicles manufactured in Brazil continued to decline, falling by 31.9% to 428 thousand units. In the Argentinian market, the deterioration in the macroeconomic situation once again had a negative impact on demand for passenger cars and light commercial vehicles, with sales figures declining drastically by 43.0%.

Asia-Pacific

Following slight decreases in 2018, the market volume of passenger cars in the Asia-Pacific region weakened further to stand at 34.0 million units at the end of the reporting period (–6.0%). This was largely due to falling demand in China and India. The trade dispute with the United States weighed on the Chinese market, leading to a distinct reduction (–6.4%). On the Indian market, passenger car sales dropped 11.9% in total compared with the previous year. The Japanese passenger car market fell 2.4% short of the prior-year volume.

Demand for light commercial vehicles in the Asia-Pacific region declined distinctly as against the previous year. Registration volumes in China, the region's dominant market and the largest market worldwide, fell markedly year-on-year. The number of new vehicle registrations in India saw a noticeable decrease versus the prior year, while in Thailand the number was on a level with the previous year.

TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

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 2019 than in the previous year, with 609 thousand new vehicle registrations (+2.8%).

In Western Europe, the number of new truck registrations was up 3.1% on the prior-year figure at a total of 306 thousand vehicles. In Germany, Western Europe's largest market, the previous year's level was exceeded moderately. While demand in the United Kingdom rose markedly due to pull-forward effects caused by the uncertain outcome of the Brexit negotiations with the EU, demand in Italy decreased perceptibly.

The Central and Eastern Europe region saw demand recede by 6.7% to 159 thousand units owing to the deterioration in the economic climate. The Russian market contracted further as the year progressed, recording a distinct year-on-year decrease. New registrations there were down 6.9% to 73 thousand vehicles.

In fiscal year 2019, the market volume in South America rose markedly compared with the previous year, with the number of new vehicle registrations climbing 15.1% to 145 thousand units. In Brazil, the region's largest market, demand for trucks grew very sharply compared with the relatively low figure for the prior-year period as a consequence of the economic recovery. By contrast, Argentina saw new registrations fall substantially. This was due to weak economic performance with a related weakening of the peso and rising interest rates.

Demand for buses in the markets that are relevant for the Volkswagen Group was much higher than in the previous year. The markets in Brazil as well as in Western Europe contributed in particular to this growth. Demand in Central and Eastern Europe was moderately higher year-on-year.

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 mostly independent of each other.

In 2019, the marine market contracted to a much lower level than in the previous year. Demand in merchant shipping fell, mainly due to economic uncertainty such as the trade dispute between China and the United States and to environmental requirements, for example a reduction of the sulfur content in marine fuel that became effective on January 1, 2020. Demand for cruise ships, passenger ferries, fishing vessels and dredgers remained steady. The special market for government vessels also continued on a stable trajectory. The existing overcapacity in the market curbed investment in offshore oil production and thus in new ship construction in this segment. Plans for tighter emission standards resulted in a positive trend toward gas-powered or dual-fuel-engined ships. China, South Korea and Japan remained the dominant shipbuilding countries, accounting for a global market share of 85% measured in terms of the number of ships. Because market volumes are still low, all segments in the marine market were continuing to experience significant competition and strong pricing pressure as a result.

The market for power generation continued the positive trend seen in 2018. Higher demand was registered in all areas of application, in particular for gas. This confirms the shift away from oil-fired power plants towards dual-fuel and gas-fired power plants. Demand for energy solutions remained high, with a strong trend towards greater flexibility and decentralized availability. The economies of key emerging markets developed positively. However, continued strong pressure from competition and pricing was discernible in all projects, having a negative impact on the earnings quality of orders. Furthermore, order placement was often delayed due to persistently difficult financing conditions for customers, particularly in emerging markets.

In 2019, the market for turbomachinery showed a pronounced improvement year-on-year. Demand for turbo compressors in the raw materials, oil, gas and processing industries recovered steadily over the year, buoyed by pent-up demand following several years of muted investment. The steam and gas turbine business continued to be dominated by overcapacity on the part of electricity producers and recorded only a slight improvement compared with the previous year. Pressure from competition and pricing eased somewhat year-on-year, and there were signs of a recovery as a result of improved use of market participants' engineering and manufacturing capacity.

The marine after-sales business for diesel engines performed positively and benefited from a continued increase in interest in long-term maintenance contracts and retrofitting solutions. The power plant after-sales business was negatively impacted by shifts in the energy mix and regulatory changes in key sales markets. The global after-sales market for turbomachinery registered a marked improvement year-on-year and, like new construction, benefited from pent-up demand from previous years.

TRENDS IN THE MARKET FOR FINANCIAL SERVICES

Amid a contraction in the overall market, demand for automotive financial services was again on a high level in 2019 due, among other reasons, to the persistently low key interest rates in the main currency areas. Service products such as maintenance and servicing agreements or insurance were especially popular, as customers in more advanced automotive financial services markets are putting their focus on reducing total cost of ownership. In the fleet segment, more customers elicited the support of automotive financial service providers in order to optimize 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 on ownership.

Overall, a small increase in the demand for new vehicles was recorded in the European market in 2019. As a consequence, the number of new lease and financing contracts signed also increased slightly. The share of loan-financed or leased new vehicles remained stable in France and Spain, while Italy saw significant volume growth. Sales of used vehicles in Europe rose somewhat, while a minor decrease was recorded in lease and financing contracts for used vehicles. There was increased demand for after-sales products such as servicing, maintenance and spare parts agreements in 2019. The number of automotive-related insurances grew modestly.

In Germany, the share of loan-financed or leased new vehicles was lifted further in the reporting period. There was also greater demand for after-sales products and integrated mobility solutions in the business customer segment.

In South Africa, demand for financing and insurance products fell slightly.

In the markets of the USA and Mexico, demand for automotive financial services remained at a high level in 2019. In the USA, demand for leasing through captive financial services products in particular was consistently high.

In Brazil, the consumer credit business was in line with the restrained positive trend seen in 2018. However, the country-specific financial services product Consorcio, a lottery-style savings plan, saw falling sales. Nearly half of the new vehicle sales were covered by financial services products in the reporting period. In the Argentinian market, the sharp rise in interest rates resulting from the most recent economic crisis posed a challenge for sales of financing and leasing products.

Demand for automotive financial services across the Asia-Pacific region was mixed in 2019. In China, new contract growth slowed as a result of the downturn in vehicle sales. The relaxation of existing restrictions on registrations in metropolitan areas, in addition to the situation in the interior of the country and for the used vehicles market, offers great potential in terms of acquiring new customers for automotive-related financial services. Demand for financial services products was slightly weaker in India and in Japan.

The demand for financial services in the Commercial Vehicles Business Area also varied from region to region. In Europe, financial services including after-sales registered a slight increase compared to 2018. In Brazil, the truck and bus business and the related financial services market recorded strong growth.

NEW GROUP MODELS IN 2019

We launched a large number of attractive new models in fiscal year 2019 with which we aim to excite our customers. Our extensive product portfolio 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 continued its global product initiative in the past year, rounding out its SUV portfolio with the new T-Cross. The T-Cross wins over customers with its colorful individualization options for the vehicle's interior and exterior along with considerable versatility in the interior. The new T-Roc R stands out in particular due to its striking dynamics for its vehicle class. The Passat – a classic in the model range – was given a fresh look and many new technical features and is the first Volkswagen to be equipped with the latest generation of the infotainment system that is now permanently connected to the internet. Innovative driver assistance systems such as Travel Assist have also been included. In addition to the Passat GTE, which has also been updated, Volkswagen is pushing the electrification of its model range with the new e-up!, which now has a range of up to 260 km. The e-Golf and electric versions of the popular Bora and Lavida saloons were launched in China. The Magotan received a sweeping model update. Volkswagen met the steadily growing demand for SUV models with the Teramont X SUV coupé and a version of the T-Cross that has been adapted to meet the needs of local customers. Successor models to the Bora, Polo and Sagitar were unveiled. To tap the full potential of the Chinese market, Volkswagen Passenger Cars launched the JETTA brand there, closing a gap between the volume segment and entry-level mobility with its VA3 and VS5 models. JETTA appeals in particular to first-time buyers by offering a fresh design, a high level of safety and good value for money. In the United States, a completely updated version of the Passat was unveiled in 2019. South America saw the premiere of the T-Cross, which has been tailored to the needs of local customers.

The Audi brand brought out the versatile Q3 Sportback in 2019. In showcasing the RS Q3 and RS Q4 models, the brand is demonstrating its expertise as a manufacturer of high-performance vehicles. This was also impressively evident elsewhere: the Audi e-tron SUV with its all-electric drive system was launched in Europe, China and the United States. A high-quality interior and a plethora of technical highlights make this a compelling vehicle; for example, thin cameras and displays in the door trims take over the function of the exterior mirrors. With extensive product updates in the A4 and Q7 series, the successful models not only have a fresh look but are also made more efficient by mild hybrid versions. In China, the best-selling A6 saloon and the Q3 were modernized from the ground up in 2019.

ŠKODA rolled out the new Scala in the reporting period. The hatchback impresses with a spacious interior, the latest technology based on the Modular Transverse Toolkit and an attractive price-performance ratio. With the new Kamiq SUV, ŠKODA is meeting the high demand for compact SUVs. Both the Superb saloon and the Superb estate have been revamped and provide the latest connectivity solutions.

The SEAT brand continued its SUV product initiative in 2019 with the Tarraco. The model joins the smaller Arona and Ateca models in the offroader series and stands out with its assertive, emotional design language. SEAT launched its first model with an all-electric drive, the Mii electric.

In 2019, Porsche impressed its customers with the all-electric Taycan featuring a puristic design, an all-digital interior and dynamic performance. In addition, different versions of the reinterpreted iconic car, the 911, were rolled out; this is distinguished by many Porsche Connect functions as well as by vehicle components that can be adjusted to the driving situation, such as the chassis and transmission. The Cayenne Coupé also boasts a variety of features ranging from its carbon roof to an E-Hybrid version.

After launching the third generation of the Continental GT in the preceding year, Bentley rolled out the open-top GTC version in the reporting period. In addition, the brand expanded its successful Bentayga series by adding the powerful yet low-emission Bentayga Hybrid and the dynamic Bentayga Speed. The new Flying Spur once again claims the apex of the automotive premium class for itself with expressive lines and technical innovations.

In 2019, Lamborghini upgraded its Huracán EVO Coupé and Spyder super sports cars and brought out the Aventador SVJ Roadster.

Bugatti celebrated its 110th birthday in 2019 with a special edition of the Chiron Sport. The one-off Bugatti La Voiture Noire pays homage to the golden era of Ettore and Jean Bugatti in the 1930s.

Volkswagen Commercial Vehicles has extensively updated all versions of the T6. The T6.1 impressively offers a new instrument cluster and center console, including the latest generation of the infotainment system, as well as a completely redesigned front end.

In 2019, Scania unveiled the new generation of Citywide buses, which will be offered with a wide variety of drive concepts including an all-electric version.

MAN presented the latest generation of its Lion's City series of city buses in fiscal year 2019; these can be ordered with a diesel, gas or electric drive.

The models Ducati launched in 2019 include the Panigale V4 R, the Monster 821 Stealth, two versions of the Multistrada and four upgraded members of the Scrambler family.

VOLKSWAGEN GROUP DELIVERIES

The Volkswagen Group delivered 10,974,636 vehicles to customers worldwide in 2019. This exceeded the previous year's figure by 1.3% and set a new record. The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted accordingly. 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[1]

	2019	2018	%
Passenger Cars	10,732,415	10,601,014	+1.2
Commercial Vehicles	242,221	232,994	+4.0
Total	**10,974,636**	**10,834,008**	**+1.3**

1 Prior-year deliveries have been updated or amended to reflect subsequent statistical trends and the changed reporting structure.
The figures include the Chinese joint ventures.

GLOBAL DELIVERIES BY THE PASSENGER CARS BUSINESS AREA

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

During the reporting period, deliveries of passenger cars to Volkswagen Group customers worldwide rose to 10,732,415 units amid difficult conditions resulting primarily from mainly declining overall markets. Year-on-year, the number of deliveries increased by 131,401 vehicles or 1.2%. The Group's new SUV models made a particular contribution to this increase. As the passenger car market as a whole declined by 4.0% over the same period, the Volkswagen Group's share of the global market rose to 12.9 (12.2)%. The largest increases in volume in absolute terms were seen in Germany and Brazil. In Argentina and Turkey, among other countries, sales figures were down on the previous year. The Volkswagen Passenger Cars, SEAT, Porsche and Lamborghini brands each exceeded their record figures from the previous year. The brands that achieved the largest growth in absolute terms were SEAT, Volkswagen Passenger Cars and Audi; ŠKODA and Volkswagen Commercial Vehicles both fell slightly short of the previous year's high figures.

The table on page 103 gives an overview of passenger car deliveries to customers of the Volkswagen Group in the regions and the key individual markets. The trends in demand for Group models in these markets and regions are described in the following sections.

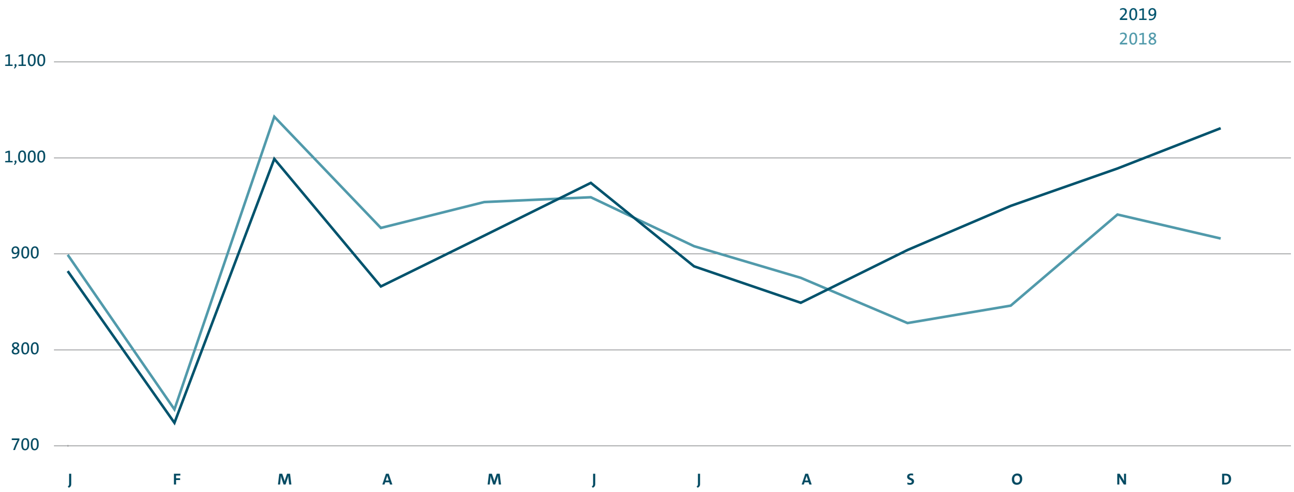
Deliveries in Europe/Other markets

In Western Europe, the Volkswagen Group delivered 3,627,693 passenger cars and light commercial vehicles to customers, exceeding the previous year's figure by 4.4%. Our deliveries rose in France, Italy and the United Kingdom, but registered a slight decline in Spain. As the overall market grew by 0.6% over the same period, the Group's share of the passenger car market in Western Europe increased to 22.8 (21.9)%. Negative effects arose from the public debate on driving bans for diesel vehicles and restricted capacity for petrol engines, among other things. The successful launch of new models had a positive effect. Encouraging increases in deliveries were recorded by the T-Roc and Tiguan Allspace models from Volkswagen Passenger Cars, the Karoq and Kodiaq from ŠKODA, the Arona and Ateca from the SEAT brand, the Porsche Macan, and the Crafter from Volkswagen Commercial Vehicles. Additionally, new or successor models introduced in the previous year were very popular with customers, these being the Touareg from Volkswagen Passenger Cars and Audi's A1 Sportback, Q3, A6 Avant and Q8. The T-Cross and Passat from the Volkswagen Passenger Cars brand, the e-tron (Audi's first all-electric production model), the Scala and Kamiq from the ŠKODA brand, the SEAT Tarraco and the Porsche Cayenne Coupé were successfully launched on the market as new or successor models.

In the Central and Eastern Europe region, the number of deliveries of passenger cars and light commercial vehicles to Volkswagen Group customers increased by 1.6% year-on-year during the reporting period. Demand for Group models increased in Russia and Poland, while it declined in the Czech Republic. Demand developed encouragingly for the T-Roc, Tiguan and Touareg models from the Volkswagen Passenger Cars brand, for ŠKODA's Scala, Karoq and Kodiaq models, and for the SEAT Arona and Tarraco. The Volkswagen Group's share of the passenger car market in Central and Eastern Europe was 20.3 (20.6)%.

In Turkey, the Volkswagen Group delivered 29.4% fewer vehicles than in the previous year in a substantially weaker overall market. In South Africa's declining passenger car market, demand for Volkswagen Group vehicles fell by 0.4%. The Polo from Volkswagen Passenger Cars continued to be the most frequently sold Group model there.

VOLKSWAGEN GROUP DELIVERIES BY MONTH
Vehicles in thousands



Deliveries in Germany

In the reporting period, the German passenger car market exceeded the high prior-year level (+5.0%). The Volkswagen Group delivered 1,324,942 vehicles to customers in its home market, 6.1% more than in the previous year, which had been positively influenced by the environmental bonus among other things. Negative effects caused by the public debate on driving bans for diesel vehicles and restricted capacity for petrol engines were compensated by the successful introduction of new models, for example. The Golf continued to top the list of the most popular passenger cars in Germany in terms of registrations. The most popular Group models also included the T-Roc and Tiguan from Volkswagen Passenger Cars, the Karoq, Kodiaq and Superb from the ŠKODA brand, the Arona and Ateca from the SEAT brand and the Porsche Macan. The Touareg from Volkswagen Passenger Cars, the Audi A1 Sportback, Q3, Q3 Sportback, A6 Avant and Q8 as well as the ŠKODA Fabia, all of which had been introduced as new or successor models over the course of the previous year, were also in high demand from customers. The T-Cross and the Passat from the Volkswagen Passenger Cars brand, the e-tron (the Audi brand's first all-electric production model), the ŠKODA Scala and Kamiq, the SEAT Tarraco and the Porsche Cayenne Coupé were successfully launched on the market as new or successor models during the reporting period. Eight Group models led the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) registration statistics in their respective segments: the Polo, Golf, T-Roc, Tiguan, Touran, Audi A6, Porsche 911 and Multivan/Transporter.

Deliveries in North America

Demand for Volkswagen Group models in North America in the reporting period was 0.5% lower at 948,309 vehicles in a slightly declining overall passenger car and light commercial vehicle market. The Group's market share was 4.7 (4.6)%. The Jetta and the Tiguan Allspace from the Volkswagen Passenger Cars brand were the most in-demand Group models in North America.

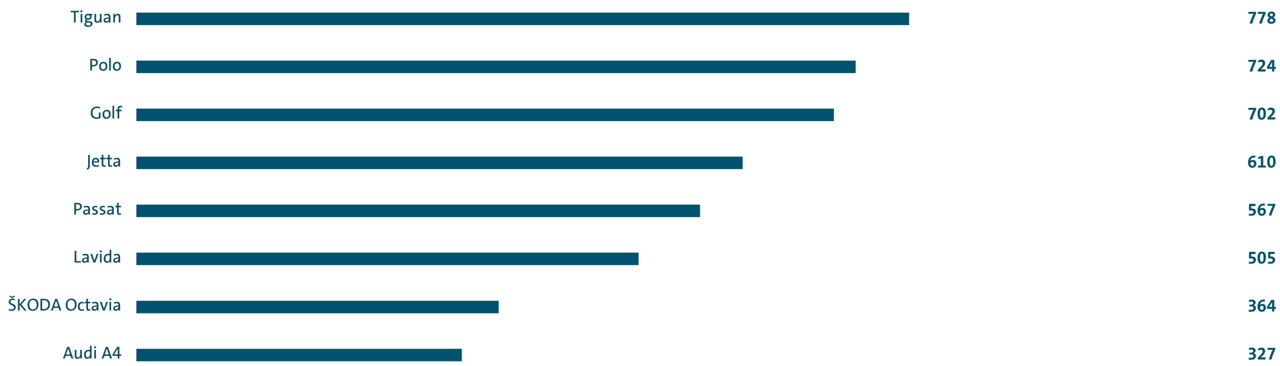
In the weaker US market, demand for Volkswagen Group models rose by 2.5% year-on-year in 2019. The biggest increases of all Group models were recorded by the Jetta, Tiguan Allspace and Atlas from the Volkswagen Passenger Cars brand, the Audi A6 and Q8, and the Porsche Cayenne. The Audi e-tron and the new Porsche Macan were successfully launched on the market.

In Canada, demand for Group models in the reporting period fell by 5.3% year-on-year in a shrinking overall market. The Golf, Jetta and Audi Q5 models as well as the new Tiguan Allspace and Atlas SUVs from the Volkswagen Passenger Cars brand were particularly popular.

In the Mexican market, which was declining on the whole, the Volkswagen Group delivered 7.4% fewer vehicles to customers compared with the previous year. The Group models with the highest level of demand were the Vento, Jetta and Tiguan Allspace from the Volkswagen Passenger Cars brand.

WORLDWIDE DELIVERIES OF THE MOST SUCCESSFUL GROUP MODEL RANGES IN 2019

Vehicles in thousands



Deliveries in South America

The South American market for passenger cars and light commercial vehicles declined overall in the reporting year. In this region we delivered 551,734 vehicles to customers, 1.8% more than a year before. The Gol and Polo from the Volkswagen Passenger Cars brand were in the greatest demand among the Group models. The T-Cross from Volkswagen Passenger Cars was successfully introduced to the market. The Volkswagen Group's share of the passenger car market in South America rose to 12.8 (11.9)%.

The Brazilian market continued its recovery path in the reporting year. The Volkswagen Group benefited from this development and delivered 15.7% more vehicles to customers there than in the previous year. This was due primarily to the market launch of the new T-Cross from the Volkswagen Passenger Cars brand, as well as the success of the Virtus, Jetta and Tiguan Allspace which the Volkswagen Passenger Cars brand had introduced to the market in the previous year as new or successor models. Demand was also very encouraging for Volkswagen Passenger Cars' Polo and Gol models as well as for the Amarok from Volkswagen Commercial Vehicles.

In Argentina, the Group recorded a 38.9% decline in sales year-on-year amid a dramatically weaker overall market. The Gol and Polo from Volkswagen Passenger Cars and the Amarok from Volkswagen Commercial Vehicles saw the highest demand of all Group models. The T-Cross, newly introduced by the Volkswagen Passenger Cars brand, was also well received by customers.

Deliveries in the Asia-Pacific region

The market volume of passenger cars in the Asia-Pacific region weakened further in the reporting year. The Volkswagen Group delivered 4,517,375 units to customers in this region. This was 0.3% fewer vehicles than in the previous year. The Group's market share in the Asia-Pacific region rose to 13.2 (12.4)%.

China, the world's largest single market and the main growth driver of the Asia-Pacific region for many years, recorded a distinct downturn in the reporting period. However, the Volkswagen Group slightly increased sales here and delivered 0.6% more vehicles to customers in China than in the prior year. The T-Roc, Tayron, Tharu, Bora, Passat and Lavida models from Volkswagen Passenger Cars, the Audi Q2L e-tron and Q5L, the ŠKODA Karoq and Kamiq, as well as the Porsche Macan and Cayenne, all of which had been introduced as new or successor models over the course of the previous year, were in especially high demand. The T-Cross, Polo, Sagitar and Teramont X models from the Volkswagen Passenger Cars brand, the Audi Q3, A6L and Q8, and the ŠKODA Kodiaq GT and Porsche Cayenne Coupé were successfully launched on the market as new or successor models during the reporting period. In addition, the Volkswagen sub-brand JETTA celebrated its successful launch in China with the VS5 SUV and the VA3 saloon.

The volume of the Indian passenger car market declined in the reporting year. Demand for models from the Volkswagen Group fell by 15.9% in this period compared with the previous year. The Polo from the Volkswagen Passenger Cars brand was the Group's most sought-after model in India.

In Japan, the number of passenger cars delivered to Volkswagen Group customers in 2019 was down 8.2% year-on-year amid a declining overall market volume. The Tiguan from the Volkswagen Passenger Cars brand, the Audi Q5 and the Porsche 911 all recorded encouraging growth in demand.

PASSENGER CAR DELIVERIES TO CUSTOMERS BY MARKET[1]

	DELIVERIES (UNITS)		CHANGE
	2019	2018	(%)
Europe/Other markets	**4,714,997**	**4,575,023**	**+3.1**
Western Europe	**3,627,693**	**3,475,401**	**+4.4**
of which: Germany	1,324,942	1,248,952	+6.1
United Kingdom	544,117	540,817	+0.6
Italy	310,944	286,980	+8.4
France	307,847	280,533	+9.7
Spain	305,494	309,907	–1.4
Central and Eastern Europe	**769,681**	**757,575**	**+1.6**
of which: Russia	223,452	216,950	+3.0
Poland	165,530	164,480	+0.6
Czech Republic	136,377	138,922	–1.8
Other markets	**317,623**	**342,047**	**–7.1**
of which: South Africa	90,969	91,311	–0.4
Turkey	78,251	110,785	–29.4
North America	**948,309**	**953,188**	**–0.5**
of which: USA	654,152	638,274	+2.5
Mexico	181,910	196,431	–7.4
Canada	112,247	118,483	–5.3
South America	**551,734**	**542,239**	**+1.8**
of which: Brazil	420,880	363,766	+15.7
Argentina	70,496	115,426	–38.9
Asia-Pacific	**4,517,375**	**4,530,564**	**–0.3**
of which: China	4,228,840	4,202,398	+0.6
Japan	79,268	86,356	–8.2
India	51,541	61,277	–15.9
Worldwide	**10,732,415**	**10,601,014**	**+1.2**
Volkswagen Passenger Cars	6,278,345	6,244,888	+0.5
Audi	1,845,573	1,812,485	+1.8
ŠKODA	1,242,767	1,253,741	–0.9
SEAT	574,078	517,627	+10.9
Bentley	11,006	10,494	+4.9
Lamborghini	8,205	5,750	+42.7
Porsche	280,800	256,255	+9.6
Bugatti	82	76	+7.9
Volkswagen Commercial Vehicles	491,559	499,698	–1.6

1 Prior-year deliveries have been updated or amended to reflect subsequent statistical trends and the changed reporting structure. The figures include the Chinese joint ventures.

COMMERCIAL VEHICLE DELIVERIES

Worldwide, the Volkswagen Group delivered a total of 242,221 mid-sized and heavy trucks, buses and commercial vehicles from the MAN TGE van series in 2019 (+4.0%). Trucks accounted for 205,936 units (+1.7%), buses for 21,496 units (–5.0%) and the TGE from MAN for 14,789 (7,871) deliveries.

In Western Europe, total deliveries stood at 119,284 units, up 10.3% on the previous year's figure. The growth was mainly driven by the German, French and UK markets. Of this figure, 100,362 were trucks and 6,042 buses; commercial vehicles from the MAN TGE van series amounted to 12,880 units.

In the period from January to December 2019, deliveries in the markets of the Central and Eastern Europe region fell by 8.7% to 36,130 vehicles; trucks accounted for 33,312 and buses for 1,311; light commercial vehicles from the MAN brand came to 1,507 units. In Russia, the region's largest market, sales declined year-on-year by 21.4% to 10,123 units.

In the Other markets, particularly in Turkey, deliveries of Volkswagen Group commercial vehicles decreased by 23.5% year-on-year to a total of 13,995 units; of this figure 11,280 were trucks and 2,326 were buses.

Deliveries in North America in the reporting period declined by 8.5% to 3,219 vehicles; this included 1,794 trucks and 1,425 buses. The vehicles were handed over almost exclusively to customers in Mexico.

In South America, the Volkswagen Group sold a total of 56,826 units (+19.0%); of this figure 48,350 were trucks and 8,476 were buses. In Brazil, deliveries rose by 30.5% following continued improvement in the economic climate. Of the units delivered, 43,438 were trucks and 6,113 were buses. Marked declines in deliveries were recorded in the other South American markets, especially Argentina, due to the development of the general economic environment.

In the Asia-Pacific region, the Volkswagen Group delivered 12,767 commercial vehicles to customers in the reporting period; among these 10,838 were trucks and 1,916 were buses. Overall, this was 18.9% less than in the previous year. In China, sales increased by 1.7% to 4,737 vehicles, of which 4,514 were trucks and 219 were buses.

COMMERCIAL VEHICLE DELIVERIES TO CUSTOMERS BY MARKET[1]

	DELIVERIES (UNITS)		CHANGE
	2019	2018	(%)
Europe/Other markets	**169,409**	**165,998**	**+2.1**
Western Europe	119,284	108,122	+10.3
Central and Eastern Europe	36,130	39,590	–8.7
Other markets	13,995	18,286	–23.5
North America	**3,219**	**3,517**	**–8.5**
South America	**56,826**	**47,734**	**+19.0**
of which: Brazil	49,551	37,984	+30.5
Asia-Pacific	**12,767**	**15,745**	**–18.9**
of which: China	4,737	4,658	+1.7
Worldwide	**242,221**	**232,994**	**+4.0**
Scania	99,457	96,477	+3.1
MAN	142,764	136,517	+4.6

1 Prior-year deliveries have been updated or amended to reflect subsequent statistical trends and the changed reporting structure.

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 around two-thirds of overall sales revenue.

ORDERS RECEIVED IN THE PASSENGER CARS SEGMENT IN WESTERN EUROPE

In the reporting period orders received in Western Europe recorded a slight increase of 2.4% compared to the previous year, which had seen a decline due to the introduction of the WLTP test procedure. Developments in the key markets were mixed: while Germany, France and Italy registered increases, incoming orders fell in the United Kingdom and Spain.

ORDERS RECEIVED FOR COMMERCIAL VEHICLES

Orders received for mid-sized and heavy trucks and buses as well as for commercial vehicles from the MAN TGE van series decreased by 6.8% year-on-year to 227,240 vehicles in 2019. In Western Europe, our main sales market, the deteriorating economic situation, especially in Germany, and the uncertain outcome of the United Kingdom's exit from the EU led to a marked decline in orders received. Orders received in South America were up as a consequence of the economic stabilization 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 2019 amounted to €4.3 (4.0) billion. Engines & Marine Systems and Turbomachinery generated more than two-thirds of the order volume in a persistently difficult market environment.

In the marine business, for example, hybrid drive systems each consisting of dual fuel engines, a MAN Cryo gas system including an LNG tank, a battery system and an energy management system, were commissioned for two new ferries. Orders were won in Germany for 22 gas-powered engines with an aggregate output of 270 MW in the power plant business. For turbomachinery, we received several orders for compressor trains, which will be used in the world's largest terephthalic acid (PTA) plant, as well as an engineering contract for several underwater compressor stations, which will be deployed at a depth of 1,350 meters at a gas production facility in the waters off the coast of Australia.

VOLKSWAGEN GROUP FINANCIAL SERVICES

The Financial Services Division includes 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 and Porsche Holding Salzburg. As of January 1, 2019, contracts signed by our international joint ventures are also included; the comparison figures have been adjusted accordingly.

The Financial Services Division's products and services remained very popular in the 2019 fiscal year. The number of new financing, leasing, service and insurance contracts signed was higher than in the previous year at 9.3 (8.8) million worldwide. In the reporting period, the ratio of leased or financed vehicles to Group deliveries (penetration rate) in the Financial Services Division's markets was 34.5 (34.2)%. As of December 31, 2019, the total number of contracts was 23.7 million, which is 5.7% higher than at the end of 2018. The number of contracts in the customer financing/leasing area climbed 4.7% to 11.8 million, while it increased by 6.7% to 11.9 million in the service/insurance area.

In the Europe/Other markets region, the number of new contracts signed between January and December 2019 increased by 8.0% to 6.9 million. The penetration rate was 48.5 (47.9)%. At the end of the reporting year, the total number of contracts was 17.5 million, thus exceeding the figure for 2018 by 6.1%. The customer financing/leasing area accounted for 7.7 million of these contracts (+6.1%), while 9.8 million (+6.2%) related to the service/insurance area.

In North America, the number of contracts on December 31, 2019 was 3.1 million, an increase of 0.8% compared to the previous year. The customer financing/leasing area accounted for 1.8 million contracts (–1.3%) and 1.2 million contracts (+4.0%) were owing to the service/insurance area. At 956 thousand contracts, the number of new contracts signed was 8.3% lower than the year before. The ratio of leased or financed vehicles to Group deliveries in North America was 59.3 (65.9)%.

The initial consolidation of Porsche Volkswagen Servicios Financieros Chile S.p.A. led to a marked boost in the number of contracts in South America. 386 (295) thousand new contracts were signed in the reporting year. The penetration rate increased to 38.4 (32.0)%. The total number of contracts as of December 31, 2019 increased by 19.4% year- on-year to

703 thousand. The contracts mainly related to the customer financing/leasing area.

In the Asia-Pacific region, the number of new contracts signed rose by 3.3% to 1.0 million in 2019. The ratio of leased or financed vehicles to Group deliveries was 15.5 (15.1)%. The total number of contracts at the end of the past financial year was 2.4 million. This was 5.7% more than on December 31, 2018. The customer financing/leasing area accounted for 1.7 million contracts (+3.7%), the number of contracts in the service/insurance area increased by 11.4% to 0.7 million contracts.

SALES TO THE DEALER ORGANIZATION

The Volkswagen Group's sales to the dealer organization increased by 0.5% to 10,956,499 units (including the Chinese joint ventures) in the reporting year. This was primarily due to higher demand in its home market of Germany as well as continually rising demand in Brazil and an upward trend in the United States. Overall, the unit sales volumes fell by 0.6% outside Germany and unit sales rose by 9.0% in Germany. At 12.3 (11.3)%, the proportion of the Group's total sales accounted for by Germany was higher than in 2018.

The Tiguan, Polo, Golf, Jetta and Passat were our biggest sellers last year. The largest increases in sales were recorded by the T-Roc, Tharu, Tiguan and T-Cross models from the Volkswagen Passenger Cars brand, the Audi Q8, Q2 and the new e-tron, as well as the ŠKODA Karoq/Yeti and Kodiaq and the SEAT Arona and the new Tarraco. Both the Porsche Cayenne and the Crafter from the Volkswagen Commercial Vehicles brand also achieved a strong growth rate.

PRODUCTION

The Volkswagen Group produced 10,823,378 vehicles worldwide in fiscal year 2019, 1.8% less than in the previous year. In total, our Chinese joint ventures manufactured 4.1% fewer units than in the year before. In Germany, the production declined by 8.3%, mainly due to numerous new vehicle start-ups as well as the transition to electric vehicles. The percentage of the Group's total production accounted for by Germany was lower than in 2018, at 19.5 (20.9)%.

INVENTORIES

Global inventories at Group companies and in the dealer organization were lower at the end of the reporting period than at year-end 2018.

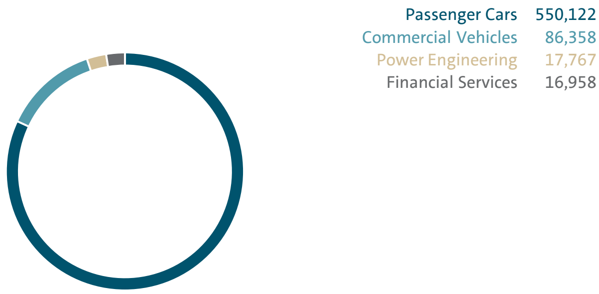
EMPLOYEES

Including the Chinese joint ventures, the Volkswagen Group employed an average of 667,748 people in fiscal year 2019, an increase of 1.8% year-on-year. In Germany, we employed 294,779 people on average in 2019; at 44.1 (44.3)%, their share of the total headcount was slightly below the level of the previous year.

The Volkswagen Group had 641,838 active employees (+0.9%) as of December 31, 2019. In addition, 9,968 employees were in the passive phase of their partial retirement and 19,399 young people were in vocational traineeships. The Volkswagen Group's headcount was 671,205 employees (+1.0%) at the end of the reporting period. This was primarily due to recruitments in the areas of electric mobility, digitalization and new mobility offerings. A total of 297,433 people were employed in Germany (+1.6%), while 373,772 were employed abroad (+0.5%).

EMPLOYEES BY DIVISION/BUSINESS AREA

as of December 31, 2019



Shares and Bonds

Volkswagen AG's ordinary and preferred shares were trading higher than at year-end 2018 amid a volatile market environment in 2019. A strong cash flow reduced the refinancing volume.

EQUITY MARKETS AND PERFORMANCE OF THE PRICE OF VOLKSWAGEN'S SHARES

In the period from January to December 2019, prices on the international equity markets rose overall amid volatile trading.

The DAX recorded an increase compared with the end of 2018. The more expansionary monetary policy pursued by the US Federal Reserve and the European Central Bank had a positive effect. Uncertainty regarding the economic policy of the US government, the continuing Brexit negotiations between the United Kingdom and the EU and the growth of the global economy had a negative impact on share prices.

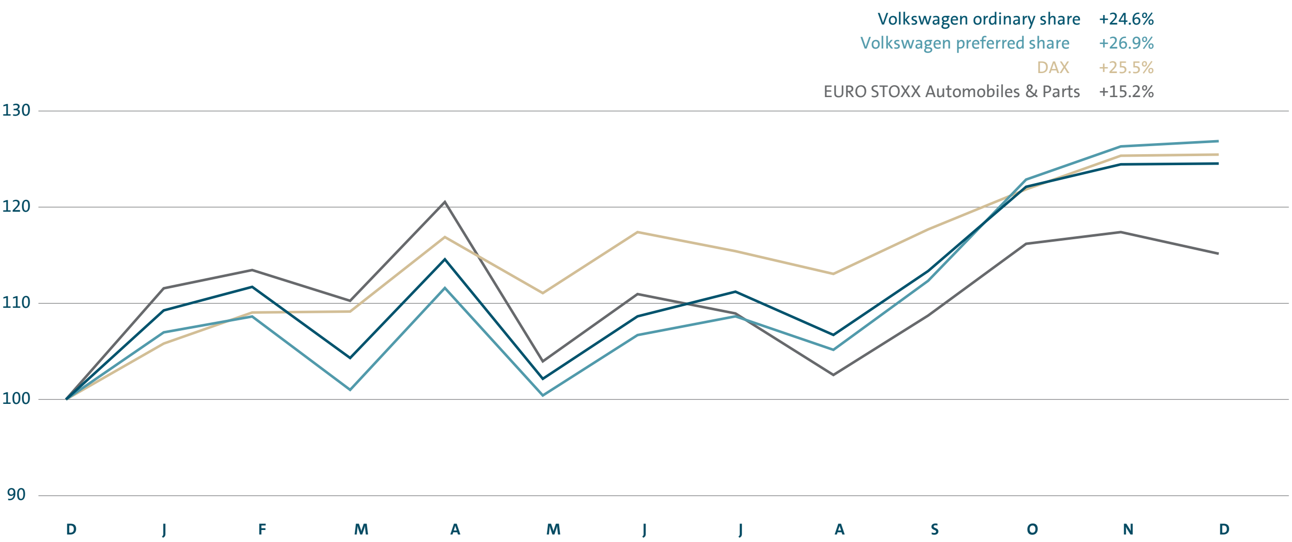
The prices of Volkswagen AG's preferred and ordinary shares also exceeded the 2018 year-end level in 2019. Healthy business figures were the main drivers of the uptrend. In particular, uncertainty regarding the future regulatory framework for diesel and electric vehicles, the US tariff policy, the continuing Brexit negotiations between the United Kingdom and the EU, the slowdown of the Chinese market and the WLTP (Worldwide Harmonized Light-Duty Vehicles Test Procedure), which is a test procedure for determining pollutant and CO_2 emissions and fuel consumption for passenger cars and light commercial vehicles, led to volatile share prices.

VOLKSWAGEN KEY SHARE FIGURES AND MARKET INDICES FROM JANUARY 1 TO DECEMBER 31, 2019

		High	Low	Closing
Ordinary share	Price (€)	182.50	135.60	173.25
	Date	Nov. 7	Jan. 3	Dec. 30
Preferred share	Price (€)	184.24	134.76	176.24
	Date	Nov. 7	Jan. 3	Dec. 30
DAX	Points	13,408	10,417	13,249
	Date	Dec. 16	Jan. 3	Dec. 30
ESTX Auto & Parts	Points	527	412	486
	Date	Apr. 18	Jan. 3	Dec. 30

PRICE DEVELOPMENT FROM DECEMBER 2018 TO DECEMBER 2019

Index based on month-end prices: December 31, 2018 = 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 with our business success. The proposed dividend therefore reflects our financial management objectives – in particular, ensuring a solid financial foundation as part of the implementation of our strategy.

The current dividend proposal can be found in the chapter entitled “Volkswagen AG (condensed in accordance with the German Commercial Code)”, on page 130 of this annual report. The Board of Management and Supervisory Board of Volkswagen AG are proposing a dividend of €6.50 per ordinary share and €6.56 per preferred share for fiscal year 2019. On this basis, the total dividend amounts to €3.3 (2.4) billion. The payout ratio is based on the Group’s earnings after tax attributable to Volkswagen AG shareholders. This amounts to 24.5% for the reporting period and stood at 20.4% in the previous year. In our Group strategy, we aim to achieve a payout ratio of at least 30%.

DIVIDEND YIELD

Based on the dividend proposal for the reporting period, the dividend yield on Volkswagen ordinary shares is 3.8 (3.5)%, measured by the closing price on the last trading day in 2019. The dividend yield on preferred shares is 3.7 (3.5)%.

EARNINGS PER SHARE

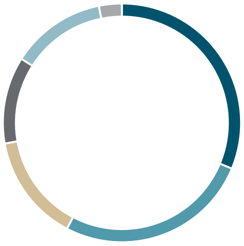
Basic earnings per ordinary share were €26.60 (23.57) in fiscal year 2019. Basic earnings per preferred share were €26.66 (23.63). In accordance with IAS 33, the calculation is based on the weighted average number of ordinary and preferred shares outstanding in the reporting period. Since the number 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.

FURTHER INFORMATION ON VOLKSWAGEN SHARES
www.volkswagenag.com/en/InvestorRelations.html

SHAREHOLDER STRUCTURE AS OF DECEMBER 31, 2019

as a percentage of subscribed capital



VOLKSWAGEN SHARE DATA

	Ordinary shares	Preferred shares
ISIN	DE0007664005	DE0007664039
WKN	766400	766403
Deutsche Börse/Bloomberg	VOW	VOW3
Reuters	VOWG.DE	VOWG_p.DE
Primary market indices	CDAX, Prime All Share, MSCI Euro, S&P Global 100 Index	DAX, CDAX, EURO STOXX, EURO STOXX 50, EURO STOXX Automobiles & Parts, Prime All Share, MSCI Euro
Exchanges	Berlin, Dusseldorf, Frankfurt, Hamburg, Hanover, Munich, Stuttgart, Xetra, SIX Swiss Exchange	

SHAREHOLDER STRUCTURE AS OF DECEMBER 31, 2019

At the end of the reporting period, Volkswagen AG's subscribed capital amounted to €1,283,315,873.28. The shareholder structure of Volkswagen AG as of December 31, 2019 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 53.1% 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 9.9% 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/en/InvestorRelations/news-and-publications.html.

OUR INVESTOR RELATIONS TEAM IS AVAILABLE FOR QUERIES AND COMMENTS:

WOLFSBURG OFFICE (VOLKSWAGEN AG)

Phone	+49 (0) 5361 9-00
Fax	+49 (0) 5361 9-30411
E-mail	investor.relations@volkswagen.de
Internet	www.volkswagenag.com/en/InvestorRelations.html

VOLKSWAGEN SHARE KEY FIGURES

Dividend development		2019	2018	2017	2016	2015
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	206,205	206,205
Dividend[1]						
per ordinary share	€	6.50	4.80	3.90	2.00	0.11
per preferred share	€	6.56	4.86	3.96	2.06	0.17
Dividend paid[1]	€ million	3,271	2,419	1,967	1,015	68
on ordinary shares	€ million	1,918	1,416	1,151	590	32
on preferred shares	€ million	1,353	1,002	817	425	35

Share price development[2]		2019	2018	2017	2016	2015
Ordinary share						
Closing	€	173.25	139.10	168.70	136.75	142.30
Price performance	%	+ 24.6	– 17.5	+ 23.4	–3.9	–21.0
Annual high	€	182.50	188.00	173.95	144.20	247.55
Annual low	€	135.60	131.10	128.70	108.95	101.15
Preferred share						
Closing	€	176.24	138.92	166.45	133.35	133.75
Price performance	%	+ 26.9	– 16.5	+ 24.8	–0.3	–27.6
Annual high	€	184.24	188.50	178.10	138.80	255.20
Annual low	€	134.76	133.70	125.35	94.00	92.36
Beta factor[3]	factor	1.17	1.17	1.12	1.22	1.28
Market capitalization at Dec. 31	€ billion	87.5	69.7	84.1	67.9	69.6
Equity attributable to Volkswagen AG shareholders and hybrid capital investors at Dec. 31	€ billion	121.8	117.1	108.8	92.7	88.1
Ratio of market capitalization to equity	factor	0.72	0.60	0.77	0.73	0.79

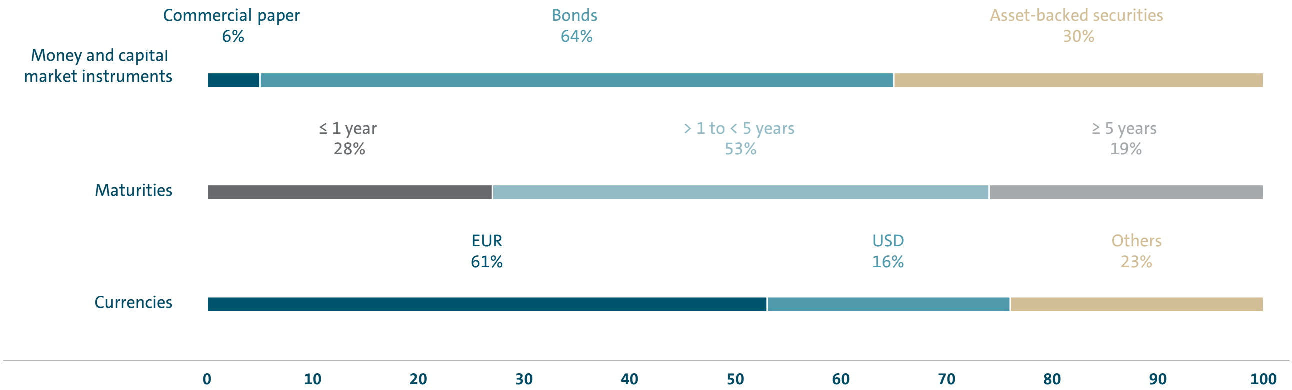
Key figures per share		2019	2018	2017	2016	2015
Earnings per ordinary share[4]						
basic	€	26.60	23.57	22.28	10.24	–3.20
diluted	€	26.60	23.57	22.28	10.24	–3.20
Equity attributable to Volkswagen AG shareholders and hybrid capital investors at Dec. 31	€	242.93	233.63	217.13	184.90	175.67
Price/earnings ratio[5]						
Ordinary share	factor	6.5	5.9	7.5	13.4	x
Preferred share	factor	6.6	5.9	7.3	13.0	x
Dividend yield[6]						
Ordinary share	%	3.8	3.5	2.3	1.5	0.1
Preferred share	%	3.7	3.5	2.4	1.5	0.1

Stock exchange turnover[7]		2019	2018	2017	2016	2015
Turnover of Volkswagen ordinary shares	€ billion	3.3	4.3	3.5	3.3	6.9
	million shares	20.9	28.0	23.6	25.4	45.4
Turnover of Volkswagen preferred shares	€ billion	41.0	54.1	45.1	41.1	72.4
	million shares	266.0	346.6	312.3	347.0	444.4
Volkswagen share of total DAX turnover	%	4.6	5.4	5.4	5.0	7.1

1 Figures for the years 2015 to 2018 relate to dividends paid in the following year. For 2019, the figures relate to the proposed dividend.
2 Xetra prices.
3 See page 126 for the calculation.
4 See note 11 to the consolidated financial statements (Earnings per share) for the calculation. 2017 figure adjusted (IFRS 9).
5 Ratio of year-end-closing price to earnings per share.
6 Dividend per share based on the year-end-closing price.
7 Order book turnover on the Xetra electronic trading platform (Deutsche Börse).

REFINANCING STRUCTURE OF THE VOLKSWAGEN GROUP

as of December 31, 2019



REFINANCING

Refinancing of the Volkswagen Group is important to ensure that the Group remains solvent at all times. Cash flows from operating activities contributed to the positive development of net liquidity in 2019. Consequently, the refinancing volume through bonds on the money and capital markets for the Automotive Division declined year-on-year.

Benchmark bonds with an aggregate volume of €7.0 billion were issued for the Financial Services Division. In addition to this, private placements were issued in various currencies. In the US capital market a bond with a total volume of USD 3.0 billion was placed with investors in five tranches. Notes with a volume of CAD 1.5 billion were issued in the Canadian refinancing market.

Alongside the placement of senior, unsecured bonds, asset-backed securities (ABS) transactions were another element of our refinancing activities. ABS transactions in the amount of €2.0 billion were placed in Europe. In addition, ABS transactions were issued in USA, China and Australia among other countries.

The Volkswagen Group was also actively involved in the commercial paper market with several issuing companies.

Furthermore, Dr. Ing. h.c. F. Porsche AG issued a green promissory note loan in the amount of €1.0 billion. The proceeds of this transaction will be used to finance the all-electric Porsche Taycan vehicle project.

The proportion of fixed-rate instruments in the past year was roughly four times as high as the proportion of floating rate instruments.

In our refinancing arrangements, we generally aim to exclude interest rate and currency risk as far as possible with the simultaneous use of derivatives.

The table below shows how our money and capital market programs were utilized as of December 31, 2019 and illustrates the financial flexibility of the Volkswagen Group:

PROGRAMS	Authorized volume € billion	Amount utilized on Dec. 31, 2019 € billion
Commercial paper	42.0	9.0
Bonds	162.0	88.5
of which hybrid issues		12.5
Asset-backed securities	92.6	41.1

RATINGS

	VOLKSWAGEN AG			VOLKSWAGEN FINANCIAL SERVICES AG			VOLKSWAGEN BANK GMBH		
	2019	2018	2017	2019	2018	2017	2019	2018	2017
Standard & Poor's									
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	stable	stable	stable	stable	stable	negative	negative	negative
Moody's Investors Service									
short-term	P–2	P–2	P–2	P–2	P–2	P–2	P–1	P–1	P–1
long-term	A3	A3	A3	A3	A3	A3	A1	A1	A3
outlook	stable	stable	negative	stable	stable	negative	stable	stable	negative

Volkswagen AG's syndicated credit line of €5.0 billion agreed in July 2011 was replaced in December 2019 by a new syndicated credit line of €10.0 billion. The new credit line has a term of five years, with the option to extend the term twice after obtaining approval from the respective banks, each for a period of one year, until 2026 at the latest. This credit facility was unused as of the end of 2019.

Of the syndicated credit lines worth a total of €10.1 billion at other Group companies, €1.4 billion has 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 €6.9 billion, of which €2.4 billion was drawn down.

RATINGS

In 2019, 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 and December, 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 was left at "stable" and that for Volkswagen Bank GmbH at "negative".

In July and August, Moody's Investors Service left its short-term and long-term ratings for Volkswagen AG and Volkswagen Financial Services AG unchanged at P–2 and A3 and those for Volkswagen Bank GmbH at P–1 and A1. The outlook for each company was left at "stable".

SUSTAINABILITY RATINGS

Analysts and investors are referring increasingly to company sustainability profiles when making their recommendations and decisions. They draw primarily on sustainability ratings to evaluate a company's environmental, social and governance performance. At the same time, sustainability ratings are instrumental in determining whether we are meeting our goal, and they provide the basis for implementing internal measures.

After the diesel issue became public knowledge, the Volkswagen Group was downgraded significantly in the MSCI, RobecoSAM, Sustainalytics, oekomISS, VigeoEiris, EcoVadis and RepRisk sustainability indices and consequently removed from sustainability indices such as the Dow Jones Sustainability Index and the FTSE4Good Index. In fiscal year 2019, Volkswagen continued to have a score of A– in the CDP and a rating of A in the Water Disclosure Project (WDP).

Results of Operations, Financial Position and Net Assets

The Volkswagen Group's sales revenue increased in fiscal year 2019 compared with the previous year. Despite further charges and cash outflows in connection with the diesel issue, operating profit and net liquidity in the Automotive Division were above the respective prior-year figure.

The Volkswagen Group's segment reporting comprises the four reportable segments of Passenger Cars and Light Commercial Vehicles, Commercial Vehicles, Power Engineering and Financial Services, in compliance with IFRS 8 and in line with the Group's internal management and reporting structures. As a result of enhancements to the management structure of the Volkswagen Group, we allocate the Volkswagen Commercial Vehicles brand to the Passenger Cars segment as of January 1, 2019, renaming this segment the Passenger Cars and Light Commercial Vehicles segment. The Commercial Vehicles segment continues to correspond to the Commercial Vehicles Business Area, but now excludes the Volkswagen Commercial Vehicles brand. The prior-year figures have been adjusted accordingly.

At Volkswagen, segment profit or loss is measured on the basis of the operating result.

The reconciliation contains activities and other operations that do not, by definition, constitute segments. These include the unallocated Group financing activities. Consolidation adjustments between the segments (including the holding company functions) are also contained in the reconciliation. The purchase price allocations for Porsche Holding Salzburg and Porsche, Scania and MAN are allocated to their corresponding segments.

The Automotive Division comprises the Passenger Cars and Light Commercial Vehicles segment, the Commercial Vehicles segment and the Power Engineering segment, as well as the figures from the reconciliation. The Passenger Cars and Light Commercial Vehicles segment is combined with the reconciliation to form the Passenger Cars Business Area, while the Commercial Vehicles and Power Engineering segments are identical to the corresponding business areas. The reorganization of the Volkswagen Commercial Vehicles brand has not led to any changes in the Automotive Division. The Financial Services Division corresponds to the Financial Services segment.

APPLICATION OF NEW INTERNATIONAL FINANCIAL REPORTING STANDARDS

The new accounting standard IFRS 16, which came into effect on January 1, 2019, amends the previous lease accounting rules with the central aim of recognizing all leases in the balance sheet. Accordingly, it establishes that lessees are no longer required to classify their leases as either finance leases or operating leases. They will instead generally be required to recognize a right-of-use asset and a lease liability in the balance sheet for every lease. The right-of-use assets are recognized in the balance sheet under those items in which

KEY FIGURES FOR 2019 BY SEGMENT

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue	202,273	26,444	3,997	40,160	272,875	−20,242	252,632
Segment result (operating result)	15,610	1,653	−93	3,212	20,381	−3,422	16,960
as a percentage of sales revenue	7.7	6.3	−2.3	8.0			6.7
Capex, including capitalized development costs	17,098	1,460	197	223	18,977	423	19,401

the assets underlying the lease would have been reported if they were owned by the Volkswagen Group.

Using the modified retrospective method (adjustments to the opening balance sheet), right-of-use assets were recognized under noncurrent assets and lease liabilities as financial liabilities for the first time as of January 1, 2019. This led to an increase in total assets but did not affect equity.

The new approach resulted in a slight increase in operating profit in 2019, because the only items allocated to operating profit as of January 1, 2019 are depreciation charges on right-of-use assets. Interest expenses on lease liabilities in the Automotive Division are recognized in the financial result, with a corresponding negative impact.

Gross and net cash flow increased by €0.9 billion in the reporting period because of the modified presentation of leases in the statement of income as a result of the new IFRS 16 (depreciation is a non-cash expense). Repayments of the principal portion of the lease liability had a corresponding negative impact on cash flows from financing activities.

The initial recognition of lease liabilities as financial liabilities in the balance sheet led to a marked increase in third-party borrowings in the cash flow statement, which in turn resulted in a negative one-off effect of €–4.8 billion on the disclosure of the Automotive Division's net liquidity as of January 1, 2019.

The prior-year figures have not been adjusted.

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 the reporting period, negative special items in connection with the diesel issue amounting to €–2.3 (–3.2) billion affected operating profit in the Passenger Cars Business Area. They are attributable to the final administrative fine of €0.5 billion imposed by the Stuttgart Public Prosecutor, which ended the ongoing regulatory offense proceeding against Dr. Ing. h.c. F. Porsche AG, as well as higher expenses for legal risks and legal defense costs (€2.1 billion). The reversal of provisions for technical measures had an offsetting effect (€0.3 billion).

COMPENSATION PAID TO THE NONCONTROLLING INTEREST SHAREHOLDERS OF MAN SE

In August 2018, the control and profit and loss transfer agreement with MAN SE was terminated by extraordinary

INCOME STATEMENT BY DIVISION

	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
€ million	2019	2018	2019	2018	2019	2018
Sales revenue	**252,632**	**235,849**	**212,473**	**201,067**	**40,160**	**34,782**
Cost of sales	−203,490	−189,500	−170,477	−161,298	−33,014	−28,201
Gross profit	**49,142**	**46,350**	**41,996**	**39,769**	**7,146**	**6,581**
Distribution expenses	−20,978	−20,510	−19,712	−19,039	−1,266	−1,471
Administrative expenses	−9,767	−8,819	−7,522	−7,105	−2,245	−1,714
Net other operating result	−1,437	−3,100	−1,014	−2,497	−423	−603
Operating result	**16,960**	**13,920**	**13,748**	**11,127**	**3,212**	**2,793**
Operating return on sales (%)	**6.7**	**5.9**	**6.5**	**5.5**	**8.0**	**8.0**
Share of the result of equity-accounted investments	3,349	3,369	3,278	3,310	71	58
Interest result and Other financial result	−1,953	−1,646	−1,889	−1,576	−64	−70
Financial result	**1,396**	**1,723**	**1,389**	**1,734**	**7**	**−12**
Earnings before tax	**18,356**	**15,643**	**15,137**	**12,861**	**3,219**	**2,782**
Income tax expense	−4,326	−3,489	−3,491	−2,657	−836	−832
Earnings after tax	**14,029**	**12,153**	**11,646**	**10,203**	**2,383**	**1,950**
Noncontrolling interests	143	17	79	−32	64	49
Earnings attributable to Volkswagen AG hybrid capital investors	540	309	540	309	–	–
Earnings attributable to Volkswagen AG shareholders	**13,346**	**11,827**	**11,027**	**9,926**	**2,319**	**1,900**

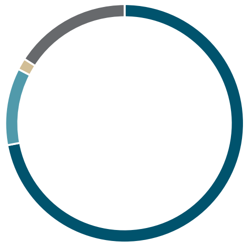
1 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

SHARE OF SALES REVENUE BY MARKET 2019

in percent

SHARE OF SALES REVENUE BY DIVISION/BUSINESS AREA 2019

in percent



notice as of January 1, 2019. Following the announcement that the termination of the control and profit and loss transfer agreement had been recorded in the commercial register, the noncontrolling shareholders of MAN SE were entitled under the provisions of the control and profit and loss transfer agreement to tender their shares to Volkswagen within a two-month period. This resulted in cash outflows of €1.1 billion in 2019 for the acquisition of shares tendered and for compensation payments. The “Put options and compensation rights granted to noncontrolling interest shareholders” item reported in the balance sheet was reduced accordingly. The put options granted to noncontrolling interest shareholders of MAN SE expired on March 4, 2019. The remaining amount of €0.7 billion was reclassified directly to equity; €0.3 billion of this amount is attributable to noncontrolling interests.

IPO OF TRATON SE

Since June 2019, shares of TRATON SE have been traded on the regulated market of the Frankfurt Stock Exchange and the NASDAQ Stockholm Exchange. The offer price was set at €27.00 per share. This led to an increase of €1.4 billion in the Volkswagen Group’s equity, of which €1.2 billion is reported as noncontrolling interests. The cash inflow occurred at the beginning of the third quarter of 2019.

CONTRIBUTION OF AUTONOMOUS INTELLIGENT DRIVING

In July 2019, Volkswagen announced that, together with Ford Motor Company, it would be investing in Argo AI, a company that is working on the development of a system for autonomous driving.

Volkswagen will contribute its consolidated subsidiary Autonomous Intelligent Driving (AID) to this venture. The contribution of AID is planned for the first half of 2020, subject to the required regulatory approvals and other conditions precedent.

SALE OF INTEREST IN RENK AG

In January 2020, the Board of Management and Supervisory Board of Volkswagen AG resolved to sell the Volkswagen Group’s 76% interest in RENK AG. The sale is expected to be completed in the second half of 2020, subject to regulatory approval.

RESULTS OF OPERATIONS

Results of operations of the Group

Between January and December 2019, the Volkswagen Group generated sales revenue of €252.6 billion, exceeding the prior-year figure by 7.1%. Particularly mix improvements, higher sales volumes and the healthy business performance of the Financial Services Division had a positive impact; whereas the negative exchange rate trend had an offsetting effect. At 80.6 (81.4)%, most of the sales revenue was generated abroad.

Gross profit rose by €2.8 billion to €49.1 billion. The gross margin stood at 19.5 (19.7)%. Adjusted for special items recognized here in both periods (positive in the reporting period due to the reversal of provisions for technical measures in connection with the diesel issue), gross profit amounted to €48.8 (46.6) billion. Excluding special items, the gross margin was 19.3 (19.8)% in fiscal year 2019.

The Volkswagen Group’s operating profit before special items improved by €2.2 billion to €19.3 billion in the reporting period. The operating return on sales before special items amounted to 7.6 (7.3)%. The increase was mainly attributable to positive mix effects, higher volumes, the reversal of impairment losses following the remeasurement of development costs, product cost optimizations, and the fair value measurement of certain derivatives. A rise in fixed costs had a negative impact. Special items in connection with the diesel issue weighed on operating profit, reducing this item by €–2.3 (–3.2) billion. The Volkswagen Group’s operating profit increased to €17.0 (13.9) billion, while the operating return on sales rose to 6.7 (5.9)%.

The financial result was down by €0.3 billion to €1.4 billion. The interest expenses included in this item rose markedly, driven by the rise in the refinancing volume, the interest expense on provisions and application of the new IFRS 16. The share of the result of equity-accounted investments was at the same level as in 2018. Measurement effects on the reporting date, especially resulting from net income from securities and funds, were positive compared with the prior-year period. The previous year's figure had also been negatively impacted by the remeasurement of put options and compensation rights in connection with the control and profit and loss transfer agreement with MAN SE.

The Volkswagen Group's profit before tax improved by 17.3% to €18.4 billion in fiscal year 2019. The return on sales before tax rose to 7.3 (6.6)%. Income taxes resulted in an expense of €4.3 (3.5) billion, which in turn led to a tax rate of 23.6 (22.3)%. Profit after tax increased by €1.9 billion to €14.0 billion.

Results of operations in the Automotive Division

The Automotive Division's sales revenue amounted to €212.5 billion in the reporting period, 5.7% more than in the previous year. Primarily, improvements in the mix and higher vehicle sales offset 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 was up, driven primarily by higher volumes and a rise in depreciation and amortization charges due to the large capex volume, as well as by a year-on-year increase in research and development costs recognized in profit or loss. The reversal of provisions for items related to the diesel issue led here to positive special items in the fiscal year. The ratio of cost of sales to sales revenue rose somewhat compared with the prior-year period. Total research and development costs, expressed as a percentage of the Automotive Division's sales revenue (research and development ratio or R&D ratio), stood at 6.7 (6.8)% in fiscal year 2019. In addition to new models, our activities focused above all on the electrification of our vehicle portfolio, a more efficient range of engines, digitalization and new technologies.

Distribution and administrative expenses were both higher in the reporting period. The ratio of distribution expenses to sales revenue was down on the prior-year period, while the ratio of administrative expenses was virtually unchanged year-on-year. The other operating result amounted to €–1.0 (–2.5) billion. The year-on-year improvement resulted from the reversal of impairment losses following the remeasurement of development costs, positive exchange rate effects and lower expenses arising from the fair value measurement of derivatives to which hedge accounting is not applied, as well as from a decline in special items related to the diesel issue.

At €13.7 billion, the Automotive Division's operating profit was €2.6 billion higher than the prior year. The main contributing factors were improvements in the mix as well as higher vehicle sales, the reversal of impairment losses following the remeasurement of development costs, product cost optimization, the measurement of certain derivatives and a decline in negative special items. Higher depreciation and amortization charges and a rise in research and development costs had an offsetting effect. The operating return on sales increased to 6.5 (5.5)%. The negative special items included in operating profit totaled €–2.3 (–3.2) billion. Excluding the special items, the Automotive Division's operating profit rose to €16.1 (14.3) billion. The operating return on sales before special items improved to 7.6 (7.1)%. Our operating profit largely benefits from the business performance of our Chinese joint ventures only through 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[1]

€ million	2019	2018
Sales revenue	182,031	172,678
Operating result	12,188	10,000
Operating return on sales (%)	6.7	5.8

1 The Volkswagen Commercial Vehicles brand has been reported in the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

The Passenger Cars Business Area recorded sales revenue of €182.0 billion in the period from January to December 2019, 5.4% more than in the prior-year period. The growth was mainly attributable to positive mix effects and the higher sales volume. This was set against a negative exchange rate trend. The operating profit of the Passenger Cars Business Area totaled €12.2 billion, up €2.2 billion on the prior year. The rise in profit was primarily due to mix and volume improvements, the reversal of impairment losses following the remeasurement of development costs as well as positive effects stemming from product costs and the measurement of certain derivatives and a decline in negative special items to €–2.3 (–3.2) billion in connection with the diesel issue. Higher depreciation and amortization charges and a rise in research and development costs were among the main factors reducing profit. The operating return on sales increased to 6.7 (5.8)%.

RESULTS OF OPERATIONS IN THE COMMERCIAL VEHICLES BUSINESS AREA[1]

€ million	2019	2018
Sales revenue	26,444	24,781
Operating result	1,653	1,191
Operating return on sales (%)	6.3	4.8

1 The Volkswagen Commercial Vehicles brand has been reported in the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

At €26.4 billion, sales revenue in the Commercial Vehicles Business Area exceeded the prior-year figure by 6.7% in fiscal year 2019. The operating profit of the Commercial Vehicles Business Area improved by €0.5 billion to €1.7 billion; the operating return on sales stood at 6.3 (4.8)%. Positive effects arising from higher volumes, mix and price improvements more than offset cost increases.

RESULTS OF OPERATIONS IN THE POWER ENGINEERING BUSINESS AREA

€ million	2019	2018
Sales revenue	3,997	3,608
Operating result	−93	−64
Operating return on sales (%)	−2.3	−1.8

The Power Engineering Business Area recorded sales revenue of €4.0 billion in fiscal year 2019, 10.8% more than in the prior year. The operating loss amounted to €–0.1 (–0.1) billion. Volumes improved while fixed costs rose. The operating return on sales amounted to −2.3 (–1.8)%.

Results of operations in the Financial Services Division

In fiscal year 2019, the Financial Services Division generated sales revenue of €40.2 billion; the 15.5% rise year-on-year was due mainly to the higher business volume.

The cost of sales expanded by 17.1% to €33.0 billion, growing slightly faster than sales revenue. Distribution expenses and the other operating result declined, while administrative expenses rose. Costs increased on the whole due to volume-related factors. Overall, the ratio of costs to sales revenue was down slightly.

Higher volumes and exchange rate effects boosted the Financial Services Division's operating profit to €3.2 billion, a 15.0% increase on the previous year, again representing a considerable contribution to consolidated net profit. The operating return on sales was unchanged at 8.0 (8.0)%. The return on equity before tax rose to 10.8 (9.9)%.

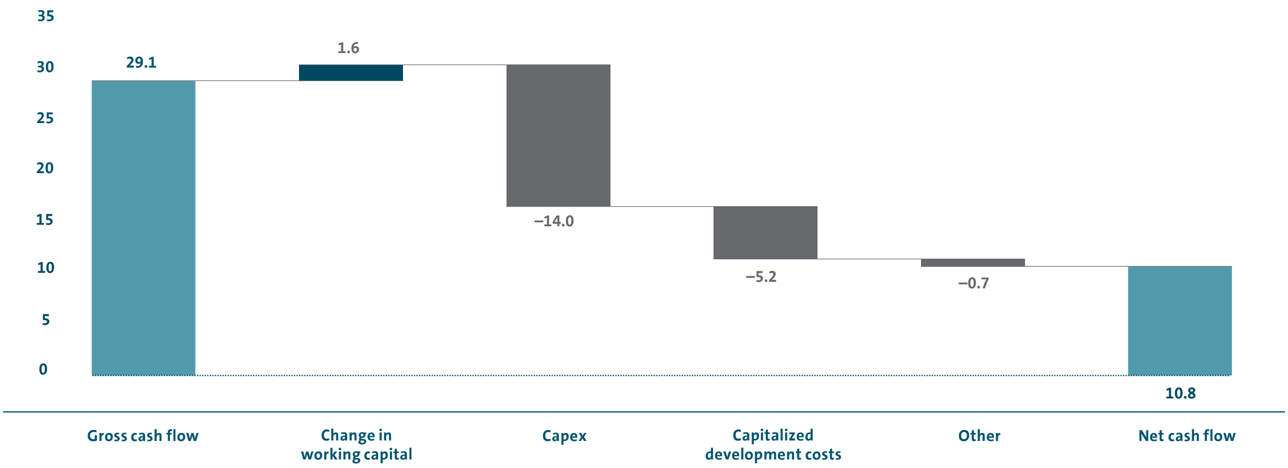
Principles and goals of financial management

Financial management in the Volkswagen Group covers liquidity management, the management of currency, interest rate and commodity price risks, as well as credit and country risk management. It is performed centrally for all Group companies by Group Treasury, based on internal guidelines and risk parameters. Some functions of the Scania, MAN and Porsche Holding Salzburg subgroups are integrated into the financial management. Additionally, these subgroups have their own financial management structures.

The goal of financial 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 this system, the balances, either positive or negative, accumulating in the cash pooling accounts are swept daily to a regional target account and thus pooled. The aim of currency, interest rate and commodity risk management is to hedge the prices on which investment, production and sales plans are based using derivative financial instruments and commodity forwards, and to mitigate interest rate risks incurred in financing transactions. In the management of credit and country risk, diversification is used to limit the Volkswagen Group's exposure to counterparty risk. To achieve this, counterparty risk management imposes internal limits on the volume of business allowed per counterparty when financial transactions are entered into. Various credit rating criteria are applied in this process. These focus primarily 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. For additional information on the principles and goals of financial management, please refer to page 187 and to the notes to the 2019 consolidated financial statements on pages 293 to 314.

AUTOMOTIVE DIVISION NET CASH FLOW 2019

€ billion



FINANCIAL POSITION

Financial position of the Group

In the period from January to December 2019, the Volkswagen Group generated gross cash flow of €39.9 (35.6) billion. The change in working capital amounted to €–22.0 (–28.3) billion. The administrative fine imposed after regulatory offense proceedings, which was recognized in the reporting period as a special item in connection with the diesel issue, led to an immediate cash outflow. Cash flows from operating activities were up by €10.7 billion to €18.0 billion.

At €20.1 billion, investing activities attributable to operating activities were 3.6% higher in the reporting period than in the previous year.

Cash outflow from financing activities amounted to €–0.9 billion, compared with cash inflow of €24.6 billion in the previous year. Financing activities include the dividend paid to the shareholders of Volkswagen AG, the acquisition of MAN shares tendered as a result of the termination of the control and profit and loss transfer agreement, the cash inflow resulting from the IPO of TRATON and, most particularly, the issuance and redemption of bonds and changes in other financial liabilities. Following the application of the new IFRS 16, payments for the principal portion of the lease liability have to be recognized under financing activities since January 1, 2019.

The Volkswagen Group's cash and cash equivalents as reported in the cash flow statement were lower than in the prior-year period, at €24.3 (28.1) billion.

At the end of the reporting period, the Volkswagen Group's net liquidity was €–148.0 billion, compared with €–134.7 billion at the end of 2018.

Financial position of the Automotive Division

The Automotive Division's gross cash flow was €29.1 billion in fiscal year 2019, an increase of €3.1 billion compared with the prior-year figure. This was driven particularly by healthy earnings growth, lower tax payments than in the previous year, and positive effects from the application of the new IFRS 16. The change in working capital amounted to €+1.6 (–7.4) billion. Year-on-year, above all a significantly smaller increase in inventories and markedly lower cash outflows attributable to the diesel issue had a positive effect. As a result, cash flows from operating activities rose by €12.2 billion to €30.7 billion.

Investing activities attributable to operating activities amounted to €19.9 billion, €1.1 billion up on the prior-year period. Investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs (capex) included in this figure stood at €14.0 billion, an increase of 6.0% compared with 2018. The ratio of capex to sales revenue was unchanged at 6.6 (6.6)%. Capex was primarily allocated to our production facilities and to models that we launched in the reporting period or are planning to launch next year. These are primarily vehicles in the Golf, Atlas, ID.3, ID.4, Audi A3, Audi e-tron, Audi Q3, Audi A6/A7 family and Porsche Taycan model series as well as the Bentley Continental series. Other investment priorities included the ecological focus of our model range, product electrification and digitalization, and our modular toolkits. Additions to capitalized development costs amounting to €5.2 (5.2) billion were on a level with the 2018 figure. Strategic investments in a number of companies led to

CASH FLOW STATEMENT BY DIVISION

€ million	VOLKSWAGEN GROUP 2019	VOLKSWAGEN GROUP 2018	AUTOMOTIVE[1] 2019	AUTOMOTIVE[1] 2018	FINANCIAL SERVICES 2019	FINANCIAL SERVICES 2018
Cash and cash equivalents at beginning of period	**28,113**	**18,038**	**23,354**	**13,428**	**4,759**	**4,609**
Earnings before tax	18,356	15,643	15,137	12,861	3,219	2,782
Income taxes paid	−2,914	−3,804	−2,187	−3,786	−726	−19
Depreciation and amortization expense[2]	24,439	22,561	15,958	15,581	8,480	6,980
Change in pension provisions	342	524	320	503	23	21
Share of the result of equity-accounted investments	460	244	520	303	−59	−58
Other noncash income/expense and reclassifications[3]	−734	445	−651	502	−83	−56
Gross cash flow	**39,950**	**35,613**	**29,097**	**25,964**	**10,853**	**9,650**
Change in working capital	**−21,966**	**−28,341**	**1,636**	**−7,433**	**−23,603**	**−20,908**
Change in inventories	−674	−5,372	−345	−5,337	−329	−34
Change in receivables	−893	−6,400	−1,176	−1,800	283	−4,600
Change in liabilities	2,297	3,645	1,564	2,793	733	853
Change in other provisions	1,304	−1,286	1,400	−1,306	−96	20
Change in lease assets (excluding depreciation)	−13,204	−11,647	−110	−1,590	−13,095	−10,056
Change in financial services receivables	−10,796	−7,282	303	−191	−11,099	−7,090
Cash flows from operating activities	**17,983**	**7,272**	**30,733**	**18,531**	**−12,750**	**−11,258**
Cash flows from investing activities attributable to operating activities	**−20,076**	**−19,386**	**−19,898**	**−18,837**	**−178**	**−549**
of which: investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs	−14,230	−13,729	−14,007	−13,218	−223	−510
capitalized development costs	−5,171	−5,234	−5,171	−5,234	–	–
acquisition and disposal of equity investments	−913	−705	−716	−594	−196	−111
Net cash flow[4]	***−2,093***	***−12,113***	***10,835***	***−306***	***−12,928***	***−11,807***
Change in investments in securities, loans and time deposits	−1,069	−2,204	−5,018	6,129	3,949	−8,332
Cash flows from investing activities	**−21,146**	**−21,590**	**−24,916**	**−12,708**	**3,771**	**−8,882**
Cash flows from financing activities	**−865**	**24,566**	**−11,278**	**4,274**	**10,413**	**20,292**
of which: Capital transactions with noncontrolling interests	1,368	−28	1,368	−28	–	–
Capital contributions/capital redemptions	–	1,491	−970	1,418	970	73
MAN noncontrolling interest shareholders: compensation payments and acquisition of shares tendered	−1,109	−2,117	−1,109	−2,117	–	–
Effect of exchange rate changes on cash and cash equivalents	243	−173	205	−171	38	−2
Change of loss allowance within cash & cash equivalents	1	−1	1	−1	−0	0
Net change in cash and cash equivalents	**−3,784**	**10,075**	**−5,256**	**9,925**	**1,472**	**150**
Cash and cash equivalents at Dec. 31[5]	**24,329**	**28,113**	**18,098**	**23,354**	**6,231**	**4,759**
Securities, loans and time deposits	29,099	28,036	13,458	8,697	15,641	19,339
Gross liquidity	**53,428**	**56,148**	**31,556**	**32,051**	**21,872**	**24,098**
Total third-party borrowings	−201,468	−190,883	−10,280	−12,683	−191,189	−178,200
Net liquidity[6]	**−148,040**	**−134,735**	**21,276**	**19,368**	**−169,316**	**−154,103**

1 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.
2 Net of impairment reversals.
3 These relate mainly to the fair value measurement of financial instruments and the reclassification of gains/losses on disposal of noncurrent assets and equity investments to investing activities.
4 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).
5 Cash and cash equivalents comprise cash at banks, checks, cash-in-hand and call deposits.
6 The total of cash, cash equivalents, securities, loans to affiliates and joint ventures as well as time deposits net of third-party borrowings (noncurrent and current financial liabilities).

a €0.1 billion increase in the "Acquisition and disposal of equity investments" item to €0.7 billion.

Compared with the low prior-year figure, the Automotive Division's net cash flow improved markedly by €11.1 billion to €10.8 billion. The main reasons were the increase in profit, a decline in cash outflows attributable to the diesel issue and a smaller increase in inventories.

The cash outflow from financing activities amounted to €–11.3 billion in fiscal year 2019; in the previous year, there had been a cash inflow of €4.3 billion. The dividend paid to the shareholders of Volkswagen AG in May 2019 amounted to €2.4 billion, a rise of €0.5 billion compared with the previous year. The "Capital transactions with noncontrolling interests" item includes the cash inflow of €1.4 billion resulting from the IPO of TRATON. As a result of the termination of the control and profit and loss transfer agreement with MAN SE, financing activities also include the acquisition of MAN shares tendered, and most particularly, the issuance and redemption of bonds and changes in other financial liabilities. As from January 1, 2019, payments of the principal portion of the lease liability are also reported in this item, as required following the application of the new IFRS 16.

As a result of the recognition of lease liabilities as financial liabilities required under IFRS 16, third-party borrowings in the Automotive Division were €5.4 billion higher at the end of the reporting period than at the end of the previous fiscal year. Despite this non-cash effect, the Automotive Division's net liquidity was €21.3 billion on December 31, 2019, €1.9 billion above the level at the end of fiscal year 2018. The Automotive Division's net liquidity accounted for 8.4 (8.2)% of consolidated sales revenue in the reporting period.

FINANCIAL POSITION IN THE PASSENGER CARS BUSINESS AREA[1]

€ million	2019	2018
Gross cash flow	25,474	22,910
Change in working capital	3,053	–5,916
Cash flows from operating activities	28,528	16,995
Cash flows from investing activities attributable to operating activities	–20,254	–17,303
Net cash flow	8,273	–308

1 The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

In fiscal year 2019, the Passenger Cars Business Area's gross cash flow was €25.5 billion, up €2.6 billion on the previous year due to earnings-related factors, lower tax payments and positive effects of the application of the new IFRS 16. The change in working capital amounted to €3.1 (–5.9) billion. The smaller increase in inventories than in the previous year and lower cash outflows attributable to the diesel issue had a positive effect. Consequently, cash flows from operating activities went up by €11.5 billion to €28.5 billion. Investing activities attributable to operating activities in the Passenger Cars Business Area increased to €20.3 (17.3) billion. Capex was higher, while capitalized development costs declined slightly. The intragroup sale of the power engineering business by the Commercial Vehicles Business Area to the Passenger Cars Business Area and strategic investments in a number of companies led to a marked year-on-year increase in the "Acquisition and disposal of equity investments" item. Compared with the low prior-year figure, the Passenger Cars Business Area's net cash flow improved by €8.6 billion to €8.3 billion.

FINANCIAL POSITION IN THE COMMERCIAL VEHICLES BUSINESS AREA[1]

€ million	2019	2018
Gross cash flow	3,357	2,745
Change in working capital	–1,249	–1,257
Cash flows from operating activities	2,108	1,488
Cash flows from investing activities attributable to operating activities	603	–1,372
Net cash flow	2,711	116

1 The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

In the reporting period, the Commercial Vehicles Business Area's gross cash flow improved by €0.6 billion to €3.4 billion. The slight year-on-year increase was driven particularly by higher profits. The change in working capital amounted to €–1.2 (–1.3) billion. Cash flows from operating activities were up by €0.6 billion to €2.1 billion. The intragroup sale of the power engineering business led to a cash inflow from investing activities attributable to operating activities. Net cash flow increased to €2.7 (0.1) billion.

FINANCIAL POSITION IN THE POWER ENGINEERING BUSINESS AREA

€ million	2019	2018
Gross cash flow	265	309
Change in working capital	−168	−260
Cash flows from operating activities	98	49
Cash flows from investing activities attributable to operating activities	−247	−162
Net cash flow	−150	−113

In fiscal year 2019, the Power Engineering Business Area recorded gross cash flow of €0.3 (0.3) billion. Due to a decrease in funds tied up in working capital, the change in working capital amounted to €–0.2 (–0.3) billion. Cash flows from operating activities were higher than in the previous year. Investing activities attributable to operating activities increased by €0.1 billion to €0.2 billion. At €–0.1 (–0.1) billion, net cash flow was virtually on a level with the previous year.

Financial position in the Financial Services Division

In the reporting period, the Financial Services Division's gross cash flow was €10.9 (9.6) billion. The change in working capital of €–23.6 (–20.9) billion was a result of an increase in funds tied up in working capital, mainly driven by the growth in business volume. Cash flows from operating activities amounted to €–12.7 (–11.3) billion.

Investing activities attributable to operating activities declined by €0.4 billion to €0.2 billion in the reporting period, mainly due to lower capex.

In the Financial Services Division, financing activities resulted in a cash inflow of €10.4 (20.3) billion in fiscal year 2019 for refinancing the business volume. This figure primarily included the issuance and redemption of bonds and other financial liabilities.

At the end of the reporting period, the Financial Services Division's negative net liquidity, which is common in the industry, stood at €–169.3 billion; on December 31, 2018, it had amounted to €–154.1 billion.

NET ASSETS

Consolidated balance sheet structure

At the end of the reporting period, the Volkswagen Group recorded total assets of €488.1 billion, 6.5% more than on December 31, 2018. This increase was mainly the result of the higher business volume in the Financial Services Division, the application of the new IFRS 16 and currency translation effects. The structure of the consolidated balance sheet as on the reporting date is shown in the chart on page 123. The Volkswagen Group's equity amounted to €123.7 billion, €6.3 billion more than at the previous balance sheet date. The equity ratio was 25.3 (25.6)%. The "Assets held for sale" item mainly comprises the asset carrying amounts expected to be derecognized following the disposal of the interest in Renk, which was resolved in January 2020. The item also includes the carrying amount of the shares in Autonomous Intelligent Driving, which is to be used as a contribution to the equity investment in the joint venture with Ford, in addition to the provision of financial resources. The "Liabilities held for sale" item comprises the carrying amounts of the respective liabilities expected to be derecognized.

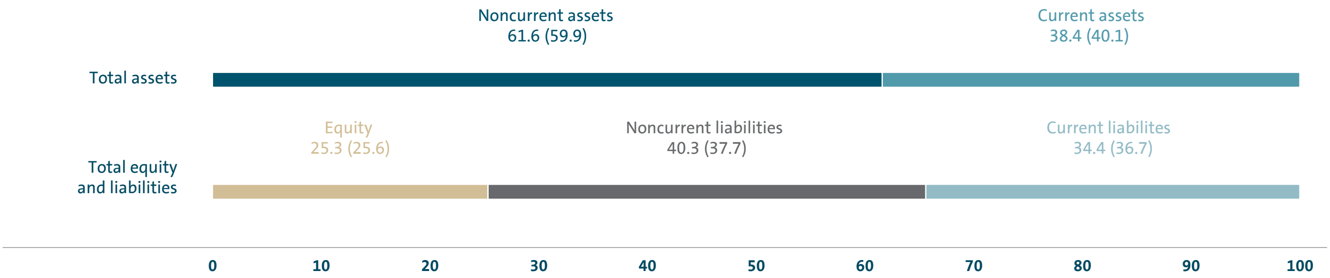
As of the end of fiscal year 2019, the Group had off-balance-sheet commitments in the form of contingent liabilities in the amount of €8.5 (9.3) billion, financial guarantees in the amount of €0.4 (0.3) billion and other financial obligations in the amount of €19.4 (26.6) billion. The previous year's amount of other financial obligations includes obligations from long-term leasing and rental contracts, which IFRS 16 requires to be presented in the affected balance sheet items as from January 1, 2019. 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. Other financial obligations primarily result from purchase commitments for property, plant and equipment 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 €1.2 billion for this purpose.

CONSOLIDATED BALANCE SHEET BY DIVISION AS OF DECEMBER 31

	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
€ million	2019	2018	2019	2018	2019	2018
Assets						
Noncurrent assets	**300,608**	**274,620**	**153,736**	**143,153**	**146,873**	**131,467**
Intangible assets	66,214	64,613	66,010	64,404	204	209
Property, plant and equipment	66,152	57,630	65,043	54,619	1,110	3,010
Lease assets	48,938	43,545	2,084	5,297	46,853	38,249
Financial services receivables	86,973	78,692	–390	9	87,363	78,684
Investments, equity-accounted investments and other equity investments, other receivables and financial assets	32,331	30,140	20,989	18,824	11,342	11,315
Current assets	**187,463**	**183,536**	**93,081**	**91,371**	**94,382**	**92,165**
Inventories	46,742	45,745	41,898	41,302	4,844	4,443
Financial services receivables	58,615	54,216	–640	–510	59,255	54,726
Other receivables and financial assets	38,620	37,557	17,803	13,033	20,817	24,524
Marketable securities	16,769	17,080	13,546	13,376	3,223	3,703
Cash, cash equivalents and time deposits	25,923	28,938	19,679	24,169	6,243	4,769
Assets held for sale	795	–	795	–	–	–
Total assets	**488,071**	**458,156**	**246,816**	**234,524**	**241,255**	**223,632**
Equity and liabilities						
Equity	**123,651**	**117,342**	**92,774**	**88,850**	**30,877**	**28,492**
Equity attributable to Volkswagen AG shareholders	109,117	104,522	78,872	76,624	30,246	27,898
Equity attributable to Volkswagen AG hybrid capital investors	12,663	12,596	12,663	12,596	–	–
Equity attributable to Volkswagen AG shareholders and hybrid capital investors	121,781	117,117	91,535	89,219	30,246	27,898
Noncontrolling interests	1,870	225	1,239	–369	631	594
Noncurrent liabilities	**196,497**	**172,846**	**90,822**	**77,692**	**105,675**	**95,154**
Financial liabilities	113,556	101,126	17,592	14,187	95,965	86,939
Provisions for pensions	41,389	33,097	40,631	32,535	759	563
Other liabilities	41,551	38,623	32,600	30,970	8,951	7,652
Current liabilities	**167,924**	**167,968**	**63,220**	**67,982**	**104,703**	**99,986**
Put options and compensation rights granted to noncontrolling interest shareholders	–	1,853	–	1,853	–	–
Financial liabilities	87,912	89,757	–7,312	–1,504	95,224	91,261
Trade payables	22,745	23,607	19,603	20,962	3,142	2,645
Other liabilities	56,896	52,750	50,559	46,671	6,337	6,079
Liabilities held for sale	370	–	370	–	–	–
Total equity and liabilities	**488,071**	**458,156**	**246,816**	**234,524**	**241,255**	**223,632**

1 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions, primarily intragroup loans.

CONSOLIDATED BALANCE SHEET STRUCTURE 2019
in percent



Automotive Division balance sheet structure

At the end of the reporting period, intangible assets were up slightly on the 2018 fiscal year. The marked increase in property, plant and equipment in the Automotive Division was attributable to the new IFRS 16. The high volume of investments was another factor driving this growth. Shares accounted for using the equity method were down on the prior-year figure: the business results of the Chinese joint ventures, which were at the prior-year level were offset by higher dividend resolutions. Noncurrent assets totaled €153.7 (143.2) billion, thus exceeding the figure at the previous balance sheet date.

Current assets rose to €93.1 (91.4) billion compared with the end of 2018. Current other receivables and financial assets increased. The Automotive Division's cash and cash equivalents were €4.5 billion lower, at €19.7 billion.

At the end of 2019, the Automotive Division's equity was €92.8 billion, 4.4% higher than on December 31, 2018. The good earnings development increased equity. Noncontrolling interests were up by €1.2 billion due to the issuance of TRATON SE shares. As a result of the termination of the control and profit and loss transfer agreement with MAN SE, the amount of €0.7 billion remaining from the put options and compensation rights in MAN SE granted to noncontrolling interest shareholders was reclassified directly to equity; €0.3 billion of this amount led to an increase in noncontrolling interests. The noncontrolling interests are now primarily held by the noncontrolling interest shareholders of TRATON, Renk and Audi. Currency translation effects additionally had a positive effect. Higher actuarial losses from the remeasurement of pension plans, the dividend paid to the shareholders of Volkswagen AG and negative effects from the measurement of derivatives recognized directly in equity had a decreasing effect on the Automotive Division's equity. The fact that total assets rose due to, among other factors, the implementation of the new IFRS 16 led to a slight decline in the equity ratio to 37.6 (37.9)%, despite an increase in equity.

At €90.8 (77.7) billion, noncurrent liabilities were markedly higher than a year earlier. The noncurrent financial liabilities included in this item rose, mainly as a result of the application of the new IFRS 16. Pension provisions were up significantly on the 2018 balance sheet date, mainly because of the actuarial remeasurement following a change in the discount rate. Noncurrent other liabilities were higher, driven by effects arising from the measurement of derivatives.

Current liabilities declined to €63.2 billion, down 7.0% compared with the end of 2018. As a result of the extraordinary termination of the control and profit and loss transfer agreement with MAN SE, the "Put options and compensation rights granted to noncontrolling interest shareholders" item was settled: the tendered MAN shares were acquired, the cash compensation was paid and the remaining amount was reclassified directly to equity. Current financial liabilities stood at €–7.3 (–1.5) 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 in both periods. Trade liabilities decreased. Current other liabilities were higher, primarily due to the effects from the measurement of derivatives and was attributable to higher liabilities from buyback transactions.

On December 31, 2019, the Automotive Division's total assets amounted to €246.8 billion, up 5.2% compared with the end of 2018.

PASSENGER CARS BUSINESS AREA BALANCE SHEET STRUCTURE[1]

€ million	Dec. 31, 2019	Dec. 31, 2018
Noncurrent assets	126,387	116,537
Current assets	75,459	70,408
Total assets	**201,846**	**186,945**
Equity	75,773	72,110
Noncurrent liabilities	78,679	66,406
Current liabilities	47,394	48,429

1 The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

COMMERCIAL VEHICLES BUSINESS AREA BALANCE SHEET STRUCTURE[1]

€ million	Dec. 31, 2019	Dec. 31, 2018
Noncurrent assets	25,143	24,117
Current assets	13,420	17,366
Total assets	**38,563**	**41,483**
Equity	14,115	13,788
Noncurrent liabilities	11,367	10,532
Current liabilities	13,081	17,162

1 The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

On December 31, 2019, intangible assets in the Passenger Cars Business Area were higher than at the 2018 balance sheet date. The new IFRS 16 resulted in a marked rise in property, plant and equipment. Noncurrent assets rose by a total of €9.8 billion to €126.4 billion. Current assets increased by a total of €5.1 billion to €75.5 billion. Current other receivables and financial assets were above the prior-year figure. Total cash and cash equivalents and securities declined. The “Assets held for sale” item comprises the carrying amount expected to be derecognized for the shares in Autonomous Intelligent Driving. At the end of 2019, the Passenger Cars Business Area had total assets amounting to €201.8 (186.9) billion. The Passenger Cars Business Area’s equity rose to €75.8 (72.1) billion, mainly due to earnings-related factors. At €78.7 billion, noncurrent liabilities were 18.5% higher in total than on December 31, 2018. The noncurrent financial liabilities included in this item increased, mainly as a result of the application of the new IFRS 16. Pension provisions rose significantly, mainly due to the actuarial remeasurement following a change in the discount rate. Current liabilities declined by 2.1% in total. Current financial liabilities were higher than at the end of 2018. Current other liabilities were up on the figure as of December 31, 2018, primarily due to the effects from the measurement of derivatives and as a result of higher liabilities from buyback transactions.

Property, plant and equipment in the Commercial Vehicles Business Area increased year-on-year because of the application of the new IFRS 16. Noncurrent other receivables and financial assets decreased. In total, noncurrent assets amounted to €25.1 (24.1) billion and were thus higher than at the end of 2018. Current assets declined by €3.9 billion to €13.4 billion. Current other receivables and financial assets were down markedly because of the intragroup sale of the power engineering business. Total securities were markedly up on the prior-year figure, while cash and cash equivalents were lower. Total assets stood at €38.6 (41.5) billion at the end of 2019.

At €14.1 (13.8) billion, the Commercial Vehicles Business Area’s equity was slightly up on the previous year. The 7.9% rise in noncurrent liabilities compared with the end of 2018 was mainly attributable to higher liabilities from buyback transactions and an increase in pension provisions. Current liabilities declined by 23.8% in total. As a result of the extraordinary termination of the control and profit and loss transfer agreement with MAN SE, the “Put options and compensation rights granted to noncontrolling interest shareholders” item was settled: the tendered MAN shares were acquired, the cash compensation was paid and the remaining amount was reclassified directly to equity. Current other liabilities were down compared with the previous year’s balance sheet date.

POWER ENGINEERING BUSINESS AREA BALANCE SHEET STRUCTURE

€ million	Dec. 31, 2019	Dec. 31, 2018
Noncurrent assets	2,206	2,499
Current assets	4,202	3,597
Total assets	**6,408**	**6,097**
Equity	2,885	2,953
Noncurrent liabilities	777	754
Current liabilities	2,746	2,391

The Power Engineering Business Area's intangible assets and property, plant and equipment were lower than the respective prior-year figures. Noncurrent assets decreased in total. Current assets rose 16.8% compared with December 31, 2018. The "Assets held for sale" item included in current assets mainly comprises the asset carrying amount expected to be derecognized following the planned disposal of Renk. Total assets in the Power Engineering Business Area stood at €6.4 (6.1) billion at the end of 2019.

On December 31, 2019, the Power Engineering Business Area's equity amounted to €2.9 (3.0) billion. Noncurrent liabilities were at the prior-year level. Noncurrent financial liabilities increased, while other noncurrent liabilities declined. Overall, current liabilities were higher than a year earlier. Contributing factors were a rise in current financial liabilities and in liabilities held for sale, which include the carrying amount of the liabilities of Renk expected to be derecognized.

Financial Services Division balance sheet structure

At the end of 2019, the Financial Services Division had total assets of €241.3 billion, 7.9% more than on December 31, 2018.

Noncurrent assets were up by 11.7% in total. The property, plant and equipment included in this item decreased. Investment property and lease assets rose due to business growth and as a result of the application of the new IFRS 16, while other receivables and financial assets declined by a corresponding amount. Noncurrent financial services receivables rose, driven by higher volumes.

Current assets amounted to €94.4 (92.2) billion. While current financial services receivables increased, current other receivables and financial assets declined. As of December 31, 2019, cash and cash equivalents in the Financial Services Division stood at €6.2 billion, up €1.5 billion on the prior-year figure.

The Financial Services Division accounted for around 49.4 (48.8)% of the Volkswagen Group's assets at the balance sheet date.

At €30.9 billion, the Financial Services Division's equity was 8.4% higher than the figure at the previous balance sheet date, driven mainly by healthy earnings. The equity ratio was 12.8 (12.7)%.

Noncurrent liabilities were up by 11.1% at the end of 2019, mainly because of a rise in noncurrent financial liabilities to refinance the business volume. Overall, current liabilities were higher than a year earlier. Especially the current financial liabilities included in this item recorded an increase.

Deposits from the direct banking business totaled €32.5 (29.9) billion, thus exceeding the figure recorded as of December 31, 2018.

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[1], 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[1] 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.

1 The value contribution corresponds to the Economic Value Added (EVA®). EVA® is a registered trademark of Stern Stewart & Co.

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.

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 Bunds, 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 7.5% reflects the general risk of a capital investment in the equity market.

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 calculated on a daily basis followed by the subsequent calculation of the average. A beta factor of 1.17 (1.17) was determined for 2019.

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 6.3 (6.2)% for 2019.

COST OF CAPITAL AFTER TAX AUTOMOTIVE DIVISION

%	2019	2018
Risk-free rate	0.0	0.8
Market risk premium	7.5	6.5
Volkswagen-specific risk premium	1.3	1.1
(Volkswagen beta factor)	(1.17)	(1.17)
Cost of equity after tax	**8.8**	**8.4**
Cost of debt	1.9	2.5
Tax	−0.6	−0.8
Cost of debt after tax	**1.3**	**1.8**
Proportion of equity	66.7	66.7
Proportion of debt	33.3	33.3
Cost of capital after tax	**6.3**	**6.2**

RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION IN THE REPORTING PERIOD

At €13,019 (11,438) million, the Automotive Division's operating result after tax, including the proportionate operating result of the Chinese joint ventures, was up on the prior-year figure. Improvements in the mix and increased vehicle sales, reversals of impairment losses as part of the remeasurement of development costs, product cost optimization as well as the measurement of certain derivatives and a decline in negative special items had a positive impact. In particular, higher depreciation and amortization charges due to the large volume of capital expenditure and a rise in research and development costs had an offsetting effect. Effects on earnings and assets from purchase price allocation are not taken into account as they cannot be influenced operationally by management.

In the reporting year, the invested capital rose to €116,016 (104,424) million. The increase was particularly due to the change in the accounting for leases (IFRS 16) that entered into force on January 1, 2019, as well as additions to capex 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. In spite of the additional adverse effects of the special items on earnings as well as the increase in the invested capital resulting from the new IFRS 16, the ROI improved as a result of the higher operating profit and amounted to 11.2 (11.0)%, which is above our minimum rate of return on invested capital of 9%.

At €7,328 (6,474) 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. After deduction of the opportunity cost of invested capital, operating result after tax – which was negatively impacted by special items – led to a positive value contribution of €5,691 (4,964) million.

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/en/InvestorRelations/news-and-publications/More_Publications.html.

RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION IN THE AUTOMOTIVE DIVISION[1]

€ million	2019	2018
Operating result after tax	**13,019**	**11,438**
Invested capital (average)[2]	116,016	104,424
Return on investment (ROI) in %	**11.2**	**11.0**
Cost of capital in %	6.3	6.2
Cost of invested capital	**7,328**	**6,474**
Value contribution	**5,691**	**4,964**

1 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.
2 When calculating the average invested capital, the effect of the application of the new IFRS 16 for full year 2019 was taken into account.

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 an environment dominated by persistently difficult market conditions, fierce competition, technological change in our industry and growing environmental awareness, we achieved a new sales record with 11.0 million vehicles delivered. We saw growth in Europe and South America. The Group's sales revenue increased by 7.1%, which was slightly better than expected. This was particularly due to mix and price improvements and the healthy business performance in the Financial Services Division. Consequently, the Volkswagen Group's operating profit before special items improved to €19.3 billion. At 7.6%, the operating return on sales before special items was slightly above the forecast range of 6.5–7.5%. Including special items related to the diesel issue, the operating return on sales rose to 6.7% and was therefore within the originally forecast range.

The research and development costs reflect our activities to safeguard the Company's future viability; at 6.7%, the R&D ratio in the Automotive Division was within the expected range.

At 6.6%, the Automotive Division's ratio of capex to sales revenue was also within the expected range. At €10.8 billion, net cash flow was, as forecast, markedly higher than in the previous year due in particular to the improved profits, lower cash outflows attributable to the diesel issue and improvements in working capital. As a consequence, net liquidity was higher than in the year before, at €21.3 billion.

The return on investment (ROI) in the Automotive Division of 11.2% was slightly higher than in the previous year and exceeded the minimum required rate of return on invested capital.

FORECAST VERSUS ACTUAL FIGURES

	Actual 2018	Original forecast for 2019	Adjusted forecast for 2019	Actual 2019
Deliveries to customers (units)	10.8 million	slight increase	at prior-year level	11.0 million
Volkswagen Group				
Sales revenue	€235.8 billion	increase of up to 5%	increase of up to 5%	€252.6 billion
Operating return on sales before special items	7.3%	6.5–7.5%	6.5–7.5%	7.6%
Operating return on sales	5.9%	6.5–7.5%	~6.5%	6.7%
Operating result before special items	€17.1 billion	within the forecast range	within the forecast range	€19.3 billion
Operating result	€13.9 billion	within the forecast range	within the forecast range	€17.0 billion
Passenger Cars Business Area[1]				
Sales revenue	€172.7 billion	increase of up to 5%	increase of up to 5%	€182.0 billion
Operating return on sales before special items	7.6%	6.5–7.5%	6.5–7.5%	8.0%
Operating return on sales	5.8%	6.5–7.5%	~6.5%	6.7%
Operating result before special items	€ 13.2 billion	within the forecast range	within the forecast range	€14.5 billion
Operating result	€10.0 billion	within the forecast range	within the forecast range	€12.2 billion
Commercial Vehicles Business Area[1]				
Sales revenue	€24.8 billion	increase of up to 5%	increase of up to 5%	€26.4 billion
Operating return on sales	4.8%	6.0–7.0%	6.0–7.0%	6.3%
Operating result	€1.2 billion	within the forecast range	within the forecast range	€1.7 billion
Power Engineering Business Area				
Sales revenue	€3.6 billion	slight increase	slight increase	€4.0 billion
Operating result	€–64 million	around the prior-year level	distinctly higher loss	€–93 million
Financial Services Division				
Sales revenue	€34.8 billion	moderate increase	moderate increase	€40.2 billion
Operating result	€2.8 billion	at prior-year level	at prior-year level	€3.2 billion
R&D ratio in the Automotive Division	6.8%	6.5–7.0%	6.5–7.0%	6.7%
Capex/sales revenue in the Automotive Division	6.6%	6.5–7.0%	6.5–7.0%	6.6%
Net cash flow in the Automotive Division	€–0.3 billion	significant increase, positive	significant increase, positive	€10.8 billion
Net liquidity in the Automotive Division	€19.4 billion	considerable decline	considerable decline	€21.3 billion
Return on investment (ROI) in the Automotive Division	11.0%	slight increase, >9%	slight increase, >9%	11.2%

1 The Volkswagen Commercial Vehicles brand has been reported as part of the Passenger Cars Business Area since January 1, 2019. The prior-year figures have been adjusted.

Volkswagen AG

(Condensed, in accordance with the German Commercial Code)

Unit sales of Volkswagen AG were on a level with the previous year in 2019, while sales and profit increased.

ANNUAL RESULT

Additional special items in connection with the diesel issue amounting to €1.8 billion were recognized in fiscal year 2019. This was mainly due to further provisions for legal risks. Special items had an impact of €–1.8 (–2.0) billion on other operating income.

At €80.6 billion, sales were 3.4% higher year-on-year due to positive mix effects. Sales generated abroad accounted for a share of €50.1 billion or 62.1%. Cost of sales increased by 2.8% to €74.7 billion.

Gross profit on sales rose accordingly to €5.9 (5.3) billion.

At €7.9 billion, distribution, general and administrative expenses were up €0.3 billion on the prior-year figure.

The net other operating result was €0.5 billion lower, at €–0.9 (–0.4) billion. The decrease resulted particularly from lower income from the reversal of provisions.

The €0.9 billion increase in the financial result to €9.1 billion resulted mainly from increased income from profit and loss transfer agreements. Impairments of equity investments (€1.5 billion) and a disposal loss recognized in connection with the IPO of TRATON SE (€0.8 billion) had an offsetting effect.

Including taxes on income of €–1.2 (–0.9) billion, net income for fiscal year 2019 amounted to €5.0 (4.6) billion.

INCOME STATEMENT OF VOLKSWAGEN AG

€ million	2019	2018
Sales	80,621	78,001
Cost of sales	– 74,700	– 72,700
Gross profit on sales	**5,921**	**5,301**
Distribution, general and administrative expenses	– 7,948	– 7,624
Net other operating result	– 914	– 415
Financial result[1]	9,115	8,264
Taxes on income	– 1,215	– 907
Earnings after tax	**4,958**	**4,620**
Net income for the fiscal year	**4,958**	**4,620**
Retained profits brought forward	0	3
Appropriations to revenue reserves	– 1,685	– 2,204
Net retained profits	**3,273**	**2,419**

1 Including write-downs of long-term financial assets.

BALANCE SHEET OF VOLKSWAGEN AG AS OF DECEMBER 31

€ million	2019	2018
Fixed assets	120,823	119,713
Inventories	5,554	5,140
Receivables[1]	35,856	36,965
Cash-in-hand and bank balances	5,639	14,595
Total assets	**167,872**	**176,412**
Equity	35,629	33,090
Special tax-allowable reserves	18	19
Long-term debt	39,206	40,348
Medium-term debt	35,983	37,422
Short-term debt	57,036	65,533

1 Including prepaid expenses.

NET ASSETS AND FINANCIAL POSITION

Total assets amounted to €167.9 billion on December 31, 2019, down €8.5 billion on the prior-year figure. Property, plant and equipment was up by €0.6 billion, with capital expenditure exceeding depreciation charges. Financial assets were on a level with the prior year at €112.8 (112.8) billion.

Fixed assets accounted for a share of 72.0 (67.9)% of total assets.

Current assets (including prepaid expenses) amounted to €47.0 (56.6) billion on December 31, 2019.

At the end of the reporting period, equity was at €35.6 billion; the increase was due particularly to the positive net income for the year. The equity ratio was 21.2 (18.8)%.

Other provisions increased by €1.3 billion to €21.4 (20.0) billion, due in part to the additional provisions in connection with the diesel issue. Provisions for pensions and similar obligations rose by €1.7 billion to €17.8 billion, primarily as a result of a change in measurement inputs, while provisions for taxes increased by €0.1 billion to €3.8 billion.

The €14.2 billion decrease in total liabilities (including deferred income) to €89.2 billion is attributable primarily to lower 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, deteriorated year-on-year from €–0.2 billion to €–7.6 billion. The interest-bearing portion of debt amounted to €78.2 (87.9) billion. In our assessment, the economic position of Volkswagen AG is just as positive overall as that of the Volkswagen Group.

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 in a manner which is commensurate with our business success. The proposed dividend therefore reflects our financial management objectives – in particular, ensuring a solid financial foundation as part of the implementation of our strategy.

In our Group strategy, we aim to achieve a payout ratio of at least 30%. The payout ratio is based on the Group's earnings after tax attributable to Volkswagen AG shareholders. It amounts to 24.5% for the reporting period and stood at 20.4% in the previous year.

DIVIDEND PROPOSAL

In fiscal year 2019, net retained profits amounted to €3.3 billion. The Board of Management and Supervisory Board are proposing to pay a total dividend of €3.3 billion, i.e. €6.50 per ordinary share and €6.56 per preferred share.

PROPOSAL ON THE APPROPRIATION OF NET PROFIT

€	2019
Dividend payout on subscribed capital (€1,283 million)	3,270,791,536.20
of which on: ordinary shares	1,918,083,817.00
preferred shares	1,352,707,719.20
Balance (carried forward to new account)	2,572,003.60
Net retained profits	**3,273,363,539.80**

EMPLOYEE PAY AND BENEFITS AT VOLKSWAGEN AG

€ million	2019	%	2018	%
Direct pay including cash benefits	8,421	70.7	8,175	70.6
Social security contributions	1,502	12.6	1,437	12.4
Compensated absence	1,310	11.0	1,350	11.7
Retirement benefits	682	5.7	611	5.3
Total expense	**11,916**	**100.0**	**11,573**	**100.0**

VEHICLE SALES

Volkswagen AG sold a total of 2,580,553 (2,597,126) vehicles in fiscal year 2019. Vehicles sold abroad accounted for a share of 67.6 (71.0)%.

PRODUCTION

Volkswagen AG produced a total of 1,069,066 vehicles at its vehicle production plants in Wolfsburg, Hanover and Emden in the reporting period (–4.0%).

EMPLOYEES

As of December 31, 2019, a total of 119,204 (119,394) people were employed at the sites of Volkswagen AG, excluding staff employed at subsidiaries. Of this figure, 5,029 (5,009) were vocational trainees. 5,254 (4,785) employees were in the passive phase of their partial retirement.

Female employees accounted for 17.6 (17.3)% of the workforce. Volkswagen AG employed 6,551 (5,883) part-time workers. The percentage of foreign employees was 6.4 (6.3)%. In the reporting period, 83.2 (83.2)% of the employees in Volkswagen AG's production area were in possession of vocational or additional training. The proportion of graduates was 20.1 (19.5)% in the same period. The average age of employees in fiscal year 2019 was 44.2 (43.9) years.

RESEARCH AND DEVELOPMENT

Volkswagen AG's research and development costs as defined in the German Commercial Code increased to €6.1 (5.6) billion in the reporting period. 13,378 (12,796) people were employed in this area at the end of the reporting period.

EXPENDITURE ON ENVIRONMENTAL PROTECTION

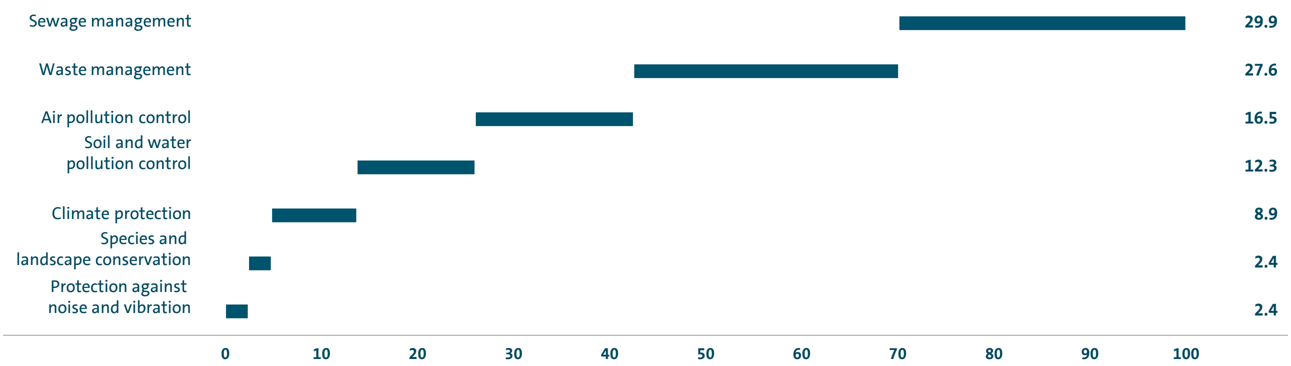
When measuring expenditure on environmental protection, a distinction is made between investments and operating costs for production-related environmental protection measures. Of our total investments, only those that are spent exclusively or primarily on environmental protection are included in environmental protection investments. We distinguish here between additive and integrated investments. Additive environmental protection measures are separate measures 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 2019 we invested primarily in air pollution control and in soil and water pollution control.

The recognized operating costs relate to 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 previous years, the emphasis in 2019 was on sewage and waste management.

VOLKSWAGEN AG EXPENDITURE ON ENVIRONMENTAL PROTECTION

€ million	2019	2018	2017	2016	2015
Investments	9	13	17	11	21
Operating costs	233	230	227	223	244

OPERATING COSTS FOR ENVIRONMENTAL PROTECTION AT VOLKSWAGEN AG 2019
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 generally 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 Aktiengesetz (AktG – German Stock Corporation Act) 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.”

The Annual Financial Statements of Volkswagen AG (in accordance with the German Commercial Code) can be accessed from the electronic company register at www.unternehmensregister.de.

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 enhanced Group strategy TOGETHER 2025+ describes this transformation in the Company. With our new vision "Shaping mobility – for generations to come" we aim to make mobility sustainable for present and future generations.

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 provide information on 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 want to increase the value of our Company in a sustainable way.

SUSTAINABILITY

For us, sustainability means simultaneously striving for economic, social and environmental goals in a way that gives them equal priority. As one of the largest industrial companies, we wish to put our creative powers to good use worldwide for the benefit of people and the environment. We have thus developed a sustainable style of company management and put in place the necessary management structures.

We have anchored our goal to sustainably shape mobility for present and future generations in our Group strategy TOGETHER 2025+. In addition, we want to be an excellent employer and a role model for the environment, safety and integrity. Sustainability is thus at the center of our corporate actions.

A particular challenge when implementing our strategic goals on all levels of the value chain is the complexity of our Company, with its twelve brands, more than 670 thousand employees and 124 production sites. At the same time, we are guiding our Group through the furthest-reaching process of change in its history. The transformation sweeping our entire industry is dominated especially by the transition to e-mobility, digitalization and new mobility services. We want to master these challenges and become a leading company for individual mobility in this electric and connected age.

Protecting the climate is currently the greatest global challenge affecting all three sustainability dimensions. We want to provide our own highly unique answer to this and have decided on an ambitious decarbonization program. With the implementation of this program we want to be a carbon-neutral company by 2050. We are assuming a pioneering role by making this voluntary commitment based on the Paris Climate Agreement. To this end, we are guided by the specifications of the Task Force on Climate-Related Financial Disclosures (TCFD); for more information, please see our Sustainability Report for fiscal year 2019.

In the field of digitalization we also want to help shape the transformation and are pressing ahead with developments in our vehicles and mobility services on the one hand and in our operating processes and management on the other. The digital transformation requires us not just to develop new technologies and be able to harness them, but also to come up with a forward-looking human resources strategy that takes our employees along this path of change and ensures that they are trained and that their jobs are secured.

Parameters and guiding principles

Our actions are determined by the Volkswagen Group Essentials as the foundation of values and the basis for our shared corporate culture. The Volkswagen Group Essentials support managers and employees in overcoming legal and ethical challenges that arise in their daily work. At the same time, we are guided in our activities by a large number of internal guidelines on sustainability. These include the Volkswagen Social Charter, the Charter on Labor Relations, the Charter on Vocational Education and Training, and the Charter on Temporary Work.

On this basis, our objective is to ensure that the Volkswagen Group's actions are in line with international agreements and frameworks such as the Sustainable Development Goals (SDGs) of the United Nations (UN), the declarations of the International Labor Organization (ILO), the principles and conventions of the Organization for Economic Co-operation and Development (OECD) and the UN covenants on basic rights and freedoms.

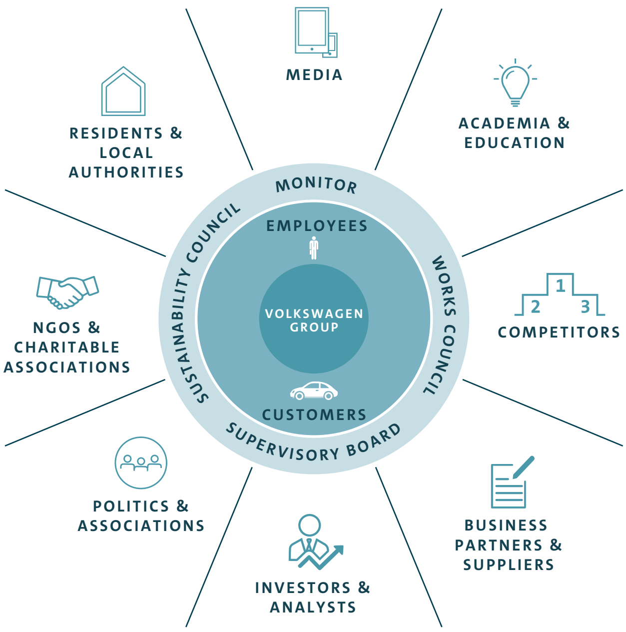
We have developed our own guiding principles for the different aspects of sustainability in conjunction with the so called mission statements. These pithy, focused statements underscore our goals, programs and measures. In this context, we created the Group's new "goTOzero" environmental mission statement in 2019 which represents our goal to achieve net carbon neutrality with a business approach that is as environmentally friendly as possible. In the implementation of its environmental mission statement, Volkswagen is primarily focusing on the four areas of climate change, resources, air quality and environmental compliance.

We take a similar approach in the area of social sustainability, where we aspire to act responsibly and fairly to all stakeholders as a good corporate citizen. Within the Company, the cornerstones of this mission statement are the characteristics of an attractive employer such as employee profit participation plans, job security, career development opportunities and equal opportunities. Externally, we seek dialog with society, initiate and support social projects and encourage our staff to take responsibility for the community.

Management and coordination

The structure and workflows of core processes in Group-wide sustainability management were refined in the reporting period. The related specifications, structures and processes will subsequently be codified in a separate Group policy. The core elements include assumption of overall responsibility for sustainability by the Chairman of the Board of Management of Volkswagen AG, specification of the competence of the responsible Board members for specific sustainability management concepts and development of rules of procedure by the Group Sustainability Steering Committee. The members of this steering committee include managers from central Board of Management business areas and representatives of the brands and the Group Works Council. The steering committee defines concrete strategic goals and programs, establishes measures for uniform further development of sustainability management across divisions, brands and regions and decides on fundamental sustainability issues. It also handles the enhancement of Group-wide sustainability management. The offices of the Group Sustainability Steering Committee are part of the Group's Sustainability function.

THE VOLKSWAGEN GROUP'S STAKEHOLDERS



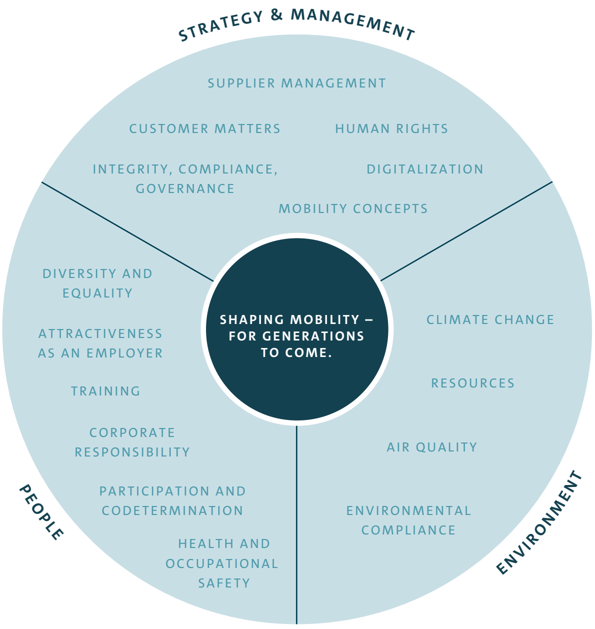
Strategic stakeholder management

Our stakeholders are individuals, groups, or organizations who have a material influence on or are materially influenced by the course or the result of corporate decisions. Our customers and employees are at the center of our stakeholder network. Based on our annual stakeholder assessment we have identified eight more external stakeholder groups of equal value around this core. The Group's supervisory and advisory bodies such as the Supervisory Board and the Works Council, the Sustainability Council and the Monitor appointed by the US Department of Justice, act as a special interface between internal and external stakeholders.

We understand stakeholder management as systematic, continuous interaction with key stakeholder groups in line with our TOGETHER 2025+ Group strategy. Stakeholder management aims to systematically record expectations and use feedback from our stakeholders to critically reflect on strategic planning processes.

To be able to systematically incorporate our stakeholders' suggestions and recommendations, we have given our stakeholder management an organizational structure in the form of external committees. At Group level these are the Sustainability Council and the Stakeholder Panel. The Panel is comprised of 300 national and international opinion leaders. In addition, we offer our stakeholders a broad range of opportunities for interaction and feedback channels including regular discussion panels with stakeholders, stakeholder surveys and international cooperative projects.

THE VOLKSWAGEN GROUP'S KEY ACTION AREAS



Sustainability Council

The Volkswagen Group appointed a Sustainability Council in September 2016, initially for the period until 2020, to provide assistance with sustainability issues. This is made up of internationally renowned experts from the academic world, politics and society. The Council establishes its own working methods and areas of focus independently, has far-reaching rights for the purposes of exchanging information, consultation and initiating action, and consults regularly with the Board of Management, top management and the employee representatives.

The projects initiated in 2018 started to deliver results in 2019:

> The Open Source Lab on Sustainable Mobility organized, among other things, dialog events on the use of open data in the field of mobility and drew up position papers on this topic.
> The international program for forecast-based civil protection financing implemented initial mechanisms.
> The research project on traffic policy instruments for reaching international climate targets published initial brief studies.
> Visiting professors at the open labs began their work.
> The project for the strategic focus of sustainability at Volkswagen reached its first milestones.

In addition, the Council decided on three new initiatives: a research project on distribution effects and acceptance of climate-friendly fiscal policy, a study on the effects of digitalization and e-mobility on employment, and a commitment to a sustainable cobalt supply chain. Furthermore, the Sustainability Council formulated further recommendations for how technological, political and cultural change should be organized to win back trust and lay the foundations for future success.

Materiality analysis

The development of our new corporate vision "Shaping mobility – for generations to come" in 2019 played a key role in identifying the topics that are material for the Volkswagen Group. We seek to provide answers to the challenges of today and tomorrow with our enhanced Group strategy TOGETHER 2025+. Our goal is to make mobility sustainable for our own and for future generations. With electric drives, digital connectivity and autonomous driving, we want to make the automobile cleaner, quieter, more intelligent and safer.

As the starting point for our materiality analysis, we are oriented towards the SDGs formulated by the United Nations, which describe the social challenges facing companies. Based on the results of the analysis we conducted in the reporting year, we have defined 16 key action areas. Key action areas were revised, restructured and grouped together in the fiscal year. In order to identify key topics, we took into account external studies, sector and media analyses, ratings, stakeholder surveys, internal and external guidelines and codes, the TOGETHER 2025+ Group strategy and the individual departmental strategies.

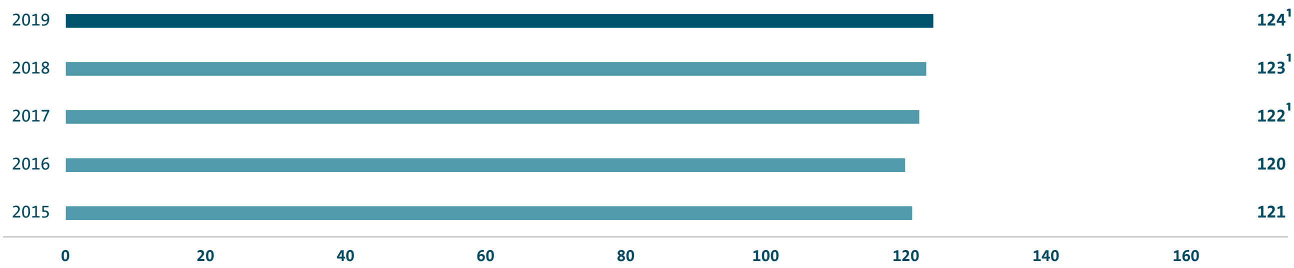
As the details of our Group strategy have not yet been finalized, we are still in the process of specifying the content of the key action areas based on values, targets and KPIs.

Corporate citizenship

As a good corporate citizen, we aim to be a constant source of economic impetus for local structural development and equal opportunities. We have always believed in the importance of recognizing our social responsibilities toward our stakeholders. The main focus of our corporate social engagement activities is on supporting future, educational and community projects at many of our sites across the world. In 2019, the brands and companies launched or continued over 520 projects and initiatives worldwide.

i CSR PROJECTS
https://csrprojects.volkswagenag.com/csr-projects.html#all

CO_2 EMISSIONS OF THE VOLKSWAGEN GROUP'S EUROPEAN (EU28) NEW PASSENGER CAR FLEET
in grams per kilometer



1 Subject to official publication by the European Commission in the annual CO_2 fleet monitoring report.

RESEARCH AND DEVELOPMENT

Forward-looking mobility solutions with brand-defining products and services would be unthinkable without innovations. This makes our research and development work essential for sustainably increasing the value of the Company.

Together with our Group brands, we have launched measures based on our future program TOGETHER 2025+ to link development activities across the Group. At the heart of this is an efficient, cross-brand development alliance characterized by a close network of our experts, collaboration on an equal footing, an innovative working environment and the pooling of development activities. The aim is to make use of synergy effects across the Group and act as a role model for the environment, safety and integrity. The development alliance is playing a major part in driving the Volkswagen Group's transformation and helping to make the Group fit for the future.

In view of this strategic focus, we concentrated in the reporting period on continuing to develop forward-looking 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.

We use a strategic indicator in Europe and the United States to measure the effectiveness of our measures to reduce emissions when driving:

> CO_2 fleet emissions. The Volkswagen Group's new passenger car fleet in the EU (excluding Lamborghini and Bentley) emitted an average of 124 g CO_2/km[1] in the reporting period, a value that is below the 2019 European target of 130 g CO_2/km. The low year-on-year increase was mainly attributable to rising demand for SUVs. As small volume manufacturers, the Lamborghini and Bentley brands each have an independent fleet for the purposes of the European CO_2 legislation and were both above their individual targets. In the United States, the regulation of fleet emissions is different to that in Europe, for example in terms of the underlying test process, the period of evaluation, which corresponds to the model year rather than the fiscal year, and the calculation period, which comprises three model years. In fiscal year 2019, we complied with the regulations that apply to our greenhouse gas account in the United States, subject to any notification by the authorities.

Fuel and drivetrain strategy

With a view to the legal regulations on emissions, we are currently developing a forward-looking vehicle and drivetrain portfolio: we have set ourselves the objective of increasing drive system efficiency with each new model generation – irrespective of whether it is a combustion engine, a hybrid, a plug-in hybrid, or a purely electric drive system. 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.

We anticipate that one in four new Volkswagen Group vehicles worldwide will already have a purely electric drive by the year 2025; depending on market development, this could be up to three million electric vehicles a year. As part of our electrification offensive, we aim to offer our customers worldwide up to 75 completely battery electric vehicles and approximately 60 hybrid models by 2029. By 2030, the Volkswagen Group aims to have electrified its entire model portfolio – from high-volume models to premium vehicles. This will mean offering at least one electric version – battery electric, hybrid or mild hybrid vehicles – of each of our passenger car models across all Group brands. To this end, in addition to the Modular Electric Drive Toolkit (MEB), we are also developing an all-electric platform for our premium and sports brands – the Premium Platform Electric (PPE).

The Volkswagen Group is committed to achieving the goals of the Paris agreement on climate change and is pursuing the objective of making its vehicle fleet completely carbon neutral by 2050.

To enable sustainable, affordable mobility in the future for as many people around the world as possible, we offer a range of drivetrains with a focus on electrification. From today's perspective, conventional combustion engines look set to continue to make up the lion's share of drive technology in the coming years. In the interest of using resources responsibly, it is therefore essential to further enhance this engine segment and systematically consolidate it for specific markets. Powertrain measures such as significantly more sophisticated exhaust gas purification or mild hybridization of our vehicles, as well as vehicle measures such as optimized aerodynamics or reduced rolling resistance will be necessary to fulfill future emissions standards. With the new Golf 8 we are placing a greater focus on efficient and sustainable mobility in the volume segment. The Golf's new petrol mild hybrid drivetrain significantly reduces fuel consumption. With its ability to shut the engine off when coasting and to give an electric boost when the car drives off, it provides attractive functions related to efficiency and driving comfort.

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. For example, we will reduce the number of versions of conventional combustion engines in the Group by more than a third in the long term. This will create capacity for the development and production of new hybrid and electric drives.

Life cycle engineering and recycling

On their own, technological innovations for reducing fuel consumption are not enough to minimize the effect of vehicles on the environment. We consider the environmental impacts we cause throughout the entire life cycle and at all stages of the value chain. These include the manufacturing process with the associated extraction of raw materials, the production of materials, the processes at our suppliers and our own production operations at our sites, the use phase with the resulting vehicle emissions and the necessary supply of fuel, and ultimately the recycling of the vehicle at the end of its life cycle. 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. We therefore already take the recyclability of the required materials into consideration when developing new vehicles, use high-quality recycled material and avoid pollutants. Under the European Directive on end-of-life vehicles, passenger cars and light commercial vehicles must be 85% recyclable and 95% recoverable. Our vehicles registered in Europe comply with these standards.

Leveraging synergies increases efficiency

When developing vehicles, we cooperate closely with our brands to leverage synergies. The joint strategy of our development alliance involves, for example, making the Group more competitive and viable 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 therefore not only work with each other, but also for each other on key technologies, forming cross-brand networks of expertise to address topics of importance for the future. For example, we have consolidated the Group's activities in and responsibility for the development, procurement and quality assurance of all battery cells in a central Center of Excellence under the umbrella of the Volkswagen Passenger Cars brand. In the Center, a pilot line for cell production was put into operation in 2019 to build up expertise for the Group in the area of cell design but also throughout the entire value chain.

We also manage our modules centrally to reduce costs, capital expenditure and complexity. We are seeking to reduce expenditure in the modular toolkits, while at the same time facilitating widespread electrification and a focus on autonomous systems. We want to achieve this through a considerable reduction in complexity using streamlined platforms that synergize but do not overlap. To this end, the individual Group brands draw on the modular toolkits, thus creating synergies between the various models of a product line, as well as across product lines. By streamlining the toolkits, we are giving ourselves the financial leeway needed for developments in the future trends of digitalization and autonomous driving. The high-volume passenger car brands have introduced a product line organization, thus strengthening their responsibility for the success of vehicle projects, improving project work across different cross-departmental areas, accelerating decision-making and intensifying the focus on project results.

We are also leveraging synergies by constantly sharing best practices, for instance in virtual development and testing. Last but not least, the centralized development and consolidation of our IT systems is also helping to strengthen cooperation across the brands, make development activities more comparable and reduce the Group's IT costs.

Sustainable mobility, connectivity and automated driving

Mobility is a basic prerequisite for economic growth. However, while the need to be mobile at all times is rising, natural resources are dwindling. This calls for comprehensive mobility concepts to minimize the environmental impact. Such solutions need to be efficient, sustainable, customer-oriented and accessible any time and anywhere.

We are researching and developing such concepts and solutions in our Group-wide alliance: when 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. Innovations such as digital connectivity and automated driving allow for new approaches to solving problems. We strive to utilize these and thus to play our part in a comprehensive mobility system for the future and to help shape our industry's transformation.

We are focusing on establishing a cross-brand business area for mobility solutions. We aim to make our mobility business MOIA a scalable and profitable business model.

In its pursuit of autonomous driving, the Volkswagen Group further improved its assistance systems and automated driving functions and introduced these in vehicles in 2019. The 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. The Volkswagen Group has presented its vision of an autonomous mobility system by unveiling the Sedric family, comprising fully autonomous vehicles for short- and long-distance mobility, as well as sports cars, self-driving delivery vehicles and heavy trucks. These vehicles will enable new forms of mobility in both cities and rural areas, particularly for user groups that have so far been excluded from access to mobility.

Autonomous driving in complex urban environments places especially heavy demands on technology. We are dedicated to meeting these challenges. Our Autonomous Intelligent Driving GmbH is working on developing a Group-wide system for self-driving vehicles.

As part of the TOGETHER 2025+ strategy, we are working with the Software-enabled Car Company module to make software one of the core competencies of the Volkswagen Group. Starting on January 1, 2020, we brought together all of our interests and subsidiaries that develop software for vehicles and digital ecosystems in the Car.Software organization, an independent entity with Group responsibility. This first step involved around 3,000 employees. Up to the middle of 2020, experts from the various Group brands and regions will also work together under the umbrella of the Car.Software organization.

The Car.Software organization is developing software for five applications within the Group: a uniform vehicle operating system "vw.os" for all Group vehicles as well as its connectivity with the Volkswagen Automotive Cloud; a standardized infotainment platform; all assistance systems including highly automated driving and parking; functions for connecting the drivetrain, chassis and charging technology; and ecosystems for all the brands' mobility services and digital business models. By 2025, all new vehicle models across the Group will be based on uniform, cross-brand software solutions. In pursuing this approach, we intend to generate economies of scale in the Group in order to reduce costs for software in the vehicle for all brands.

Pooling strengths with strategic alliances

The aim of our future program TOGETHER 2025+ is 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 strongly defined through regional innovation activities. Volkswagen therefore concentrates its strategic venture capital activities and partnerships in the Group's international innovation ecosystem and provides central support to the brands in the identification and implementation of technologies that will safeguard our competitive position. This approach helps us to identify regional customer needs more precisely, to adjust our product range accordingly and to establish competitive cost structures. We therefore rely to a greater extent than in the past on partnerships, acquisitions and venture capital investments. We manage investment selection centrally so as to generate maximum value for the Group and its brands. It is against this backdrop that we have formed an alliance with the Ford Motor Company. This involves an intended collaboration regarding the development of vans and mid-sized pickups. In addition, we plan to invest with Ford in Argo AI, a company that is working on the development of a system for autonomous driving. This alliance allows both car companies to integrate Argo AI's self-driving system into their own models independently of each other. The system is supposed to make fully automated driving possible and to open up new opportunities, particularly for ride sharing providers and delivery services in urban areas, from the use of fully automated vehicles. In addition, Ford intends to use the Modular Electric Drive Toolkit (MEB) developed by Volkswagen for a zero-emissions volume model that should be offered in Europe starting in 2023. The aim of the cooperation is to place both Volkswagen and Ford in a position that enables them to improve their competitiveness, tailor their products to better meet the needs of customers worldwide and at the same time to leverage synergies related to cost and investment. The completion of the Argo transaction is subject to the approval of various official authorities and other conditions.

The strategic partnership with Microsoft enables us to accelerate our transformation into a mobility service provider with a fully connected vehicle fleet and our Volkswagen We digital ecosystem. Together, we will press ahead with software development for the automobile of tomorrow and new services for our customers. Our IT expertise and solutions will thereby be comprehensively strengthened and expanded.

Battery technology is to become a core competency 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 when differentiating between products. We have already pooled our in-house expertise in battery cells in a Center of Excellence and at the same time intend to accelerate technological change and the development of expertise through intelligent partnerships. We anticipate that we will need a battery capacity of more than 150 GWh a year in the period to 2025 just to equip our own electric fleet with lithium-ion batteries. To cover this enormous demand, we have defined strategic battery cell suppliers for our most important markets and the first MEB models, and we aim to initiate further long-term strategic partnerships in China, Europe and the USA. The joint venture formed with Northvolt AB will build a 16 GWh battery cell factory in Salzgitter. Looking ahead, we are already preparing for the next generation: we intend to bring solid-state batteries to market readiness in partnership with other companies.

Our Group brands Volkswagen Passenger Cars, Audi and Porsche are involved in the pan-European High-Power Charging (HPC) joint venture IONITY, under which a comprehensive charging infrastructure is being built to safeguard long-distance mobility: after building 200 fast-charging stations in 2019 and with 65 more in construction, we plan to have around 380 of a total of 400 stations in operation along major transport arteries in Europe by the end of 2020.

We support the design of the framework conditions for the approval and introduction of our own self-driving system by our active involvement in public projects. The experience we are gathering here will benefit the Group brands and thus also our customers.

Key R&D figures

In fiscal year 2019, we filed 7,614 (7,639) patent applications worldwide for employee inventions, the majority of them in Germany. The fact that an ever increasing share of these patents is for important cutting-edge fields 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 period amounted to €14.3 (13.6) billion and were 4.9% higher than in the previous year; their percentage of the Automotive Division's sales revenue – the R&D ratio – came to 6.7 (6.8)%. Along with new models, the focus was primarily on the electrification of our vehicle portfolio, a more efficient range of engines, digitalization and new technologies. The capitalization ratio was 36.1 (38.4)%. Research and development expenditure recognized in profit or loss in accordance with IFRSs increased to €13.2 (12.1) billion.

As of December 31, 2019, our Research and Development departments – including the equity-accounted Chinese joint ventures – employed 54,947 people (+5.8%) Group-wide, corresponding to 8.2% of the total workforce.

RESEARCH AND DEVELOPMENT COSTS IN THE AUTOMOTIVE DIVISION

€ million	2019	2018
Total research and development costs	14,306	13,640
of which capitalized development costs	5,171	5,234
Capitalization ratio in %	36.1	38.4
Amortization of capitalized development costs	4,064	3,710
Research and development costs recognized in profit or loss	13,199	12,116
Sales revenue	212,473	201,067
Total research and development costs	14,306	13,640
R&D ratio	**6.7**	**6.8**

PROCUREMENT

In fiscal year 2019, the main task for Procurement was once again to safeguard supplies, and to help create competitive, innovative products and optimize cost structures. In addition, we continued to drive digitalized procurement processes forward.

Procurement strategy

The enhanced Group strategy TOGETHER 2025+ stands for more speed, focus and stringency, also within the Procurement division, and is driving faster change. The focus in 2019 was on implementing the concepts developed in the procurement strategy. Procurement's key performance indicators were revised as part of a combined system of targets for Group Components and Procurement. Alongside the targets for material and investment costs and the timely award of contracts, the system of targets now gives greater weight to sustainability aspects and the achievement of carbon neutrality in the supply chain.

Target-costing strategies are becoming increasingly important in Procurement. They allow costs to be made transparent and concepts to be influenced in the early stage of product development by focusing on calculatory potentials. They also provide approaches for worldwide benchmarking and the exchange of best practices.

A cross-divisional strategic value chain management has been implemented to support profitable growth and safeguard the availability of hard- and software that is strategically relevant and/or crucial for ensuring supplies. Going forward, the newly formed committee for "Strategic Value Chain Management" will be responsible for taking strategically important "make", "buy" or "partner" decisions.

The growing volume of software and the new partners and suppliers this entails necessitate adjustments to the process chain and Procurement's award criteria. In future, the newly formed "Corporate Sourcing Committee Digital Car" will be in charge of the optimal award of contracts for vehicle and vehicle-related software. It will thereby create a key interface to the board-level management function with responsibility for Digital Car & Services, which was established at the Volkswagen Passenger Cars brand in 2019.

Volkswagen FAST – Supplier network as the basis for success

With the FAST (Future Automotive Supply Tracks) initiative, Group Procurement is instrumental in advancing the Volkswagen Group and its supply network with a view to partnerships and future-viability.

Thanks to the program, which was launched in 2015, Volkswagen was able to expand its portfolio of strategically important partners again in the reporting period. With the partners Microsoft, Infineon, Cree/Wolfspeed and AVL List, the priority in 2019 was above all on strengthening partnerships in the area of zero-emission and autonomous mobility.

FAST facilitates the regular exchange of information so that both sides are strongly positioned to cope with the future challenges facing the automotive industry. Based on a set of criteria, a comprehensive assessment of the previous year is disclosed to the suppliers so that improvements can be made together. Alongside the existing supply relationships, strategic agreements on globalization and innovation are still core issues of this exchange.

FAST partners are prioritized in the cross-divisional innovation process in that they are given the opportunity to present innovations to representatives from the Procurement and Technical development divisions at upper management level in strategy meetings. FAST partners are invited to attend relevant innovation events at which they can contribute their expertise. At the annual FAST Summit, talks were given on the strategic direction of e-mobility and a zero-emission future. The program will continue to be updated and refined in order to take full advantage of the potential from the FAST initiative.

E-mobility

A key task for Procurement is to safeguard supplies for the rapidly growing requirements of the e-mobility offensive through 2025 with a view to sustainability and optimizing cost structures in the process.

The adjustments to our organizational structures in Group Procurement are designed to let us focus on high-voltage batteries and e-resources. Through benchmarking and requirements-based training, we are increasing the purchasing expertise of our procurement organization in the area of the e-mobility offensive.

When awarding contracts to our e-mobility partners, we provide clear requirements in relation to sustainable supply sources, transparent, traceable supply streams, and energy- and carbon-optimized supply chains. We pool global demand from the European, American and Asian markets and award Group contracts with the goal of cost leadership for e-mobility solutions. To this end, we take steps to ensure diversification and localization of the supplier portfolio in an effort to reduce economic and geopolitical risks.

Digitalization of supply

We are working systematically to implement a completely digitalized supply chain. This is intended to help us to ensure supply and leverage synergies throughout the Group in order to take a leading position in terms of 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. The objective of our functional area strategy for Procurement is to standardize transactions with our suppliers in the future and automate them where possible. This will not only reduce transaction costs but will also accelerate business processes. Potential supply risks can be reported automatically in order to identify measures and alternatives faster together. The cornerstone for the future of Procurement was laid in 2018 in the form of Group Procurement's digitalization strategy. This strategy aims not only to eliminate the weaknesses of Procurement's IT system environment but also to increase the organization's effectiveness, efficiency and future viability.

Structure of key procurement markets

Our procurement process 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 growth markets, we identify and train local suppliers to generate cost advantages for all Group production sites. We are also putting a focus on start-ups and software suppliers. 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 safeguarding of the supply of purchase parts is one of Procurement's goals. Adverse effects on production in the Group caused by unforeseeable events such as natural disasters were minimized to the best of our ability.

Management of purchased parts and suppliers

Today's market environment is characterized by persistent segmentation, diversification and globalization. We face these challenges with our purchased parts and supplier management, which supports and supervises the supplier processes. From development to series production, we focus on safeguarding the industrialization processes of the purchased parts at the individual supplier locations. The complexity of the components requires regular monitoring of manufacturing capacity. It is vital that we identify any disruptions at an early stage and take rapid action to remedy these. Close cooperation with the quality assurance units at the production sites is crucial for our vehicle projects by ensuring a stable supply of purchased parts to start-up and series production.

Sustainability in supplier relationships

Successful relationships with our business partners are based on observance of human rights, compliance with occupational health and safety standards, active environmental protection and combating corruption. These sustainability standards are defined in the contractually binding Volkswagen Group requirements for sustainability in relations with business partners (Code of Conduct for Business Partners). At the same time, the documents signed contain the expectation that any subsuppliers will be subject to the same obligation. We use the management system to review compliance with the requirements, which since 2019 has been an explicit condition for award of contract.

In our recently introduced sustainability rating we determine suppliers' sustainability performance by means of self-disclosures and on-site audits. By the end of 2019, we had received 12,646 self-disclosures and the findings of 1,331 audits. As a rule, contracts are not awarded to suppliers who fail to comply with regulations or do not implement these adequately. Tying award decisions to sustainability criteria is one of the strongest levers for enforcing these. We address existing sustainability risks and violations of sustainability principles by systematically implementing measures; this also includes the upstream supply chain. Depending on the severity, these may entail the inclusion of stipulations and measures in performance specifications for suppliers. In connection with the introduction of the sustainability rating, we have once again stepped up our focus on advanced training for suppliers: in fiscal year 2019, around 1,100 suppliers in seven countries took advantage of the training programs.

Due to the Group's transformation into a provider of sustainable mobility solutions, decarbonization and responsible raw material sourcing were two particularly important topics in 2019. Here we significantly expanded our activities in order to meet our own and external requirements. We systematically anchored the use of renewable energy in the specifications for battery suppliers and agreed measures to reduce CO_2 emissions in a series of workshops with strategic suppliers. Our commitment to sustainability in connection with raw materials was equally emphatic. By focusing on battery raw materials and their potential adverse effects on people and the environment in the upstream chain, we significantly expanded our activities beyond our direct contractual partners. Key activities included the performance of audits, work with certified smelters and development of a sustainability standard for mines.

The basis for most of these measures is supply chain transparency. To increase this, we implemented a series of pilot projects in 2019 including blockchain projects for tracking individual supply chains and auditing critical subsuppliers at neuralgic points of high-risk supply chains. Worthy of note is the Responsible Sourcing Blockchain Network (RSBN), in which we, along with other large corporations, aim to track the cobalt supply chain and make it more sustainable.

COMPONENTS BUSINESS

A realignment of the Group-wide components business was decided on as part of the enhanced Group strategy TOGETHER 2025+ and implemented as of January 1, 2019. The aim is further improvement of future viability and competitiveness through cross-brand management of component activities and a value creation strategy coordinated throughout the Group. Synergies will be leveraged across both traditional technologies and topics of the future to advance the progressive transition to e-mobility.

The components business manages some 75 thousand people worldwide. The focus of their expertise is the development and manufacture of vehicle components. In order to realign these competencies in a future-oriented way, it was decided as part of the Group strategy to combine components activities around the world into an independent entity, Volkswagen Group Components, under the umbrella of Volkswagen AG.

The entity has been re-organized into new business areas: Engine and Foundry, Transmissions and Electric Drive Systems, Chassis, Seats and Battery Cells. In each of the business areas, innovative power and competitiveness will be increased through an economical product portfolio that is viable for the future with a continuously optimized product range and economies of scale exploited across all business areas. Group Components in the Volkswagen Group will be responsible for the development and production of battery systems and electric drives for new electric vehicles as well as for the development and pilot production of battery cells and the management of production partners. There are also plans to reuse the battery cells in innovative reutilization concepts such as the flexible fast charging station and then recycle them in a climate-friendly manner. Moreover, further strategic initiatives will be implemented in Group Components' central strategy program "ONE MISSION 2025". Using innovative digitalization strategies such as robot-controlled process optimization, the transition process to new topics of future relevance will be accelerated.

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, forward-looking innovations, flexible supply streams and structures, and an agile team. In fiscal year 2019, the global vehicle production volume was slightly under the previous year's level, reaching 10.8 million units. Productivity increased by around 4.0% year-on-year, despite the continuing difficult conditions in many markets.

"Intelligently networked" production strategy

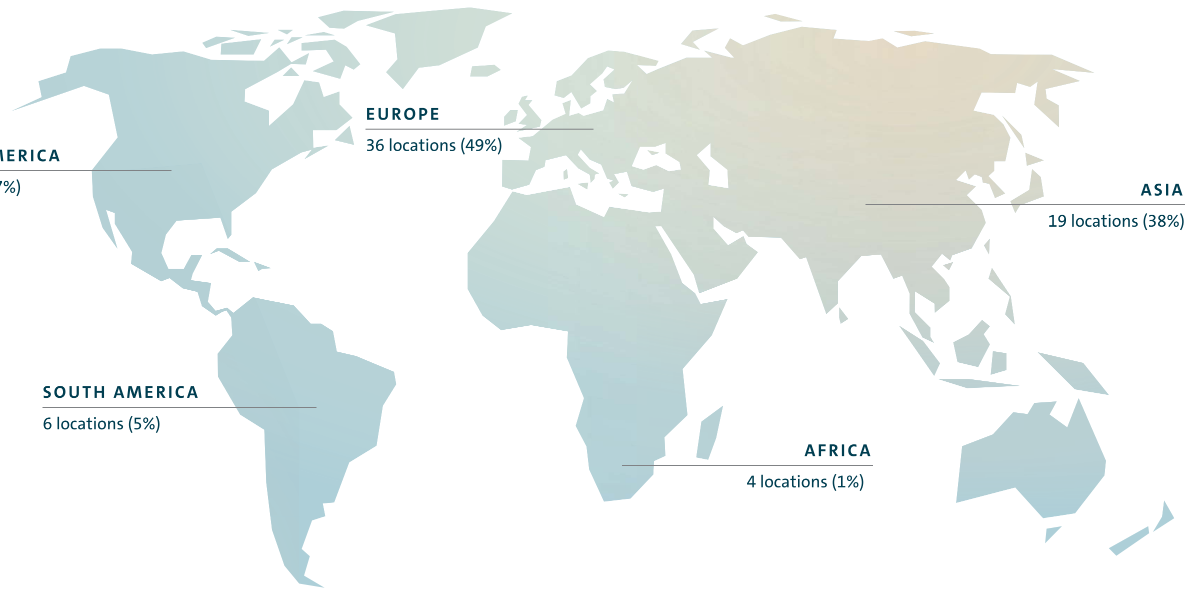
Production is supporting the enhanced Group strategy TOGETHER 2025+ with its functional area strategy, "Intelligently Networked". By intelligently connecting people, brands and machines, we aim to pool the strengths and potential of our global production and logistics and take advantage of the resulting synergy effects. We are guided in this by four strategic goals:

> Versatile production network
> Efficient production
> Intelligent production processes
> Future-ready production

With division-specific initiatives we have created 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 align our activities to the current challenges.

VEHICLE PRODUCTION LOCATIONS OF THE VOLKSWAGEN GROUP
Share of total production 2019 in percent



Global production network

With twelve brands and 124 production locations, aspects such as consistent standards for product concepts, plants, operating 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 multibrand locations. Currently, almost half of the 45 passenger car locations are already multibrand locations. The Bratislava site continues to serve as a prime example in the Group, producing vehicles for the Volkswagen Passenger Cars, Audi, Porsche, SEAT and ŠKODA brands.

The Volkswagen Group has set itself the goal of becoming a world-leading provider of battery electric vehicles by 2025. The basis for this is the introduction of the Modular Electric Drive Toolkit (MEB), which we are using to complement our range with additional battery-electric vehicles. We have been manufacturing battery-electric vehicles based on the MEB in Zwickau, the Volkswagen Group's first electric car factory, since 2019.

In order to design multibrand projects and electric 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 enables reduced capital expenditure and provides the opportunity to better utilize existing capacities. The future will also see electric vehicle projects at multibrand locations such as Zwickau, Germany and 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.

Production locations

The Volkswagen Group's production network is comprised of 124 locations in which passenger cars, commercial vehicles and motorcycles, as well as powertrains and components are manufactured.

With 72 locations, Europe remains our most important production region for vehicles and components. There are 28 sites in Germany alone. The Asia-Pacific region has 33 locations. We have six locations in North America and nine in South America. The Group operates four locations in Africa.

2019 saw 89 production start-ups: 29 for new products and successor products, and 60 for product upgrades and derivatives.

Capacity utilization of the locations in the Volkswagen Group's production network is further enhanced by supplying the locations with complete knock-down (CKD) kits for local assembly.

The Group’s production system

The aim of the Group’s production system is to continuously and sustainably improve production workflows at all the Group brand and regional sites. The Group´s production system is the key component for achieving excellence in processes in production and production-related environments; we are strengthening this on a continuous basis and increasing the extent to which it is used.

Leadership and individual responsibility are indispensable factors; they are made visible by treating each other with respect and are part of our culture.

Having our factories working at optimal capacity enables us to manufacture high-quality products that give customers maximum benefits at competitive prices. This is made possible by the standardization of production processes and operating equipment early on in the line, based on the principle of concept consistency. This ensures that common design principles, joining techniques and joining sequences, but also installation and connection concepts are applied in the development and production areas at the brands. The principle of concept consistency establishes a foundation for creating efficient logistics and manufacturing processes.

New technologies and digitalization roadmap

3D printing is still one of the key technologies for Industry 4.0 and digitalizing the automotive value chain. It is successfully used in select sites of the Volkswagen Group in the manufacture of components and also operating equipment. The process opens up wholly new opportunities in the areas of development, design and production. Due to the digital nature of the technology, which requires no tools whatsoever, components and operating equipment can be flexibly implemented directly from digital drawings, and completely new designs and component geometries can be created.

Developments for large-scale automotive production applications point to considerable potential for the future. To this end, Volkswagen leverages the diversity of the Group, achieved through close collaboration between its brands, and cooperates with leading technology providers and research institutions. Alongside new technologies, moving the IT architecture over to a cloud-based platform solution will be the main task in the coming years on the road to digitalized manufacturing. This will bring the Volkswagen Group closer to the project for the future Industry 4.0. The cloud-based platform with its simplified data exchange is a vital prerequisite for making innovations available rapidly across all sites. Examples include intelligent robotics and data analysis functions for analyzing and comparing cross-plant processes. The cloud-based platform can be used to scale new applications directly to all sites so that specific services and functions can be put into operation in the area of production and logistics at the Volkswagen Group. The entire project will take several years to be implemented. Volkswagen is creating its industrial cloud as an open platform with the goal of incorporating companies from the entire value chain. In the long term, the Volkswagen Group aims to integrate its global supply chain with over 30,000 sites of more than 1,500 suppliers and partner companies into the cloud, creating a constantly growing, worldwide ecosystem.

Environmentally efficient production

We are planning the production of tomorrow with our functional area strategy, “Intelligently Networked”. Emissions levels and the use of resources at Volkswagen Group locations require particular attention. The goTOzero Impact Factory program is developing specific steps for more sustainable production, with a vision of a factory that has no adverse environmental impact. Decarbonization, biodiversity and zero plastic waste in production are key elements of this program.

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 provide training to our employees in environmental protection.

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 1,240 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 were once again able in the reporting period to reduce environmental indicator levels, such as those incorporated in the decarbonization index (DCI), while at the same time improving production processes.

GoTOzero Impact Logistics

To help achieve the goals of the Group’s goTOzero environmental mission statement in the area of logistics, Group Logistics is collaborating with colleagues from the brands in the goTOzero Impact Logistics initiative. This builds on the preceding Green Logistics initiative. Emissions are reduced by continuously optimizing the production and transport network. The use of new low-emissions technologies for transporting production materials and vehicles will also be analyzed and accelerated.

The measures the Volkswagen Group is taking to achieve carbon-neutral logistics include moving shipments from road to rail and CO_2 exemption of rail transport in collaboration with Deutsche Bahn AG. In addition, Group Logistics is putting the world's first liquefied natural gas (LNG) powered roll-on/roll-off (RoRo) charter ships into service for transporting vehicles across the North Atlantic and is promoting the use of LNG trucks by freight forwarders working for Volkswagen.

SALES AND MARKETING

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.

Together with their sales partners and importers, our passenger car brands agreed on a procedure for integrating innovative products and services into the sales network. The priority thereby is the safe handling of customer data and the way in which this is processed for digital products and services or in connection with the vehicle purchase. The legal requirements for handling customer data have been tightened in many countries. At the same time, new Group vehicles that are permanently connected to the internet are about to be launched. We are increasingly investing in distribution systems and processes with the goal of further digitalizing and improving the individual customer experience in all distribution channels.

The Volkswagen Group's financial strength and profitability is attributable to an extensive portfolio of strong brands. The objective of our Best Brand Equity strategic module is to continuously sharpen the brand profiles and demarcate the respective vehicle segments – that are served by the brands – as clearly as possible. Our aim in this endeavor is to achieve high market saturation with maximum efficiency and a low level of cannibalization of the brands in question. Market positioning is an important element for increasing brand values. To this end, we are establishing automobile-specific customer segmentation to steer the positioning of our brands. It will be continuously applied in the strategy and product process.

Customer satisfaction and customer loyalty

The Volkswagen Group aims its sales activities at exciting its customers. This is our top priority, as satisfied 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 compile and analyze two strategic indicators for the passenger car-producing brands:

> Loyalty rate. Proportion of customers of our passenger 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 rankings in the core European markets in comparison with competitors for a number of years thanks to their faithful customers, even though these Group brands have seen a slight decrease in the loyalty rate. Compared to other manufacturer groups, the Volkswagen Group continues to hold a top spot in the core European markets 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, the Volkswagen Group has a top ranking in comparison with competitors, primarily thanks to the good scores achieved by the Volkswagen Passenger Cars brand.

In the core European markets, the figures of the Volkswagen Passenger Cars brand relating to brand image and confidence in the brand stabilized further in 2019. Porsche remains in top position in the image ranking.

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

> Customer satisfaction. Satisfaction of our customers results from a customer-oriented product range and the service focus of our staff. In the annual assessment, these two aspects serve as suitable indicators for the critical evaluation as to whether we will achieve our customer satisfaction target of 90% in 2025. In 2019, we were within the expected range with a satisfaction rate of 83 (82)%. Our goal is to satisfy our customers completely. To do so, we are developing suitable measures at country level.

> Customer loyalty. Trust in and loyalty to our services rely on customer satisfaction with our product range and service. The re-entering contract rates (defined as financing and leasing agreements for repurchases of new Volkswagen Group vehicles) that have been surveyed up to now based on product sales to our customers are being revised in the context of changing customer needs and the development of the product offering at our financial services companies.

E-mobility and digitalization in Group Sales

As part of our electrification campaign, we aim to offer our customers worldwide up to 75 completely battery-electric vehicles and approximately 60 hybrid models by 2029. This campaign will be complemented by vehicle-related, customer-focused offerings, such as customized charging infrastructure solutions and mobile online services. The Volkswagen Group is thus transforming from an automotive manufacturer into a mobility service provider, posing completely new challenges for sales.

We are making highly targeted use of the opportunities of digitalization in sales, which include an improved customer approach. 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 the customers of our brand – one which impresses with a seamless communication process, from the initial interest in purchasing a vehicle, to servicing and ultimately to the sale of the used car. In doing so, we are opening up new business models relating to 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 also align our internal processes and structures to the methods and new forms of working created by 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 – and new lean systems and cloud-based IT solutions.

Fleet customer business

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, especially in Germany and the rest of Europe. Our extensive product range enables us to satisfy their individual mobility needs from a single source.

In the German passenger car market, which expanded as a whole by 5.0% in 2019, the share of fleet customers in total registrations was 14.8 (13.6)%. The Volkswagen Group's share of this customer segment increased to 44.1 (44.0)%. Outside Germany, the Group's share of registrations by fleet customers in Europe was up slightly at 25.6 (25.2)%. The upward trend shows that fleet customers' confidence in the Group remains on a high level.

After Sales and Service

In addition to individual service, the timely provision of genuine parts is essential to ensure passenger car customer satisfaction in After Sales. The genuine parts supplied by our passenger car brands and the expertise of the service centers stand for quality and ensure the safety and value retention of our customers' vehicles. With our global after sales network including more than 130 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.

In the Digital After Sales project, we are modernizing processes and IT systems in After Sales. By adopting an approach that focuses product and service development on the specific needs of both dealers and customers, we aim to reduce the time needed for administrative tasks at the dealers through automated, interrelated services and also stabilize existing IT systems and boost efficiency. Innovative digital after-sales services will additionally improve the customer experience.

Around the world, our commercial vehicles business also prides itself on products of quality and on customer focus. Our range of trucks, buses and engines is complemented by services that guarantee fuel efficiency, reliability and wide 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 the vehicles' total operating costs and helping to 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.

QUALITY

The quality of our products and services plays a key role in maintaining customer satisfaction. Customers are particularly satisfied and 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 our customers and inspire enthusiasm in all areas, and thus to win them over with our outstanding quality.

In the reporting period, we transferred operational tasks such as damage analysis from the Group to individual brands and rearranged strategic topics at Group level. This will underpin the principle "The Group manages the brands, the brands manage the regions and the regions manage the factories" and strengthen networks across the brands at the same time.

Strategy of Group Quality

When enhancing our future program, we also reviewed our functional area strategy in depth and coordinated it with the brands. We continue to embody outstanding quality and ensure reliable mobility for our customers worldwide. This is the strategic goal that guides our actions. Group Quality and the brands' quality organizations play an active role at all stages of product emergence and testing, making an important contribution to successful product launches, high customer satisfaction and low warranty and goodwill costs.

Advancing digitalization continues to be a major challenge for us: software is increasingly becoming a priority for the Group as the importance of smart functions in our products and services grows. In the reporting year, we sharpened the focus of our activities on the "Automotive SPICE" process assessment model that we use to improve our processes, in order to ensure future viability in the field of software-based system development. In doing so, we are staying abreast of the progressive regulation, for example of autonomous driving functions.

Furthermore, we are developing Group-wide standards on cybersecurity so as to protect the users of our vehicles against possible attacks. The UNECE (United Nations Economic Commission for Europe) provides for corresponding certification and homologation in the future to ensure that companies can guarantee that these aspects are dealt with properly. This gives rise to the need for Volkswagen to review its organizational structures and processes and adjust these as required. In this context, we have begun to implement an Automotive Cyber Security Management System (ACSMS) that will be incorporated into the quality management system.

The strategy of Group Quality developed in this context comprises the following four goals:

> We will excite our customers with our outstanding quality by understanding what exactly they perceive as quality and implementing this 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 the personal development of every single employee even more intensively.

To achieve our goals, we are working on a variety of quality initiatives. All are focused on the topics that are decisive to the success of the quality organizations in the Volkswagen Group.

Contributing to the Group's strategic indicators

We use a strategic indicator to measure the contribution of Group Quality in the major passenger car-producing brands at the top level of consideration.

> Tow-in 12 MIS. This indicator shows the number of vehicles that need to be towed to a dealer per 1,000 vehicles after 12 months in service (MIS). It includes all Group vehicles categorized as tow-ins by dealers in the German market. It also includes vehicles which, after being taken to a repair workshop, are unable to continue driving without restriction. The number of Volkswagen Group tow-ins in the German market has fallen fairly steadily in the last five years. All six brands featured saw their performance improve year-on-year. The brands' ratios for the 2018 production year are within or slightly above the target corridor in each case. Quality is the Volkswagen Group's top priority. All of the Group brands are therefore striving to continuously reduce the number of vehicles that need to be towed to a dealer.

Legal and regulatory compliance

The legal and regulatory compliance of our products is paramount in our work. In our processes we employ the principle of multiple-party verification, which involves mutual support and control between the divisions. Software development is accompanied by quality milestones at all brands, whereby all systems, components and parts that directly influence a vehicle's safety, type approval and functioning and therefore require particular vigilance are safeguarded through multiple-party verification. At the series production stage, we are also ensuring even more stringently than before that the conformity checks on our products are carried out and assessed with the participation of all business units involved. This applies particularly to emissions and fuel consumption.

We are also dedicating even more attention to our quality management system than before, reinforcing the process-driven approach Group-wide across all business areas. The quality management system in the Volkswagen Group is based on the standard ISO 9001. This standard must be complied with for us to obtain type approval for the manufacture and sale of 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. Particular focus was placed on assessing the risk of non-compliance with defined processes. Our quality management consultants pay attention to ensuring that these and other new requirements, as well as official regulations, are implemented and complied with; they are supported in this endeavor by a central office in Group Quality.

With these and other measures, the quality organizations are helping to ensure that we as a manufacturer and our products meet the legal and official requirements.

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 is therefore 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.

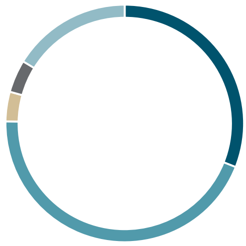
To ensure that the perceived quality of our vehicles is at a level commensurate with that of our competitors, we take regional customer needs into account in our vehicle audits. Every brand works together with the individual regions to decide how its product is to be positioned there. This enables us to strengthen the responsibility of the brands and invest less in features that do not resonate with customers. To ensure that the audit returns comparable results, consistent quality benchmarks apply across all brands and regions. We are continually adapting these to changing requirements. For more than 40 years now, we have been deploying auditors around the world to assess, from the customer's perspective, those vehicles that are ready for delivery and to ensure that these vehicles comply with the benchmarks defined.

EMPLOYEES

The Volkswagen Group is one of the world's largest employers in the private sector. On December 31, 2019, we employed a total of 671,205 people, which includes the Chinese joint ventures. This figure represents a 1.0% increase compared with the end of 2018. The ratio of Group employees in Germany to those abroad remained largely stable over the past year; at the end of 2019, 44.3 (44.1)% of the workforce worked in Germany.

EMPLOYEES BY MARKET

in percent, as of December 31, 2019



Human resources strategy and principles of the human resources policy

With the functional area strategy for Human Resources – "Empower to transform" – the Group is continuing with key and successful approaches in its human resources policy. These include the pronounced stakeholder focus on 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 – an approach whereby most of the responsibility for the work organization is transferred to the teams – are set to be expanded.

In the Human Resources division, we are guided within the framework of our strategy by five overarching objectives:

> The Volkswagen Group, including all of its brands and companies, aims to be an excellent employer worldwide.
> Highly competent and dedicated employees strive for excellence in terms of innovation, added value and customer focus.
> A forward-looking work organization ensures optimal working conditions in factories and offices.
> An exemplary corporate culture creates an open work environment that is characterized by mutual trust and collaboration.
> The Company's human resources work is highly employee-oriented, strives for operational excellence, and yields strategic value-added contributions.

During the implementation of our enhanced future program TOGETHER 2025+, we paid particular attention in the reporting period to the level of achievement regarding the goals set by the applicable strategic KPIs. For the passenger car-producing brands, we compile and analyze the following information:

> Internal employer attractiveness. This indicator is determined by asking respondents, as part of the 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 85.6 index points was achieved in the reporting period, contrasted with 84.2 points in the previous year. The scope of this survey extends beyond the brands that manufacture passenger cars.
> External employer attractiveness. The ability to recruit top talent is of decisive importance, particularly in view of the Company's transformation into one of the world's leading providers of sustainable mobility solutions and the associated development of new business fields. We use this strategic indicator to check the positioning of the major passenger car-producing brands on the labor markets once a year with regard to graduates and young professionals. Rankings in surveys conducted by renowned institutions, in which we aim to achieve top scores for the Group brands featured, serve as the basis for this. In fiscal year 2019, the Audi, Volkswagen Passenger Cars and Volkswagen Commercial Vehicles brands recorded slight improvements year-on-year, and partly achieved the targets set, while Porsche, ŠKODA and SEAT fully reached and even exceeded them in some cases.
> Diversity index. Given the cultural diversity in our global markets and the growing economic momentum, success in a highly competitive marketplace requires an ever-wider range of experience, world views, problem-solving solutions and product ideas. The diversity of our workforce provides potential for innovation in this area, which we aim to make better use of in future. As we establish diversity management across the Group, this strategic indicator is used as a percentage of the active workforce worldwide to report the development of the proportion of women in management and the internationalization of top management. In particular, it underpins the objective of the human resources strategy, which is aimed at contributing to an exemplary leadership and corporate culture. The proportion of women in management amounted to 14.3% in 2019, up on the prior-year level; we aim to raise this figure to 20.2% by 2025. We aim to increase the level of internationalization in top management, the uppermost of our three management tiers, to 25.0% in 2025; in the past fiscal year this was 18.4 (19.2)%.

One strategic indicator has been defined for the financial services business:

> External employer ranking. This involves taking part in external benchmarking, in general once every two years. The aim is to position ourselves as an attractive employer and derive appropriate measures to achieve a ranking among the top-20 employers by 2025, not just in Europe, but globally. Volkswagen Financial Services AG was represented in various national and international best-employer rankings the last time it participated in 2019. Coming in 11th place, it was among the top European employers in the “Great Place to Work” employer competition.

The implementation of our enhanced Group strategy TOGETHER 2025+ has been accompanied by a work package that we defined with the Excellent Leadership module under the slogan "versatility, integrity, strong leadership” to drive the change toward a cooperative management culture that places even more focus on integrity. Management development and training will undergo fundamental change and an even more systematic approach to succession planning will be taken to ensure that the Group has the right people available for the right positions at the right time.

We continued to implement our new system for staff development across the Group in 2019. Going forward, the development paths that lead to management will be characterized by greater individual responsibility, transparency and practical relevance, and will include employees from different levels of the hierarchy in the evaluation of candidates.

To address the challenges of the transformation with success, the Group and the employee representatives have signed agreements for the future that will position the Group's individual brands more efficiently and also structure employee career prospects. The Volkswagen Passenger Cars brand's roadmap for digital transformation is one example, as is the Audi brand's Audi.Zukunft agreement, both of which were announced in fiscal year 2019.

We are also driving large-scale cultural change to achieve greater openness and transparency in line with our corporate strategy. The seven Volkswagen Group Essentials define the shared underlying values and the foundation for cultural change across all of the brands and companies:

> We take on responsibility for the environment and society.
> We are honest and speak up when something is wrong.
> We break new ground.
> We live diversity.
> We are proud of the work we do.
> We not me.
> We keep our word.

Group-wide activities such as team dialog and the role model program encourage employees to analyze the Group Essentials and incorporate them into all work processes. In the role model program, managers from all brands improve the corporate culture together with their staff.

Training and professional development

At Volkswagen, our capacity for innovation and our competitive position largely depends on the commitment and knowledge of our employees, particularly during the transformation.

Staff training at Volkswagen is organized systematically and according to vocational groups. These comprise all employees whose tasks are based on similar technical skills and who require related expertise in order to perform their jobs. A skills profile lays down the specialist and interdisciplinary skills for each job and serves as a guide for training measures.

Volkswagen Group employees have access to a wide range of training measures – from further training in general Company-related issues to specific training or personal development programs. Thanks to these opportunities, Volkswagen employees are able to further develop and steadily deepen their knowledge throughout their working lives. In this process, they are also able to learn from more experienced colleagues, who pass on their knowledge as experts in the vocational group academies. Training measures are based on the dual training principle, which combines theoretical content with practical experience on the job by means of specific tasks.

The range of learning opportunities is being expanded continuously. In 2019, the Volkswagen Group Academy commenced initial partnerships with renowned external training portals to expand online learning, for example on IT topics. The Company will set aside additional funds for the personnel skills transformation brought on by digitalization. This will be used for special training for the groups of employees and departments affected by the transformation. In addition, Volkswagen is striking out in new directions with the Faculty 73 program and is training the software developers who are needed for the digital transformation internally. The first academic year started in 2019 with about 100 participants. The program is designed for employees and also external applicants with IT affinity and an interest in software development.

As part of the Volkswagen Group Academy, the AutoUni conveys knowledge to the Group that is relevant for the future on the key issues of digitalization and IT by engaging external and in-house senior experts in addition to universities.

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 2019, the Volkswagen Group trained 19,399 young people. We have introduced the principle of dual vocational training at many of the Group's international locations over the past few years and are continuously working on improvements. Once a year, Volkswagen honors its highest-achieving vocational trainees in the Group with the Best Apprentice Award.

Even after their vocational training has been completed, young people at the start of their careers are encouraged to continue their professional development in our Company. This is why we promote particularly talented young specialists in talent groups. These two-year development and training programs accept the highest-achieving 10% of fully qualified vocational trainees at Volkswagen AG each year. In addition, fully qualified vocational trainees have the option of working at a Group company outside Germany for twelve months as part of the “Wanderjahre” (Year Abroad) program. In the reporting period, 33 Volkswagen Group locations in 16 countries took part in this program.

Last but not least, we developed the AGEBI+ program, which promotes fully qualified vocational trainees who are eligible for university and wish to combine a degree program in subjects that are crucial for Volkswagen's future with closely related practical experience.

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 two years 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 here is to get to know the Company in all its diversity and to build up a broad network. During their participation in the program, young professionals become familiarized with several locations in Germany and other countries by working in various departments. Both programs also include several weeks' experience working in production. In 2019, Volkswagen AG hired a total of 246 graduate trainees as part of these programs, 31.7% of whom were women.

Young people can also take part in graduate trainee programs at the other Group companies as well as at the Group's international locations, such as ŠKODA in the Czech Republic, SEAT in Spain or Scania in Sweden.

PROPORTION OF WOMEN

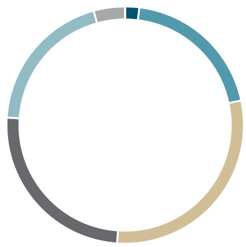
as of December 31

%	2019	2018
Employees	16.8	16.5
Vocational trainees[1]	24.1	25.6
Graduate recruits[2]	31.7	28.7
Total management[3]	12.1	11.5
Management[3]	13.7	13.1
Senior management[3]	9.7	9.1
Top management[3]	7.4	6.1

1 Germany, excluding Scania.
2 Volkswagen AG
3 Germany

AGE STRUCTURE IN YEARS OF VOLKSWAGEN GROUP EMPLOYEES

as of December 31, 2019; in percent



< 20	2%
20–29	20%
30–39	29%
40–49	25%
50–59	20%
60 +	4%

Increasing attractiveness as an employer and development programs for specific target groups

A family-friendly human resources policy is a major component of Volkswagen's attractiveness as an employer; in particular, it contributes to greater gender equality. We are working continuously to develop family-friendly models for working time models and to increase the number of women in management positions. In line with German law on the equal participation of women and men in leadership positions (Führpos-GleichberG – German Act on the Equal Participation of Women and Men in Leadership Positions in the Private and Public Sectors), Volkswagen AG is aiming to have a 13.0% share of women at the first management level and 16.9% at the second management level by the end of 2021. As of December 31, 2019, the proportion of women in the active workforce at the first level of management was 11.4 (10.7)% and at the second level of management it was 16.4 (15.4)%.

We have set targets for every board-level division at Volkswagen AG regarding the development of the proportion of women in management to encourage women with high potential to advance within the Company. This approach is supported by many different measures ranging from cross-brand mentoring programs to a quota system for the management selection procedure and targets for the share of women among external hires.

In recent years, a large number of company regulations have also come into effect in the Group to make it easier for employees to balance the demands of work and home life and allow staff to arrange their own individual working model. These include flexible working hours, variable part-time work and shift models, leave of absence programs enabling employees to care for family members, childcare services that are associated with the company or are company-owned, and mobile working.

At Volkswagen AG, which entered into its works agreement for mobile working already back in 2016, more than 23 thousand employees were making use of a more flexible working arrangement as of the end of the 2019 fiscal year.

Preventive healthcare and occupational safety

Preventive healthcare and occupational safety are key human resources policy topics in the Volkswagen Group. In fiscal year 2019, we underpinned these with a corresponding Group policy. This defines basic requirements and objectives relating to occupational health and safety, laying down rules for the organization thereof as well as the responsibilities of the Group, brands and companies.

In addition to fulfilling statutory requirements, Volkswagen's Health department places strong emphasis on preventive approaches with regard to health, fitness and performance. Employees are given the opportunity to have regular check-ups followed by a talk in which they receive offers that draw on recent scientific findings for improving their individual health. Another task of the Health department is to advise the Group on any potential impact on employee health resulting from new production technologies introduced throughout the production chain and in all work processes. One example of this is a pilot project conducted in 2019 by Audi BKK and the Hanover Medical School (MHH) to reduce the risk factors associated with metabolic syndrome, such as high levels of body fat, blood lipids and blood pressure. Telemonitoring of these levels, exercise programs, nutritional consultations and individual support, combined with modern technology such as wearables (electronic aids worn on the body), have led to significant improvements, particularly among shift workers.

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 criticisms being heard.

We brief our employees extensively on upcoming changes so as to involve them in strategic decision-making as early as possible. In forming cooperative labor relations characterized by social peace, we are guided by universal human rights and the standards of the International Labour Organization (ILO). Building on these principles, we have agreed various charters and declarations with the European and the World Works Councils which set out the principles of labor policy in the Volkswagen Group as well as individual employee rights.

With the opinion survey, a poll of 180 companies of the Group, the Company not only regularly gathers information regarding employee satisfaction, but also inquires about the shape of our corporate culture and the manner in which, for example, compliance requirements are implemented. Based on the results, follow-up processes are implemented in which measures are developed and executed. Over 620,000 employees in 50 countries were invited to take part in the survey. The participation rate was 81%. The average result from all of the answers provided for the questions in the opinion survey – the sentiment rating – is an important parameter of the survey; in 2019 it stood at 80.0 out of a possible total of 100 index points. The score achieved in 2019 was thus higher than the previous year's figure, which amounted to 78.9 points.

In addition, we also encourage our employees' involvement by means of Idea Management. Employees have the opportunity to put their creativity and knowledge to use in the form of ideas for improvements, thus contributing to streamlining workflows, further enhancing ergonomics in the workplace, reducing costs and continuously increasing efficiency. Through Idea Management employees can actively participate in the planning and design of their work. The system also provides monetary incentives by offering set rewards.

INFORMATION TECHNOLOGY (IT)

Volkswagen is working hard on strengthening its digital competencies with a view to shaping and safeguarding the Company's future viability. To this end we are continuously upgrading our IT systems so that they are sustainable in the long term and are progressively moving our systems and applications over to new cloud platforms. Our primary concern is further increasing the efficiency of the IT systems used throughout the Company and standardizing these as far as possible. We are also concentrating on building up our expertise and specialist IT knowledge, especially in key digital technologies such as artificial intelligence and the use of new IT technologies in products, services and business processes.

To safeguard the development of core competencies in our Company in the fields of technology, digitalization and autonomous driving, we are building up IT resources that will help shape and push the Company's digital transformation.

The Group IT Steering Committee was formed in fiscal year 2019 for this purpose. In addition to managing the Group's IT portfolio, this steering committee will enable synergies to be leveraged more efficiently and promote communication with departments on IT projects. Group-wide planning and management of portfolios will ensure coordinated use of budgets and resources in the development, implementation and use of IT solutions within the Group.

Volkswagen is embracing digitalization in the Company at its in-house IT labs, for example. The labs act as centers of innovation and expertise that conduct research and experiment with new technologies. Here, Group IT, research institutions, technology partners and policy-makers are working closely together on future trends in information technology. At the same time, the labs function as liaison offices for start-ups. This allows the experience and strategic expertise of a large company like Volkswagen to be combined with the pragmatism and speed of young start-ups. Highly specialized experts at the IT labs in San Francisco and Munich, for example, are working on exploiting the potential of quantum computers for areas that have a commercial application. The focus here is on optimization of flows of traffic and simulation of materials and alloys. Initial experimental projects are also investigating opportunities for combining the potential of quantum computers with self-learning systems (quantum machine learning).

In addition to topics such as data analytics (process for the systematic analysis of data in electronic form) and decentralized databases, which allow network participants to jointly process and store data (distributed ledger technologies), the IT labs are used to realize knowledge transfer throughout the entire Company, and to make new technologies usable for the Company. For instance, numerous "bot" projects are being implemented to automate business processes (robotic process automation). Self-learning systems will intelligently analyze data to assist staff in recurring administrative work steps by preparing these activities independently and giving them to staff for a decision.

The further convergence of different business areas with IT is also opening up opportunities.

In production, for example, big data processes help us to analyze faulty machinery and take action at an early stage. Big data refers to data volumes that are too vast and too complex to be analyzed and evaluated using manual or conventional methods. Production processes are also safeguarded by artificial intelligence and camera systems (computer vision). The systems and equipment in the factory are combined into an integrated overall system. This will allow efficiency to be increased and digital pilot projects to be integrated into the existing architecture much more easily than before. Applied research in the field of intelligent human-robot collaboration and IT systems to control mobile assistive robotics are also important elements of the digitalization of production at the Volkswagen Group.

Group IT is likewise contributing its expertise in the field of research and development in conjunction with the different departments. For instance, digitalized work tools such as the “virtual concept vehicle” make the product development process faster and more efficient.

Value creation in sales is being increased with the help of advanced analytics (a process for systematic analysis of future events and behavior), for example on distribution parking lots for vehicles and in sales planning.

The “IT for everyone” initiative aims to give all employees at Volkswagen AG access to digital media and work tools. The objective is to further improve communication and collaboration among production and administrative employees. An important issue in this connection is the growing volume of official work being performed on mobile devices. The Company’s internal network Group Connect promotes knowledge transfer and networking among all employees. The platform puts experts in touch with one another across brands and internationally. In software development centers we develop cross-brand software for digital ecosystems and for new business processes in the Group. We thereby maintain in-house expertise in the rapid, demand-oriented development of software and IT solutions. This capability will become increasingly important as the Company’s digital transformation evolves.

At the new software development center established in Lisbon in 2019, software architects, designers and developers are working together on IT projects in the areas of sales and marketing and on the connected car, among other things. The project work is flanked by a lean, agile development process based on the simultaneous work of teams of two (pair programming).

Cutting-edge technologies for the industrial internet of Things are being developed at the new software development center in Dresden. In collaboration with a leading cloud provider, Amazon Web Services, we are working on a digital production platform that will enable Volkswagen to significantly reduce its production costs in the future.

Safeguarding data and systems at the Volkswagen Group is another focus of our IT. In order to also protect our customers against cyberattacks and ensure that our solutions are in conformity with national and international legislation, we are continuing to implement an integrated, cross-brand, cross-regional Information Security Management System (ISMS) as part of the Protected Customer program. 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. Key central information security processes have been audited and certified within the international ISO 27001 framework. This is the most important standard for information security and extends beyond IT to also cover issues such as human resource security, compliance, physical security and legal requirements. One of the aims of the program, which is set to run until 2021, is also to safeguard the complete life cycle of our vehicles and the digital mobility services.

In fiscal year 2019, another focus of IT was on continuing the systematic implementation of the European General Data Protection Regulation (GDPR), which was combined in a Group program and rolled out in all corporate functions. In the course of the sustainable implementation of the GDPR, the data protection processes and procedures in place in the brands will be consolidated and standardized further. When new IT solutions are being developed, the requirements will be enforced from the outset. Transparency in the processing and minimization of data is a key goal on which we will continue to work. To ensure sustainable observance of the GDPR, we will systematically press ahead with the establishment of the Company-wide data protection management system begun in this reporting period as well as with the data protection organization.

In 2015, Volkswagen AG co-founded Deutsche Cyber-Sicherheitsorganisation GmbH (DCSO). DCSO is accumulating specialist knowledge on cybersecurity and aims to become the preferred service provider to European businesses in this field. DCSO is a competence center and a managed security service provider for protecting companies against criminal hackers, industrial espionage, government attacks and sabotage.

ENVIRONMENTAL STRATEGY

As one of the largest automobile manufacturers, Volkswagen takes responsibility for the environmental impact of its activities. Based on the TOGETHER 2025+ Group strategy, we have set ourselves ambitious environmental targets with our environmental mission statement. With goTOzero, we aspire to minimize environmental impacts along the entire life cycle – from raw material extraction until end-of-life – for all our products and mobility solutions in order to keep ecosystems intact and to ensure that we have a positive impact on society. Compliance with environmental regulations, standards and voluntary commitments is a basic prerequisite of our actions.

Our focus is on four prioritized action areas:

> Climate change. We are committed to the 2°C target of the Paris Climate Agreement. By 2025, we plan to reduce the greenhouse gas emissions of our passenger cars and light commercial vehicles by 30% over the total life cycle compared with 2015. We use the decarbonization index to document our progress. We intend to become a carbon-neutral company by 2050.

> Resources. We intend to reduce production-related environmental impact, maximize our resource efficiency and promote circular economy approaches in the areas of materials, energy and water.

> Air quality. We are driving e-mobility forward to improve the local air quality. By 2025, the share of battery electric vehicles in our model portfolio shall be between 20% and 25%. The share of electric vehicles in our new vehicle fleet in Europe and China is set to rise to at least 40% by 2030.

> Environmental compliance. Where integrity is concerned, we aim to become a role model for a modern, transparent and successful enterprise by implementing and monitoring effective management systems that cover the environmental impacts of our mobility solutions over all life cycle stages.

With our future program TOGETHER 2025+, we have defined a strategic indicator for the major brands that manufacture passenger cars for the EU28, China and USA regions:

> Decarbonization index (DCI). This measures the average emissions of CO_2 and CO_2 equivalents (together CO_2e) over the entire life cycle of the portfolio of passenger cars and light commercial vehicles and is stated in tonnes per vehicle. The DCI encompasses both direct and indirect CO_2e emissions at the individual production sites (Scope 1 and 2) as well as all further upstream and downstream CO_2e emissions over the life cycle of the vehicles sold – from the extraction of raw materials to the use of the vehicle and final disposal of old vehicles (Scope 3). As a strategic indicator, the DCI enables transparent, comprehensive tracking of progress toward climate-friendly mobility. The average value was 43.0 t CO_2e/vehicle in the reporting period; by 2025 the decarbonization index shall be reduced by around 30%.

Organization of environmental protection

Volkswagen has created an environmental policy that sets out guidelines for environmental decision-making, for the management of projects and for the Group's environmental stewardship. Thus, parameters are set for the conduct and working methods of management and staff in five areas: management behavior, compliance, environmental protection, collaboration with stakeholders and continuous improvement.

The Board of Management of Volkswagen AG is the highest internal decision-making level for environmental issues. The Volkswagen AG's and brand's boards of management take business, social and environmental criteria into account when making key company decisions. The Group-wide management of environmental protection is the responsibility of the Group Steering Committee for the Environment and Energy. Other bodies take responsibility for steering key individual aspects in relation to products such as CO_2 emissions and exhaust gas emissions. These include the Group CO_2 Steering Committee, the Group Steering Committee for Fleet Compliance and Exhaust Gas, and the Group Sustainability Steering Committee.

The Volkswagen Group coordinates the activities of the brands, which in turn steer the measures in the regions. The brands and companies are responsible for their own environmental organization. They base their own environmental protection activities on the targets, guidelines and principles that apply throughout the Group.

We are dedicated to comply with legal and regulatory requirements. Furthermore, we are guided by company standards and targets. Our environmental compliance management systems shall ensure that environmental aspects and obligations are taken into account in our business operations. Disregard for the rules, fraud and misconduct are treated as severe compliance violations. Compliance with our Environmental Policy Statement and with other Group environmental requirements is evaluated annually and reported to the Board of Management of Volkswagen AG, the respective boards of management of the brands or the managing directors of the companies.

SEPARATE NON-FINANCIAL 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 2019 will be available on the website https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2019/Nichtfinanzieller_Bericht_2019_d.pdf in German and at https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2019/Nonfinancial_Report_2019_e.pdf in English by no later than April 30, 2020.

REPORT ON POST-BALANCE SHEET DATE EVENTS

For more information on the offer for the acquisition of all outstanding ordinary shares of Navistar International Corporation by TRATON SE placed on January 30, 2020, please refer to the details provided in the "Events after the balance sheet date" section on page 328 of the notes to the consolidated financial statements.

Report on Expected Developments

Global economic growth in 2020 is expected to continue at the prior-year level. Global demand for passenger cars will probably vary from region to region and remain at the 2019 level on the whole. With our brand diversity, broad product range, technologies and services, we are well prepared for the future challenges in the mobility business.

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.

DEVELOPMENTS IN THE GLOBAL ECONOMY

Our forecasts are based on the assumption that global economic growth in 2020 will be at the same level as in the preceding year. We still believe that risks will arise from protectionist tendencies, turbulence in the financial markets and structural deficits in individual countries. In addition, growth prospects will be negatively impacted by continuing geopolitical tensions and conflicts as well as epidemics spanning countries and regions, such as the current spread of the coronavirus. We anticipate that momentum in both the advanced economies and the emerging markets will be similar to that seen in 2019. We expect to see 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 2021 to 2024.

Europe/Other Markets

In Western Europe, economic growth in 2020 is likely to decline slightly compared to the reporting year. Resolving structural problems continues to pose a major challenge, as does the uncertain impact of the United Kingdom's exit from the EU.

In Central Europe, we estimate that growth rates in 2020 will remain approximately level with those for the past fiscal year. The economic situation in Eastern Europe should stabilize, providing the conflict between Russia and Ukraine does not worsen. The Russian economy is expected to see only muted growth.

For Turkey, we anticipate a rising growth rate amid higher inflation. The South African economy will probably be dominated by political uncertainty and social tensions again in 2020 resulting, in particular, from high unemployment. Growth should therefore increase only slightly.

Germany

We expect that gross domestic product (GDP) in Germany will increase only at a low rate in 2020. The situation in the labor market will probably remain stable and bolster consumer spending.

North America

We assume that the economic situation in the USA will continue to be stable in 2020. GDP growth should be lower than in the reporting period, however. The US Federal Reserve could further reduce the key interest rate during 2020. Economic growth is likely to remain more or less stable in Canada. In Mexico, we expect it to increase slightly following stagnation in the previous year.

South America

The Brazilian economy will most likely stabilize in 2020 and record somewhat more dynamic growth than in the reporting period. Amid sustained high inflation, the economic situation in Argentina is expected to stay very tense.

Asia-Pacific

In 2020, the Chinese economy is expected to continue growing at a relatively high level, but will lose some of its momentum compared with prior years. The agreement on trade matters with the United States and fiscal policy by the government are likely to have a stabilizing impact, whereas a further spread of the coronavirus may have a dampening effect on the economic development. For India, we anticipate an expansion rate on a similar scale to the previous years. In Japan, growth is forecast to remain weak.

TRENDS IN THE MARKETS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

We expect trends in the markets for passenger cars in the individual regions to be mixed in 2020. Overall, the volume of global demand for new vehicles will probably match the 2019 level. We are forecasting growing demand for passenger cars worldwide in the period from 2021 to 2024.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed in 2020; on the whole, we anticipate a slight dip in demand in 2020. We expect a return to the growth trajectory for the years 2021 to 2024.

The Volkswagen Group is well prepared for the future challenges pertaining to the automotive mobility business and the mixed developments in regional automotive markets. Our brand diversity, our presence in all major world markets, our broad and selectively expanded product range, and our technologies and services put us in a good competitive position worldwide. With electric drives, digital connectivity and autonomous driving, we want to make the automobile cleaner, quieter, more intelligent and safer. We have set ourselves the goal of continuing to excite our customers in future and meeting their diverse needs with an appealing product portfolio of impressive vehicles and forward-looking, tailor-made mobility solutions.

Europe/Other Markets

For 2020, we anticipate that the volume of new passenger car registrations in Western Europe will be distinctly below that recorded in the reporting period. The uncertain impact of the United Kingdom’s exit from the EU is likely to further exacerbate the ongoing uncertainty among consumers, continuing to dampen demand. We expect a moderate decline on the British and Italian markets in 2020. In France and Spain, the markets are likely to fall perceptibly short of the level seen in the reporting year.

For light commercial vehicles, we expect demand in Western Europe in 2020 to be distinctly lower than the prior-year level, owing to the uncertain impact of the United Kingdom’s exit from the EU and the pull-forward effect on sales of the WLTP in 2019. In France, the United Kingdom, Italy and Spain we are forecasting a marked drop in some cases.

Sales of passenger cars in 2020 are expected to slightly fall short of the prior-year figures in markets in Central and Eastern Europe. In Russia, we anticipate a market volume that is slightly higher than in the previous year. The number of new registrations should recede in most of the other markets in this region.

Registrations of light commercial vehicles in the Central and Eastern European markets in 2020 will probably be noticeably lower than in the previous year. We expect a distinct decline in market volume for Russia.

The Turkish passenger car market is projected to record a sharp increase in 2020 in contrast to the weak preceding year. The volume of new registrations in South Africa in 2020 is likely to match the figure for the previous year.

Germany

After a positive performance overall in recent years, we assume that demand in the German passenger car market will fall noticeably year-on-year in 2020.

We anticipate that registrations of light commercial vehicles will be up slightly on the previous year’s level.

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 in 2020 is likely to fall slightly short of the previous year. Demand will probably remain highest for models in the SUV and pickup segments. In Canada, the number of new registrations is also projected to be slightly lower than the previous year’s level. For Mexico, we expect a moderate fall in demand compared with the reporting year.

South America

Owing to their dependence on demand for raw materials worldwide, the South American markets for passenger cars and light commercial vehicles are heavily influenced by developments in the global economy. We expect to see an overall moderate increase in new registrations in the South American markets in 2020 compared with the previous year. In Brazil, demand volume is expected to rise perceptibly again in 2020 following the increase in the reporting period. However, we anticipate that demand in Argentina will be slightly lower year-on-year.

Asia-Pacific

In 2020, the passenger car markets in the Asia-Pacific region are expected to be at the prior-year level. We expect, subject to a further spread of the coronavirus, demand in China to be slightly up on the previous year's level. Attractively priced entry-level models in the SUV segment in particular should still see strong demand. For as long as there is no resolution in sight, the trade dispute between China and the United States will continue to weigh on business and consumer confidence. We anticipate a slight decrease in the Indian market compared with the previous year. By contrast, Japan's market volume is forecast to record a distinct decrease in 2020.

The market volume for light commercial vehicles in 2020 will probably fall moderately short of the previous year's figure. We are expecting demand in the Chinese market to be distinctly below that of the prior year. For India, we are forecasting a moderately higher volume in 2020 than in the reporting period. In the Japanese market, demand is likely to be markedly lower than the previous year's level.

TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

Starting in fiscal year 2020, we are redefining the relevant markets of the Volkswagen Group for trucks and buses based on our core countries. Our relevant truck markets are the 27 EU member states excluding Malta, but including the United Kingdom, Norway and Switzerland (EU27+3), as well as Brazil, Russia, Turkey and South Africa. The bus markets relevant for the Volkswagen Group are the EU27+3, Brazil and Mexico.

For 2020, we expect new registrations for mid-sized and heavy trucks with a gross weight of more than six tonnes to be distinctly lower than the 2019 level in markets that are relevant for the Volkswagen Group. We regard the declining incoming orders seen in 2019 and the anticipated drop in transport volumes as a sign of a downturn in the European truck market. For the EU27+3 countries, we expect a 10 to 20% downturn in the market in 2020. Russia will probably witness a distinct rebound in demand. In Turkey, we are forecasting a very sharp recovery of demand after a very low level in the prior year. For South Africa, we are forecasting a moderate decrease. We estimate that demand in Brazil will be much higher than in the previous year.

On average, we anticipate solid growth rates in the relevant truck markets for the years 2021 to 2024.

A slight year-on-year increase in overall demand for 2020 is likely in the bus markets relevant for the Volkswagen Group. We anticipate a moderate decline in the market in the EU27+3 countries, a moderate increase in Mexico and new registrations in Brazil will probably be much higher than the prior-year level.

Overall, we expect a noticeable decrease in the demand for buses on the relevant markets for the period from 2021 to 2024.

TRENDS IN THE MARKETS FOR POWER ENGINEERING

We expect the market environment in power engineering to remain difficult in 2020, with continuation of the general tendencies seen in 2019.

In 2020, the market volume for two-stroke engines used in merchant shipping is likely to reach a higher level than in the reporting period. Calls for high energy efficiency and low pollutant emissions will continue to have a significant influence on ship designs in the future. We expect sustained stable demand in the market for four-stroke engines used in ferries, cruise ships, dredgers and government vessels. In the offshore sector, new order volumes of special applications look set to be on the low side due to existing overcapacity. Overall, we expect the marine market to be at a slightly higher level than that seen in 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 2020, we expect demand to rise slightly for the gas sector in particular but to remain at a low level overall. On the whole, this low level of demand poses a major challenge for the new market with carbon-neutral technologies.

In turbomachinery, we expect to see continued strong demand in 2020, attributable to an investment backlog and also to stable commodity prices. High capacity utilization of production equipment by market participants can be expected, which is likely to bring about a further easing of competition. Energy generation is still marked by overcapacity on the part of electricity producers in industrialized countries, but due to the increase in investments for power generation using biomass and the use of natural gas as a transition source of energy, we expect a slight increase in demand for steam and gas turbines. Renewable energy sources in particular are expected to generate growth because their irregular electricity production will necessitate greater storage capacity. This is the reason the construction of pilot plants for thermal storage is being pushed, which in turn has led a build out of the market for turbocompressors and turboexpanders.

We anticipate a stable trend in the marine and power plant after-sales business for diesel engines in 2020. In turbomachinery, we expect a slight upward trend for the coming year. Particularly in the oil and gas sector we are seeing a positive trend resulting from the clearing of the investment backlog from recent years.

For the period 2021 to 2024, we expect to see growing demand in the power engineering markets. However, the extent and timing of this growth will vary in the individual business fields.

TRENDS IN THE MARKETS FOR FINANCIAL SERVICES

We believe that automotive financial services will also be very important for vehicle sales worldwide in 2020. We expect demand to continue rising in emerging markets where market penetration has so far been low. Regions with established automotive financial services markets will see a continuation of the trend towards enabling mobility at the lowest possible total cost. Integrated end-to-end solutions, which include mobility-related service modules such as insurance and innovative packages of services, will become increasingly important for this. Additionally, we expect demand to increase for new forms of mobility, such as rental services, and for integrated mobility services, for example parking, refueling and charging. We estimate that this trend will continue in the years 2021 to 2024.

In the mid-sized and heavy commercial vehicles category, we anticipate rising demand for financial services products in emerging markets. In these countries in particular, financing solutions support vehicle sales and are thus an essential component of the sales process. In the developed markets, we expect to see increased demand for telematics services and services aimed at reducing total cost of ownership in 2020. This trend is also expected to continue in the period 2021 to 2024.

EXCHANGE RATE TRENDS

In 2019, the euro lost ground against the US dollar on an annual average. The euro/sterling exchange rate remained stable overall, despite some volatility amid continued high uncertainty about the outcome of the Brexit negotiations with the EU and the related question of what form this relationship would take in the future. The currencies of Asian emerging markets , the Russian ruble and the Mexican peso also posted gains against the euro in the reporting period, in contrast to the Argentine peso, the Brazilian real and the South African rand which posted losses. For 2020, we are forecasting that the euro will strengthen against the US dollar, sterling and the Chinese renminbi. The expectation is that the Brazilian real and Indian rupee will remain relatively weak. The Russian ruble will probably be unable to maintain the recent positive gains. For 2021 to 2024, we expect that the euro will be stable against the key currencies, but that the comparative weakness of the currencies in the above-mentioned emerging markets will probably continue. However, there is still a general event risk – defined as the risk arising from unforeseen market developments.

INTEREST RATE TRENDS

Interest rates remained comparatively low with a few exceptions in fiscal year 2019 due to the continuation of expansionary monetary policies worldwide and the challenging overall economic environment. In the major Western industrialized nations, key interest rates persisted at a low level on the whole. The US Federal Reserve changed course in the summer in an effort to shore up the economy, cutting its key interest rate after several years of successive increases. The European Central Bank continued its expansionary monetary policy. In the light of further expansionary monetary policy measures, we currently therefore do not expect interest rates in the USA and the eurozone to rise in 2020. For the years 2021 to 2024, however, we anticipate a rise in interest rates, though the pace will vary from region to region.

COMMODITY PRICE TRENDS

Geopolitical and economic uncertainty in different forms caused the prices for many raw and input materials to vary in 2019. For example, average prices for raw materials such as crude oil, aluminum, lead, copper and coking coal fell, while prices for iron ore, rare earths, natural rubber and the precious metals palladium and rhodium, among others, rose. Prices for the raw materials that are relevant for e-mobility also developed unevenly: average prices for lithium and cobalt fell, while nickel prices were up on the prior-year level. Based on analyses of factors of influence and trends in the commodity markets, we expect the prices of most commodities to rise in 2020. For the years 2021 to 2024, we continue to expect volatility in the commodity markets with prices trending upwards. We preventively analyze and limit these risks using system-based procurement methods. Long-term, stable supply agreements ensure that the Group's needs are satisfied and guarantee a high degree of supply reliability.

NEW MODELS IN 2020

The Volkswagen Passenger Cars brand will launch the eighth generation of its best-selling Golf model in 2020 and it will again claim a leading position in the compact class with a sharper design, numerous technical highlights and an all-digital cockpit. The all-electric ID.3, the first vehicle to be based on the Modular Electric Drive Toolkit, aims to excite its customers with a range suited to everyday usability, a forward-looking design and equipment such as the augmented reality head-up display. In 2020, the T-Roc will be available as a convertible. The Arteon will receive a product upgrade and the Arteon Shooting Brake will also be presented. The up! and the Tiguan will likewise receive a model update. In the Chinese market, Volkswagen will continue its electric car offensive with the electric Tharu and the Tayron as a plug-in hybrid. Alongside these, a multi-purpose vehicle, the coupé versions of the Tayron and Tiguan L and the updated Phideon will be launched. Volkswagen will strengthen its presence in the United States with the upgrated Atlas, the new Atlas Cross Sport and an electric SUV. South America will see the launch of the sporty versions of the Polo and Virtus and the New Urban Coupé Nivus.

In 2020, Audi will launch more versions of the e-tron and the likewise all-electric e-tron Sportback. With successor models to the A3 and A3 Sportback, Audi is also looking to defend its lead in the premium segment of the compact class. The A3 Sportback, the A6 saloon and the Avant will all be available as plug-in hybrids in 2020. The A5, Q2 and Q5 model series will be updated.

ŠKODA will market two vehicles with all-electric drives from 2020 – the Citigo^{e} IV and the new Enyaq SUV. Production of the successor models to the successful Octavia and Octavia Combi will also start. In addition, a plug-in hybrid will be available in the Octavia and Superb series. The Chinese, Indian and Russian markets will see the launch of the Rapid model tailored to the requirements of local customers.

In 2020, SEAT will offer the el-Born, an all-electric vehicle with a sporty emotive design. The new Leon is waiting in the wings. CUPRA will also present a particularly powerful version of the Leon and expand its product range with the addition of its first standalone model, the CUPRA Formentor.

Following the launch of the Taycan in the United States at the end of 2019, Porsche will gradually introduce the all-electric sports car to further markets in 2020.

Bentley will present the luxurious spearhead of the model series with the Continental GT Mulliner Convertible.

Lamborghini will bring out an upgrade of its Huracán RWD.

Volkswagen Commercial Vehicles will present the successor model of the Caddy, popular with families and tradespeople alike.

Scania and MAN will also work steadily on introducing new products and services in 2020.

Ducati will launch the Streetfighter V4 and the Streetfighter V4 S in addition to three new models from the Panigale family, among others. The Icon Dark model will also expand the Scrambler family.

FUTURE ORGANIZATIONAL STRUCTURE OF THE GROUP

Our plans are based on the Volkswagen Group's current structures.

They do not include a possible sale of RENK AG or the possible acquisition of all outstanding ordinary shares of Navistar International Corporation.

The effects of such transactions on the results of operations, financial position and net assets are not taken into account in the forecast of the Volkswagen Group.

INVESTMENT AND FINANCIAL PLANNING

To ensure the Volkswagen Group's future viability, we will continue to mobilize our pronounced strengths in innovation and technology and push the Volkswagen Group's transformation while leveraging our economies of scale and achieving the greatest possible synergies.

In our current planning for 2020, 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 on hybridization, electrification and digitalization of our vehicles has been stepped up again, particularly through the development of the Modular Electric Drive Toolkit (MEB) and the Premium Platform Electric (PPE), the all-electric platform for our premium and sports brands. We are also investing in the modification of selected locations for the production of electric vehicles. The Automotive Division's ratio of capex to sales revenue will fluctuate around a level of 6.0–6.5%.

Besides capex, investing activities will also include additions to capitalized development costs. Among other things, these reflect upfront expenditures in connection with the electrification and updating of our model range.

With the investments in our facilities and models, as well as in the development of electric drives and modular toolkits, we 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. For 2020, we expect further cash outflows resulting from the diesel issue and significantly higher outflows from mergers & acquisitions. We estimate that net cash flow in 2020 will subsequently be clearly positive albeit perceptibly below the prior-year figure.

Nevertheless, net liquidity in the Automotive Division will probably be distinctly higher than in the reporting period.

These plans are based on the Volkswagen Group's current structures. A possible sale of RENK AG and related cash inflows are not taken into account. Our planning also does not include cash outflows for a possible acquisition of all outstanding ordinary shares of Navistar International Corporation.

Our joint ventures in China are accounted for using the equity method and are therefore not included in the figures above. For 2020, the joint ventures plan to invest in e-mobility, further enhancement of the model portfolio, the development of new mobility solutions and smart city concepts. Their capex will exceed the 2019 level and be financed from the companies' own funds.

In the Financial Services Division, we are planning higher investments in 2020 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 half 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, the issuing of asset-backed securities, customer deposits from the direct banking business, and 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 change in the accounting for leases (IFRS 16), which entered into force in January 2019 and increased invested capital in fiscal year 2019, as well as other adverse effects of the special items on earnings, we exceeded both the prior-year figure and our minimum rate of return on invested capital in the reporting period with a return on investment (ROI) of 11.2 (11.0)% (see also page 125). Invested capital will continue to increase further in 2020 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 (ROI) in the Automotive Division will probably exceed our minimum required rate of return on invested capital and be slightly higher than in the previous year.

SUMMARY OF EXPECTED DEVELOPMENTS

The Volkswagen Group's Board of Management expects the global economy to continue growing in 2020 at the level of the previous year. We still believe that risks will arise from protectionist tendencies, turbulence in the financial markets and structural deficits in individual countries. In addition, growth prospects will be negatively impacted by continuing geopolitical tensions and conflicts as well as epidemics spanning countries and regions, such as the current spread of the coronavirus. We anticipate that momentum in both the advanced economies and the emerging markets will be similar to that seen in 2019. We expect to see 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 predict that trends in the markets for passenger cars in the individual regions will be mixed in 2020. Overall, the volume of global demand for new vehicles will probably match that of 2019. For 2020, we anticipate that the volume of new passenger car registrations in Western Europe will be distinctly below that recorded in the reporting period. After a positive performance overall in recent years, we expect demand in the German passenger car market to fall noticeably year-on-year in 2020. Sales of passenger cars are expected to fall slightly short of the prior-year figures in markets in Central and Eastern Europe in 2020. The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America in 2020 is likely to be slightly lower than in the prior year. We expect to see an overall moderate increase in new registrations for passenger cars and light commercial vehicles in the South American markets in 2020 compared with the previous year. The passenger car markets in the Asia-Pacific region are expected to be at the prior-year level in 2020.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed in 2020; on the whole, we anticipate a slight dip in demand.

We expect a distinct year-on-year fall in 2020 of new registrations of mid-sized and heavy trucks with a gross weight of more than six tonnes in the markets relevant for the Commercial Vehicles Business Area. In the bus markets that are relevant for the Volkswagen Group, we expect to see a slight increase in overall demand in 2020 compared with the previous year.

We believe that automotive financial services will again be very important for vehicle sales worldwide in 2020.

The Volkswagen Group is well prepared for the future challenges pertaining to automobility business activities and for the mixed development of the regional automotive markets. Our brand diversity, our presence in all major world markets, our broad and selectively expanded product range, and our technologies and services put us in a good competitive position worldwide. As part of the transformation of our core business, we are positioning our Group brands with an even stronger focus on their individual characteristics and are optimizing the vehicle and drive portfolio. The focus is primarily on our vehicle fleet's carbon footprint and on the most attractive and fastest-growing market segments. In addition, we are working to leverage the advantages of our multibrand Group even more effectively with the ongoing development of new technologies and the enhancement of our toolkits. With electric drives, digital connectivity and autonomous driving, we want to make the automobile cleaner, quieter, more intelligent and safer. We have set ourselves the goal of continuing to excite our customers in future and meeting their diverse needs with an appealing product portfolio of impressive vehicles and forward-looking, tailor-made mobility solutions.

We expect deliveries to customers of the Volkswagen Group in 2020 to be in line with the previous year amid market conditions that continue to be demanding.

Challenges will arise particularly from the economic situation, the increasing intensity of competition, volatile commodity and foreign exchange markets and more stringent emissions-related requirements.

We expect the sales revenue of the Volkswagen Group to grow by up to 4% in 2020 and the sales revenue of the Passenger Cars Business Area to be moderately higher than in the prior-year. In terms of 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 2020. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of 4.0–5.0% amid a moderate decrease in sales revenue. In the Power Engineering Business Area we expect that sales revenue will match that of the previous year and that the operating loss will become smaller. For the Financial Services Division we forecast that sales revenue and the operating result will be in line with the previous year.

In the Automotive Division, the R&D ratio and the ratio of capex to sales revenue will probably fluctuate in the range of 6.0–6.5% in 2020. We anticipate further cash outflows resulting from the diesel issue and significantly higher outflows from mergers & acquisitions in 2020. Consequently, we estimate that the net cash flow will be clearly positive albeit perceptibly below the prior-year figure. Net liquidity in the Automotive Division will probably distinctly exceed the prior-year level. We expect a slight increase in return on investment (ROI) compared with the previous year. Our unchanged stated goal is to continue our solid liquidity policy.

To achieve sustainable success, we need skilled and dedicated employees. We aim to increase their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, and a forward-looking organization of work. Every day, we at the Volkswagen Group assume and exercise responsibility in issues relating to the environment, safety and society. In terms of integrity, Volkswagen aims to become a role model for a modern, transparent and successful enterprise. We are also aiming for operational excellence in all business processes.

Report on Risks and Opportunities

(CONTAINS THE REPORT IN ACCORDANCE WITH SECTION 289(4) 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 an 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.

THE THREE LINES OF DEFENSE MODEL

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 long-term 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 likelihood of occurrence 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 framework for enterprise risk management ensures that potential risk areas are covered in full. Uniform Group principles are used as the basis for managing risks in a standardized manner. Opportunities are not recorded.

Another key element of the RMS/ICS at Volkswagen is the three lines of defense model, a basic element required by the European Confederation of Institutes of Internal Auditing (ECIIA), among other bodies. 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 minimum requirements for the RMS/ICS, including the concept of the three lines of defense, are set out in guidelines for the entire Group.

The RMS/ICS was further developed in the past fiscal year. A new risk management IT system, Risk Radar, was introduced in almost all brands. In this way, we have increased process and data security and reduced our manual workload through automated workflows and end-to-end system support for the analysis of data. At the same time, risk awareness in the Company is further intensified, risk transparency is improved and risks can be analyzed with end-to-end system support. The ICS has been standardized for risky business processes in significant companies. We will continue to develop our RMS/ICS in the future.

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

The risk management and internal control system in operation also includes compliance with the so called Golden Rules in the areas of control unit software development, emission classification and escalation management. These rules are the minimum requirements in the organization, processes and tools & systems categories.

Second line of defense: identifying and reporting systemic and acute risks using Group-wide processes

In addition to the ongoing operational risk management, the Group Risk Management department sends standardized surveys each year 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).

As part of this process, each systemic risk inherent to the process or inherent to the business that is reported is recorded and assessed in our RICORS IT system. The risk assessment is made by multiplying the criterion of likelihood of occurrence (Prop) with the potential extent of the damage. The extent of the damage is calculated from the criteria of

CALCULATION OF RISK SCORE

financial loss (Mat) and reputational damage (Rep) and criminal relevance (Penal). A score between 0 and 10 is assigned to each of these criteria. The measures taken to manage and control risk are taken into account in the risk assessment (net perspective). The result is a risk score that expresses the risk.

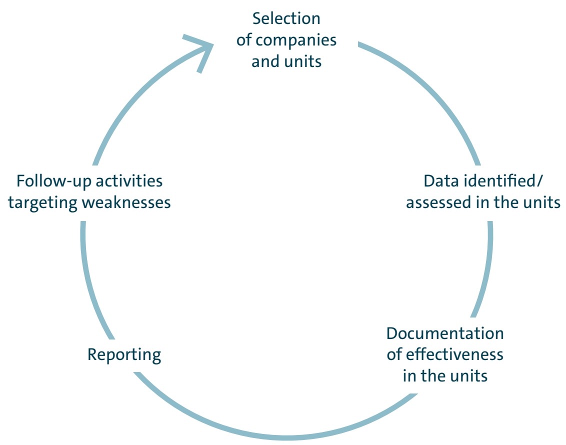
The score for a likelihood of occurrence of more than 50% in the analysis period is classified as high; for a medium classification the likelihood of occurrence is at least 25%. For the criterion of financial loss, the score rises with an increasing scale; the highest score of 10 is reached upwards of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

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 2019.

Quarterly risk reports are produced in addition to the annual risk assessment. These depict the Volkswagen Group's acute – short to medium-term – risk situation. The assessment of risks from this quarterly risk process (QRP) is conducted in the Risk Radar IT system similarly to that of the annual regular GRC process. All Group brands as well as

ANNUAL STANDARD GOVERNANCE, RISK AND COMPLIANCE PROCESS



Porsche Holding Salzburg, Volkswagen Financial Services AG and Volkswagen Bank GmbH are included in the QRP.

In addition, significant changes to the risk situation that can arise in the short term, for instance from unexpected external events – such as the current spread of the coronavirus – are reported to the Board of Management as required. This is necessary if, among other things, the risk may lead to damages of over €1 billion.

Based on the feedback from the annual standard GRC process and quarterly risk surveys, the overall picture of the potential risk situation is updated and the system's effectiveness assessed.

A separate Group Board of Management Committee for Risk Management examines the key aspects of the RMS/ICS every quarter. Its tasks are as follows:

> 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.

Risk reporting to the committees of Volkswagen AG depends on materiality thresholds. Systemic risks from a risk score of 20 and acute risks from a risk score of 40 or potential financial damages of €1 billion or more are regularly presented to the Board of Management and the Audit Committee of the Supervisory Board of Volkswagen AG.

Third line of defense: Review 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 compliance management system (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 by means of the RMS/ICS elements 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 together with 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.

Volkswagen Financial Services AG operates a risk early warning and management system. This system ensures that the locally applicable regulatory requirements are adhered to and at the same time enables appropriate and effective risk management at Group level. Important components of it are regularly reviewed as part of the audit of the annual financial statements.

Monitoring the effectiveness of the risk management system and the internal control system

To ensure the effectiveness of the RMS/ICS, we regularly optimize it as part of our continuous monitoring and improvement processes. In the process, we give equal consideration to both internal and external requirements. On a case-by-case basis, external experts assist in the continuous enhancement of our RMS/ICS. 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 intended to ensure that the information required for the preparation of the financial statements of Volkswagen AG, the consolidated financial statements and the combined management report of the Volkswagen Group and Volkswagen AG is complete, accurate and transmitted in a timely manner. 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 in the context of 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 in line with external expert opinions in certain cases, ensures the application and assessment 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 that are required to be prepared by the Group companies are also set out in detail there, and requirements have been 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 plausibility of the single-entity financial statements and specific significant issues at the subsidiaries. Alongside plausibility checks, 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 combined management report of the Volkswagen Group and Volkswagen AG 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.

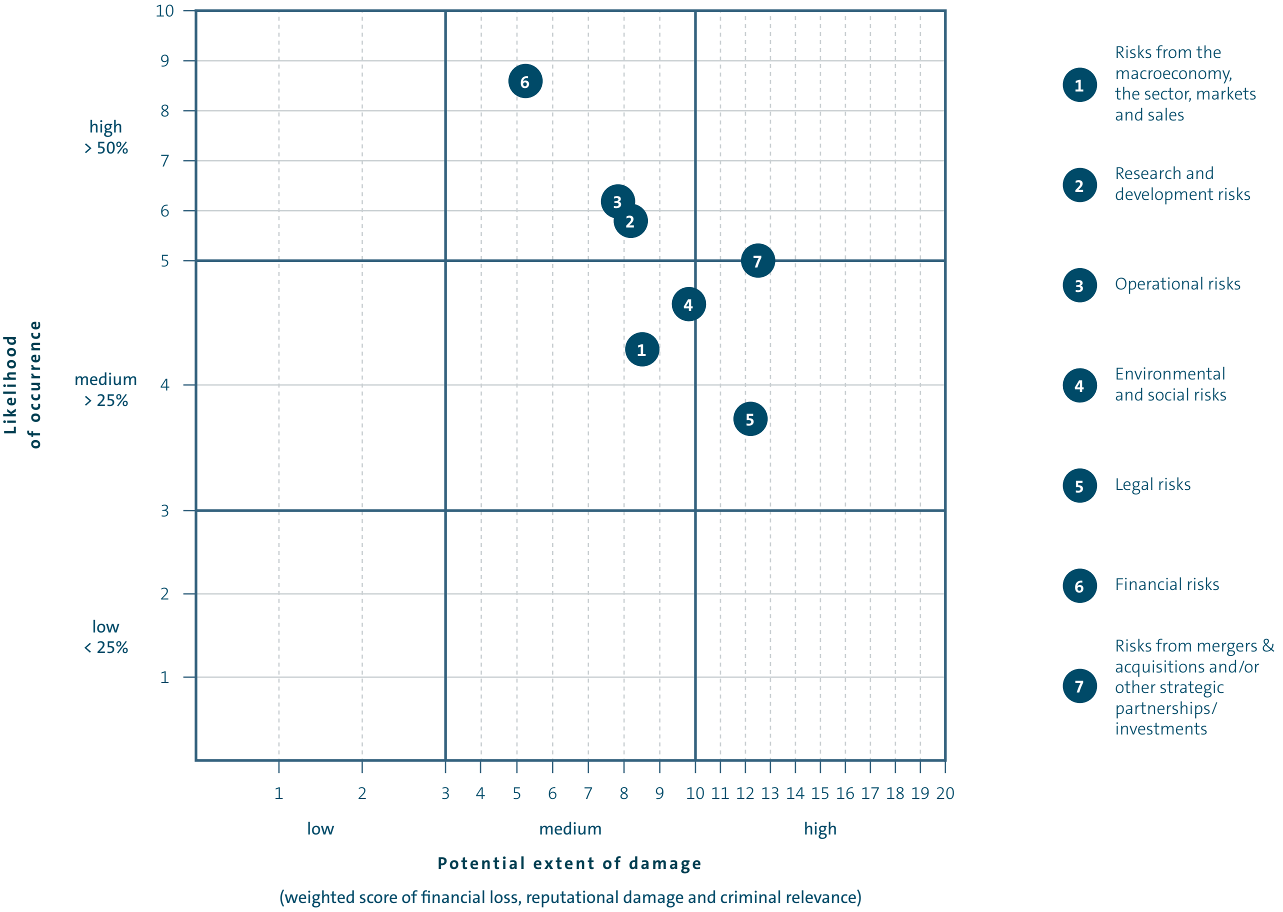
Integrated consolidation and planning system

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 main risks and opportunities arising in our business activities. In order to provide a better overview, we have grouped the risks and opportunities into categories. At the beginning of each risk category, we state the most significant risks in order of their importance as identified using the risk score from the regular GRC process and the quarterly risk process (QRP). We then describe the individual risks in no particular order. Unless explicitly mentioned, there were no material changes to the specific risks and opportunities compared with the previous year even though the weighting of individual risks has increased with the transformation of the industry.

AVERAGE SCORES OF THE RISK CATEGORIES



The risks from the regular GRC process and the QRP reported to the Board of Management and the Audit Committee are incorporated into the assessment of the Volkswagen Group's risk categories. The risk categories are plotted based on the average scores.

We use analyses of the competition and the competitive environment in addition to market studies to identify not only risks but also opportunities that have 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, based on existing information, may result in a negative or positive deviation from our forecast or targets.

Risks and opportunities from the macroeconomy, the sector, markets and sales

The most significant risks from the regular GRC process and the QRP lie in restrictions on trade and increasingly protectionist tendencies resulting in a negative trend in markets and unit sales.

Macroeconomic risks and opportunities

We believe that risks to continued global economic growth arise primarily from turbulence in the financial and commodity markets, increasingly protectionist tendencies, and structural deficits, which pose a threat to the performance of individual advanced economies and emerging markets. In addition, there are increasing environmental challenges that affect individual countries and regions to varying degrees. The possible worldwide transition from an expansionary monetary policy to a more restrictive one also presents risks for the macroeconomic environment. Persistently high private- and public-sector debt in many places is clouding the outlook for growth and may likewise 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. In particular, the Volkswagen Group would be adversely affected by a disorderly Brexit and by other trade policy measures such as tariffs or non-tariff trade barriers.

The economic development of some emerging economies is being hampered primarily by dependence on energy and commodity prices and capital inflows, but also by sociopolitical tensions. Corruption, inadequate government structures and a lack of legal certainty also pose risks.

Geopolitical tensions and conflicts, along with signs of fragmentation in the global economy, are a further major risk factor to the performance of individual countries and regions. In light of the existing, strong global interdependence, local developments could have adverse effects on the world economy. 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 violent conflicts, terrorist activities, cyber attacks 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 for the year 2020. However, due to the risk factors mentioned, as well as cyclical and structural aspects, 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/potential

Western Europe, especially Germany, and China are our main sales markets. A drop in demand in these regions due to the economic climate would have a particularly strong impact on the Company's earnings including financial services. We counter this risk with a clear, customer-oriented and innovative product and pricing policy.

Outside Western Europe and China, delivery volumes are spread widely across the key regions: Central and Eastern Europe, North America and South America. In addition, we either already have a strong presence in numerous existing and developing markets or are working systematically towards this goal. Particularly in smaller markets with growth potential, we are increasing our presence with the help of strategic partnerships in order to cater to local requirements.

Price pressure in established automotive markets for new and used vehicles as a result of 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.

Excess capacity in global automotive production may lead to a rise in inventories and therefore an increase in the amount of capital tied up. With a decline in demand for vehicles and genuine parts, automotive manufacturers may adjust their capacities or intensify measures to promote sales. This would lead to additional costs and greater price pressure.

The growth markets of Central and Eastern Europe, South America and Asia are particularly important to the Volkswagen Group. 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. 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.

In Europe, there is a risk that further municipalities and cities will impose a driving ban on diesel vehicles in order to comply with emission limits. In China, restrictions on vehicle registrations could enter into force in further metropolitan areas in the future. Furthermore, China imposed a so-called "new energy vehicle quota" in 2019, which means that battery-electric vehicles, plug-in hybrids and fuel cell vehicles will have to account for a certain proportion of a manufacturer's new passenger car fleet. To ensure compliance with emissions standards, we continuously tailor our range of vehicle models and engines to the conditions in the relevant markets. These requirements may lead to higher costs and consequently to price increases and declines in volumes.

The demand that built up in individual established markets in times of crisis could result in a more marked recovery if the economic environment eases more quickly than expected.

Economic performance varied in individual regions in fiscal year 2019. 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, for example by 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 regulatory reasons. This is due to the provisions of the block exemption regulations, which have applied to after-sales services since June 2010, and also to the amendments included in EU Regulation 566/2011 of June 8, 2011 and EU Regulation 858/2018 applicable from September 1, 2020, regarding access by independent market participants to technical information.

In Germany, legislation is currently being prepared to restrict or abolish design protection for repair parts through the introduction of a repair clause. In addition, the European Commission is evaluating the market with regard to existing design protection. A possible restriction or abolition of design protection for visible replacement parts 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. There is uncertainty regarding the widespread use of electric vehicles and the availability of the necessary charging infrastructure.

Furthermore, we cannot entirely rule out the possibility of freight deliveries worldwide being shifted from trucks to other means of transport, and demand for the Group's commercial vehicles falling as a result.

Below, we outline the regions and markets with the greatest growth potential for the Volkswagen Group.

China

In China, the largest market in the Asia-Pacific region, there was a noticeable year-on-year decline in the passenger car market in the reporting year. Demand for vehicles is expected to increase in the coming years due to the need for individual mobility. However, the current trade dispute with the USA will slow the pace of this growth. It is also expected that demand will shift from the coastal metropolises to the interior. In order to leverage the considerable opportunities offered by this 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

Despite political stability, India's economic momentum slowed in 2019. The passenger car market was unable to continue its growth path and declined considerably. We expect the market to fall slightly short of the prior-year level in 2020 but to return to growth in subsequent years. 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 2019 was slightly down on the previous year. In 2020, the market volume is again expected to be slightly down on the reporting period. In the USA, Volkswagen Group of America is consistently pursuing the strategy of becoming a full-fledged volume supplier. The expansion of local production capacity – including a production facility for electric vehicles in the future – will allow the Group to better serve the market in the North America region. We are also working intensively on offering additional products specifically tailored to the US market.

Brazil

The economic environment eased somewhat in the reporting year, while Brazil's political path has been uncertain since the presidential elections. The volume of demand in the vehicle market continued to recover markedly compared with the weak prior years. We anticipate a continued upturn in demand in 2020. 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

The volume of the Russian vehicle market in 2019 was slightly down on the previous year and we are forecasting that the passenger car market will slightly exceed the reporting year in 2020. However, the heavy reliance on oil and gas income, rising taxes, currency volatility resulting at present in high vehicle prices, the political crisis and the related sanctions imposed by the EU and the USA continue to impact the development of demand negatively. The market remains strategically important to the Volkswagen Group, which is why we have a strong focus on market cultivation there.

The Middle East

Political and economic uncertainty is weighing on the region’s main sales markets, particularly Turkey. Here, the continued weakness of the Turkish lira and the resulting high inflation, among other things, led to a decline in purchasing power and therefore weaker demand in 2019. Despite the instability, however, the Middle East region offers short-term and long-term growth potential. We aim to leverage the potential for growth with a range of vehicles that has been specifically tailored to this market, without as yet having our own production facilities there.

Power Engineering

Trends in the global economy, such as increasing interest in technologies to reduce emissions and a greater international division of labor, are set to continue, despite increased geopolitical and macroeconomic risks compared with the previous year. This also applies to the resulting transport routes and volumes and to the demand for touristic offers such as cruises. Growing global energy needs call for innovation in industry and a growing willingness on the part of governments to invest in line with the global climate policy.

We are working systematically to leverage market opportunities across the world, for example by positioning ourselves as a solution provider for reduced-carbon drive system and energy generation technologies as well as for storage technologies. Moreover, significant potential can be leveraged in the medium term by enhancing our after-sales business through the introduction of new products and the expansion of our service network. The requirements for occupational safety, which will continue to increase in the future, 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 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.

Sales risks

As a result of the diesel issue, the Volkswagen Group may experience decreases in demand, possibly exacerbated by media reports 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 Volkswagen Group has recognized provisions arising from the diesel issue, in particular for the service measures, recalls and customer-related measures. Further significant financial liabilities may emerge due to existing estimation risks particularly from technical solutions, repurchase obligations, customer-related measures and possible official or statutory requirements for diesel vehicles.

The Volkswagen Group’s multibrand strategy may weaken individual Group brands if there are overlaps in customer segments or the product portfolio. This effect may be reinforced by the Volkswagen Group’s common-parts strategy, as this strategy means that, in some cases, the differences in product substance between the brands are small. This could result in internal cannibalization between the Group brands, higher marketing costs, or repositioning expenses. By sharpening the brand identities as part of our Best Brand Equity strategic module, we are working to minimize these risks.

Viewed over an extended period, the fleet customer business is more stable than the business with retail customers; in 2019, 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 consistently high market share in Europe shows that fleet customers still have confidence in the Group.

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 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. We are countering reluctance to buy with our attractive range of models and our strict policy of customer orientation.

A combination of buyer reluctance in some markets as a result of the crisis, and increases in some vehicle taxes based on CO_2 emissions – which have already been observed in many European countries – may shift demand towards smaller segments and engines. We counter the risk that such a shift will negatively impact the Volkswagen Group's financial situation 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, restrictions on trade, and protectionist tendencies. Sales incentives may lead to shifts in the timing of demand.

Commercial vehicles are capital goods: even minor changes in growth rates or growth forecasts may significantly affect transport requirements and thus demand. The production fluctuations occurring 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 does in fact significantly exceed 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. Furthermore, customers are increasingly interested in additional services such as freight optimization and fleet utilization, which we offer in the commercial vehicle segment through the digital brand RIO, for example.

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 and improved technologies.

Other factors

Going beyond the risks outlined in the individual risk categories, 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, such occurrences include natural disasters, epidemics – such as the current spread of the coronavirus –, violent conflicts and terrorist attacks.

The spread of the coronavirus could give rise to risks for global economic growth and subsequently risks for the Volkswagen Group particularly with regard to procurement, production and sales.

Research and development risks

The most significant risks from the regular GRC process and QRP result from the failure to develop products in line with demand and regulations, especially in view of e-mobility and digitalization.

Research and development risks

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 fuel 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. On a national and international level there are numerous legal requirements regarding the use, handling and storage of substances and mixtures (including restrictions concerning chemicals, heavy metals, biocides, persistent organic pollutants), which apply to both the manufacturing of automobiles and the automobile itself.

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 changing conditions. Given the intensity of competition and the speed of technological development, for example in the fields of digitalization and automated driving, it is crucial to identify relevant trends at an early stage and respond accordingly.

Among other things, we therefore conduct trend analyses and customer surveys 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 – especially in relation to e-mobility and digitalization – 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. To avoid patent infringements, we intensively analyze third-party industrial property rights, increasingly in relation to communication technologies. We regularly compare the results of all the analyses with the respective project's targets; in the event of variances, we introduce appropriate countermeasures in good time. Our end-to-end project organization supports 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.

Risks and opportunities from the modular toolkit strategy

We are continuously expanding our modular toolkits, focusing on future customer requirements, legal requirements and infrastructural requirements.

Higher volumes will, however, increase the risk that quality problems will affect an increasing number of vehicles.

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 synergy effects thereby achieved, we are able to cut both development costs and the necessary one-time expenses as well as manufacturing times. The toolkits also allow us to produce different models from different brands in various quantities, using the same equipment 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 transferred this principle of standardization with maximum flexibility to the Modular Electric Drive 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 worldwide with the introduction of the first MEB-based vehicle.

Operational risks and opportunities

The most significant risks from the regular GRC process and QRP lie particularly in the area of cyber security and new regulatory requirements for IT, in quality problems as well as in volatile commodity markets.

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 carry out projects. Among other things, Procurement takes into consideration the risk of insufficient competition if it concentrates on a few financially strong suppliers when awarding contracts.

Weakening growth in the global economy, the ongoing trade disputes and shifts in customer demand – especially the technological shift toward e-mobility – along with the resulting changes in call-offs from suppliers are posing challenges for us.

The changed circumstances have restricted suppliers' financing opportunities and increased general uncertainty, particularly in areas where existing technologies are becoming obsolete and alternative technologies are gaining in importance. The number of crises and insolvencies among suppliers worldwide increased in 2019. Specialists in restructuring and supply reliability in procurement continuously monitor the financial situation of our suppliers all over the world and take targeted measures to avoid supply bottlenecks. Potential resource shortages, possible speculations on the market as well as current trends in the automotive industry, such as the growing share of electrified vehicles, may also affect the availability and prices of certain raw materials. The raw material and demand trend was continuously analyzed and assessed on an interdisciplinary basis over the reporting year to enable steps to be taken at an early stage in the event of potential bottlenecks.

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 present to rule out the possibility of a further increase in recalls of various models produced by different 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 arise, for example, as a result of fires or accidents at suppliers. Epidemics such as the current spread of the coronavirus may also cause bottlenecks. Supply risks are identified without delay in procurement through early warning systems and mitigated immediately by applying derived measures. Additional measures were taken to safeguard supply and avert future assembly line stoppages caused by suspensions of deliveries.

Specialists in procurement systematically investigate risks resulting from antitrust violations by suppliers and file claims for any damages that arise.

Production risks

Volatile developments in the global automotive markets, accidents at suppliers and disruption in the supply chain caused production volumes of some vehicle models to fluctuate at some plants. In specific markets, we also continued to record a trend away from orders for diesel vehicles and toward increased orders for vehicles with petrol engines. 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.

Legal changes, for instance in the context of the changeover to the WLTP test procedure, may impact production. For one thing, a temporary reduction in the range causes demand to focus on the available variants. Moreover, gaps in production can occur if model variants have not been approved. These fluctuations necessitate measures to stabilize production, such as the temporary storage of vehicles until official approval.

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, for example, by continuously comparing our available resources against future demand scenarios. If bottlenecks in the supply of materials are indicated, 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. Volkswagen or its major suppliers may be unable to sufficiently adjust production capacity in the event of increased fluctuation in demand that goes beyond the available technical flexibility.

The range of our models is growing, particularly with the upcoming electrification offensive, 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 – to the highest degree possible – that production volumes and quality standards are met during our new vehicle start-ups throughout the Group.

In order to prevent downtime, lost output, rejects and reworking in general, 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.

Particular events beyond our control such as natural disasters, epidemics – currently the spread of the coronavirus – 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.

Risks arising from long-term production

In the case of large projects within the Power Engineering Business Area, risks may arise that are often only identified over the course of the project. They may result in particular from contract drafting errors, inaccurate or incomplete information used in costing, post-contract changes in economic and technical conditions, weaknesses in project management, or poor performance by subcontractors. Most notably, 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.

Quality risks

Right from the product development stage, we aim to identify and rectify quality problems at the earliest 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 quickly and eliminate the malfunctions. Nonconformity of internally or externally sourced parts or components may necessitate time-consuming and cost-intensive measures and lead to recalls and therefore to damage to the Volkswagen Group's image. In addition, the resulting financial impacts may exceed provisions. To meet our customers' expectations and minimize warranty and ex gratia repair costs, we continuously optimize the processes at our brands with which we can prevent these defects.

Increasing technical complexity and the use of the toolkit system in the Group mean that the need for high-grade supplier components and software of impeccable quality is rising. For the future management of cyber security, which is becoming an increasingly important area, we are establishing an Automotive Cyber Security Management System (ACSMS) in all brands and integrating it into the existing quality management system. This will allow us to fulfill the legal requirements that will apply from 2021.

Assuring quality is of fundamental importance especially in the US, Brazilian, Russian, Indian and Chinese markets, for which we develop vehicles specific to the countries 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 their individual needs. 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. Furthermore, several countries have special – and in some cases new – rules aimed at protecting customers in their dealings with vehicle manufacturers. We have established quality processes to ensure that the Volkswagen Group brands and their products fulfill all respective 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.

IT risks

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 or customer data as well as limited systems availability as a consequence of downtime and disasters. Handling data with integrity ensures that data is correct and uncorrupted, and that systems function without error.

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 technology used for our mobility services must be protected against cyber attacks. New legal regulations including the future UNECE (United Nations Economic Commission for Europe) cyber security regulation (WP.29) are creating new requirements for our vehicle and software development. These have an equally large impact on our IT systems. We therefore work on an interdisciplinary basis to protect our connected vehicles and mobility services. Our guiding principles are data security, transparency and informational self-determination.

We address the risk of unauthorized access to, modification of, or extraction of corporate and customer data with the use of 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. Redundant IT infrastructures protect us against risks that occur in the event of a systems failure or natural or other disasters.

We use commercially available technologies to protect our IT landscape, adhering to standards applicable throughout the Company. We future-proof our IT through continual standardization and updates. Continuously increasing automation enhances process reliability and the quality of processing.

The further development and Group-wide use of IT governance processes, particularly the further standardization of the IT risk management process, also help to identify weaknesses at an early stage and to reduce or avoid risks effectively.

Another focus is the continuous enhancement of Group-wide security measures with modern technologies and tools, such as the further expansion of the IT security command center for the early detection of and defense against cyber attacks.

Volkswagen complements these technical measures by systematically raising awareness and providing training for employees.

Risks from media impact

The image 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 and strategic orientation 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 by individuals and the resulting reputational damage can never be fully prevented. In addition, media reactions can have a negative effect on the image of the Volkswagen Group and its brands. This impact could be amplified through insufficient crisis communication.

Environmental and social risks

The most significant risks from the regular GRC process and QRP arise from not meeting CO_2-related regulations.

Personnel risks

We counter economic risks as well as changes in the market and the competitive situation with a range of instruments that help the Volkswagen Group to remain flexible in terms of staff deployment when faced with a fluctuating order situation – whether orders are in decline, or there is an increase in demand for our products. These instruments include time accounts to which hours are added when overtime is necessary and from which hours are deducted in quiet periods, enabling our factories to adjust their capacity to production volume with measures such as extra shifts, closure days and flexible shift models. The use of temporary workers also allows us to be more flexible in our planning. 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. We counter the risk of not being able to develop sufficient expertise in the Company's different vocational groups with our strategically oriented and holistic human resource development, which gives all employees attractive training and development opportunities. By boosting our training programs, particularly at our international locations, we are able to adequately address the challenges of technological change.

To counter the potential risk of a shortage of skilled specialists – especially in the areas of digitalization and IT – we continuously expand 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 and our Faculty 73 ensure a pipeline of highly qualified and motivated employees. By systematically increasing our attractiveness as an employer, we are able to gain talented people in the areas of IT, design and social media, which are crucial for the future. With tools such as these, we want to ensure that our demand for qualified new staff is covered, even amid a shortage of skilled labor.

We counter the risks associated with employee fluctuation and loss of knowledge as a result of retirement with intensive, department-specific succession planning and training. 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.

The advancing digitalization of our human resources processes entails risks arising from the processing of personal data. Volkswagen is aware of its responsibility in the processing of this data. We address these risks as part of our data protection management system by implementing a wide range of measures.

One challenge posed by our collaboration with the Monitor lies in the tension that sometimes arises from the conflict between the Monitor's requests for information on the one hand, and both German and international data protection requirements on the other. This is true particularly in view of the fact that these data protection requirements are open to a certain degree of interpretation and assessment. In the interest of precluding infringements of the law as far as possible, despite a partially unclear legal situation, Volkswagen is advised by external law firms on these issues.

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_2 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_2 emissions of the new European passenger car fleet have not been allowed to exceed 130 g CO_2/km since 2012. Compliance with this requirement was introduced in phases; since 2015 the entire fleet has had to meet this limit.

The EU's CO_2 regulation for light commercial vehicles sets limits to be met from 2014 onwards, with targets having been phased in over the period to 2017. Under this regulation, the average CO_2 emissions from newly registered vehicles in Europe must not exceed 175 g CO_2/km.

On April 17, 2019, the EU adopted new rules for the CO_2 regime from 2020 onward. It published these in EU Regulation 2019/631 for passenger cars and light commercial vehicles on April 25, 2019. This regulation states that, from 2021 onward, the average emissions from the European passenger car fleet must be no higher than 95 g CO_2/km; in 2020, this emissions limit will already apply to 95% of the fleet. Up to and including 2020, European fleet legislation will be complied with on the basis of the New European Driving Cycle (NEDC). After 2021, the NEDC target value will be replaced by a WLTP target value through a process defined by lawmakers; this change shall not lead to additional tightening of the target value. A similar approach will apply to light commercial vehicles, where a target of 147 g CO_2/km will apply to the entire fleet in 2020.

The targets will be further tightened as from 2025: for new European passenger car fleets, a reduction of 15% will be required from 2025 and a reduction of 37.5% from 2030. For new light commercial vehicle fleets, the required reductions will be 15% from 2025 and 31% from 2030. In each case, the starting point is the fleet value in 2021. These targets can only be achieved through a high proportion of electric vehicles. Non-fulfillment of the fleet-wide targets will incur penalties of €95 per exceeded gram of CO_2 per vehicle sold.

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 which grants tax advantages. To receive a 30% tax advantage, manufacturers must, among other things, achieve a specified fleet efficiency. The fuel consumption regulations in China, which set an average fleet target of 6.9 liters/100 km for the period 2012–2015, were continued into the period 2016–2020 with a target of 5.0 liters/100 km. Preparations for legislation up to 2025 have begun. In addition to this legislation on fleet fuel consumption, a so-called "new energy vehicle quota" applies in China. This requires every manufacturer to increase the share of electric vehicles – which are included with different weightings – in its total sales. The quota for 2020 is 12%, to be fulfilled through battery-electric vehicles, plug-in hybrids, or fuel cell vehicles. Due to the extension of greenhouse gas legislation in the USA (the law was signed in 2012), uniform fuel consumption and greenhouse gas standards apply in all US states in the period from 2017 to 2025. Here, too, lawmakers are debating amending the rules from 2021 onward.

The increased regulation of fleet-based CO_2 emissions and fuel consumption makes it necessary to use the latest mobility technologies in all key markets worldwide. At the same time, electrified and also purely electric drives will 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_2 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 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, for example, our drivetrain and fuel strategy.

In the EU, a new, more time-consuming test procedure has applied to all new vehicles with WLTP since September 2018. Other challenges arise in connection with stricter processes and requirements regarding WLTP, such as from test criteria and from homologation (achievement of approval).

The Real Driving Emissions (RDE) regulation for passenger cars and light commercial vehicles is also one of the main European regulations. 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, leading to stricter requirements for exhaust gas aftertreatment in passenger cars and light commercial vehicles. Stricter RDE processes and requirements have resulted in certain challenges, for example relating to test criteria and homologation.

The other main EU regulations affecting the automotive industry include:

> EU Directive 2007/46/EC establishing a framework for the type 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 follow-up regulation (RED2) contains higher quotas for advanced biofuels,
- 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_2 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_2 emissions are having a similar steering effect; many EU member states have already incorporated CO_2 elements into their rules on vehicle taxation.

There is particular momentum in the debate on 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_2) immissions. In many places, lawsuits have been filed and judgments issued. It is argued that only driving bans for diesel vehicles can bring about the necessary short-term reduction in NO_2 immissions. The discussion may result in sales volumes of diesel vehicles declining further and financial liabilities arising from customer-related measures and potential official or statutory requirements.

Local driving bans are already in place in a number of countries, though these mainly affect older vehicles. Regulations in Belgium that successively bar older vehicles from larger cities are one example. With a view to the future, large urban areas such as Paris and London are discussing banning vehicles with combustion engines.

Commercial vehicles are increasingly subject to ever stricter environmental regulations all around the world, particularly to regulations relating to climate change and vehicle emissions. With Regulation (EU) 2019/1242 of June 20, 2019, which specifies CO_2 emission standards for new heavy trucks with a permitted gross weight of over 16 tonnes, the EU has set heavy commercial vehicle manufacturers very ambitious targets for reducing CO_2 emissions within the next decade. The CO_2 emissions from such vehicles must be reduced by 15% by 2025 and 30% by 2030 compared to a reference value for a monitoring period from July 2019 to June 2020. If they fail to meet these targets, vehicle manufacturers will be liable to substantial penalties for the excess emissions, amounting to €4,250 per excess gram of CO_2/tonne-kilometer (tkm) per vehicle for the period from 2025 to 2029 and €6,800 per excess gram of CO_2/tkm per vehicle for the period from 2030 onward.

Compliance with regulations relating to climate change and vehicle emissions requires considerable investment in new technologies, including alternative drive systems and vehicles powered by alternative fuels. Increasing connectivity within transport networks can help to reduce inefficiencies such as unused transport capacity, empty runs and inefficient routes in existing transport networks. In conjunction with connected traffic management systems, this can result in optimized goods transport and therefore a reduction in CO_2 emissions.

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 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. Moreover, emission limits are in force under Regulation (EU) 2016/1628 and in accordance with the regulations of the US Environmental Protection Agency (EPA), for example. We are pushing for a maritime energy transition in specialist bodies and also promote this to the general public. In a first step, we are supporting the switch to liquefied natural gas (LNG) as a fuel for maritime applications and also offer dual fuel and gas-powered engines for new and retrofitted vessels. For the long-term and climate-neutral operation of seagoing vessels, we advocate power-to-X technology, in which excess sustainably generated electricity is converted into carbon-neutral gas or liquid fuel.

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 in countries that have adopted no national requirements of their own, or requirements that are less strict than those of the World Bank Group. These guidelines 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 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 is allocated free of charge on the basis of benchmarks applicable throughout the EU. This portion of free certificates 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 carbon leakage list that came into effect in 2015. As a result, individual facilities at Volkswagen Group locations in Europe will receive additional certificates free of charge up to 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 that was established in 2018. The reserve will serve to offset 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 for 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. In China, for example, seven corresponding pilot projects are underway. These do not affect the Volkswagen Group. The Chinese government officially implemented a national emissions trading system at the end of 2017. Initially, this affects only the power generation sector; a gradual expansion is being planned.

LEGAL RISKS

The most significant risks from the regular GRC process and QRP are associated with the diesel issue.

Litigation

Volkswagen AG and the companies in which it is directly or indirectly invested are involved in a substantial number of legal disputes and governmental proceedings in Germany and abroad. Such legal disputes and other proceedings occur, among other things, in relation to or in connection with employees, public authorities, services, dealers, investors, customers, suppliers, products, or other contracting parties. For the companies in question, these disputes and proceedings may result in payments such as fines or in other obligations or consequences. In particular, substantial compensatory or punitive damages may have to be paid and cost-intensive measures may have to be implemented. In this context, specific estimation of the objectively likely consequences is often possible only to a very limited extent, if at all.

Risks may also emerge in connection with the adherence to regulatory requirements. This particularly applies in the case of regulatory gray areas where Volkswagen and the authorities responsible for the respective regulations may interpret the regulations differently. 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 based on existing information 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 material loss or damage not covered by the insured amounts and provisions cannot be ruled out. This applies particularly 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_x) emissions had been discovered in emissions tests on certain Volkswagen Group vehicles 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 various countries. We have since succeeded in making substantial progress and ending many of these proceedings.

In the USA, Volkswagen AG and certain affiliates reached settlement agreements with various government authorities and private plaintiffs, the latter represented by a Plaintiffs' Steering Committee in a multidistrict litigation in the US state of California. These agreements resolved certain civil claims as well as criminal charges under US federal law and the laws of certain US states in connection with the diesel issue. As part of the agreements entered into with the US Department of Justice and the State of California (Plea Agreement and Third Partial Consent Decrees), a Compliance Monitor and Compliance Auditor was appointed for Volkswagen in 2017 for a term of three years. Although Volkswagen AG and its subsidiaries and affiliates are firmly committed to fulfilling the obligations arising from these agreements, a breach of these obligations cannot be completely ruled out. In the event of a violation, significant penalties could be imposed as stipulated in the agreements, in addition to the possibility of further monetary fines, criminal sanctions and injunctive relief.

The diesel issue is rooted in a modification of parts of the software of the relevant engine control units – which, according to Volkswagen AG's legal position, is only unlawful under US law – 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 several years to follow, knowledge of the development and implementation of this software function.

In the months following publication of a study by the International Council on Clean Transportation in May 2014, Volkswagen AG's Powertrain Development department checked the test set-ups on which the study was based for plausibility, confirming the unusually high NO_x emissions from certain US vehicles with type EA 189 2.0 l diesel engines. 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 engine control unit software of 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 products that have been 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.

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 in 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 EPA's publication of the "Notice of Violation" on September 18, 2015, which the Board of Management had not expected, especially at that time, then presented the situation in an entirely different light.

The AUDI AG Board of Management members in office at the time in question have likewise stated that they had no knowledge of the use of "defeat device" software that was prohibited by US law in the type V6 3.0 l TDI engines until the EPA issued its November 2015 "Notice of Violation."

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- and eight-cylinder diesel engines such as the type V6 3.0 l and V8 4.2 l diesel engines.

In agreement with the respective responsible authorities, the Volkswagen Group is making technical measures available worldwide for virtually all diesel vehicles with type EA 189 engines. Within its area of responsibility, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) 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_2 emission figures, engine output, maximum torque, and noise emissions.

Following the studies carried out by AUDI AG to check all relevant diesel concepts for possible irregularities and retrofit potentials, measures proposed by AUDI AG have been adopted and mandated by the KBA in various recall orders pertaining to vehicle models with V6 and V8 TDI engines. Currently, AUDI AG assumes that the total cost, including the amount based on recalls, of the ongoing largely software-based retrofit program that began in July 2017 will be manageable and has recognized corresponding balance-sheet risk provisions. AUDI AG has in the meantime developed software updates for many of the affected powertrains and, after approval by the KBA, already installed these in the vehicles of a large number of affected customers. The approvals that are still outstanding are expected in the course of 2020.

In connection with the diesel issue, potential consequences for Volkswagen's results of operations, financial position and net assets could emerge primarily in the following legal areas:

1. Criminal and administrative proceedings worldwide (excluding the USA/Canada)
Criminal investigations, regulatory offense proceedings, and/or administrative proceedings have been opened in some countries (in Germany for example by the Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin – Federal Financial Supervisory Authority). The public prosecutor's offices in Braunschweig and Munich are investigating the core issues of the criminal investigations.

In April 2019, the Braunschweig Office of the Public Prosecutor issued indictments, including one against a former Chairman of the Board of Management of Volkswagen AG, charging, among other things, fraud relating to Type EA 189 engines in connection with the diesel issue.

In September 2019, the Braunschweig Office of the Public Prosecutor furthermore indicted the current and a former Chairman of the Board of Management of Volkswagen AG as well as a former member of its Board of Management (currently Chairman of the Supervisory Board) on charges of market manipulation relating to capital market disclosure obligations in connection with the diesel issue. The Public Prosecutor's Office also requested that the court name Volkswagen AG as a collateral participant in the proceedings.

In July 2019, the Munich II Office of the Public Prosecutor issued indictments, including one against the former Chairman of the Board of Management of AUDI AG, charging, among other things, fraud relating to 3.0 TDI engines in connection with the diesel issue.

Based on the information available at the present time, no change in the risk situation of the Volkswagen Group results from these indictments.

The Stuttgart Office of the Public Prosecutor is conducting a criminal investigation relating to the diesel issue on suspicion of fraud and illegal advertising that also involves a member of the Board of Management of Dr. Ing. h.c. F. Porsche AG.

The respective Group companies appointed renowned law firms to clarify the matters underlying the public prosecutor's accusations. The Board of Management and Supervisory Board receive regular updates on the current status.

In an administrative fine order issued on May 7, 2019, the Stuttgart Office of the Public Prosecutor terminated the regulatory offense proceeding conducted against Dr. Ing. h.c. F. Porsche AG in connection with the diesel issue by finding a negligent breach of the obligation to supervise occurring in the organizational unit "Prüffeld Entwicklung Gesamtfahrzeug/Qualität" (Overall Vehicle Development/ Quality - Testing Facility). The administrative order imposes a total fine of €535 million, consisting of a penalty payment of €4 million and the forfeiture of economic benefits in the amount of €531 million. After thorough examination, Dr. Ing. h.c. F. Porsche AG has accepted the fine and paid it in full, rendering the administrative fine order legally final. Further sanctions against or forfeitures by Dr. Ing. h.c. F. Porsche AG are therefore not to be expected in Europe in connection with the unitary factual situation underlying the administrative fine order.

As the type approval authority of proper jurisdiction, the KBA moreover continuously tests Audi, VW, and Porsche brand vehicles for problematic functions. If certain functions are deemed impermissible by the KBA, the affected vehicles are recalled pursuant to a recall order or they are brought back into compliance by means of a voluntary service measure.

Furthermore, additional administrative actions relating to the diesel issue are ongoing in other jurisdictions.

The companies of the Volkswagen Group continue to cooperate with the government authorities.

Whether the criminal and administrative proceedings will ultimately result in fines or other consequences for the Company, and if so what amounts these may entail, is currently subject to estimation risks. According to Volkswagen's estimates, the likelihood that a sanction will be imposed is 50% or less in the majority of these proceedings. Contingent liabilities have therefore been disclosed where the amount of such liabilities could be measured and the likelihood of a sanction being imposed was assessed at not lower than 10%. Provisions were recognized to a small extent.

2. Product-related lawsuits worldwide (excluding the USA/ Canada)
In principle, it is possible that customers in the affected markets will file civil lawsuits or that importers and dealers will assert recourse claims against Volkswagen AG and other Volkswagen Group companies. Besides individual lawsuits, various forms of collective actions (i.e. assertion of individual claims by plaintiffs acting jointly or as representatives of a class) are available in various jurisdictions. Furthermore, in a

number of markets it is possible for consumer and/or environmental organizations to bring suit to enforce alleged rights to injunctive relief, declaratory judgment, or damages.

Customer class action lawsuits and actions brought by consumer and/or environmental organizations are pending against Volkswagen AG and other Volkswagen Group companies in a number of countries including Australia, Belgium, Brazil, Germany, Italy, the Netherlands, Portugal, South Africa, and the United Kingdom. Alleged rights to damages and other relief are asserted in these actions. The pending actions include in particular the following:

In Australia, various class action lawsuits with opt-out provisions are currently pending against Volkswagen AG and other Volkswagen Group companies, including the Australian subsidiaries. Given the opt-out rule, the class actions have the potential to automatically cover all vehicles with type EA 189 engines unless the right to opt out is actively exercised. In all, approximately 100 thousand vehicles in the Australian market with type EA 189 engines are affected. In December 2019 Volkswagen AG reached agreements with the Australian class action plaintiffs that would terminate the litigation. The court must still approve the settlement. Depending on the number of claims filed under the class action settlement, Volkswagen AG anticipates payment of an amount of up to AUD 127.1 million plus litigation costs to settle the class action lawsuits. Two civil suits filed against Volkswagen AG and other Group companies by the Australian Competition and Consumer Commission (ACCC) were settled in the second half of 2019. The settlement is not yet legally final, however, as an appellate court has yet to rule on the amount of the fine. Depending on the appellate court decision, Volkswagen AG anticipates payment of a fine of up to AUD 125 million plus litigation costs.

In Belgium, the Belgian consumer organization Test Aankoop VZW has filed a class action to which an opt-out mechanism has been held to apply. The class action pertains to vehicles purchased by consumers on the Belgian market after September 1, 2014. The asserted claims are based on purported violations of unfair competition and consumer protection law as well as on alleged breach of contract.

In Brazil two class actions are pending. One of these pertains to approximately 17 thousand vehicles. In this litigation, an appeals judgment was rendered in May 2019 that only partially upheld the lower court's decision. This judgment initially reduced the damage liability of Volkswagen do Brasil considerably to around BRL 172 million plus interest. This amount can increase as a result of the adjudicated inflation rate and the assertion of individual claims alleging declines in the value of affected Amarok vehicles. The judgment remains non-final. In the second class action, compensation claims are made based on purported breaches of environmental regulations.

In Germany, the Verbraucherzentrale Bundesverband e.V. (Federation of Consumer Organizations) filed an action in November 2018 with the Braunschweig Higher Regional Court for model declaratory judgment against Volkswagen AG. The complaint is seeking a ruling that certain preconditions for potential consumer claims against Volkswagen AG are met; however, no specific payment obligations would result from any determinations the court may make. Individual claims would have to be established afterwards in subsequent separate proceedings. Oral argument in the consumer action for model declaratory judgment began in September 2019. Volkswagen AG intends to offer individual settlements to consumers who registered claims under the action for model declaratory judgment and meet the settlement criteria. The volume of such settlements amounts to approximately €830 million.

In addition, various actions have been brought against companies of the Volkswagen Group in several German regional courts by financialright GmbH, which is asserting rights assigned to it by a total of approximately 45 thousand customers in Germany, Slovenia, and Switzerland.

In England and Wales, suits filed in court by various law firms have been joined in a single collective action (group litigation). Because of the opt-in mechanism, not all vehicles with type EA 189 engines are automatically covered by the group litigation; potential claimants must instead take action in order to join. To date, some 90 thousand plaintiffs have registered claims under the group litigation. The group litigation opt-in period has expired.

In Italy, a class action lawsuit filed by the consumer association Altroconsumo on behalf of Italian customers is pending before the Venice Regional Court. This litigation involves damage claims based on alleged breach of contract as well as claims based on purported violations of Italian consumer protection law. Some 82 thousand customers have registered for the class action, whereby the validity of roughly half of the registrations is still unclear. In Italy, the court decision dismissing the class action filed by the consumer association Codacons as inadmissible also became legally final in the reporting year.

In the Netherlands, Stichting Volkswagen Car Claim has brought an opt-out class action seeking declaratory rulings. Any individual claims would then have to be established afterwards in separate proceedings. In November 2019, the Regional Court in Amsterdam held the requests for relief to be inadmissible in part. Oral argument on the merits of the class action will take place in 2020.

A Portuguese consumer organization has filed a class action with opt-out mechanism in Portugal. There are potentially up to approximately 139 thousand vehicles affected in the Portuguese market. The complaint seeks vehicle return and alleges damages as well.

In South Africa, an opt-out class action seeking damages is pending that pertains to some 8 thousand vehicles with V6 and V8 TDI engines in addition to approximately 72 thousand vehicles with type EA 189 engines.

Furthermore, individual lawsuits and similar proceedings are pending against Volkswagen AG and other Volkswagen Group companies in various countries, most of which are seeking damages or rescission of the purchase contract. In Germany, there are over 70 thousand such individual lawsuits.

Volkswagen estimates the likelihood that the plaintiffs will prevail to be 50% or less in the great majority of customer class actions, complaints filed by consumer and/or environmental organizations, and individual lawsuits. Contingent liabilities are disclosed for these proceedings where the amount of such liabilities can be measured and the chance that the plaintiff will prevail was assessed as not implausible. Since most of these proceedings are still in an early stage, it is in many cases not yet possible to quantify the realistic risk exposure. In addition, provisions were recognized to the extent necessary based on the current assessment.

At this time it cannot be estimated how many customers will choose to file lawsuits in the future in addition to those already pending, given the consumer action for model declaratory judgment in Germany, among other things, and what their prospect of success will be.

3. 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 Regional Court in Braunschweig. In August 2016, the Regional Court in Braunschweig ordered that common questions of law and fact relevant to the lawsuits pending at the Regional Court in Braunschweig be referred to the Higher Regional Court in Braunschweig for binding declaratory rulings pursuant to the Kapitalanleger-Musterverfahrensgesetz (KapMuG – German Act on Model Case Proceedings in Disputes Regarding Capital Market Information). In this proceeding, common questions of law and fact relevant to these actions are to be adjudicated in a consolidated manner by the Higher Regional Court in Braunschweig (model case proceedings). All lawsuits at the Regional Court in Braunschweig will be stayed pending resolution of the common issues, unless the cases can be dismissed for reasons independent of the common issues that are to be adjudicated in the model case proceedings. The resolution in the model case proceedings of the common questions of law and fact will be binding for all pending cases that have been stayed in the described manner. Oral argument in the model case proceedings before the Braunschweig Higher Regional Court began in September 2018 and will be continued at subsequent hearings.

At the Regional Court in Stuttgart, further investor lawsuits have been filed against Volkswagen AG, in some cases along with Porsche SE as joint and several debtor.

Holding that the factual situation at issue is by and large already covered by the model case proceedings being heard by the Braunschweig Higher Regional Court and that these proceedings, being paramount in this regard, preclude further such actions, the Stuttgart Higher Regional Court in March 2019 refused to proceed with further capital investor model case proceedings (which include Porsche SE) that had been referred to it by the Stuttgart Regional Court. The plaintiff side has appealed one of these decisions to the Federal Court of Justice.

Further investor lawsuits have been filed at various courts in Germany and the Netherlands. 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 AG in connection with the diesel issue, with the claims totaling roughly €9.6 billion. Volkswagen AG 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.

4. Proceedings in the USA/Canada

In the USA and Canada, the matters described in the EPA's "Notices of Violation" are the subject of various types of lawsuits and requests for information that have been filed in particular by customers, investors, salespersons, and various government agencies in Canada and the United States, including the attorneys general of several US states, against Volkswagen AG and other Volkswagen Group companies.

In the fiscal year, Volkswagen AG and certain affiliates settled the consumer protection claims asserted by the Attorney General of the US state of New Mexico, the last remaining state asserting consumer protection claims.

The attorneys general of five US states (Illinois, Montana, New Hampshire, Ohio, and Texas) and some municipalities have suits pending in state and federal courts against Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates, alleging violations of environmental laws. In the fiscal year, the environmental claims of two US states – Alabama and Tennessee – were dismissed in full by trial or appellate courts as preempted by federal law with no possibility of further appeal, and the New Mexico Attorney General voluntarily dismissed its environmental claims. The claims asserted by Illinois, Hillsborough County (Florida), and Salt Lake County (Utah) have been dismissed in full, but the dismissals have been appealed. Certain claims asserted by Ohio, Texas, and two Texas counties have also been dismissed, but these suits are currently proceeding as to other claims.

In March 2019, the US Securities and Exchange Commission filed a lawsuit against Volkswagen AG, Volkswagen Group of America Finance, LLC, VW Credit, Inc. and a former Chairman of the Board of Management of Volkswagen AG, asserting claims under US federal securities law based among other things on alleged misstatements and omissions in connection with the offer and sale of certain bonds and asset-backed securities.

Furthermore, in December 2019, the Canadian federal environmental regulator filed charges against Volkswagen AG in respect of 2.0 l and 3.0 l Volkswagen and Audi diesel vehicles at the conclusion of its criminal enforcement-related investigation into the diesel emissions issue. Volkswagen AG cooperated with the investigation and agreed to a plea resolution addressing all of the charges. In January 2020, Volkswagen AG pleaded guilty to the charges and agreed to pay a penalty of CAD 196.5 million, which was approved by the court. Following this approval, the Ontario provincial environmental regulator withdrew its action against Volkswagen AG as to a quasi-criminal enforcement-related offense with respect to certain Volkswagen and Audi 2.0 l diesel vehicles. Additionally, a certified environmental class action is pending on behalf of residents in Quebec. This action was authorized on the sole issue of whether punitive damages could be recovered. The appeals filed by Volkswagen were denied. The case remains in the early stages.

To the extent a matter is not separately described above, an assessment is not yet possible at the current stage of the proceedings or has, in accordance with IAS 37.92, not been presented so as not to compromise the results of the proceedings and the interests of the Company.

5. Additional proceedings

With its ruling of 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 is to examine whether there was a breach of duties on the part of the members of the Board of Management and Supervisory Board of Volkswagen AG in connection with the diesel issue on or after June 22, 2006 and, if so, whether this resulted in damages for Volkswagen AG. The ruling by the Higher Regional Court of Celle is formally unappealable. However, Volkswagen AG has filed a constitutional complaint with the German Federal Constitutional Court alleging infringement of its constitutionally guaranteed rights. It is currently unclear when the Federal Constitutional Court will reach a decision on this matter. Following the formally unappealable ruling from the Higher Regional Court of Celle, the special auditor appointed by the court indicated that he was not available to conduct the special audit on grounds of age. In June 2019, the Hanover Regional Court denied the motion filed by the US funds to replace the special auditor. The opposing side has appealed this denial to the Celle Higher Regional Court; this appeal is still pending.

In addition, a second motion seeking appointment of a special auditor for Volkswagen AG to examine matters relating to the diesel issue has been filed with the Regional Court of Hanover. This proceeding has been stayed pending a decision by the Federal Constitutional Court in the initial special auditor litigation.

6. Risk assessment regarding the diesel issue

An amount of around €2.9 (2.4) billion has been included in the provisions for litigation and legal risks as of December 31, 2019 to protect against the currently known legal risks related to the diesel issue based on existing information and current assessments. Insofar as these can be adequately measured at this stage, contingent liabilities relating to the diesel issue were disclosed in the notes in an aggregate amount of €3.7 (5.4) billion, whereby €3.4 (3.4) billion of this amount results from lawsuits filed by investors in Germany. The provisions recognized and the contingent liabilities disclosed as well as the other latent legal risks in the context of the diesel issue are in part subject to substantial estimation risks given that the fact-finding efforts have not yet been concluded, the complexity of the individual relevant factors and the ongoing coordination with the authorities. Should these legal or estimation risks materialize, this could result in further substantial financial charges. In particular, the possibility cannot be ruled out that the provisions recognized may have to be adjusted in light of knowledge acquired or future events.

Based on the information as it exists and has been established, there continue to be no conclusive findings or assessments available to the Board of Management of Volkswagen AG regarding the described facts that would suggest that a different assessment of the associated risks should have been made.

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 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 SE in 2008. The damages currently being sought based on allegedly assigned rights amounted to approximately €2.26 billion plus interest. In April 2016, the Regional 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 in October 2017, the court already indicated that it currently does not see claims against Volkswagen AG as justified, both for want of sufficiently specific pleadings and for reasons of law. 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 in question (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 Brazil, the Brazilian tax authorities commenced tax proceedings against MAN Latin America; at issue in these proceedings are the tax consequences of the acquisition structure chosen for MAN Latin America in 2009. In December 2017, a second instance judgment that was negative for MAN Latin America was rendered in administrative court proceedings. MAN Latin America initiated 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 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 fined Scania €0.88 billion. Scania has appealed to the European Court of Justice 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 were received from customers. 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.

In April 2019 the European Commission issued a statement of objections to Volkswagen AG, AUDI AG, and Dr. Ing. h.c. F. Porsche AG in connection with the Commission's antitrust investigation of the automobile industry. These objections state the European Commission's preliminary evaluation of the matter and afford the opportunity to comment. The subject matter of the proceedings is limited to the cooperation of German automobile manufacturers on technical questions in connection with the development and introduction of SCR systems and gasoline particulate filters for passenger cars that were sold in the European Economic Area. The manufacturers are not charged with any other misconduct such as price fixing or allocating markets and customers. After receiving access to the investigation files starting in July 2019, Volkswagen in December 2019 filed its reply to the European Commission's statement of objections. In the same matter, the Chinese Competition Authority has also issued information requests to Volkswagen AG, AUDI AG, and Dr. Ing. h.c. F. Porsche AG, and commenced an administrative action.

In the proceedings against a number of captive automobile finance companies regarding potential competition law infringements (alleged exchange of competitively sensitive information), the Italian Competition Authority assessed a fine of €163 million against Volkswagen AG and Volkswagen Bank GmbH in January 2019. Provisions were recognized by Volkswagen Bank GmbH. Volkswagen AG and Volkswagen Bank GmbH filed an appeal against this decision in March 2019. In the same context, an antitrust class action lawsuit has furthermore been filed by customers in Italy against Volkswagen Bank GmbH, among others.

In June 2019, the US District Court for the Northern District of California dismissed two putative class action complaints brought by purchasers of German luxury vehicles alleging that, since the 1990s, several automobile manufacturers, including Volkswagen AG and other Group companies, conspired to unlawfully increase the prices of German luxury vehicles in violation of US antitrust and consumer protection law. The court held that the plaintiffs have not stated a claim for relief because the allegations in the complaints do not plausibly support the alleged anticompetitive agreements. Plaintiffs filed amended complaints, which Volkswagen moved to dismiss. Plaintiffs in Canada filed claims with similar allegations on behalf of putative classes of purchasers of German luxury vehicles against several automobile manufacturers, including Volkswagen Group Canada Inc., Audi Canada Inc., and other Group companies. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

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.

Volkswagen has been responding to information requests from the US Environmental Protection Agency (EPA) and CARB related to automatic transmissions in certain vehicles with gasoline engines. In August 2019, Volkswagen agreed with the EPA to forfeit approximately 220 thousand Greenhouse Gas Emission Credits in response to the EPA's inquiry. Also in August 2019, Volkswagen and the Plaintiffs' Steering Committee announced the settlement of civil claims relating to approximately 98 thousand Volkswagen, Audi, Porsche and Bentley vehicles. Volkswagen's testing of these vehicles in connection with the information requests resulted in a 1 mile per gallon change, when rounded according to EPA rules, in the fuel economy disclosed on the "Monroney label" required by US regulations. In October 2019, the Court granted preliminary approval of the settlement.

Provisions were recognized by Volkswagen Bank GmbH and Volkswagen Leasing GmbH for possible claims in connection with financial services provided to consumers.

In February 2020, Volkswagen AG and another defendant were served with a lawsuit filed by GT Gettaxi Ltd. The lawsuit in particular alleges large damage claims. Volkswagen will evaluate the alleged claims and defend itself against them.

In addition, various proceedings are pending worldwide, particularly in the USA, in which customers are asserting purported claims either individually or in class actions. These claims are as a rule based on alleged vehicle defects, including defects alleged in vehicle parts supplied to the Volkswagen Group (for instance, in the Takata case).

Risks may also result from actions for infringement of intellectual property, including infringement of patents, trademarks or other third-party rights, particularly in Germany and the USA. These actions pertain among other things to patents for semiconductor technology used in vehicles, but may also extend to control, regulation or power-units, and communications technology as well. If Volkswagen is alleged or determined to have violated third-party intellectual property rights, it may have to pay damages, modify manufacturing processes, or redesign products and may be barred from selling certain products. Volkswagen could also face costly litigation. These risks could lead to delivery and production restrictions or interruptions.

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.

Tax risks

Volkswagen AG and its subsidiaries have operations worldwide and are audited by local tax authorities on an ongoing basis. Amendments to tax laws as well as changes in their application by the courts and their interpretation by the tax authorities in the respective countries may lead to tax payments that differ from the estimates made in the financial statements.

Risks arise particularly from tax assessment of the cross-border supply of intragroup goods and services. Through organizational measures, such as the implementation of an advance pricing agreement as well as the monitoring of transfer prices, Volkswagen is constantly monitoring the development of tax risks as well as the impact thereof on the consolidated financial statements.

Tax provisions were recognized for potential future retrospective tax payments, while other provisions were recognized for ancillary tax payments arising in this connection.

Financial risks

The most significant risks from the regular GRC process and QRP result from volatile foreign exchange markets.

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 these financial and liquidity risks is the central responsibility of the Group Treasury department, which reduces 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 mainly comprise currency forwards and currency options. 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 ten years. We thus hedge our principal foreign currency risks, mostly against the euro and primarily in Australian dollars, Brazilian real, British pound sterling, Canadian dollars, Chinese renminbi, Czech koruna, Hong Kong dollars, Hungarian forints, Indian rupees, Japanese yen, Mexican pesos, Norwegian kroner, Polish zloty, Russian rubles, Singapore dollars, South African rand, South Korean won, Swedish kronor, Swiss francs, Taiwan dollars and US dollars.

The hedging of commodity prices entails risks relating to the availability of raw materials and price trends. We continuously analyze potential risks arising from changes in commodity and energy prices in the market 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 and copper over a period of up to six years, in the case of nickel for up to nine years. The precious metals platinum, palladium and rhodium have shorter hedging periods, generally amounting to a maximum of up to three years. We have entered into similar transactions in order to supplement and improve allocations of CO_2 emission certificates.

Pages 293 to 314 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 117. The financial instruments held for hedging purposes give rise to both counterparty risks and balance sheet risks, which we limit using 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 293.

Liquidity risk

Volkswagen is reliant on its ability to ensure that there is adequate coverage for its financing needs. A liquidity risk consists of potentially being unable to ensure existing capital requirements by raising funds or being unable to finance the Group on reasonable terms, which in turn can have substantially negative impact on Volkswagen's business position, assets, financial position and earnings.

In principle, the Automotive Division and Financial Services Division refinance themselves independently of one another. However, they are subject to very similar refinancing risks. In the Automotive Division, the company's solvency is ensured at all times mostly through retained, non-distributed earnings, by drawing down on credit lines and by issuing financial instruments on the money and capital markets. The capital requirements of the financial services business are covered mainly by raising funds in the national and international financial markets, as well as through customer deposits from the direct banking business.

Volkswagen finances projects with, for example, loans provided by national development banks such as Kreditanstalt für Wiederaufbau (KfW) or Banco Nacional de Desenvolvimento Econômico e Social (BNDES) or by supranational development banks such as the European Investment Bank (EIB).

In addition to confirmed credit lines, unconfirmed lines of credit from commercial banks supplement our broadly diversified refinancing structure.

Financing opportunities can be hindered by worsening financial and general market conditions, a worsening credit profile and outlook or a downgrade or withdrawal of the credit rating. In such cases, there may be a fall in demand from market participants for securities issued by Volkswagen, which may additionally have a detrimental effect on the interest rates payable and restrict access to the capital market.

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 112 of this report.

Risks in the financial services business

In the course of our financial services activities, we are exposed primarily to residual value risks and credit risks.

A residual value risk arises when the expected fair value for the disposal of the lease or finance asset may be lower than the residual value set at contract conclusion. However, there is an opportunity that disposal of the asset will generate more income than calculated for the residual value.

Referring to the bearer of residual value risk, a distinction is made between direct and indirect residual value risks. A direct residual value risk means that our financial services companies directly bear this risk (as outlined in the contract). An indirect residual value risk occurs when, based on a residual value guarantee, the residual value risk has passed to a third party, such as a dealer. In such cases, an initial counterparty default risk associated with this third party exists (the residual value guarantor). If the guarantor defaults, the residual value risk passes to our financial services companies.

Management of the residual value risk is based on a defined control cycle, which ensures that risks are fully assessed, monitored, responded to and communicated. This process structure enables us to manage residual risks professionally and also to systematically improve and enhance the way we handle residual value risks.

In the course of our risk management, the appropriateness of the risk provision is assessed regularly, as in the residual value risk potential. In the process, we compare the contractually agreed residual values with the obtainable fair values. These are determined utilizing data from external service providers and our own marketing data. We do not take account of the possible gains on residual market values when recognizing loss allowances.

Resulting from potential of residual value risks, a variety of measures are initiated in order to limit these risks. Current market circumstances and future influencing factors must be considered when making a residual value recommendation related to new business.

Credit risk describes the risk of losses due to defaults in customer transactions, specifically by the borrower or lessee. Default occurs when the borrower or lessee is unable or unwilling to make the payments due. This includes late or partial payment of interest and principal on the part of the contracting party.

Credit checks on borrowers are the primary basis for lending decisions. Rating and scoring systems are used to provide an objective decision-making basis for granting loans and leases.

Risks are managed and monitored within the framework of corresponding processes relating to economic circumstances and collateral, adherence to limits, contractual obligations and conditions stipulated both by outside parties and the company itself. As such, commitments are managed according to the degree of risk involved (standard, intensified and problem loan management).

More information on risks in the financial services business can be found in the 2019 annual reports of Volkswagen Financial Services AG and Volkswagen Bank GmbH.

Opportunities and risks from mergers & acquisitions and/or other strategic partnerships/investments

The most significant risks from the regular GRC process and QRP are linked to the cooperation with other partners.

Opportunities and risks from partnerships

As part of our future program TOGETHER 2025⁺, we are stepping up our efforts to forge collaborations, both for the transformation of our core business and for the establishment of the new mobility solutions business.

In the area of battery cells, possible risks could arise from potential disagreement with our partners, possible delays in battery cell development, or delayed battery cell production.

With the marketing of the Modular Electric Drive Toolkit to third parties, as is conceivable as part of the strategic alliance with Ford, for example, damage claims could arise in the event of problems with procurement, production and quality.

By entering into partnerships at a local level, we aim to identify regional customer needs more precisely, establish competitive cost structures and thus 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. At the same time, there is a risk that the interests of business partners differ from our own. 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 also protects its expertise with legal action.

Risks arising from the recoverability of goodwill or brand names

Volkswagen tests at least once a year on the basis of underlying cash-generating units, if the value of the goodwill or the brand names has been impaired. If there are objective indications that the recoverable amount of the asset concerned is lower than the carrying amount, then Volkswagen recognizes this as a non-cash impairment. An impairment can be caused, among other things, by an increase in interest rates or deteriorating business prospects.

Risks from the disposal of equity investments

An unexpected need for funding, for example in connection with the diesel issue, may lead to assets having to be sold for an amount not equivalent to their value.

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 Volkswagen Group across all risk categories result from a negative trend in markets and unit sales, quality problems, and the failure to develop products in line with demand and regulations, especially in view of e-mobility and digitalization. We have added cyber security and failure to meet CO_2-related regulations to this list given their growing importance. The Volkswagen Group is still exposed to risks from the diesel issue. Depending on the course of events, the spread of the coronavirus could have a negative impact on 2020. 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.

Prospects for 2020

The Volkswagen Group's Board of Management expects the global economy to continue growing in 2020 at the level of the previous year. We still believe that risks will arise from protectionist tendencies, turbulence in the financial markets and structural deficits in individual countries. In addition, growth prospects will be negatively impacted by continuing geopolitical tensions and conflicts as well as epidemics spanning countries and regions, such as the current spread of the coronavirus. We anticipate that momentum in both the advanced economies and the emerging markets will be similar to that seen in 2019. We expect to see the strongest rates of expansion in Asia's emerging economies.

We predict that trends in the markets for passenger cars in the individual regions will be mixed in 2020. Overall, the volume of global demand for new vehicles will probably match that of 2019. For 2020, we anticipate that the volume of new passenger car registrations in Western Europe will be distinctly below that recorded in the reporting period. After a positive performance overall in recent years, we expect demand in the German passenger car market to fall noticeably year-on-year in 2020. Sales of passenger cars are expected to fall slightly short of the prior-year figures in markets in Central and Eastern Europe in 2020. The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America in 2020 is likely to be slightly lower than in the prior year. We expect to see an overall moderate increase in new registrations for passenger cars and light commercial vehicles in the South American markets in 2020 compared with the previous year. The passenger car markets in the Asia-Pacific region are expected to be at the prior-year level in 2020.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed in 2020; on the whole, we anticipate a slight dip in demand.

We expect a distinct year-on-year fall in 2020 of new registrations of mid-sized and heavy trucks with a gross weight of more than six tonnes in the markets relevant for the Commercial Vehicles Business Area. In the bus markets that are relevant for the Volkswagen Group, we expect to see a slight increase in overall demand in 2020 compared with the previous year.

We believe that automotive financial services will again be very important for vehicle sales worldwide in 2020.

The Volkswagen Group is well prepared for the future challenges pertaining to automobility business activities and for the mixed development of the regional automotive markets. Our brand diversity, our presence in all major world markets, our broad and selectively expanded product range, and our technologies and services put us in a good competitive position worldwide. As part of the transformation of our core business, we are positioning our Group brands with an even stronger focus on their individual characteristics, and are optimizing the vehicle and drive portfolio. The focus is primarily on our vehicle fleet's carbon footprint and on the most attractive and fastest-growing market segments. In addition, we are working to leverage the advantages of our multibrand Group even more effectively with the ongoing development of new technologies and the enhancement of our toolkits.

We expect deliveries to customers of the Volkswagen Group in 2020 to be in line with the previous year amid market conditions that continue to be demanding.

Challenges will arise particularly from the economic situation, the increasing intensity of competition, volatile commodity and foreign exchange markets, and more stringent emissions-related requirements.

We expect the sales revenue of the Volkswagen Group to grow by up to 4% in 2020 and the sales revenue of the Passenger Cars Business Area to be moderately higher than in the prior year. In terms of 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 2020. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of 4.0–5.0% amid a moderate decrease in sales revenue. In the Power Engineering Business Area we expect that sales revenue will match that of the previous year and that the operating loss will become smaller. For the Financial Services Division we forecast that sales revenue and the operating result will be in line with the previous year.

Wolfsburg, February 18, 2020
The Board of Management

4

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Income Statement

of the Volkswagen Group for the period January 1 to December 31, 2019

€ million	Note	2019	2018
Sales revenue	**1**	**252,632**	**235,849**
Cost of sales	2	–203,490	–189,500
Gross result		**49,142**	**46,350**
Distribution expenses	3	–20,978	–20,510
Administrative expenses	4	–9,767	–8,819
Other operating income	5	11,453	11,631
Other operating expenses	6	–12,890	–14,731
Operating result		**16,960**	**13,920**
Share of the result of equity-accounted investments	7	3,349	3,369
Interest income	8	910	967
Interest expenses	8	–2,524	–1,547
Other financial result	9	–339	–1,066
Financial result		**1,396**	**1,723**
Earnings before tax		**18,356**	**15,643**
Income tax income/expense	10	–4,326	–3,489
Current		–4,147	–3,533
Deferred		–180	43
Earnings after tax		**14,029**	**12,153**
of which attributable to			
Noncontrolling interests		143	17
Volkswagen AG hybrid capital investors		540	309
Volkswagen AG shareholders		13,346	11,827
Basic/diluted earnings per ordinary share in €	**11**	**26.60**	**23.57**
Basic/diluted earnings per preferred share in €	**11**	**26.66**	**23.63**

Statement of Comprehensive Income

Changes in comprehensive income for the period January 1 to December 31, 2018

€ million	Total	Equity attributable to Volkswagen AG shareholders	Equity attributable to Volkswagen AG hybrid capital investors	Equity attributable to noncontrolling interests
Earnings after tax	**12,153**	**11,827**	**309**	**17**
Pension plan remeasurements recognized in other comprehensive income				
Pension plan remeasurements recognized in other comprehensive income, before tax	144	145	–	–1
Deferred taxes relating to pension plan remeasurements recognized in other comprehensive income	–88	–88	–	0
Pension plan remeasurements recognized in other comprehensive income, net of tax	56	57	–	–1
Fair Value valuation of other participations and securities (equity instruments) that will not be reclassified to profit or loss, net of tax	19	19	–	–
Share of other comprehensive income of equity-accounted investments that will not be reclassified to profit or loss, net of tax	34	34	–	–
Items that will not be reclassified to profit or loss	**110**	**110**	**–**	**–1**
Exchange differences on translating foreign operations				
Gains/losses on currency translation recognized in other comprehensive income	–406	–406	–	1
Transferred to profit or loss	61	61	–	0
Exchange differences on translating foreign operations, before tax	–345	–345	–	1
Deferred taxes relating to exchange differences on translating foreign operations	–8	–8	–	–
Exchange differences on translating foreign operations, net of tax	–353	–353	–	1
Hedging				
Fair value changes recognized in other comprehensive income (OCI I)	–568	–568	–	0
Transferred to profit or loss (OCI I)	–1,939	–1,939	–	0
Cash flow hedges (OCI I), before tax	–2,506	–2,506	–	0
Deferred taxes relating to cash flow hedges (OCI I)	715	715	–	0
Cash flow hedges (OCI I), net of tax	–1,792	–1,791	–	0
Fair value changes recognized in other comprehensive income (OCI II)	–1,360	–1,360	–	–
Transferred to profit or loss (OCI II)	377	377	–	–
Cash flow hedges (OCI II), before tax	–983	–983	–	–
Deferred taxes relating to cash flow hedges (OCI II)	291	291	–	–
Cash flow hedges (OCI II), net of tax	–692	–692	–	–
Fair value valuation of securities and receivables (debt instruments) that may be reclassified to profit or loss				
Fair value changes recognized in other comprehensive income	–5	–5	–	–
Transferred to profit or loss	1	1	–	–
Fair value valuation of securities and receivables (debt instruments) that may be reclassified to profit or loss, before tax	–4	–4	–	–
Deferred taxes relating to fair value valuation of securities and receivables (debt instruments) recognized in other comprehensive income	1	1	–	0
Fair value valuation of securities and receivables (debt instruments) that may be reclassified to profit or loss, net of tax	–3	–3	–	0
Share of other comprehensive income of equity-accounted investments that may be reclassified to profit or loss, net of tax	28	28	–	–
Items that may be reclassified to profit or loss	**–2,811**	**–2,812**	**–**	**0**
Other comprehensive income, before tax	–3,612	–3,612	–	0
Deferred taxes relating to other comprehensive income	911	911	–	0
Other comprehensive income, net of tax	**–2,701**	**–2,701**	**–**	**0**
Total comprehensive income	**9,452**	**9,126**	**309**	**17**

Changes in comprehensive income for the period January 1 to December 31, 2019

€ million	Total	Equity attributable to Volkswagen AG shareholders	Equity attributable to Volkswagen AG hybrid capital investors	Equity attributable to noncontrolling interests
Earnings after tax	**14,029**	**13,346**	**540**	**143**
Pension plan remeasurements recognized in other comprehensive income				
Pension plan remeasurements recognized in other comprehensive income, before tax	–8,011	–7,993	–	–18
Deferred taxes relating to pension plan remeasurements recognized in other comprehensive income	2,429	2,423	–	6
Pension plan remeasurements recognized in other comprehensive income, net of tax	–5,582	–5,570	–	–11
Fair Value valuation of other participations and securities (equity instruments) that will not be reclassified to profit or loss, net of tax	–27	–26	–	–1
Share of other comprehensive income of equity-accounted investments that will not be reclassified to profit or loss, net of tax	–3	–1	–	–2
Items that will not be reclassified to profit or loss	**–5,612**	**–5,597**	**–**	**–15**
Exchange differences on translating foreign operations				
Gains/losses on currency translation recognized in other comprehensive income	572	565	–	7
Transferred to profit or loss	2	2	–	0
Exchange differences on translating foreign operations, before tax	574	567	–	7
Deferred taxes relating to exchange differences on translating foreign operations	12	12	–	–
Exchange differences on translating foreign operations, net of tax	586	579	–	7
Hedging				
Fair value changes recognized in other comprehensive income (OCI I)	–1,622	–1,618	–	–4
Transferred to profit or loss (OCI I)	–782	–784	–	2
Cash flow hedges (OCI I), before tax	–2,404	–2,402	–	–2
Deferred taxes relating to cash flow hedges (OCI I)	708	707	–	1
Cash flow hedges (OCI I), net of tax	–1,697	–1,695	–	–1
Fair value changes recognized in other comprehensive income (OCI II)	–1,490	–1,490	–	0
Transferred to profit or loss (OCI II)	997	996	–	1
Cash flow hedges (OCI II), before tax	–493	–494	–	1
Deferred taxes relating to cash flow hedges (OCI II)	146	146	–	0
Cash flow hedges (OCI II), net of tax	–347	–348	–	1
Fair value valuation of securities and receivables (debt instruments) that may be reclassified to profit or loss				
Fair value changes recognized in other comprehensive income	23	23	–	–
Transferred to profit or loss	1	1	–	–
Fair value valuation of securities and receivables (debt instruments) that may be reclassified to profit or loss, before tax	24	24	–	–
Deferred taxes relating to fair value valuation of securities and receivables (debt instruments) recognized in other comprehensive income	–7	–7	–	–
Fair value valuation of securities and receivables (debt instruments) that may be reclassified to profit or loss, net of tax	17	17	–	–
Share of other comprehensive income of equity-accounted investments that may be reclassified to profit or loss, net of tax	78	77	–	1
Items that may be reclassified to profit or loss	**–1,363**	**–1,370**	**–**	**7**
Other comprehensive income, before tax	–10,263	–10,248	–	–14
Deferred taxes relating to other comprehensive income	3,288	3,282	–	7
Other comprehensive income, net of tax	**–6,974**	**–6,967**	**–**	**–8**
Total comprehensive income	**7,055**	**6,379**	**540**	**136**

Balance Sheet

of the Volkswagen Group as of December 31, 2019

€ million	Note	Dec. 31, 2019	Dec. 31, 2018
Assets			
Noncurrent assets			
Intangible assets	12	66,214	64,613
Property, plant and equipment	13, 34	66,152	57,630
Lease assets	14, 34	48,938	43,545
Investment property	14	538	496
Equity-accounted investments	15	8,169	8,434
Other equity investments	15	1,902	1,474
Financial services receivables	16	86,973	78,692
Other financial assets	17	5,553	6,521
Other receivables	18	2,722	2,608
Tax receivables	19	341	476
Deferred tax assets	19	13,106	10,131
		300,608	**274,620**
Current assets			
Inventories	20	46,742	45,745
Trade receivables	21	17,941	17,888
Financial services receivables	16	58,615	54,216
Other financial assets	17	12,216	11,586
Other receivables	18	7,272	6,203
Tax receivables	19	1,190	1,879
Marketable securities	22	16,769	17,080
Cash, cash equivalents and time deposits	23	25,923	28,938
Assets held for sale		795	–
		187,463	**183,536**
Total assets		**488,071**	**458,156**

€ million	Note	Dec. 31, 2019	Dec. 31, 2018
Equity and Liabilities			
Equity	**24**		
Subscribed capital		1,283	1,283
Capital reserve		14,551	14,551
Retained earnings		96,929	91,105
Other reserves		–3,646	–2,417
Equity attributable to Volkswagen AG hybrid capital investors		12,663	12,596
Equity attributable to Volkswagen AG shareholders and hybrid capital investors		121,781	117,117
Noncontrolling interests		1,870	225
		123,651	**117,342**
Noncurrent liabilities			
Financial liabilities	25	113,556	101,126
Other financial liabilities	26	4,499	3,219
Other liabilities	27	7,271	6,448
Deferred tax liabilities	28	5,007	5,030
Provisions for pensions	29	41,389	33,097
Provisions for taxes	28	2,991	3,047
Other provisions	30	21,783	20,879
		196,497	**172,846**
Current liabilities			
Put options and compensation rights granted to noncontrolling interest shareholders	31	–	1,853
Financial liabilities	25	87,912	89,757
Trade payables	32	22,745	23,607
Tax payables	28	408	456
Other financial liabilities	26	10,858	9,416
Other liabilities	27	19,320	17,593
Provisions for taxes	28	1,876	1,412
Other provisions	30	24,434	23,874
Liabilities associated with assets held for sale		370	–
		167,924	**167,968**
Total equity and liabilities		**488,071**	**458,156**

Statement of Changes in Equity

of the Volkswagen Group for the period January 1 to December 31, 2019

				OTHER RESERVES
€ million	Subscribed capital	Capital reserve	Retained earnings	Currency translation reserve
Unadjusted balance at Jan. 1, 2018	**1,283**	**14,551**	**81,367**	**–3,223**
Changes in accounting policy to reflect IFRS 9 and 15	–	–	–282	–
Balance at Jan. 1, 2018	**1,283**	**14,551**	**81,085**	**–3,223**
Earnings after tax	–	–	11,827	–
Other comprehensive income, net of tax	–	–	57	–353
Total comprehensive income	**–**	**–**	**11,884**	**–353**
Disposal of equity instruments	–	–	113	–
Capital increases/Capital decreases[1]	–	–	–	–
Dividends payment	–	–	–1,967	–
Capital transactions involving a change in ownership interest	–	–	–10	–
Other changes	–	–	0	–
Balance at Dec. 31, 2018	**1,283**	**14,551**	**91,105**	**–3,576**
Balance at Jan. 1, 2019	**1,283**	**14,551**	**91,105**	**–3,576**
Earnings after tax	–	–	13,346	–
Other comprehensive income, net of tax	–	–	–5,570	579
Total comprehensive income	**–**	**–**	**7,776**	**579**
Disposal of equity instruments	–	–	–4	–
Capital increases/Capital decreases	–	–	–	–
Dividends payment	–	–	–2,419	–
Capital transactions involving a change in ownership interest[2]	–	–	390	173
Other changes	–	–	81	–
Balance at Dec. 31, 2019	**1,283**	**14,551**	**96,929**	**–2,824**

1 Volkswagen AG recorded an inflow of cash funds amounting to €2,750 million, less transaction costs of €19 million, from the hybrid capital issued in June 2018. Additionally, there were noncash effects from the deferral of taxes amounting to €6 million. The hybrid capital is required to be classified as equity instruments granted. The calling of the first tranche of the hybrid capital issued in September 2013 resulted in an outflow of cash funds of €1,250 million in September 2018. In addition, other effects of €14 million had to be recognized in equity.
2 For the change in capital transactions involving a change in ownership interest see the section entitled “Key events”.
3 As of fiscal year 2019, due to a change of IAS 12, attributable earnings and dividends payment related to hybrid capital are reported without tax effects.

Explanatory notes on equity are presented in the note relating to equity.

	HEDGING							
	Cash flow hedges (OCI I)	Deferred costs of hedging (OCI II)	Equity and debt instruments	Equity-accounted investments	Equity attributable to Volkswagen AG hybrid capital investors[3]	Equity attributable to Volkswagen AG shareholders and hybrid capital investors	Noncontrolling interests	Total equity
	3,525	**–**	**91**	**166**	**11,088**	**108,849**	**229**	**109,077**
	56	63	–225	–	–	–388	1	–387
	3,581	**63**	**–133**	**166**	**11,088**	**108,461**	**229**	**108,690**
	–	–	–	–	309	12,136	17	12,153
	–1,791	–692	16	62	–	–2,701	0	–2,701
	–1,791	**–692**	**16**	**62**	**309**	**9,435**	**17**	**9,452**
	–	–	–113	–	–	–	–	–
	–	–	–	–	1,501	1,501	–	1,501
	–	–	–	–	–403	–2,370	–4	–2,375
	–	–	–	–	–	–10	–18	–28
	–	–	–	–	101	101	2	102
	1,790	**–629**	**–230**	**228**	**12,596**	**117,117**	**225**	**117,342**
	1,790	**–629**	**–230**	**228**	**12,596**	**117,117**	**225**	**117,342**
	–	–	–	–	540	13,886	143	14,029
	–1,695	–348	–9	76	–	–6,967	–8	–6,974
	–1,695	**–348**	**–9**	**76**	**540**	**6,920**	**136**	**7,055**
	–	–	4	–	–	–	–	–
	–	–	–	–	–	–	–	–
	–	–	–	–	–472	–2,891	–9	–2,899
	1	0	–1	–10	–	553	1,519	2,071
	–	–	–	1	–	82	–1	81
	95	**–977**	**–235**	**295**	**12,663**	**121,781**	**1,870**	**123,651**

Cash flow statement

of the Volkswagen Group for the period January 1 to December 31, 2019

€ million	2019	2018
Cash and cash equivalents at beginning of period	**28,113**	**18,038**
Earnings before tax	18,356	15,643
Income taxes paid	–2,914	–3,804
Depreciation and amortization of, and impairment losses on, intangible assets, property, plant and equipment, and investment property[1]	12,046	11,034
Amortization of and impairment losses on capitalized development costs[1]	3,665	3,668
Impairment losses on equity investments[1]	300	170
Depreciation of and impairment losses on lease assets[1]	8,428	7,689
Gain/loss on disposal of noncurrent assets and equity investments	–4	98
Share of the result of equity-accounted investments	460	244
Other noncash expense/income	–730	347
Change in inventories	–674	–5,372
Change in receivables (excluding financial services)	–893	–6,400
Change in liabilities (excluding financial liabilities)	2,297	3,645
Change in provisions	1,646	–762
Change in lease assets	–13,204	–11,647
Change in financial services receivables	–10,796	–7,282
Cash flows from operating activities	**17,983**	**7,272**
Investments in intangible assets (excluding development costs), property, plant and equipment, and investment property	–14,230	–13,729
Additions to capitalized development costs	–5,171	–5,234
Acquisition of subsidiaries	–673	–470
Acquisition of other equity investments	–420	–420
Disposal of subsidiaries	3	–26
Disposal of other equity investments	177	210
Proceeds from disposal of intangible assets, property, plant and equipment, and investment property	237	282
Change in investments in securities	387	–1,378
Change in loans and time deposits	–1,456	–826
Cash flows from investing activities	**–21,146**	**–21,590**
Capital contributions/capital redemptions	–	1,491
Dividends paid	–2,899	–2,375
Capital transactions with noncontrolling interest shareholders	1,368	–28
Proceeds from issuance of bonds	25,916	35,308
Repayments of bonds	–19,784	–15,290
Changes in other financial liabilities	–4,509	5,488
Repayments of lease liabilities	–957	–29
Cash flows from financing activities	**–865**	**24,566**
Effect of exchange rate changes on cash and cash equivalents	243	–173
Change of loss allowance within cash and cash equivalents	1	–1
Net change in cash and cash equivalents	**–3,784**	**10,075**
Cash and cash equivalents at end of period	**24,329**	**28,113**
Cash and cash equivalents at end of period	24,329	28,113
Securities, loans and time deposits	29,099	28,036
Gross liquidity	**53,428**	**56,148**
Total third-party borrowings	–201,468	–190,883
Net liquidity	**–148,040**	**–134,735**

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, 2019

Basis of presentation

Volkswagen AG is domiciled in Wolfsburg, Germany, and entered in the commercial register at the Braunschweig Local Court under No. HRB 100484. 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 2019 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 generally retained. The only changes required resulted from new or amended standards and in relation to the definition of cash-generating units (see disclosure in the "Key Events" section).

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 18, 2020. 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 2019.

A number of requirements entered into force on January 1, 2019 as part of the 2017 improvements to the International Financial Reporting Standards (2017 annual improvements project). They include clarifications to IAS 12, IAS 23, IFRS 3 and IFRS 11. Additions were made to IAS 12 (Income Taxes) to clarify that the way any income tax consequences of dividend payments are recognized is based on the way the transactions have been recognized that made the dividend payment possible. Furthermore, guidance was added to IAS 23 (Borrowing Costs) to clarify how the weighted average of the borrowing costs is determined. Moreover, additional guidance in IFRS 3 (Business Combinations) and IFRS 11 (Joint Arrangements) explains that, on obtaining control of equity investments formerly recognized as joint operations, the rules for a business combination achieved in stages must be applied.

The amendments to IAS 28 (Investments in Associates and Joint Ventures) clarify that, with effect from January 1, 2019, long-term financial instruments representing a net investment in an associate or joint venture that are not accounted for using the equity method should be accounted for using the impairment rules of IFRS 9 (Financial Instruments).

In addition, amendments to IFRS 9 (Financial Instruments) have applied since January 1, 2019, which clarify that certain financial instruments that include a prepayment feature with negative compensation can be measured at amortized cost or at fair value directly in equity.

IFRIC 23 (Uncertainty over Income Tax Treatments) also applies: it requires that tax risks must be taken into account if it is probable that the tax authorities will not accept tax treatments in the income tax filing.

Moreover, it was clarified in IAS 19 (Employee Benefits) that the actuarial assumptions must be updated at the time of a plan amendment, curtailment, or settlement.

The Volkswagen Group has opted for early application of the amendments to IFRS 9, IAS 39 and IFRS 7 Interest Rate Benchmark Reform (published on September 26, 2019). Application of the amendments would only have been mandatory from January 1, 2020. This affects hedges that existed at the beginning of the reporting period or have subsequently been designated. In application of the associated practical expedient, the Volkswagen Group assumes that the effectiveness of designated hedges will not be negatively impacted by the IBOR reform and that it will consequently not be necessary to terminate any hedges.

The amendments referred to above do not materially affect the Volkswagen Group’s net assets, financial position and results of operations.

IFRS 16 – LEASES

IFRS 16 amends the rules for lease accounting and replaces the previous IAS 17 standard and related interpretations.

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 general, they are instead required to recognize a right-of-use asset and a lease liability for the leases in the balance sheet. In the Volkswagen Group the lease liability is measured on the basis of the present value of outstanding lease payments, while the right-of-use asset is generally measured at the amount of the lease liability plus any direct costs. During the lease term, the right-of-use asset must be depreciated and the lease liability adjusted using the effective interest method and taking the lease payments into account. IFRS 16 offers practical expedients for short-term and low-value leases; the Volkswagen Group makes use of this option and therefore does not recognize right-of-use assets or liabilities for these types of leases. In this respect, the lease payments are continued to be recognized in the income statement in the same way as before. At the initial application date, leases whose term ended before January 1, 2020 were reclassified as short-term leases, irrespective of the start date of the lease. In addition, existing leases were not reassessed at the initial application date to determine whether or not they are leases under the criteria of IFRS 16. Instead, contracts classified as leases under IAS 17 or IFRIC 4 are continued to be accounted for as leases. Contracts not classified as leases under IAS 17 or IFRIC 4 are continued not to be accounted for as leases.

Lessor accounting essentially follows the previous guidance of IAS 17. Lessors are required to 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.

The Volkswagen Group accounts for leases in accordance with IFRS 16, using the modified retrospective method (within the meaning of IFRS 16.C5(b)), for the first time as of January 1, 2019. Prior-year periods have not been restated. According to this method, the lease liability to be recognized at the transition date is the present value of the outstanding lease payments, which is determined using the incremental borrowing rates as of January 1, 2019. The weighted average interest rate applied in the Volkswagen Group was 3.7%.

Applying the permitted exemption, the right-of-use asset is adjusted for the amounts that were recognized in the balance sheet as provisions for onerous operating leases as of December 31, 2018. The right-of-use assets were not tested for impairment in this context at the initial application date.

The initial recognition of right-of-use assets and lease liabilities had the following effects as of January 1, 2019:

> Right-of-use assets of €5.5 billion were recognized in the opening balance sheet (including €5.4 billion under property, plant and equipment and €0.1 billion under investment property). Prepayments capitalized, accrued liabilities and provisions for onerous operating leases were offset with the right-of-use assets. The right-of-use assets recognized included an amount of €0.4 billion that had already been recognized under finance leases as of December 31, 2018. In connection with the initial application of IFRS 16 there was an adjustment to the classification of noncurrent assets, resulting in the reclassification of property, plant and equipment of €0.4 billion to lease assets and investment property.
> Lease liabilities are recognized in the opening balance in an amount of €5.6 billion; they are reported under noncurrent and current financial liabilities. The lease liabilities recognized included an amount of €0.4 billion that had already been recognized under finance leases as of December 31, 2018.
> Initial application did not have any effect on equity.

The difference between the expected payments for operating leases in an amount of €4.9 billion, discounted using the incremental borrowing rate as of December 31, 2018, and the lease liabilities in an amount of €5.6 billion recognized in the opening balance sheet is mainly the result of taking account of existing finance leases and a new estimate of expected lease payments, attributable to the capitalization of certain variable lease payments, for example. The lease terms taken into account when recognizing lease liabilities were also reassessed in accordance with the rules of IFRS 16. In this process, reasonably certain extension or termination options were taken into account in determining the lease payments to be recognized. Moreover, the opening balance sheet does not include lease payments for low-value or short-term leases.

Unlike the previous procedure, under which all operating lease expenses were reported under operating profit, the only items allocated to operating profit in the Automotive Division under IFRS 16 are depreciation charges on right-of-use assets. Interest expense from adding interest on lease liabilities in the Automotive Division is reported in the financial result. This had a positive impact of €0.2 billion on the operating result in fiscal year 2019.

The change in the way expenses from operating leases are presented in the statement of cash flows resulted in an improvement of €1.0 billion in cash flows from operating activities and net cash flow in fiscal year 2019, of which €0.9 billion is attributable to the Automotive Division. Cash flows from financing activities declined accordingly. The increase in financial liabilities attributable to the change in accounting rules had a negative impact of €5.8 billion on the Volkswagen Group’s net liquidity as of December 31, 2019, of which €5.4 billion is attributable to the Automotive Division.

New and amended IFRSs not applied

In its 2019 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[1]	Adopted by the EU	Expected impact
IFRS 3	Business Combinations: Definition of a Business	Oct. 22, 2018	Jan. 1, 2020	No	No material impact
IFRS 17	Insurance Contracts	May 18, 2017	Jan. 1, 2021[2]	No	No material impact
IAS 1 and IAS 8	Presentation of Financial Statements and Accounting Policies, Changes in Accounting Estimates and Errors: Definition of Material	Oct. 31, 2018	Jan. 1, 2020	Yes	No material impact
IAS 1	Classification of liabilities	Jan. 23, 2020	Jan. 1, 2022	No	No material impact

1 Effective date from Volkswagen AG's perspective.
2 The IASB has proposed to defer the effective date to January 1, 2022.

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 (NO_x) emissions had been discovered in emissions tests on certain Volkswagen Group vehicles 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 following publication of a study by the International Council on Clean Transportation in May 2014, Volkswagen AG's Powertrain Development department checked the test set-ups on which the study was based for plausibility, confirming the unusually high NO_x emissions from certain US vehicles with type EA 189 2.0 l diesel engines. 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 engine control unit software of 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 products that have been 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.

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 EPA's publication of the “Notice of Violation” on September 18, 2015, which the Board of Management had not expected, especially at that time, then presented the situation in an entirely different light.

In fiscal year 2019, additional special items of €2.3 billion had to be recognized in connection with the diesel issue. Charges of €2.6 billion were recognized under other operating expenses, which arose from the administrative fine order of €0.5 billion issued in May 2019 by the Stuttgart Public Prosecutor, which ended the ongoing regulatory offense proceeding against Dr. Ing. h.c. F. Porsche AG, and higher provisions for legal risks. This was set against the reversal of reserves for technical measures of €0.3 billion, which reduced cost of sales.

Furthermore, based on the information as it exists and has been established, there continue to be no conclusive findings or assessments available to the Board of Management of Volkswagen AG regarding the described facts that would suggest that a different assessment of the associated risks should have been made.

In August 2018, the control and profit and loss transfer agreement with MAN SE was terminated by extraordinary notice as of January 1, 2019. Following the announcement of the termination of the control and profit and loss transfer agreement and the recording thereof in the commercial register, the noncontrolling shareholders of MAN SE had the right to tender their shares to Volkswagen, pursuant to the provisions of the control and profit and loss transfer agreement, within a two-month period. This resulted in cash outflows of €1.1 billion in the first half of this year for the acquisition of shares tendered and compensation payments. There was a corresponding decline in the amount of put options and compensation rights granted to noncontrolling interest shareholders reported in the balance sheet. The put options granted to noncontrolling interest shareholders of MAN SE expired on March 4, 2019. The remaining liability of €0.7 billion was reclassified directly to equity; €0.3 billion of this amount is attributable to noncontrolling interests.

Since June 28, 2019, 51 million shares of TRATON SE have been traded on the regulated markets of the Frankfurt Stock Exchange and of the Nasdaq Stockholm. The offer price was set at €27.00 per share. This led to an increase of €1.4 billion in the Volkswagen Group’s equity, of which €1.2 billion is reported as noncontrolling interests.

In the case of internally generated intangible assets with finite useful lives and the associated property, plant and equipment in the Passenger Cars Business Area, the individual product or product group has in the past represented the cash-generating unit. This had to be redefined for the Passenger Cars Business Area in the past fiscal year, because the cash flows generated by the individual products are not largely independent of each other any longer. In particular, the fact that emission regulations are being tightened worldwide means that the cash flows of the individual products influence each other to an increasing extent. As a consequence of the change in circumstances, the brands have, since the fourth quarter of 2019, normally been designated as cash-generating units in the Passenger Cars Business Area, thus forming the basis for impairment tests and profitability assessments when initially recognizing internally generated intangible assets. The changed definition of cash-generating units led to a non-recurring reversal of write-downs, which had an effect of €0.9 billion on other operating income in the fourth quarter of 2019 and will lead to increased depreciation and amortization in subsequent periods. Furthermore, impairment losses of €0.2 billion recognized in the first quarters of the fiscal year had to be reversed. In addition, the financial result benefited in an amount of €75 million from the reversal of impairment losses at the Chinese joint ventures. The revised definition of cash-generating units will in future lead to a slight increase in the capitalization ratio.

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:

Number	2019	2018
Volkswagen AG and consolidated subsidiaries		
Germany	151	152
Abroad	714	712
Subsidiaries carried at cost		
Germany	78	70
Abroad	290	251
Associates, joint ventures and other equity investments		
Germany	76	64
Abroad	107	79
	1,416	**1,328**

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 and from 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 Electronics Venture GmbH, Gaimersheim
> 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
> GETAS Verwaltung GmbH & Co. Objekt Augsburg KG, Pullach i. Isartal
> GETAS Verwaltung GmbH & Co. Objekt Heinrich-von-Buz-Straße KG, Pullach i. Isartal
> HABAMO Verwaltung GmbH & Co. Objekt Sterkrade KG, Pullach i. Isartal
> Haberl Beteiligungs-GmbH, Munich
> Karosseriewerk Porsche GmbH & Co. KG, Stuttgart
> MAHAG GmbH, Munich
> MAN Energy Solutions SE, Augsburg
> MOIA GmbH, Berlin
> MOIA Operations Germany GmbH, Hamburg
> 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 Smart Mobility GmbH, Stuttgart
> Porsche Zentrum Hoppegarten GmbH, Stuttgart
> Raffay Versicherungsdienst GmbH, Hamburg
> SEAT Deutschland Niederlassung GmbH, Frankfurt am Main
> 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 Software Asset Management GmbH, Wolfsburg
- Volkswagen Vermögensverwaltung GmbH, Wolfsburg
- Volkswagen Vertriebsbetreuungsgesellschaft mbH, Chemnitz
- Volkswagen Vierte Leasingobjekt GmbH, Braunschweig
- Volkswagen Zubehör GmbH, Dreieich
- Volkswagen Zweite Leasingobjekt GmbH, Braunschweig

CONSOLIDATED SUBSIDIARIES

The fiscal year's changes in the consolidated Group are shown in the following table:

Number	Germany	Abroad
Initially consolidated		
Subsidiaries previously carried at cost	4	13
Newly acquired subsidiaries	0	3
Newly formed subsidiaries	0	5
	4	**21**
Deconsolidated		
Mergers	1	5
Liquidations	2	6
Sales/Other	2	8
	5	**19**

The initial consolidation or deconsolidation 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, Illinois/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, 2019, the quoted market price of the shares in Sinotruk amounted to €1,312 million (previous year: €908 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, 2019, the quoted market price of the shares in Bertrandt amounted to €165 million (previous year: €201 million).

There Holding

Together with the BMW Group, Daimler AG and other companies, Volkswagen holds an equity investment in There Holding B.V., Rijswijk (the Netherlands), an investment company. In turn, There Holding B.V. holds around 85 % of the shares of HERE International B.V., Eindhoven (the Netherlands). HERE International B.V. is one of the world's largest producers of digital road maps for navigation systems. Since the interest held does not grant control in accordance with IFRS 10, HERE International B.V. is included in the financial statements of There Holding B.V. as an associate using the equity method.

Capital increases were implemented at There Holding B.V. in 2019, in which Volkswagen participated. As a result, the shares accounted for using the equity method increased by €69 million. The ownership interest in There Holding B.V. amounted to 29.7 % as of December 31, 2019.

In December 2019, it was announced that additional investors would acquire shares in HERE International B.V. Following the signing in December 2019, Mitsubishi Corporation (MC) and Nippon Telegraph and Telephone Corporation of Japan (NTT) are aiming to jointly acquire 30 % of the shares of HERE International B.V. in the first half of 2020, subject to antitrust approval. The interest held by There Holding B.V. in HERE International B.V. is expected to decline to around 60 % as a result.

Navistar

Navistar International Corporation (Navistar) is a US manufacturer of commercial vehicles; it is based in Lisle, Illinois/USA. Navistar and TRATON GROUP companies have entered into master agreements for strategic technology and supply cooperation as well as a procurement joint venture.

Since two members of TRATON SE's Executive Board are represented on the Board of Directors of Navistar and because of the agreed cooperations, the investment in Navistar is reported as an equity-accounted investment in the consolidated financial statements.

As of December 31, 2019, the quoted market price of the shares in Navistar amounted to €429 million (December 31, 2018: €377 million).

SUMMARIZED FINANCIAL INFORMATION ON MATERIAL ASSOCIATES ON A 100% BASIS

€ million	Sinotruk[1]	Bertrandt[2]	There Holding	Navistar[3]
2019				
Equity interest in %	25	29	30	17
Noncurrent assets	2,351	575	1,131	1,762
Current assets	6,127	468	467	4,441
Noncurrent liabilities	50	313	–	6,336
Current liabilities	4,669	153	0	3,206
Net assets	3,758	578	1,597	–3,339
Sales revenue	8,047	1,058	–	10,004
Earnings after tax from continuing operations	627	16	–390	216
Earnings after tax from discontinued operations	–	–	–	–
Other comprehensive income	0	–1	1	7
Total comprehensive income	627	15	–389	223
Dividends received[4]	47	6	–	–
2018				
Equity interest in %	25	29	30	17
Noncurrent assets	2,239	586	1,763	1,846
Current assets	6,461	469	2	4,528
Noncurrent liabilities	54	306	–	6,478
Current liabilities	5,250	167	1	3,356
Net assets	3,395	583	1,764	–3,461
Sales revenue	8,047	1,020	–	8,625
Earnings after tax from continuing operations	558	25	–351	310
Earnings after tax from discontinued operations	–	–	–	–
Other comprehensive income	0	0	–7	245
Total comprehensive income	558	25	–358	555
Dividends received[4]	50	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 Balance sheet amounts refer to the October 31 reporting date and income statement amounts refer to the period from November 1 to October 31.
4 Proportionate dividends are shown net of withholding tax.

RECONCILIATION OF THE FINANCIAL INFORMATION TO THE CARRYING AMOUNT OF THE EQUITY-ACCOUNTED INVESTMENTS

€ million	Sinotruk	Bertrandt	There Holding	Navistar
2019				
Net assets at January 1	3,395	583	1,764	–3,461
Profit or loss	627	16	–390	216
Other comprehensive income	0	–1	1	7
Changes in reserves	1	–	222	–21
Foreign exchange differences	–46	–	–	–60
Dividends[1]	–218	–20	–	–20
Net assets at December 31	3,758	578	1,597	–3,339
Proportionate equity	940	167	475	–560
Consolidation/Goodwill/Others	–388	80	–	1,007
Carrying amount of equity-accounted investments	552	247	475	447
2018				
Net assets at January 1	3,060	583	2,209	–3,816
Profit or loss	558	25	–351	310
Other comprehensive income	0	0	–7	245
Changes in reserves	–3	–	–87	13
Foreign exchange differences	13	–	–	–191
Dividends[1]	–232	–25	–	–22
Net assets at December 31	3,395	583	1,764	–3,461
Proportionate equity	849	168	522	–582
Consolidation/Goodwill/Others	–402	163	–	1,012
Carrying amount of equity-accounted investments	447	331	522	430

1 Dividends are shown before withholding tax.

SUMMARIZED FINANCIAL INFORMATION ON INDIVIDUALLY IMMATERIAL ASSOCIATES ON THE BASIS OF THE VOLKSWAGEN GROUP'S PROPORTIONATE INTEREST

€ million	2019	2018
Earnings after tax from continuing operations	27	–20
Earnings after tax from discontinued operations	–	–
Other comprehensive income	12	1
Total comprehensive income	39	–20
Carrying amount of equity-accounted investments	597	332

There were unrecognized losses of €54 million (previous year: €– million) relating to investments in associates. Furthermore, 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, and SAIC-Volkswagen Sales Company Ltd., Shanghai, China, were material at the 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.

SUMMARIZED FINANCIAL INFORMATION ON THE MATERIAL JOINT VENTURES ON A 100% BASIS

€ million	FAW-Volkswagen Automotive Company	SAIC-Volkswagen Automotive Company[1]	SAIC-Volkswagen Sales Company
2019			
Equity interest in %	40	50	30
Noncurrent assets	12,069	9,355	896
Current assets	11,876	8,251	4,477
of which cash and cash equivalents	5,423	6,513	210
Noncurrent liabilities	1,221	1,130	160
of which financial liabilities[2]	–	–	–
Current liabilities	15,321	11,674	4,665
of which financial liabilities[2]	29	1	–
Net assets	7,403	4,802	548
Sales revenue	44,181	26,922	32,115
Depreciation and amortization	1,825	2,190	21
Interest income	125	53	5
Interest expenses	4	2	–
Earnings before tax from continuing operations	4,775	3,594	659
Income tax expense	1,251	845	166
Earnings after tax from continuing operations	3,524	2,749	493
Earnings after tax from discontinued operations	–	–	–
Other comprehensive income	–49	3	–
Total comprehensive income	3,475	2,752	493
Dividends received[3]	1,332	1,732	153
2018			
Equity interest in %	40	50	30
Noncurrent assets	10,651	8,580	671
Current assets	10,903	6,689	3,680
of which cash and cash equivalents	3,764	4,412	206
Noncurrent liabilities	1,260	1,205	110
of which financial liabilities[2]	–	–	–
Current liabilities	12,936	8,526	3,692
of which financial liabilities[2]	–	4	–
Net assets	7,358	5,538	549
Sales revenue	41,607	28,863	33,212
Depreciation and amortization	1,335	1,479	8
Interest income	123	64	5
Interest expenses	–	1	–
Earnings before tax from continuing operations	4,851	4,588	665
Income tax expense	1,186	1,040	167
Earnings after tax from continuing operations	3,665	3,548	498
Earnings after tax from discontinued operations	–	–	–
Other comprehensive income	47	1	–
Total comprehensive income	3,712	3,549	498
Dividends received[3]	1,209	1,626	148

1 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.

2 Excluding trade liabilities.

3 Proportionate dividends are shown net of withholding tax.

RECONCILIATION OF THE FINANCIAL INFORMATION TO THE CARRYING AMOUNT OF THE EQUITY-ACCOUNTED INVESTMENTS

€ million	FAW-Volkswagen Automotive Company	SAIC-Volkswagen Automotive Company	SAIC-Volkswagen Sales Company
2019			
Net assets at January 1	7,358	5,538	549
Profit or loss	3,524	2,749	493
Other comprehensive income	–49	3	–
Changes in share capital	–	–	–
Changes in reserves	–	–	–
Foreign exchange differences	54	37	16
Dividends[1]	–3,483	–3,524	–509
Net assets at December 31	7,403	4,802	548
Proportionate equity	2,961	2,401	164
Consolidation/Goodwill/Others	–760	–803	–
Carrying amount of equity-accounted investments	2,201	1,599	164
2018			
Net assets at January 1	6,851	5,405	546
Profit or loss	3,665	3,548	498
Other comprehensive income	47	1	–
Changes in share capital	–	–	–
Changes in reserves	–	–	–
Foreign exchange differences	68	–23	–1
Dividends[1]	–3,273	–3,393	–494
Net assets at December 31	7,358	5,538	549
Proportionate equity	2,943	2,769	165
Consolidation/Goodwill/Others	–593	–851	–
Carrying amount of equity-accounted investments	2,350	1,918	165

1 Dividends are shown before withholding tax.

SUMMARIZED FINANCIAL INFORMATION ON INDIVIDUALLY IMMATERIAL JOINT VENTURES ON THE BASIS OF THE VOLKSWAGEN GROUP'S PROPORTIONATE INTEREST

€ million	2019	2018
Earnings after tax from continuing operations	434	319
Earnings after tax from discontinued operations	–	–
Other comprehensive income	3	–2
Total comprehensive income	436	317
Carrying amount of equity-accounted investments	1,887	1,939

There were unrecognized losses of €29 million (previous year: €– million) relating to investments in joint ventures. Contingent liabilities to joint ventures amounted to €224 million (previous year: €183 million), while financial guarantees stood at €134 million (previous year: €146 million). Cash funds of €276 million (previous year: €268 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

On July 12, 2019, Volkswagen announced that, together with Ford Motor Company (Ford), it would be investing in Argo AI, a company that is working on the development of a system for autonomous driving. The investment will firstly include the provision of financial resources totaling USD 1.0 billion, spread over several years, and secondly Volkswagen will contribute its consolidated subsidiary Autonomous Intelligent Driving (AID). Furthermore, Volkswagen will acquire existing Argo AI shares from Ford for a purchase price of USD 500 million, payable in three equal annual installments. The transaction, including the contribution of AID, is expected to be completed in the first half of 2020 – subject to the required regulatory approvals and other conditions precedent.

On January 30, 2020, the Board of Management and Supervisory Board of Volkswagen AG resolved to sell the Volkswagen Group's 76% interest in RENK AG. RENK AG is a global provider of high-quality gear units and propulsion systems for various areas of application. It is part of the Power Engineering segment. The sale is expected to be completed in the second half of 2020 – subject to approval by the regulatory authorities.

In accordance with IFRS 5, the RENK AG subgroup and AID are reported as disposal groups held for sale and measured at their carrying amounts.

The assets and liabilities of the disposal groups are each reported in separate balance sheet accounts. The main categories of the assets and liabilities of the disposal groups are presented below:

€ million	Dec. 31, 2019
Intangible assets	110
Property, plant and equipment	261
Inventories	230
Cash and securities	4
Tax assets	2
Other assets	190
Assets held for sale	**795**
Financial liabilities	9
Provisions	72
Other liabilities	289
Liabilities associated with assets held for sale	**370**

Accumulated income and expenses in connection with the disposal groups classified as held for sale and recognized in other comprehensive income amount to €4.6 million.

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 have the same maturity.

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:

		BALANCE SHEET MIDDLE RATE ON DECEMBER 31		INCOME STATEMENT AVERAGE RATE	
	€1 =	2019	2018	2019	2018
Argentina	ARS	67.23626	43.15687	53.78083	32.89363
Australia	AUD	1.60080	1.62240	1.61071	1.58021
Brazil	BRL	4.51350	4.44485	4.41485	4.30729
Canada	CAD	1.46205	1.55930	1.48595	1.53032
Czech Republic	CZK	25.40650	25.72450	25.66983	25.64308
India	INR	80.15450	79.90650	78.86396	80.71466
Japan	JPY	121.89500	125.91000	122.08649	130.40158
Mexico	MXN	21.24340	22.52035	21.56326	22.71496
People's Republic of China	CNY	7.81470	7.87725	7.73444	7.80766
Poland	PLN	4.25970	4.29780	4.29784	4.26098
Republic of Korea	KRW	1,296.35000	1,276.90000	1,304.89265	1,299.41384
Russia	RUB	69.84685	79.83765	72.46709	74.08214
South Africa	ZAR	15.76470	16.46690	16.17716	15.62243
Sweden	SEK	10.44505	10.25070	10.58593	10.25830
United Kingdom	GBP	0.84995	0.89690	0.87744	0.88476
USA	USD	1.12275	1.14525	1.11974	1.18156

Accounting policies

MEASUREMENT PRINCIPLES

With certain exceptions, such as financial instruments measured at fair value 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 normally amortized over three years.

In accordance with IAS 38, research costs are recognized as expenses when incurred.

Since the fourth quarter of 2019, development costs for future series products and other internally generated intangible assets are capitalized at cost, provided the cash-generating unit to which the respective intangible asset is attributable is not impaired. 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 functional areas 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 to determine the recoverable amount of goodwill and intangible assets with finite and indefinite useful lives. Since the fourth quarter of 2019, normally the respective brand is the cash-generating unit that is used as the testing level. 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	2019	2018
Passenger Cars segment	5.7%	5.5%
Commercial Vehicles segment	7.7%	6.8%
Power Engineering segment	7.9%	7.8%

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; changes in the leverage as a result of the initial application of IFRS 16 are taken into account appropriately. 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 operational equipment is 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 other 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 (see also disclosures on adjustments to cash-generating units in the “Key Events” section).

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.

LEASES

Until December 31, 2018, the Volkswagen Group accounted for leases in accordance with IAS 17. A lease was defined as a contract under which the lessor transfers to the lessee the right to use an asset for an agreed period of time in return for a series of payments. The accounting treatment of the lease at the lessee and lessor depended on the distribution of the risks and rewards associated with the leased asset.

If the material risks and rewards were attributable to the Volkswagen Group as lessee, the leased assets concerned were 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 was shorter. The payment obligations arising from the future lease payments were discounted and recorded as a liability in the balance sheet.

Where the Volkswagen Group was the lessee of operating lease assets, i.e. if not all material risks and rewards were transferred, lease and rental payments were recorded directly as expenses in profit or loss.

Since January 1, 2019, the Volkswagen Group has accounted for leases in accordance with IFRS 16, which defines a lease as a contract or part of a contract in which a lessor transfers to a lessee the right to use an asset for an agreed period of time in exchange for consideration.

RIGHT-OF-USE ASSETS/LEASE LIABILITIES

If the Volkswagen Group is the lessee, it generally recognizes in its balance sheet a right-of-use asset and a lease liability for all leases. In the Volkswagen Group the lease liability is measured on the basis of the present value of outstanding lease payments, while the right-of-use asset is always measured at the amount of the lease liability plus any initial direct costs.

During the lease term, the right-of-use asset is always depreciated on a straight-line basis over the term of the lease. The lease liability is adjusted using the effective interest method and taking the lease payments into account.

The right-of-use assets are reported in the balance sheet under those items in which the assets underlying the lease would have been recognized if the Volkswagen Group had been their beneficial owner. For this reason, the right-of-use assets are presented under noncurrent assets, mostly in property, plant and equipment, as of the balance sheet date and included in impairment tests of property, plant and equipment conducted in accordance with IAS 36.

There are practical expedients for short-term and low-value leases; the Volkswagen Group makes use of this option and therefore does not recognize right-of-use assets or liabilities for these types of leases. In this respect, the lease payments will continue to be recognized in the income statement. Leases are accounted for as of low value if the value of the leased asset as new is no higher than €5,000. Furthermore, the accounting rules of IFRS 16 are not applied to leases of intangible assets.

A large number of leases contain extension and termination options. The determination of the lease terms considers all relevant facts and circumstances that create an economic incentive to exercise or not to exercise the option. Optional periods are taken into account in determining the lease term, if it is reasonably certain that the option will or will not be exercised.

LEASE ASSETS

The accounting treatment of leases of lease assets is based on the classification into operating leases and finance leases. The classification is made on the basis of the distribution of risks and rewards incidental to ownership of the lease asset.

If the lease is an operating lease, the Volkswagen Group is exposed to the material risks and rewards. The lease asset is recognized at amortized cost in the Volkswagen Group's noncurrent assets and the lease installments collected in the period are recognized as income in the income statement.

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. 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.

Under a finance lease, the material risks and rewards are transferred to the lessee. The lease asset is derecognized from the Volkswagen Group's noncurrent assets, and instead a receivable is recognized in the amount of the net investment in the lease.

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 of qualifying assets 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.

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.

IFRS 9 classifies financial assets into the following categories:
> financial assets at fair value through profit or loss;
> financial assets at fair value through other comprehensive income (debt instruments);
> financial assets at fair value through other comprehensive income (equity instruments); and
> financial assets at amortized cost.

Financial liabilities are classified into the following categories:
> financial liabilities at fair value through profit or loss; and
> financial liabilities measured at amortized cost.

In the Volkswagen Group, the categories presented above are allocated to the "at amortized cost" and "at fair value" classes.

FINANCIAL ASSETS AND LIABILITIES AT AMORTIZED COST

Financial assets measured at amortized cost are held under a business model that is aimed at collecting contractual cash flows ("hold" business model). The cash flows of these assets relate solely to payments of principal and interest on the principal amount outstanding. 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;
> taking account of any loss allowances, write-downs for impairment and uncollectibility relating to financial assets; and
> 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.

Financial liabilities measured at amortized cost using the effective interest method relate to liabilities to banks, bonds, commercial paper and notes, loans and other liabilities. Gains or losses resulting from changes in amortized cost, including the effects of changes in exchange rates, are recognized through profit or loss. For reasons of materiality, discounting or unwinding of discounting is not applied to current liabilities (due within one year).

Financial assets and liabilities measured at amortized cost are
> receivables from financing business;
> trade receivables and payables;
> other receivables and financial assets and liabilities;
> financial liabilities; and
> cash, cash equivalents and time deposits.

FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE

Changes in the carrying amount of financial assets measured at fair value are recognized either through OCI or through profit or loss.

The fair value through OCI (debt instruments) category comprises exclusively debt instruments. Changes in fair value are always recognized directly in equity, net of deferred taxes. Certain changes in the fair value of these debt instruments (impairment losses, foreign exchange gains and losses, interest calculated using the effective interest method) are recognized immediately in profit or loss.

Financial assets measured at fair value through other comprehensive income (debt instruments) are held under a business model aimed at both collecting contractual cash flows and selling financial assets ("hold and sell" business model).

Financial assets that are equity instruments are also measured at fair value. Here Volkswagen exercises the option to recognize changes in fair value always through other comprehensive income, i.e. gains and losses from the measurement of equity investments are never recycled to the income statement and instead reclassified to revenue reserves on disposal (no reclassification).

Any financial assets not measured at either amortized cost or through other comprehensive income are allocated to the fair value through profit or loss category. Financial assets at fair value through profit or loss are aimed in particular at generating cash flows by selling financial instruments (“sell” business model).

At Volkswagen, this category primarily comprises
> hedging relationships to which hedge accounting is not applied and
> investment fund units.

All financial liabilities at fair value through profit or loss relate to derivatives to which hedge accounting is not applied.

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.

In the case of current financial receivables and liabilities, amortized cost generally corresponds to the principal or repayment amount.

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 IFRS 9 and IFRS 7.

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 fair value 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 measurement of hedging instruments and hedged items are recognized in profit or loss. In the Volkswagen Group, IAS 39 is applied alongside IFRS 9 to account for portfolio hedges of interest rate risk in the Financial Services Division.

In the case of hedges of future cash flows (cash flow hedges), the hedging instruments are also measured at fair value. The designated effective portion of the hedging instrument is accounted for through OCI I and the non-designated portion through OCI II. They are only recognized in the income statement when the hedged item is recognized in profit or loss. The ineffective portion of cash flow hedges is recognized through profit or loss immediately.

Derivatives used by the Volkswagen Group for financial management purposes to hedge against interest rate, foreign currency, commodity price, equity price, or fund price risks, but that do not meet the strict hedge accounting criteria of IFRS 9, are classified as financial assets or liabilities at fair value through profit or loss (referred to below as derivatives to which hedge accounting is not applied). 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 for example to the non-designated currency forwards used to hedge sales revenue, interest rate hedges, commodity futures and currency forwards relating to commodity futures.

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.

IMPAIRMENT LOSSES ON FINANCIAL INSTRUMENTS

Financial assets are exposed to default risk, which is taken into account by recognizing loss allowances or, if losses have already been incurred, by recognizing impairment losses. Default risk on loans and receivables in the financial services segment is accounted for by recognizing specific loss allowances and portfolio-based loss allowances.

In particular, a loss allowance is recognized on these financial assets in the amount of the expected loss in accordance with Group-wide standards. The actual specific loss allowances for the losses incurred are then charged to this loss allowance. A potential impairment is assumed not only for 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, but also for receivables that are not past due.

Portfolio-based loss 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. Average historical default probabilities are used in combination with forward-looking parameters for the portfolio concerned to calculate the amount of the impairment loss.

Credit risks must be considered for all financial assets measured at amortized cost or fair value through profit or loss (debt instruments), as well as for contract assets in accordance with IFRS 15 and lease receivables within the scope of IFRS 16. The rules on impairment also apply to risks from irrevocable credit commitments not recognized in the balance sheet and to the measurement of financial guarantees.

As a matter of principle, a simplified process, which takes historical default rates and forward-looking information into account, and specific loss allowances are used to account for impairment losses on receivables outside the Financial Services segment.

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 loss 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 –0.10% (previous year: 0.20%) 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.

Insurance contracts that form part of the insurance business are recognized 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 remote, 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.

Lease liabilities 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, i.e. when the customer has obtained control of the good or service. Where new and used vehicles and original parts are sold, the Company's performance invariably occurs upon delivery, because that is the point when control is transferred, and the inventory risk and, for deliveries to a dealer, invariably also the pricing decision pass to the customer. Revenue is reported net of sales allowances (discounts, rebates, or customer bonuses). The Volkswagen Group measures sales allowances and other variable consideration on the basis of experience and by taking account of current circumstances. Vehicles are normally sold on payment terms. A trade receivable is recognized for the period between vehicle delivery and receipt of payment. Any financing component included in the transaction is only recognized if the period between the transfer of the goods and the payment of consideration is longer than one year and the amount to be accrued is significant.

Sales revenue from financing and finance 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. Sales revenue from operate leases is recognized over the term of the contract on a straight line basis.

In contracts under which the goods or services are transferred over a period of time, revenue is recognized, depending on the type of goods or services provided, either according to the stage of completion or, to simplify, on a straight-line basis; the latter is only allowed, if revenue recognition on a straight-line basis does not differ materially from recognition according to the stage of completion. 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). Contract costs incurred invariably represent the best way to measure the stage of completion for the performance obligation. If the outcome of a performance obligation satisfied over time is not sufficiently certain, but the company expects, as a minimum, to recover its costs, revenue is only recognized in the amount of contract costs incurred (zero profit margin method). If the expected costs exceed the expected revenue, the expected losses are recognized immediately in full as expenses by recognizing impairment losses on the associated contract assets recognized, and additionally by recognizing provisions for any amounts in excess of the impairment losses. Since long-term construction contracts invariably give rise to contingent receivables from customers for the period to completion or payment by the customer, contract assets are recognized for the corresponding amounts. A trade receivable is recognized as soon as the Company has transferred the goods or services in full.

If a contract comprises several separately identifiable components (multiple-element arrangements), these components are recognized separately in accordance with the principles outlined above.

If services are sold to the customer at the same time as the vehicle, and the customer pays for them in advance, the Group recognizes a corresponding contract liability until the services have been transferred. Examples of services that customers pay for in advance are servicing, maintenance and certain warranty contracts as well as mobile online services. For extended warranties granted to customers for a particular model, a provision is normally recognized in the same way as for statutory warranties. If the warranty is optional for the customer or includes an additional service component, the sales revenue is deferred and recognized over the term of the warranty.

Income from the sale of assets for which a Group company has a buyback 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.

Sales revenue is always determined on the basis of the price stated in the contract. If variable consideration (e.g. volume-based bonus payments) has been agreed in a contract, the large number of contracts involved means that revenue has to be estimated using the expected value method. In exceptional cases, the most probable amount method may also be used. Once the expected sales revenue has been estimated, an additional check is carried out to determine whether there is any uncertainty that necessitates the reversal of the revenue initially recognized so that it can be virtually ruled out that sales revenue subsequently has to be adjusted downward. Provisions for reimbursements arise mainly from dealer bonuses.

In multiple element arrangements, the transaction price is allocated to the different performance obligations of the contract on the basis of relative standalone selling prices. In the Automotive Division, non-vehicle-related services are invariably measured at their standalone selling prices for reasons of materiality.

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.

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 as 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 operational equipment) 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. A change to the definition of cash-generating units in the Passenger Cars Business Area was required in the past fiscal year. 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 experience taking into account current market data as well as rating categories and scoring information. The section entitled "IFRS 7 (Financial Instruments)" contains further details on how to determine loss 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 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. Similarly to expenses for the recognition of provisions, income from the reversal of provisions is allocated to the respective 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. In addition, assumptions must be made about the nature and extent of future warranty and ex gratia claims.

For the provisions recognized in connection with the diesel issue, assumptions were made in particular about working hours, material costs and hourly wage rates, depending on the series, model year and country concerned. In addition, assumptions are made about future resale prices of repurchased vehicles. These assumptions 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 experience. Further information on the legal proceedings and on the legal risks associated with the diesel issue can be found in the "Litigation" section.

Tax provisions were recognized for potential future tax back payments, while other provisions were recognized for ancillary tax payments arising in this connection.

Volkswagen AG and its subsidiaries have operations worldwide and are audited by local tax authorities on an ongoing basis. Amendments to tax laws and changes in legal precedent and their interpretation by the tax authorities in the respective countries may lead to tax payments that differ from the estimates made in the financial statements.

The measurement of the tax provision is based on the most likely exposure resulting from this risk materializing. Volkswagen decides whether to account for multiple tax uncertainties separately or in groups on the merits of each individual case considered, depending on which type of presentation is better suited to predicting the extent to which the tax risk will materialize. The pricing of individual products and services is complex, especially in relation to contracts for the cross-border supply of intragroup goods and services, because it is in many cases not possible to observe market prices for internally generated products, or the use of market prices for similar products is subject to uncertainty because they are not comparable. In these cases, prices – including for tax purposes – are determined on the basis of standardized, generally accepted valuation techniques.

If actual developments differ from the assumptions made for recognizing the provisions, the figures actually recorded may differ from the estimates expected originally.

An overview of other provisions can be found in the “Noncurrent and current other provisions” section.

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 experience and are reviewed regularly. Where estimates are modified the residual useful life is adjusted and an impairment loss is recognized, if necessary.

Estimates of lease terms under IFRS 16 are based on the non-cancelable period of a lease and an assessment of whether existing extension and termination options will be exercised. The determination of the lease term and the discount rates used impacts on the amounts to be recognized for right-of-use assets and lease liabilities.

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 2.6% (previous year: 3.2%) in 2019. Our forecasts are based on the assumption that global economic growth will slow down somewhat in 2020. 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 and Light Commercial Vehicles, Commercial Vehicles, Power Engineering and Financial Services. As a result of an internal management change as from January 1, 2019, light commercial vehicles of the Volkswagen Commercial Vehicles brand are no longer allocated to the Commercial Vehicles segment, but reported under the Passenger Cars and Light Commercial Vehicles segment. The prior-year figures have been adjusted accordingly.

The activities of the Passenger Cars and Light Commercial Vehicles segment cover the development of vehicles and engines, the production and sale of passenger cars and light commercial vehicles, and the corresponding genuine parts business. In the Passenger Cars and Light Commercial Vehicles reporting segment, the individual brands are being combined into a single reportable segment, in particular as a response to the high degree of technological and economic interlinking in the production network. 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 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 sales. 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.

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 in right-of-use assets from 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 2018[1]

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue from external customers	176,613	23,803	3,605	31,592	235,613	236	235,849
Intersegment sales revenue	12,895	979	3	3,190	17,067	–17,067	–
Total sales revenue	189,508	24,781	3,608	34,782	252,680	–16,830	235,849
Depreciation and amortization	12,700	1,966	378	6,523	21,567	–56	21,511
Impairment losses	629	89	–	469	1,186	110	1,296
Reversal of impairment losses	156	6	2	98	262	–	262
Segment result (operating result)	13,068	1,191	–64	2,793	16,988	–3,068	13,920
Share of the result of equity-accounted investments	3,094	213	3	58	3,369	–	3,369
Interest result and other financial result	164	297	2	–70	393	–2,039	–1,646
Equity-accounted investments	6,731	971	18	712	8,434	–	8,434
Investments in intangible assets, property, plant and equipment, and investment property	16,709	1,380	176	510	18,776	187	18,962

1 The prior-year figures have been adjusted to reflect a change in the allocation of Light Commercial Vehicles of the Volkswagen Commercial Vehicles brand.

REPORTING SEGMENTS 2019

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue from external customers	186,511	25,401	3,995	36,446	252,353	280	252,632
Intersegment sales revenue	15,762	1,043	2	3,714	20,522	–20,522	–
Total sales revenue	202,273	26,444	3,997	40,160	272,875	–20,242	252,632
Depreciation and amortization	14,622	2,280	420	8,080	25,402	–996	24,406
Impairment losses	201	1	–	538	740	209	949
Reversal of impairment losses	886	71	2	181	1,140	–15	1,124
Segment result (operating result)	15,610	1,653	–93	3,212	20,381	–3,422	16,960
Share of the result of equity-accounted investments	3,053	225	–1	71	3,349	–	3,349
Interest result and other financial result	–1,582	–70	1	–64	–1,715	–238	–1,953
Equity-accounted investments	6,232	1,118	34	784	8,169	–	8,169
Investments in intangible assets, property, plant and equipment, and investment property	17,098	1,460	197	223	18,977	423	19,401

RECONCILIATION

€ million	2019	2018[1]
Segment sales revenue	**272,875**	**252,680**
Unallocated activities	969	981
Group financing	28	24
Consolidation	–21,239	–17,835
Group sales revenue	**252,632**	**235,849**
Segment result (operating result)	**20,381**	**16,988**
Unallocated activities	–72	–22
Group financing	–38	–17
Consolidation	–3,312	–3,029
Operating result	**16,960**	**13,920**
Financial result	**1,396**	**1,723**
Consolidated result before tax	**18,356**	**15,643**

1 The prior-year figures have been adjusted to reflect a change in the allocation of Light Commercial Vehicles of the Volkswagen Commercial Vehicles brand.

BY REGION 2018

€ million	Germany	Europe/Other markets[1]	North America	South America	Asia-Pacific	Hedges sales revenue	Total
Sales revenue from external customers	43,526	99,563	37,656	10,405	43,166	1,535	235,849
Intangible assets, property, plant and equipment, lease assets and investment property	95,217	36,110	29,332	2,795	2,830	–	166,285

1 Excluding Germany.

BY REGION 2019

€ million	Germany	Europe/Other markets[1]	North America	South America	Asia-Pacific	Hedges sales revenue	Total
Sales revenue from external customers	48,991	105,009	43,351	11,297	43,974	11	252,632
Intangible assets, property, plant and equipment, lease assets and investment property	101,092	47,353	26,771	3,064	3,562	–	181,842

1 Excluding Germany.

Allocation of sales revenue to the regions follows the destination principle.

The allocation of interregional intragroup transactions has been unitary presented according to the economic ownership regarding the segment assets.

Income statement disclosures

1. Sales revenue

STRUCTURE OF GROUP SALES REVENUE 2018[1]

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total Segments	Reconciliation	Volkswagen Group
Vehicles	141,339	16,035	–	–	157,374	–10,548	146,826
Genuine parts	12,703	3,316	–	–	16,019	–100	15,919
Used vehicles and third-party products	11,776	1,387	–	–	13,163	–609	12,554
Engines, powertrains and parts deliveries	11,773	676	–	–	12,449	–9	12,440
Power Engineering	–	–	3,608	–	3,608	–3	3,605
Motorcycles	582	–	–	–	582	–	582
Leasing business	889	1,651	–	26,667	29,207	–4,200	25,006
Interest and similar income	230	6	–	7,302	7,537	–187	7,351
Hedges sales revenue	1,440	12	–	–	1,451	83	1,535
Other sales revenue	8,776	1,699	–	814	11,289	–1,258	10,031
	189,508	**24,781**	**3,608**	**34,782**	**252,680**	**–16,830**	**235,849**

1 Since January 1, 2019, sales revenue from the sale of light commercial vehicles of the Volkswagen Commercial Vehicles brand has not been reported in the Commercial Vehicles segment. The prior-year figures have been adjusted accordingly.

STRUCTURE OF GROUP SALES REVENUE 2019

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total Segments	Reconciliation	Volkswagen Group
Vehicles	154,377	17,387	–	–	171,764	–14,552	157,212
Genuine parts	13,329	3,464	–	–	16,793	–117	16,676
Used vehicles and third-party products	12,583	1,415	–	–	13,997	–549	13,449
Engines, powertrains and parts deliveries	11,496	641	–	–	12,137	–21	12,116
Power Engineering	–	–	3,997	–	3,997	–2	3,994
Motorcycles	603	–	–	–	603	0	603
Leasing business	986	1,735	0	30,795	33,517	–4,370	29,147
Interest and similar income	235	5	–	8,031	8,271	–205	8,066
Hedges sales revenue	–143	–18	–	0	–161	171	11
Other sales revenue	8,808	1,814	–	1,334	11,956	–597	11,359
	202,273	**26,444**	**3,997**	**40,160**	**272,875**	**–20,242**	**252,632**

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.

Of the sales revenue recognized in the period under review, an amount of €6,333 million was included in contract liabilities as of January 1, 2019.

€359 million (previous year: €667 million) of the sales revenue recognized in the period under review is attributable to performance obligations satisfied in a prior period.

In addition to existing performance obligations of €3,967 million (previous year: €3,614 million) in the Power Engineering segment, most of which are expected to be satisfied or for which sales revenue is expected to be recognized by December 31, 2020, the vast majority of the Volkswagen Group's performance obligations that are unsatisfied as of the reporting date relate to vehicle deliveries. Most of these deliveries had already been made at the time this report was prepared, or will be made in the first quarter of 2020. The calculation of the amounts for the Power Engineering Business Area took account of both contracts with a term of more than one year and service contracts under which the Volkswagen Group realizes sales revenue in exactly the same amount as the customer benefits from the provision of services by the Company. In the case of variable consideration, sales revenue is only recognized to the extent that there is reasonable assurance that this sales revenue will not subsequently have to be reversed or adjusted downward.

2. Cost of sales

Cost of sales includes interest expenses of €2,705 million (previous year: €2,270 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 €830 million (previous year: €1,165 million). The impairment losses totaling €295 million (previous year: €631 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 €535 million (previous year: €534 million) are predominantly attributable to the Financial Services segment. They are based on constantly updated internal and external information that is factored into the forecast residual values of the vehicles. Thereof, €25 million (previous year: €24 million) are reported in current lease assets.

Government grants related to income amounted to €657 million in the fiscal year (previous year: €466 million) and were generally allocated to the functional areas.

3. Distribution expenses

Distribution expenses amounting to €21.0 billion (previous year: €20.5 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

Administrative expenses of €9.8 billion (previous year: €8.8 billion) mainly include nonstaff overheads and personnel costs, as well as depreciation and amortization charges applicable to the administrative function.

5. Other operating income

€ million	2019	2018
Income from reversal of loss allowances on receivables and other assets	1,482	1,586
Income from reversal of provisions and accruals	969	1,144
Income from foreign currency hedging derivatives within hedge accounting	686	822
Income from foreign exchange gains	2,346	2,530
Income from other hedges	1,177	1,138
Income from sale of promotional material	498	483
Income from cost allocations	985	1,139
Income from investment property	12	14
Gains on asset disposals and the reversal of impairment losses	1,182	390
Miscellaneous other operating income	2,116	2,383
	11,453	**11,631**

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.

Income from other hedges includes primarily foreign exchange gains from the fair value measurement of financial instruments used to hedge exchange rates and commodity prices and that are not designated in a hedging relationship. Foreign exchange losses are included in other operating expenses.

6. Other operating expenses

€ million	2019	2018
Loss allowances on trade receivables including construction contracts	317	315
Loss allowances on other receivables and other assets	1,783	1,833
Losses from foreign currency hedging derivatives within hedge accounting	997	856
Expenses from other hedges	1,332	1,592
Foreign exchange losses	2,013	2,800
Expenses from cost allocations	563	650
Expenses for termination agreements	54	36
Losses on disposal of noncurrent assets	119	161
Miscellaneous other operating expenses	5,712	6,488
	12,890	**14,731**

Allowances on other receivables and other assets include allowances on receivables from long-term construction contracts amounting to €0.3 million (previous year: €1.0 million).

Expenses from other hedges include primarily foreign exchange losses from the fair value measurement of financial instruments used to hedge exchange rates and commodity prices and that are not designated in a hedging relationship.

Miscellaneous other operating expenses consist mainly of litigation expenses in connection with the diesel issue (see the “Key Events” section for more information).

7. Share of the result of equity-accounted investments

€ million	2019	2018
Share of profits of equity-accounted investments	3,501	3,551
of which from joint ventures	3,257	3,320
of which from associates	244	231
Share of losses of equity-accounted investments	152	182
of which from joint ventures	10	23
of which from associates	142	159
	3,349	**3,369**

8. Interest result

€ million	2019	2018
Interest income	**910**	**967**
Other interest and similar income	904	950
Income from valuation of interest derivatives	6	17
Interest expenses	**–2,524**	**–1,547**
Other interest and similar expenses	–1,401	–974
Expenses from valuation of interest derivatives	–6	–1
Interest expenses included in lease payments	–217	–27
Interest result from discounting/unwinding discount on other noncurrent liabilities	–238	77
Net interest on the net defined benefit liability	–662	–623
Interest result	**–1,614**	**–580**

9. Other financial result

€ million	2019	2018
Income from profit and loss transfer agreements	19	77
Cost of loss absorption	–72	–54
Other income from equity investments	178	101
Other expenses from equity investments	–374	–360
Income from marketable securities and loans	27	–355
Realized income of loan receivables and payables in foreign currency	877	1,161
Realized expenses of loan receivables and payables in foreign currency	–980	–1,130
Gains and losses from remeasurement and impairment of financial instruments	228	–41
Gains and losses from fair value changes of derivatives not included in hedge accounting	–240	–453
Gains and losses from fair value changes of derivatives included in hedge accounting	0	–12
Other financial result	**–339**	**–1,066**

10. Income tax income/expense

COMPONENTS OF TAX INCOME AND EXPENSE

€ million	2019	2018
Current tax expense, Germany	1,473	1,131
Current tax expense, abroad	2,673	2,401
Current income tax expense	**4,147**	**3,533**
of which prior-period income (–)/expense (+)	32	79
Deferred tax income (–)/expense (+), Germany	115	429
Deferred tax income (–)/expense (+), abroad	65	–472
Deferred tax income (–)/expense (+)	**180**	**–43**
Income tax income/expense	**4,326**	**3,489**

The statutory corporation tax rate in Germany for the 2019 assessment period was 15%. Including trade tax and the solidarity surcharge, this resulted in an aggregate tax rate of 29.8% (previous year: 29.9%).

A tax rate of 29.8% (previous year: 29.8%) 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 2019 of €692 million (previous year: €732 million).

The tax loss carryforwards and the expiry of loss carryforwards that could not be used changed as follows:

€ million	PREVIOUSLY UNUSED TAX LOSS CARRYFORWARDS	
	Dec. 31, 2019	Dec. 31, 2018
Indefinitely to be carried forward	14,498	13,217
Carried forward within 10 years	568	636
Carried forward from 10 to 20 years	5,579	6,648
Total	**20,645**	**20,501**

€ million	EXPIRY OF UNUSABLE TAX LOSS CARRYFORWARDS	
	Dec. 31, 2019	Dec. 31, 2018
Non-expiring tax loss carryforwards	5,919	5,390
Expiry within 10 years	473	432
Expiry from 10 to 20 years	1,743	2,047
Expiry over 20 years	62	126
Total	**8,197**	**7,995**

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 €36 million (previous year: €94 million). Deferred tax expense was reduced by €66 million (previous year: €116 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 €58 million (previous year: €95 million). Deferred tax income resulting from the reversal of a write-down of deferred tax assets amounts to €35 million (previous year: €231 million).

Tax credits granted by various countries amounted to €378 million (previous year: €385 million).

No deferred tax assets were recognized for deductible temporary differences of €897 million (previous year: €1,123 million) and for tax credits of €138 million (previous year: €123 million) that would expire in the next 20 years, or for tax credits of €0 million (previous year: €3 million) that will not expire.

In accordance with IAS 12.39, deferred tax liabilities of €231 million (previous year: €213 million) for temporary differences and undistributed profits of Volkswagen AG subsidiaries were not recognized because control exists.

Deferred tax expense resulting from changes in tax rates amounted to €116 million at Group level (previous year: €79 million).

Deferred taxes in respect of temporary differences and tax loss carryforwards of €1,006 million (previous year: €8,235 million) were recognized without being offset by deferred tax liabilities in the same amount. In fiscal year 2018, the deferred tax assets of companies within the German tax group were recognized due to positive results in the past and were 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.

€7,820 million (previous year: €4,532 million) of the deferred taxes recognized in the balance sheet was credited to equity and relates to other comprehensive income. €53 million (previous year: €2 million) of this figure is attributable to noncontrolling interests. There were effects from capital transactions with noncontrolling interest shareholders in the reporting period. In fiscal years 2019 and 2018, there were only immaterial changes arising from items that will not be reclassified to profit or loss and were recognized directly in equity. The first-time application of IFRS 9 in the year 2018 resulted in adjustments and reclassifications totaling €33 million, which were accounted for as a deduction from equity. Changes in deferred taxes classified by balance sheet item are presented in the statement of comprehensive income.

In fiscal year 2018, tax effects of €6 million resulting from equity transaction costs were recognized in equity. The calling of the first tranche of the hybrid capital issued in September 2013 resulted in a reduction of equity in the amount of €5 million in the year 2018.

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:

	DEFERRED TAX ASSETS		DEFERRED TAX LIABILITIES	
€ million	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Intangible assets	267	370	10,555	10,402
Property, plant and equipment, and lease assets	5,576	4,677	8,493	6,996
Noncurrent financial assets	18	35	43	179
Inventories	2,348	2,458	821	838
Receivables and other assets (including Financial Services Division)	2,270	2,113	9,670	7,990
Other current assets	3,768	3,653	7	5
Pension provisions	9,013	6,429	52	33
Liabilities and other provisions	13,358	10,173	4,167	3,581
Loss allowances on deferred tax assets from temporary differences	–141	–151	–	–
Temporary differences, net of loss allowances	36,478	29,758	33,809	30,024
Tax loss carryforwards, net of loss allowances	3,068	3,246	–	–
Tax credits, net of loss allowances	239	259	–	–
Value before consolidation and offset	**39,786**	**33,262**	**33,809**	**30,024**
of which noncurrent	26,307	21,530	26,736	23,147
Offset	29,627	26,038	29,627	26,038
Consolidation	2,947	2,906	826	1,044
Amount recognized	**13,106**	**10,131**	**5,007**	**5,030**

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 2019 of €4,326 million (previous year: €3,489 million) was €1,144 million lower (previous year: €1,188 million) than the expected tax expense of €5,470 million that would have resulted from application of a tax rate for the Group of 29.8% (previous year: 29.9%) to the earnings before tax of the Group.

RECONCILIATION OF EXPECTED TO EFFECTIVE INCOME TAX

€ million	2019	2018
Profit before tax	18,356	15,643
Expected income tax income (–)/expense (+) (tax rate 29.8%; previous year: 29.9%)	**5,470**	**4,677**
Reconciliation:		
Effect of different tax rates outside Germany	–843	–684
Proportion of taxation relating to:		
tax-exempt income	–1,124	–1,152
expenses not deductible for tax purposes	509	440
effects of loss carryforwards and tax credits	163	255
permanent differences	51	61
Tax credits	–54	–69
Prior-period tax expense	–151	–406
Effect of tax rate changes	116	79
Nondeductible withholding tax	359	502
Other taxation changes	–170	–214
Effective income tax expense	**4,326**	**3,489**
Effective tax rate in %	23.6	22.3

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 there were no transactions in 2019 and 2018 that had a dilutive effect on the number of shares, diluted earnings per share are equivalent to basic earnings per share.

In accordance with Article 27(2) No. 3 of the Articles of Association of Volkswagen AG, the dividend paid for each preferred share is €0.06 higher than that paid for each ordinary share.

		2019	2018
Weighted average number of:			
Ordinary shares – basic/diluted	Shares	295,089,818	295,089,818
Preferred shares – basic/diluted	Shares	206,205,445	206,205,445
Earnings after tax	€ million	14,029	12,153
Earnings attributable to noncontrolling interests	€ million	143	17
Earnings attributable to Volkswagen AG hybrid capital investors	€ million	540	309
Earnings attributable to Volkswagen AG shareholders	€ million	13,346	11,827
of which basic/diluted earnings attributable to ordinary shares	€ million	7,849	6,955
of which basic/diluted earnings attributable to preferred shares	€ million	5,497	4,872
Earnings per ordinary share – basic/diluted	€	26.60	23.57
Earnings per preferred share – basic/diluted	€	26.66	23.63

Balance sheet disclosures

12. Intangible assets

CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018

€ million	Brand names	Goodwill	Capitalized development costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
Cost						
Balance at Jan. 1, 2018	**16,995**	**23,443**	**7,115**	**28,952**	**8,588**	**85,093**
Foreign exchange differences	–43	–131	–20	–125	–103	–421
Changes in consolidated Group	–	6	–	0	12	18
Additions	–	–	4,192	1,042	581	5,815
Transfers	–	–	–4,040	4,040	41	41
Disposals	–	–	32	1,890	127	2,049
Balance at Dec. 31, 2018	**16,952**	**23,318**	**7,215**	**32,020**	**8,992**	**88,496**
Amortization and impairment						
Balance at Jan. 1, 2018	**83**	**0**	**95**	**14,999**	**6,496**	**21,674**
Foreign exchange differences	–2	0	–1	–55	–79	–137
Changes in consolidated Group	–	0	0	–	–1	–1
Additions to cumulative amortization	3	–	–	3,665	669	4,337
Additions to cumulative impairment losses	–	–	3	41	13	57
Transfers	–	–	–15	15	1	1
Disposals	–	–	–	1,897	109	2,005
Reversal of impairment losses	–	–	42	–	0	42
Balance at Dec. 31, 2018	**84**	**1**	**42**	**16,768**	**6,989**	**23,883**
Carrying amount at Dec. 31, 2018	**16,868**	**23,317**	**7,173**	**15,251**	**2,003**	**64,613**

CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2019

€ million	Brand names	Goodwill	Capitalized development costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
Cost						
Balance at Jan. 1, 2019	**16,952**	**23,318**	**7,215**	**32,020**	**8,992**	**88,496**
Foreign exchange differences	–18	–57	33	77	12	46
Changes in consolidated Group	5	17	–	–	234	256
Additions	–	–	3,251	1,920	770	5,940
Transfers	–	–	–4,301	4,299	54	52
Classified as held for sale	61	15	–	–	47	122
Disposals	–	16	8	1,421	126	1,571
Balance at Dec. 31, 2019	**16,878**	**23,247**	**6,188**	**36,895**	**9,889**	**93,098**
Amortization and impairment						
Balance at Jan. 1, 2019	**84**	**1**	**42**	**16,768**	**6,989**	**23,883**
Foreign exchange differences	0	–	0	45	6	51
Changes in consolidated Group	–	–	–	–	147	147
Additions to cumulative amortization	3	–	–	4,049	680	4,731
Additions to cumulative impairment losses	–	15	7	8	4	34
Transfers	–	–	–1	1	2	2
Classified as held for sale	0	–	–	–	12	12
Disposals	–	16	–	1,422	114	1,551
Reversal of impairment losses	–	–	3	396	3	402
Balance at Dec. 31, 2019	**86**	**–**	**45**	**19,053**	**7,700**	**26,884**
Carrying amount at Dec. 31, 2019	**16,793**	**23,247**	**6,143**	**17,842**	**2,189**	**66,214**

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	2019	2018
Brand names by operating segment		
Porsche	13,823	13,823
Scania Vehicles and Services	932	949
MAN Truck & Bus	1,127	1,127
MAN Energy Solutions	415	415
Ducati	404	404
Other	93	150
	16,793	**16,868**
Goodwill by operating segment		
Porsche	18,825	18,825
Scania Vehicles and Services	2,699	2,755
MAN Truck & Bus	587	587
MAN Energy Solutions	265	267
Ducati	290	290
ŠKODA	160	158
Porsche Holding Salzburg	151	156
Other	271	280
	23,247	**23,317**

The impairment test for recognized goodwill and brand names 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	2019	2018	%
Total research and development costs	14,306	13,640	4.9
of which capitalized development costs	5,171	5,234	–1.2
Capitalization ratio in %	36.1	38.4	
Amortization of capitalized development costs	4,064	3,710	9.6
Research and development costs recognized in profit or loss	**13,199**	**12,116**	**8.9**

13. Property, plant and equipment

CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018

€ 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
Cost					
Balance at Jan. 1, 2018	**34,335**	**45,450**	**68,909**	**6,876**	**155,569**
Foreign exchange differences	–98	–216	–79	–59	–452
Changes in consolidated Group	168	9	6	6	189
Additions	597	1,103	4,960	6,452	13,112
Transfers	858	1,753	2,048	–4,703	–43
Disposals	117	1,424	1,495	35	3,071
Balance at Dec. 31, 2018	**35,743**	**46,676**	**74,350**	**8,537**	**165,305**
Depreciation and impairment					
Balance at Jan. 1, 2018	**14,621**	**32,286**	**53,352**	**69**	**100,327**
Foreign exchange differences	–39	–130	–59	–5	–232
Changes in consolidated Group	10	7	1	–	18
Additions to cumulative depreciation	1,062	3,222	5,593	–	9,876
Additions to cumulative impairment losses	22	21	273	258	574
Transfers	–5	47	–25	–18	–1
Disposals	83	1,370	1,318	0	2,770
Reversal of impairment losses	36	26	14	41	117
Balance at Dec. 31, 2018	**15,552**	**34,057**	**57,803**	**263**	**107,675**
Carrying amount at Dec. 31, 2018	**20,191**	**12,618**	**16,546**	**8,274**	**57,630**
of which assets leased under finance leases Carrying amount at Dec. 31, 2018	267	5	41	0	314

Future finance lease payments due, and their present values, are shown in the following table:

€ million	2019	2020 – 2023	from 2024	Total
Finance lease payments	68	231	360	659
Interest component of finance lease payments	18	73	119	210
Carrying amount of liabilities	**51**	**158**	**241**	**449**

CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2019

€ 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
Cost					
Balance at Jan. 1, 2019[1]	**39,976**	**46,684**	**74,702**	**8,536**	**169,898**
Foreign exchange differences	198	181	303	36	718
Changes in consolidated Group	56	16	28	8	108
Additions	1,862	1,716	5,403	6,104	15,084
Transfers	1,867	2,776	2,946	–7,109	481
Classified as held for sale	124	206	54	21	406
Disposals	303	1,077	1,331	29	2,740
Balance at Dec. 31, 2019	**43,531**	**50,090**	**81,997**	**7,526**	**183,143**
Depreciation and impairment					
Balance at Jan. 1, 2019[1]	**15,418**	**34,052**	**57,821**	**263**	**107,554**
Foreign exchange differences	48	131	218	6	402
Changes in consolidated Group	0	3	15	0	18
Additions to cumulative depreciation	1,927	3,407	6,237	–	11,572
Additions to cumulative impairment losses	53	2	63	142	260
Transfers	151	20	38	–59	149
Classified as held for sale	26	88	30	–	145
Disposals	149	1,014	1,169	–	2,332
Reversal of impairment losses	32	14	331	109	487
Balance at Dec. 31, 2019	**17,389**	**36,498**	**62,862**	**242**	**116,991**
Carrying amount at Dec. 31, 2019	**26,142**	**13,592**	**19,135**	**7,284**	**66,152**

1 Value in the opening balance adjusted (see disclosures on IFRS 16).

In the previous year, payments for assets leased under operating leases recognized in the income statement amounted to €1,690 million. With respect to internally used assets, € 1,544 million of this figure was attributable to minimum lease payments and €13 million to contingent lease payments in the previous year. The payments of €133 million under subleases primarily related to minimum lease payments in the previous year.

Government grants of €146 million (previous year: €207 million) were deducted from the cost of property, plant and equipment and as in the previous year noncash benefits received amounting to €0.4 million were not capitalized as the cost of assets.

In connection with land and buildings, real property liens of €1,221 million (previous year: €1,062 million) are pledged as collateral for partial retirement obligations, financial liabilities and other liabilities.

14. Lease assets and investment property

CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2018

€ million	Lease assets	Investment property	Total
Cost			
Balance at Jan. 1, 2018	**52,226**	**748**	**52,973**
Foreign exchange differences	609	12	621
Changes in consolidated Group	–138	–	–138
Additions	21,256	38	21,294
Transfers	–106	2	–104
Disposals	16,354	13	16,367
Balance at Dec. 31, 2018	**57,493**	**786**	**58,279**
Depreciation and impairment			
Balance at Jan. 1, 2018	**13,007**	**279**	**13,287**
Foreign exchange differences	60	2	62
Changes in consolidated Group	–57	–	–57
Additions to cumulative depreciation	7,282	16	7,298
Additions to cumulative impairment losses	510	0	511
Transfers	–8	0	–8
Disposals	6,744	8	6,752
Reversal of impairment losses	103	0	103
Balance at Dec. 31, 2018	**13,947**	**290**	**14,237**
Carrying amount at Dec. 31, 2018	**43,545**	**496**	**44,042**

In the previous year, we had expected to receive the following payments from noncancelable leases and rental agreements:

€ million	2019	2020 – 2023	from 2024	Total
Lease payments	4,108	5,187	17	9,312

CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2019

€ million	Lease assets	Investment property	Total
Cost			
Balance at Jan. 1, 2019[1]	**57,998**	**803**	**58,802**
Foreign exchange differences	1,075	5	1,080
Changes in consolidated Group	–46	–1	–48
Additions	24,906	43	24,949
Transfers	–533	0	–533
Disposals	19,015	6	19,021
Balance at Dec. 31, 2019	**64,384**	**845**	**65,229**
Depreciation and impairment			
Balance at Jan. 1, 2019[1]	**14,076**	**291**	**14,367**
Foreign exchange differences	333	1	334
Changes in consolidated Group	73	–	73
Additions to cumulative depreciation	8,087	17	8,103
Additions to cumulative impairment losses	510	–	510
Transfers	–151	0	–151
Disposals	7,314	1	7,315
Reversal of impairment losses	169	0	169
Balance at Dec. 31, 2019	**15,446**	**307**	**15,753**
Carrying amount at Dec. 31, 2019	**48,938**	**538**	**49,476**

1 Value in the opening balance adjusted (see disclosures on IFRS 16).

Lease assets include assets leased out under the terms of operating leases and assets covered by long-term buyback agreements.

Investment property includes apartments rented out and leased dealerships with a fair value of €1,206 million (previous year: €1,106 million). Fair value is estimated using an investment method based on internal calculations (Level 3 of the fair value hierarchy). Operating expenses of €56 million (previous year: €46 million) were incurred for the maintenance of investment property in use. Expenses of €0.1 million (previous year: €0.6 million) were incurred for unused investment property.

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, 2018

€ million	Equity-accounted investments	Other equity investments	Total
Gross carrying amount			
Balance at Jan. 1, 2018	**8,431**	**1,827**	**10,259**
Foreign exchange differences	–9	9	0
Changes in consolidated Group	269	–368	–99
Additions	247	693	939
Transfers	–	0	0
Disposals	84	19	103
Changes recognized in profit or loss	3,371	–	3,371
Dividends[1]	–3,460	–	–3,460
Other changes recognized in other comprehensive income	62	1	62
Balance at Dec. 31, 2018	**8,826**	**2,142**	**10,968**
Impairment losses			
Balance at Jan. 1, 2018	**238**	**507**	**745**
Foreign exchange differences	–1	–1	–2
Changes in consolidated Group	–	–4	–4
Additions	155	172	326
Transfers	–	0	0
Disposals	–	5	5
Reversal of impairment losses	–	1	1
Balance at Dec. 31, 2018	**392**	**668**	**1,060**
Carrying amount at Dec. 31, 2018	**8,434**	**1,474**	**9,908**

1 Dividends are shown before withholding tax.

CHANGES IN EQUITY-ACCOUNTED INVESTMENTS AND OTHER EQUITY INVESTMENTS IN THE PERIOD JANUARY 1, DECEMBER 31, 2019

€ million	Equity-accounted investments	Other equity investments	Total
Gross carrying amount			
Balance at Jan. 1, 2019	**8,826**	**2,142**	**10,968**
Foreign exchange differences	22	6	28
Changes in consolidated Group	16	–252	–236
Additions	236	856	1,093
Transfers	–	0	0
Classified as held for sale	–	15	15
Disposals	76	88	164
Changes recognized in profit or loss	3,326	–	3,326
Dividends[1]	–3,786	–	–3,786
Other changes recognized in other comprehensive income	75	–34	41
Balance at Dec. 31, 2019	**8,639**	**2,616**	**11,255**
Impairment losses			
Balance at Jan. 1, 2019	**392**	**668**	**1,060**
Foreign exchange differences	1	0	1
Changes in consolidated Group	–	–131	–131
Additions	143	226	369
Transfers	–	–	–
Classified as held for sale	–	0	0
Disposals	–	31	31
Reversal of impairment losses	67	18	85
Balance at Dec. 31, 2019	**470**	**714**	**1,183**
Carrying amount at Dec. 31, 2019	**8,169**	**1,902**	**10,071**

1 Dividends are shown before withholding tax.

Equity-accounted investments include joint ventures in the amount of €5,851 million (previous year: €6,372 million) and associates in the amount of €2,318 million (previous year: €2,062 million).

Of the other changes recognized in other comprehensive income, €53 million (previous year: €7 million) is attributable to joint ventures and €22 million (previous year: €55 million) to associates. They are mainly the result of foreign exchange differences in the amount of €94 million (previous year: €9 million), pension plan remeasurements in the amount of €1 million (previous year: €31 million) and fair value measurement of cash flow hedges in the amount of €–27 million (previous year: €28 million).

16. Noncurrent and current financial services receivables

€ million	CARRYING AMOUNT			FAIR VALUE	CARRYING AMOUNT			FAIR VALUE
	Current	Noncurrent	Dec. 31, 2019	Dec. 31, 2019	Current	Noncurrent	Dec. 31, 2018	Dec. 31, 2018
Receivables from financing business								
Customer financing	22,873	49,175	72,048	73,248	21,487	45,089	66,575	67,500
Dealer financing	16,781	2,512	19,293	19,270	14,781	2,099	16,879	16,839
Direct banking	305	5	310	310	284	3	288	288
	39,958	**51,692**	**91,650**	**92,827**	**36,551**	**47,191**	**83,742**	**84,627**
Receivables from operating leases	285	–	285	285	219	–	219	219
Receivables from finance leases	18,371	35,281	53,652	54,742	17,446	31,501	48,948	49,572
	58,615	**86,973**	**145,588**	**147,855**	**54,216**	**78,692**	**132,909**	**134,418**

The receivables from customer financing and finance leases contained in financial services receivables of €145.6 billion (previous year: €132.9 billion) increased by €2 million (previous year: decreased by €26 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, €181 million (previous year: €175 million) was furnished as collateral for financial liabilities and contingent liabilities.

The receivables from dealer financing include €22 million (previous year: €24 million) receivable from unconsolidated affiliated companies.

The receivables from finance leases – almost all of them for vehicles – were based on the following expected cash flows as of December 31, 2018:

€ million	2019	2020 – 2023	from 2024	Total
Future payments from finance lease receivables	18,768	33,611	156	52,534
Unearned finance income from finance leases (discounting)	–1,321	–2,256	–9	–3,586
Present value of minimum lease payments outstanding at the reporting date	**17,446**	**31,355**	**146**	**48,948**

17. Noncurrent and current other financial assets

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2019	Current	Noncurrent	Dec. 31, 2018
Positive fair value of derivatives	1,622	1,628	3,250	2,047	1,932	3,979
Receivables from loans, bonds, profit participation rights (excluding interest)	6,639	3,278	9,917	5,513	3,441	8,953
Miscellaneous financial assets	3,955	646	4,601	4,026	1,149	5,175
	12,216	**5,553**	**17,769**	**11,586**	**6,521**	**18,107**

Other financial assets include receivables from related parties of €9.7 billion (previous year: €8.8 billion). Other financial assets amounting to €244 million (previous year: €89 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, 2019	Dec. 31, 2018
Transactions for hedging		
foreign currency risk from assets using fair value hedges	39	109
foreign currency risk from liabilities using fair value hedges	36	77
interest rate risk using fair value hedges	662	561
interest rate risk using cash flow hedges	13	54
foreign currency and price risk from future cash flows (cash flow hedges)	785	2,049
Hedging transactions Total	**1,535**	**2,851**
Assets related to derivatives not included in hedging relationships	1,715	1,128
Total	**3,250**	**3,979**

Positive fair values of €6 million (previous year: €24 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

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2019	Current	Noncurrent	Dec. 31, 2018
Other recoverable income taxes	4,244	806	5,050	4,189	773	4,962
Miscellaneous receivables	3,028	1,916	4,945	2,015	1,835	3,849
	7,272	**2,722**	**9,995**	**6,203**	**2,608**	**8,811**

Miscellaneous receivables include assets to fund post-employment benefits in the amount of €65 million (previous year: €76 million). This item also includes the share of the technical provisions attributable to reinsurers amounting to €58 million (previous year: €60 million).

Current other receivables are predominantly non-interest-bearing.

Other receivables include contingent receivables from long-term construction contracts recognized using the percentage of completion (PoC) method. They were reported under trade receivables in the previous year. They correspond to the contract assets recognized under contracts with customers and changed as follows:

€ million	2019	2018
Contingent construction contract receivables at Jan. 1	**352**	**338**
Additions and disposals	–36	4
Changes in consolidated Group	–	–
Change in valuation allowances	1	10
Classified as held for sale	4	–
Changes in estimates and assumptions as well as contract modifications	–	–
Foreign exchange differences	2	0
Contingent construction contract receivables at Dec. 31	**314**	**352**

Costs to fulfill contracts were not capitalized in the Volkswagen Group. The Volkswagen Group capitalizes costs to obtain a contract and amortizes them on a straight-line basis over the life of the contract only if they are material, the underlying contract has a term of at least one year, and these costs would not have been incurred, if the corresponding contract had not been entered into. On December 31, 2019, costs to obtain contracts amounting to €65 million (previous year: €– million) were recognized as assets. In 2019, amortization charges on capitalized costs to obtain contracts amounted to €13 million (previous year: €– million). No impairment losses were recognized on capitalized costs to obtain contracts in 2019 and 2018.

19. Tax assets

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2019	Current	Noncurrent	Dec. 31, 2018
Deferred tax assets	–	13,106	13,106	–	10,131	10,131
Tax receivables	1,190	341	1,531	1,879	476	2,355
	1,190	**13,447**	**14,637**	**1,879**	**10,606**	**12,486**

€7,490 million (previous year: €6,036 million) of the deferred tax assets are due within one year.

20. Inventories

€ million	Dec. 31, 2019	Dec. 31, 2018
Raw materials, consumables and supplies	6,099	5,543
Work in progress	4,110	4,382
Finished goods and purchased merchandise	30,617	30,553
Current lease assets	5,699	5,107
Prepayments	222	168
Hedges on inventories	–6	–8
	46,742	**45,745**

At the same time as the relevant revenue was recognized, inventories in the amount of €192 billion (previous year: €179 billion) were included in cost of sales. Loss allowances (excluding lease assets) recognized as expenses in the reporting period amounted to €672 million (previous year: €902 million). Vehicles amounting to €340 million (previous year: €316 million) were assigned as collateral for partial retirement obligations.

21. Trade receivables

€ million	Dec. 31, 2019	Dec. 31, 2018
Trade receivables from		
third parties	13,445	13,356
unconsolidated subsidiaries	180	206
joint ventures	4,283	3,958
associates	32	51
other investees and investors	1	317
	17,941	**17,888**

In the previous year contingent receivables from long-term construction contracts recognized using the percentage of completion (PoC) method were reported under trade receivables, which are now included in other receivables.

The fair values of the trade receivables correspond to the carrying amounts.

22. Marketable securities

The marketable securities serve to safeguard liquidity. They are short-term fixed-income securities and shares. Most securities are measured at fair value. Current securities amounting to €639 million (previous year: €997 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.

23. Cash, cash equivalents and time deposits

€ million	Dec. 31, 2019	Dec. 31, 2018
Bank balances	25,264	28,522
Checks, cash-in-hand, bills and call deposits	659	416
	25,923	**28,938**

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.

The Annual General Meeting on May 14, 2019 resolved to create authorized capital of up to €179 million, expiring on May 13, 2024, to issue new preferred bearer shares.

In June 2018, Volkswagen AG placed unsecured subordinated hybrid notes with an aggregate principal amount of €2.8 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 (€1.3 billion and a coupon of 3.375%) is after 6 years, and the first call date for the second tranche (€1.5 billion and a coupon of 4.625%) is after 10 years.

Interest may be accumulated depending on whether a dividend is paid to Volkswagen AG shareholders. Under IAS 32, these 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. IAS 32 only allows these hybrid notes to be classified as debt once the respective hybrid note was called.

In July 2018, Volkswagen AG called the first tranche of hybrid notes with an aggregate principal amount of €1.3 billion placed in 2013 via VIF (issuer). In addition, other effects of €14 million had to be recognized in equity.

The expiry of the put options granted to noncontrolling interest shareholders of MAN SE on March 4, 2019 resulted in an increase in equity of €0.7 billion. See the "Key Events" section for more information.

CHANGE IN ORDINARY AND PREFERRED SHARES AND SUBSCRIBED CAPITAL

	SHARES		€	
	2019	2018	2019	2018
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 €3,273 million are eligible for distribution following the transfer of €1,685 million to the revenue reserves. The Board of Management and Supervisory Board will propose to the Annual General Meeting that a total dividend of €3,271 million, i.e. €6.50 per ordinary share and €6.56 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 €4.80 per ordinary share and €4.86 per preferred share was distributed in fiscal year 2019.

NONCONTROLLING INTERESTS

As of December 31, 2019, noncontrolling interests amounted to €1,870 million (previous year: €225 million). Most of the noncontrolling interests in equity arose as a result of the IPO of the TRATON GROUP. See the “Key Events” section for further details.

The table below shows summarized financial information of the TRATON GROUP, including goodwill and fair value adjustments at the acquisition date:

€ million	TRATON GROUP
Equity interest in %[1]	10.28
Equity interest	1,640
Earnings after tax attributable to noncontrolling interests	125
Noncurrent assets	29,623
Current assets	16,728
Noncurrent liabilities	14,938
Current liabilities	16,664
Sales revenue	26,901
Earnings after tax	1,517
Other comprehensive income, net of tax	–316
Gross cash flow	3,433
Change in working capital	–2,346
Cash flows from operating activities	1,087
Cash flows from investing activities	634
Net cash flow	1,721

1 The percentage only includes direct noncontrolling interests.

25. Noncurrent and current financial liabilities

€ million	Carrying amount Current	Carrying amount Noncurrent	Dec. 31, 2019	Carrying amount Current	Carrying amount Noncurrent	Dec. 31, 2018
Bonds	19,789	68,839	88,629	19,132	62,416	81,549
Commercial paper and notes	18,103	20,147	38,250	22,381	18,975	41,356
Liabilities to banks	17,337	15,337	32,674	18,455	15,447	33,903
Deposits business	30,252	2,395	32,647	28,555	1,455	30,010
Loans and miscellaneous liabilities	1,429	1,629	3,058	1,183	2,433	3,617
Lease liabilities	1,002	5,208	6,210	51	399	449
	87,912	**113,556**	**201,468**	**89,757**	**101,126**	**190,883**

26. Noncurrent and current other financial liabilities

€ million	Carrying amount Current	Carrying amount Noncurrent	Dec. 31, 2019	Carrying amount Current	Carrying amount Noncurrent	Dec. 31, 2018
Negative fair values of derivative financial instruments	2,245	1,950	4,195	1,439	1,134	2,573
Interest payable	691	116	807	661	113	774
Miscellaneous financial liabilities	7,922	2,434	10,356	7,316	1,972	9,288
	10,858	**4,499**	**15,358**	**9,416**	**3,219**	**12,635**

The negative fair values of derivatives relate to the following items:

€ million	Dec. 31, 2019	Dec. 31, 2018
Transactions for hedging		
foreign currency risk from assets using fair value hedges	107	65
foreign currency risk from liabilities using fair value hedges	5	10
interest rate risk using fair value hedges	97	61
interest rate risk using cash flow hedges	53	17
foreign currency and price risk from future cash flows (cash flow hedges)	2,172	936
Hedging transactions Total	**2,435**	**1,088**
Liabilities related to derivatives not included in hedging relationships	1,760	1,484
Total	**4,195**	**2,573**

Negative fair values of €63 million (previous year: €22 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

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2019	Current	Noncurrent	Dec. 31, 2018
Payments received on account of orders	7,474	5,202	12,676	6,936	4,300	11,235
Liabilities relating to						
other taxes	2,812	133	2,946	2,273	112	2,384
social security	610	162	772	546	43	589
wages and salaries	5,848	1,008	6,856	5,299	947	6,247
Miscellaneous liabilities	2,576	766	3,342	2,539	1,046	3,585
	19,320	**7,271**	**26,591**	**17,593**	**6,448**	**24,041**

The liabilities from payments on account received under contracts with customers correspond to contract liabilities under contracts with customers. They changed as follows:

CHANGES IN LIABILITIES FROM PAYMENTS ON ACCOUNT RECEIVED UNDER CONTRACTS WITH CUSTOMERS

€ million	2019	2018
Liabilities from advance payments received under contracts with customers at Jan. 1	**9,669**	**7,261**
Additions and disposals	1,245	2,395
Changes in consolidated Group	12	4
Classified as held for sale	167	–
Changes in estimates and assumptions as well as contract modifications	–	–
Foreign exchange differences	148	8
Liabilities from advance payments received under contracts with customers at Dec. 31	**10,907**	**9,669**

28. Tax liabilities

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2019	Current	Noncurrent	Dec. 31, 2018
Deferred tax liabilities	–	5,007	5,007	–	5,030	5,030
Provisions for taxes	1,876	2,991	4,867	1,412	3,047	4,458
Tax payables	408	–	408	456	–	456
	2,283	**7,998**	**10,282**	**1,867**	**8,077**	**9,944**

€387 million (previous year: €407 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 2019, they amounted to a total of €2,565 million (previous year: €2,385 million) in the Volkswagen Group. Of this figure, contributions to the compulsory state pension system in Germany amounted to €1,796 million (previous year: €1,745 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 €22 million for fiscal year 2020.

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 healthcare. In fiscal year 2019, €18 million (previous year: €14 million) was recognized as an expense for healthcare costs. The related carrying amount as of December 31, 2019 was €266 million (previous year: €231 million).

The following amounts were recognized in the balance sheet for defined benefit plans:

€ million	Dec. 31, 2019	Dec. 31, 2018
Present value of funded obligations	21,090	15,606
Fair value of plan assets	12,478	10,920
Funded status (net)	8,613	4,686
Present value of unfunded obligations	32,710	28,312
Amount not recognized as an asset because of the ceiling in IAS 19	2	23
Net liability recognized in the balance sheet	**41,324**	**33,022**
of which provisions for pensions	41,389	33,097
of which other assets	65	76

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 2018 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 2018 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	
%	2019	2018	2019	2018
Discount rate at December 31	1.09	1.97	2.30	3.16
Payroll trend	3.59	3.48	2.16	2.66
Pension trend	1.50	1.50	2.68	2.41
Employee turnover rate	1.24	1.17	3.75	3.93
Annual increase in healthcare costs	–	–	5.56	5.50

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	2019	2018
Net liability recognized in the balance sheet at January 1	**33,022**	**32,666**
Current service cost	1,555	1,410
Net interest expense	660	620
Actuarial gains (–)/losses (+) arising from changes in demographic assumptions	–67	399
Actuarial gains (–)/losses (+) arising from changes in financial assumptions	8,689	–957
Actuarial gains (–)/losses (+) arising from experience adjustments	27	–105
Income/expenses from plan assets not included in interest income	654	–530
Change in amount not recognized as an asset because of the ceiling in IAS 19	21	3
Employer contributions to plan assets	969	708
Employee contributions to plan assets	–9	–9
Pension payments from company assets	873	842
Past service cost (including plan curtailments)	–25	24
Gains (–)/losses (+) arising from plan settlements	2	2
Changes in consolidated Group	–3	10
Classified as held for sale	14	–
Other changes	–8	–5
Foreign exchange differences from foreign plans	–4	–30
Net liability recognized in the balance sheet at December 31	**41,324**	**33,022**

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	2019	2018
Present value of obligations at January 1	**43,918**	**43,829**
Current service cost	1,555	1,410
Interest cost	921	901
Actuarial gains (–)/losses (+) arising from changes in demographic assumptions	–67	399
Actuarial gains (–)/losses (+) arising from changes in financial assumptions	8,689	–957
Actuarial gains (–)/losses (+) arising from experience adjustments	27	–105
Employee contributions to plan assets	19	19
Pension payments from company assets	873	842
Pension payments from plan assets	300	237
Past service cost (including plan curtailments)	–25	24
Gains (–)/losses (+) arising from plan settlements	–8	0
Changes in consolidated Group	–7	10
Classified as held for sale	182	–
Other changes	–2	–460
Foreign exchange differences from foreign plans	135	–73
Present value of obligations at December 31	**53,800**	**43,918**

In the previous year, actuarial gains/losses arising from changes in demographic assumptions were mainly the result of the first-time application of the “Heubeck 2018 G” mortality tables.

Following the regular review of our pension plans, one plan used by South American subsidiaries had to be classified as a defined contribution plan in fiscal year 2018, and this led to a change in the pension obligation reported in the above table. The decrease in the present value of the defined benefit obligation in the amount of €460 million is shown under other changes.

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, 2019 € million	DEC. 31, 2019 Change in percent	DEC. 31, 2018 € million	DEC. 31, 2018 Change in percent
Discount rate	is 0.5 percentage points higher	48,598	–9.67	40,048	–8.81
	is 0.5 percentage points lower	59,888	11.32	48,398	10.20
Pension trend	is 0.5 percentage points higher	56,633	5.27	46,147	5.07
	is 0.5 percentage points lower	51,258	–4.73	41,892	–4.61
Payroll trend	is 0.5 percentage points higher	54,331	0.99	44,382	1.05
	is 0.5 percentage points lower	53,319	–0.89	43,507	–0.94
Longevity	increases by one year	55,719	3.57	45,311	3.17

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 22 years (previous year: 19 years).

The present value of the defined benefit obligation is attributable as follows to the members of the plan:

€ million	2019	2018
Active members with pension entitlements	33,027	25,783
Members with vested entitlements who have left the Company	3,136	2,580
Pensioners	17,637	15,555
	53,800	**43,918**

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	2019	2018
Payments due within the next fiscal year	1,161	1,160
Payments due between two and five years	5,121	5,251
Payments due in more than five years	47,518	37,508
	53,800	**43,918**

Changes in plan assets are shown in the following table:

€ million	2019	2018
Fair value of plan assets at January 1	**10,920**	**11,192**
Interest income on plan assets determined using the discount rate	261	281
Income (+)/expenses (–) from plan assets not included in interest income	654	–530
Employer contributions to plan assets	969	708
Employee contributions to plan assets	9	9
Pension payments from plan assets	299	237
Gains (+)/losses (–) arising from plan settlements	10	2
Changes in consolidated Group	–5	0
Classified as held for sale	167	–
Other changes	7	–455
Foreign exchange differences from foreign plans	139	–46
Fair value of plan assets at December 31	**12,478**	**10,920**

Other changes in the previous year were attributable to the change in the presentation of a plan used by South American subsidiaries.

The investment of the plan assets to cover future pension obligations resulted in income of €915 million (previous year: expenses of €250 million).

Employer contributions to plan assets are expected to amount to €927 million (previous year: €769 million) in the next fiscal year.

Plan assets are invested in the following asset classes:

€ million	DEC. 31, 2019 Quoted prices in active markets	No quoted prices in active markets	Total	DEC. 31, 2018 Quoted prices in active markets	No quoted prices in active markets	Total
Cash and cash equivalents	501	–	501	666	2	669
Equity instruments	401	–	401	375	–	375
Debt instruments	850	5	855	1,041	4	1,044
Direct investments in real estate	–	110	110	11	100	112
Derivatives	15	–28	–13	–21	–17	–38
Equity funds	2,653	20	2,673	1,433	26	1,459
Bond funds	5,729	128	5,857	5,443	118	5,561
Real estate funds	170	–	170	193	–	193
Other funds	1,225	22	1,247	890	6	896
Other instruments	83	594	676	80	568	648

44.6% (previous year: 53.3%) of the plan assets are invested in German assets, 27.0% (previous year: 27.4%) in other European assets and 28.4% (previous year: 19.3%) in assets in other regions.

Plan assets include €14 million (previous year: €3 million) invested in Volkswagen Group assets and €14 million (previous year: €12 million) in Volkswagen Group debt instruments.

The following amounts were recognized in the income statement:

€ million	2019	2018
Current service cost	1,555	1,410
Net interest on the net defined benefit liability	662	623
Past service cost (including plan curtailments)	–25	24
Gains (–) or losses (+) arising from plan settlements	2	2
Net income (–) and expenses (+) recognized in profit or loss	**2,194**	**2,059**

The above amounts are generally included in the personnel costs of the functional areas 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
Balance at Jan. 1, 2018	**27,867**	**4,886**	**5,802**	**7,631**	**46,185**
Foreign exchange differences	39	–17	–88	–21	–88
Changes in consolidated Group	–2	–7	–1	–44	–53
Utilization	10,437	1,632	2,396	2,415	16,880
Additions/New provisions	12,179	2,019	2,131	3,153	19,483
Unwinding of discount/effect of change in discount rate	–108	5	–19	9	–114
Reversals	2,503	99	516	662	3,780
Balance at Dec. 31, 2018	**27,035**	**5,155**	**4,913**	**7,651**	**44,754**
of which current	13,986	2,248	2,349	5,291	23,874
of which noncurrent	13,050	2,906	2,563	2,360	20,879
Balance at Jan. 1, 2019[1]	**27,035**	**5,155**	**4,913**	**7,639**	**44,742**
Foreign exchange differences	199	15	–14	41	241
Changes in consolidated Group	–1	3	–1	0	2
Classified as held for sale	33	10	–	12	55
Utilization	9,442	1,899	1,913	2,404	15,658
Additions/New provisions	11,618	2,633	2,835	3,486	20,572
Unwinding of discount/effect of change in discount rate	3	225	–29	20	220
Reversals	2,391	128	531	795	3,845
Balance at Dec. 31, 2019	**26,988**	**5,993**	**5,260**	**7,976**	**46,217**
of which current	13,468	2,466	3,112	5,388	24,434
of which noncurrent	13,520	3,527	2,147	2,588	21,783

1 Value in the opening balance adjusted (see disclosures on IFRS 16).

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.

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 €568 million (previous year: €562 million) relating to the insurance business.

31. Put options and compensation rights granted to noncontrolling interest shareholders

In the previous year, this balance sheet item consisted primarily of the present value of the cash settlement of €90.29 per share 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. The put options granted to noncontrolling interest shareholders expired in the fiscal year. The liability for shares not tendered and for compensation payments remaining after these rights expired was reclassified directly to equity.

Further information can be found in the “Key Events” section.

32. Trade payables

€ million	Dec. 31, 2019	Dec. 31, 2018
Trade payables to		
third parties	21,948	22,928
unconsolidated subsidiaries	222	235
joint ventures	375	327
associates	195	113
other investees and investors	5	4
	22,745	**23,607**

Other disclosures

33. IAS 23 (Borrowing Costs)

Capitalized borrowing costs amounted to €68 million (previous year: €62 million) and related mainly to capitalized development costs. An average cost of debt of 1.6% (previous year: 1.5%) was used as a basis for capitalization in the Volkswagen Group.

34. IFRS 16 (Leases)

1. LESSEE ACCOUNTING

The Volkswagen Group is a lessee, mainly as a result of leasing office equipment, real estate and other means of production. The leases are negotiated individually and include a large number of contract terms and conditions. The following amounts for right-of-use assets resulting from leases are included in the balance sheet items:

PRESENTATION OF AND CHANGES IN RIGHT-OF-USE ASSETS FROM LEASES FOR THE PERIOD FROM JANUARY 1 TO DECEMBER 31, 2019

€ million	Right of use on land, land rights and buildings incl. buildings on third party land	Right of use on technical equipment and machinery	Right of use on other equipment, operational and office equipment	Total
Cost				
Balance at Jan. 1, 2019	**5,139**	**77**	**294**	**5,510**
Foreign exchange differences	82	0	1	83
Changes in consolidated Group	13	–	0	13
Additions	1,201	5	459	1,666
Transfers	–8	–39	–5	–52
Classified as held for sale	9	–	1	10
Disposals	166	0	11	177
Balance at Dec. 31, 2019	**6,253**	**44**	**738**	**7,034**
Depreciation and impairment				
Balance at Jan. 1, 2019	**63**	**17**	**4**	**84**
Foreign exchange differences	3	0	0	4
Changes in consolidated Group	1	–	–	1
Additions to cumulative depreciation	810	6	126	942
Additions to cumulative impairment losses	–	–	–	–
Transfers	–8	–	0	–8
Classified as held for sale	1	–	0	1
Disposals	19	0	4	23
Reversal of impairment losses	–	–	0	0
Balance at Dec. 31, 2019	**848**	**23**	**126**	**998**
Carrying amount at Dec. 31, 2019	**5,404**	**21**	**611**	**6,036**

Subleases of right-of-use assets generated income of €20 million in the fiscal year.

The measurement of right-of-use assets from leases and the associated lease liabilities is based on a best estimate regarding the exercise of extension and termination options. If there are material changes in circumstances or in the contract, this estimate is updated.

The tables below show how the lease liabilities are assigned in the balance sheet and give an overview of their contractual maturities:

ASSIGNMENT OF LEASE LIABILITIES TO THE RESPECTIVE BALANCE SHEET ITEMS

€ million	Dec. 31, 2019
Financial liabilities – Noncurrent	5,208
Financial liabilities – Current	1,002
Lease liabilities – Total	**6,210**

MATURITY ANALYSIS OF LEASE LIABILITIES

	REMAINING CONTRACTUAL MATURITIES			
€ million	under one year	within one to five years	over five years	Total
Lease liabilities at Dec. 31, 2019	1,002	2,613	2,595	6,210

Interest expenses of €230 million were incurred for lease liabilities in the fiscal year.

No right-of-use assets are recognized for low-value or short-term leases. Expenses for leasing low-value assets totaled €270 million in the fiscal year. This figure does not include any expenses for short-term leases, which totaled €333 million in the fiscal year. Variable lease expenses not included in the measurement of lease liabilities accounted for €1 million in the fiscal year.

Leases gave rise to cash outflows totaling €1,797 million in the fiscal year.

The table below shows a summary of potential future cash outflows, that have not been included in the measurement of the lease liabilities:

€ million	2019
Future cash outflows to which the lessee is potentially exposed	
Variable lease payments	1
Residual value guarantees	0
Extension options	3,575
Termination options	3
Obligations under leases not yet commenced	359
	3,938

2. LESSOR ACCOUNTING

The Volkswagen Group is a lessor in both the finance lease business and the operating lease business. The subject of these transactions is primarily motor vehicles and, to a small extent, land and buildings and items of equipment for dealerships.

The Volkswagen Group fully accounts for the default risk on lease receivables by recognizing loss allowances, which are recognized in accordance with the requirements of IFRS 9. As lessor, the Volkswagen Group covers risks arising from the assets underlying the leases by, among other measures, taking account of residual value guarantees received for parts of the lease portfolio and by taking account of forward-looking residual values forecast on the basis of internal and external information as part of residual value management. The forecast residual values are regularly reviewed.

2.1 OPERATING LEASES

Assets leased under long-term operating leases amounted to €49,476 million at the end of the fiscal year. While €538 million is attributable to investment property, assets separately reported as lease assets in the balance sheet amount to €48,938 million. They relate primarily to vehicles in an amount of €48,853 million as well as land, land rights and buildings, including buildings on third-party land, in an amount of €78 million. The remaining assets relate to technical equipment and machinery as well as other equipment, operating and office equipment. More information on changes in value of investment property and lease assets can be found in the section entitled “Lease assets and investment property”.

The following cash inflows from expected outstanding, non-discounted operating lease payments are expected over the coming years:

€ million	2020	2021	2022	2023	2024	From 2025	Total
Lease payments	9,370	6,436	3,677	997	338	344	21,164

BREAKDOWN OF INCOME FROM OPERATING LEASES

€ million	2019
Lease income	12,014
Income from variable lease payments	13
Total	**12,027**

2.2 FINANCE LEASES

Interest income from the net investment in the leases amounted to €2.4 billion in the fiscal year. Furthermore, a selling profit from the finance leases in the amount of €1.2 billion was recognized.

The following table shows the reconciliation of outstanding lease payments under finance leases to the net investment:

€ million	Dec. 31, 2019
Non-discounted lease payments	**54,302**
Non-guaranteed residual value	4,112
Unearned interest income	–3,789
Loss allowance on lease receivables	–971
Net investment	**53,652**

The following cash inflows from expected outstanding, non-discounted finance lease payments are expected over the coming years:

€ million	2020	2021	2022	2023	2024	From 2025	Total
Lease payments	19,428	14,590	12,179	6,883	847	373	54,302

35. IFRS 7 (Financial Instruments)

The table below shows the carrying amounts of financial instruments by measurement category:

CARRYING AMOUNT OF FINANCIAL INSTRUMENTS BY IFRS 9 MEASUREMENT CATEGORY

€ million	Dec. 31, 2019	Dec. 31, 2018
Financial assets at fair value through profit or loss	16,331	15,556
Financial assets at fair value through other comprehensive income (debt instruments)	3,139	3,542
Financial assets at fair value through other comprehensive income (equity instruments)	68	148
of which classified as held for sale	3	–
Financial assets measured at amortized cost	149,203	143,466
of which classified as held for sale	158	–
Financial liabilities at fair value through profit or loss	1,760	1,484
Financial liabilities measured at amortized cost	229,229	225,989
of which classified as held for sale	44	–

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;
> derivative financial instruments within hedge accounting;
> not allocated to any measurement category; and
> credit commitments and financial guarantees (off-balance sheet).

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.

For reconciliation to the carrying amounts, the “Not allocated to a measurement category” column in the table also includes items other than financial instruments.

The risk variables governing the fair value of the receivables are risk-adjusted interest rates.

“Financial instruments measured at fair value” also include shares in partnerships and corporations.

RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS AS OF DECEMBER 31, 2018

	MEASURED AT FAIR VALUE	MEASURED AT AMORTIZED COST		DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING	NOT ALLOCATED TO A MEASUREMENT CATEGORY	BALANCE SHEET ITEM AT DEC. 31, 2018
€ million	Carrying amount	Carrying amount	Fair value	Carrying amount	Carrying amount	
Noncurrent assets						
Equity-accounted investments	–	–	–	–	8,434	8,434
Other equity investments	134	–	–	–	1,340	1,474
Financial services receivables	286	46,905	47,789	–	31,501	78,692
Other financial assets	772	4,240	4,252	1,510	–	6,521
Tax receivables	–	–	–	–	476	476
Current assets						
Trade receivables	–	17,537	17,537	–	352	17,888
Financial services receivables	22	36,529	36,529	–	17,665	54,216
Other financial assets	1,094	9,150	9,150	1,341	1	11,586
Tax receivables	–	29	29	–	1,850	1,879
Marketable securities	16,940	140	140	–	–	17,080
Cash, cash equivalents and time deposits	–	28,938	28,938	–	–	28,938
Noncurrent liabilities						
Noncurrent financial liabilities	–	100,727	100,964	–	399	101,126
Other noncurrent financial liabilities	767	2,085	2,087	368	–	3,219
Current liabilities						
Put options and compensation rights granted to noncontrolling interest shareholders	–	1,853	1,853	–	–	1,853
Current financial liabilities	–	89,707	89,707	–	51	89,757
Trade payables	–	23,607	23,607	–	–	23,607
Other current financial liabilities	718	7,977	7,977	721	–	9,416
Tax payables	–	33	33	–	423	456

RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS AS OF DECEMBER 31, 2019

€ million	MEASURED AT FAIR VALUE	MEASURED AT AMORTIZED COST		DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING	NOT ALLOCATED TO A MEASUREMENT CATEGORY	BALANCE SHEET ITEM AT DEC. 31, 2019
	Carrying amount	Carrying amount	Fair value	Carrying amount	Carrying amount	
Noncurrent assets						
Equity-accounted investments	–	–	–	–	8,169	8,169
Other equity investments	54	–	–	–	1,848	1,902
Financial services receivables	288	51,404	52,581	–	35,281	86,973
Other financial assets	1,012	3,625	3,628	916	–	5,553
Tax receivables	–	–	–	–	341	341
Current assets						
Trade receivables	1	17,940	17,940	–	–	17,941
Financial services receivables	22	39,936	39,936	–	18,656	58,615
Other financial assets	1,477	10,120	10,120	619	–	12,216
Tax receivables	–	9	9	–	1,181	1,190
Marketable securities	16,681	88	88	–	–	16,769
Cash, cash equivalents and time deposits	–	25,923	25,923	–	–	25,923
Assets held for sale	3	158	158	–	634	795
Noncurrent liabilities						
Noncurrent financial liabilities	–	108,348	110,679	–	5,208	113,556
Other noncurrent financial liabilities	943	2,549	2,554	1,007	–	4,499
Current liabilities						
Current financial liabilities	–	86,911	86,911	–	1,002	87,912
Trade payables	–	22,745	22,745	–	–	22,745
Other current financial liabilities	817	8,614	8,614	1,427	–	10,858
Tax payables	–	19	19	–	389	408
Liabilities associated with assets held for sale	–	44	44	–	326	370

The carrying amount of lease receivables was €53.9 billion (previous year: €49.2 billion) and their fair value (fair value hierarchy level 3) was €55.0 billion (previous year: €49.8 billion).

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 entitled "Accounting policies". 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. The inputs used are not observable in an active market.

The following tables contain 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, 2018	Level 1	Level 2	Level 3
Noncurrent assets				
Other equity investments	134	56	25	53
Financial services receivables	286	–	–	286
Other financial assets	772	–	357	415
Current assets				
Financial services receivables	22	–	–	22
Other financial assets	1,094	–	880	214
Marketable securities	16,940	16,940	–	–
Noncurrent liabilities				
Other noncurrent financial liabilities	767	–	250	516
Current liabilities				
Other current financial liabilities	718	–	419	299

€ million	Dec. 31, 2019	Level 1	Level 2	Level 3
Noncurrent assets				
Other equity investments	54	43	0	11
Financial services receivables	288	–	–	288
Other financial assets	1,012	–	595	417
Current assets				
Other financial assets	1	–	–	1
Financial services receivables	22	–	–	22
Other financial assets	1,477	–	1,304	173
Marketable securities	16,681	16,681	–	–
Assets held for sale	3	–	–	3
Noncurrent liabilities				
Other noncurrent financial liabilities	943	–	425	518
Current liabilities				
Other current financial liabilities	817	–	570	247

FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES MEASURED AT AMORTIZED COST BY LEVEL

€ million	Dec. 31, 2018	Level 1	Level 2	Level 3
Fair value of financial assets measured at amortized cost				
Financial services receivables	84,319	–	–	84,319
Trade receivables	17,537	–	17,537	–
Other financial assets	13,403	378	5,004	8,020
Tax receivables	29	–	29	–
Cash, cash equivalents and time deposits	28,938	28,115	823	–
Fair value of financial assets measured at amortized cost	**144,226**	**28,493**	**23,394**	**92,339**
Fair value of financial liabilities measured at amortized cost				
Put options and compensation rights granted to noncontrolling interest shareholders	1,853	–	–	1,853
Trade payables	23,607	–	23,607	–
Financial liabilities	190,671	59,089	131,316	266
Other financial liabilities	10,064	1,297	8,535	233
Tax payables	33	–	33	–
Fair value of financial liabilities measured at amortized cost	**226,228**	**60,386**	**163,491**	**2,352**

€ million	Dec. 31, 2019	Level 1	Level 2	Level 3
Fair value of financial assets measured at amortized cost				
Financial services receivables	92,518	–	–	92,518
Trade receivables	17,940	–	17,940	–
Other financial assets	13,748	456	4,534	8,758
Tax receivables	9	–	9	–
Cash, cash equivalents and time deposits	25,923	24,912	1,010	–
Assets held for sale	158	4	154	–
Fair value of financial assets measured at amortized cost	**150,296**	**25,372**	**23,648**	**101,276**
Fair value of financial liabilities measured at amortized cost				
Trade payables	22,745	–	22,745	–
Financial liabilities	197,590	42,828	152,329	2,433
Other financial liabilities	11,168	707	10,069	392
Tax payables	19	–	19	–
Liabilities associated with assets held for sale	44	–	44	–
Fair value of financial liabilities measured at amortized cost	**231,566**	**43,535**	**185,205**	**2,825**

DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING BY LEVEL

€ million	Dec. 31, 2018	Level 1	Level 2	Level 3
Noncurrent assets				
Other financial assets	1,510	–	1,510	–
Current assets				
Other financial assets	1,341	–	1,341	–
Noncurrent liabilities				
Other noncurrent financial liabilities	368	–	368	0
Current liabilities				
Other current financial liabilities	721	–	721	–

€ million	Dec. 31, 2019	Level 1	Level 2	Level 3
Noncurrent assets				
Other financial assets	916	–	916	–
Current assets				
Other financial assets	619	–	619	–
Noncurrent liabilities				
Other noncurrent financial liabilities	1,007	–	1,007	–
Current liabilities				
Other current financial liabilities	1,427	–	1,427	–

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 that are listed and traded on a public market. Fair values in Level 2, for example of derivatives, are measured on the basis of 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. Fair Values in Level 3 are calculated using valuation techniques that incorporate inputs that are not directly 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, residual value protection models, customer financing receivables, receivables from vehicle financing programs and other equity investments are also reported in Level 3. In this process, the relevant corporate plans and company-specific discount rates in particular are used for measuring the equity instruments. 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. The measurement of vehicle financing programs requires in particular the use of the corresponding vehicle price.

The table below provides a summary of changes in Level 3 balance sheet items measured at fair value:

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
Balance at Jan. 1, 2018	**823**	**765**
Foreign exchange differences	–33	–3
Changes in consolidated Group	–184	–
Total comprehensive income	78	204
recognized in profit or loss	27	204
recognized in other comprehensive income	51	–
Additions (purchases)	339	28
Sales and settlements	–2	–183
Transfers into Level 2	–32	5
Balance at Dec. 31, 2018	**990**	**816**
Total gains or losses recognized in profit or loss	**27**	**–204**
Net other operating expense/income	31	–203
of which attributable to assets/liabilities held at the reporting date	58	–235
Financial result	–4	0
of which attributable to assets/liabilities held at the reporting date	–5	–

€ million	Financial assets measured at fair value	Financial liabilities measured at fair value	Financial assets held for sale
Balance at Jan. 1, 2019	**990**	**816**	**–**
Foreign exchange differences	22	9	–
Changes in consolidated Group	0	–	–
Total comprehensive income	154	293	–
recognized in profit or loss	157	293	–
recognized in other comprehensive income	–3	–	–
Additions (purchases)	13	–	3
Sales and settlements	–215	–301	–
Transfers into Level 2	–46	–51	–
Classified as held for sale	–3	–	–
Balance at Dec. 31, 2019	**913**	**765**	**3**
Total gains or losses recognized in profit or loss	**157**	**–293**	**–**
Net other operating expense/income	161	–292	–
of which attributable to assets/liabilities held at the reporting date	115	–238	–
Financial result	–4	–1	–
of which attributable to assets/liabilities held at the reporting date	–4	–	–

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 further 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, 2019, earnings after tax would have been €168 million (previous year: €59 million) higher (lower). The equity is not affected.

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 at December 31, 2019 had been 10% higher, earnings after tax would have been €3 million (previous year: €3 million) higher. If the assumed enterprise values at December 31, 2019 had been 10% lower, earnings after tax would have been €3 million (previous year: €3 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 buyback 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 of the used cars covered by the residual value protection model had been 10% higher as of December 31, 2019, earnings after tax would have been €354 million (previous year: €325 million) higher. If the prices of the used cars covered by the residual value protection model had been 10% lower as of December 31, 2019, earnings after tax would have been €374 million (previous year: €352 million) lower.

If the risk-adjusted interest rates applied to receivables measured at fair value had been 100 basis points higher as of December 31, 2019, earnings after tax would have been €3 million (previous year: €1 million) lower. If the risk-adjusted interest rates as of December 31, 2019 had been 100 basis points lower, earnings after tax would have been €3 million (previous year: €4 million) higher.

If the corresponding vehicle prices used in the vehicle financing programs had been 10% higher as of December 31, 2019, earnings after tax would have been €5 million (previous year: €8 million) higher. If the corresponding vehicle prices used in the vehicle financing programs had been 10% lower as of December 31, 2019, earnings after tax would have been €5 million (previous year: €8 million) lower.

If the result of operations of equity investments measured at fair value had been 10% better as of December 31, 2019, the equity would have been €0.2 million (previous year: €2.8 million) higher. If the result of operations had been 10% worse, the equity would have been €0.2 million (previous year: €2.8 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.

				AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET		
€ million	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	Net amount at Dec. 31, 2018
Derivatives	3,979	0	3,979	–1,819	–171	1,989
Financial services receivables	132,909	–	132,909	–	–77	132,831
Trade receivables	17,537	0	17,537	0	–	17,536
Marketable securities	17,080	–	17,080	–	–	17,080
Cash, cash equivalents and time deposits	28,938	–	28,938	–	–	28,938
Other financial assets	14,307	–15	14,291	–	–	14,291

				AMOUNTS THAT ARE NOT SET OFF IN THE BALANCE SHEET		
€ million	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	Net amount at Dec. 31, 2019
Derivatives	3,396	–146	3,250	–2,010	–45	1,195
Financial services receivables	146,218	–630	145,588	–	–98	145,490
Trade receivables	17,952	–11	17,941	0	–	17,941
Marketable securities	16,769	–	16,769	–	–	16,769
Cash, cash equivalents and time deposits	25,923	–	25,923	–	–	25,923
Other financial assets	14,436	146	14,581	0	–	14,581

Other financial assets include receivables from tax allocations of €9 million (previous year: €29 million).

€ million	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	Amounts that are not set off in the balance sheet: Financial instruments	Amounts that are not set off in the balance sheet: Collateral pledged	Net amount at Dec. 31, 2018
Put options and compensation rights granted to noncontrolling interest shareholders	1,853	–	1,853	–	–	1,853
Derivatives	2,573	0	2,573	–1,738	–1	834
Financial liabilities	190,883	–	190,883	–	–1,953	188,931
Trade payables	23,607	0	23,607	0	–	23,607
Other financial liabilities	10,111	–15	10,095	–	–	10,095

€ million	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	Amounts that are not set off in the balance sheet: Financial instruments	Amounts that are not set off in the balance sheet: Collateral pledged	Net amount at Dec. 31, 2019
Derivatives	4,195	0	4,195	–1,900	–53	2,241
Financial liabilities	201,468	–	201,468	–	–1,729	199,740
Trade payables	22,756	–11	22,745	0	–	22,745
Other financial liabilities	11,812	–630	11,182	–	–	11,182

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.

Other financial liabilities include liabilities from tax allocations of €19 million (previous year: €33 million).

ASSET-BACKED SECURITIES TRANSACTIONS

Asset-backed securities transactions with financial assets amounting to €27.8 billion (previous year: €27.9 billion) 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 €34.1 billion (previous year: €32.7 billion). Collateral of €47.9 billion (previous year: €47.9 billion) 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, 2019, the fair value of the assigned receivables still recognized in the balance sheet was €34.8 billion (previous year: €32.9 billion). The fair value of the related liabilities was €30.1 billion (previous year: €30.1 billion) 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.

ADDITIONAL INCOME STATEMENT DISCLOSURES IN ACCORDANCE WITH IFRS 7 (FINANCIAL INSTRUMENTS)

The table below shows net gains and losses on financial assets and financial liabilities by measurement category, followed by a detailed explanation of key aspects:

NET GAINS OR LOSSES FROM FINANCIAL INSTRUMENTS BY IFRS 9 MEASUREMENT CATEGORY

€ million	2019	2018
Financial instruments at fair value through profit or loss	–242	–763
Financial assets measured at amortized cost	6,282	6,241
Financial assets at fair value through other comprehensive income (debt instruments)	7	17
Financial liabilities measured at amortized cost	–4,420	–4,963
	1,628	**531**

Net gains and losses in the category at "financial instruments at fair value through profit or loss" are mainly 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 financial assets measured at fair value through other comprehensive income (debt instruments) relate to interest income from fixed-income securities.

Net gains and losses from financial assets and liabilities measured at amortized cost mainly comprise interest income and expenses calculated according to the effective interest method pursuant to IFRS 9, currency translation effects, and the recognition of loss allowances. Interest also includes interest income and expenses from the lending business of the Financial Services Division.

The table below presents total interest income and expenses from financial assets and liabilities measured at amortized cost, separately from financial assets measured at fair value through other comprehensive income:

TOTAL INTEREST INCOME AND EXPENSES ATTRIBUTABLE TO FINANCIAL INSTRUMENTS NOT MEASURED AT FAIR VALUE THROUGH PROFIT OR LOSS

€ million	2019	2018
Financial assets and liabilities measured at amortized cost		
Interest income	7,563	5,022
Interest expenses	4,120	3,183
Financial assets (debt instruments) and liabilities measured at fair value through other comprehensive income		
Interest income	8	17
Interest expenses	–	1

GAINS AND LOSSES ON THE DISPOSAL OF FINANCIAL ASSETS MEASURED AT AMORTIZED COST

€ million	2019	2018
Gains arising from the derecognition of financial assets measured at amortized cost	845	1,001
Losses arising from the derecognition of financial assets measured at amortized cost	–978	–1,073
	–133	**–72**

In the fiscal year, €2 million (previous year: €2 million) was recognized as an expense and €44 million (previous year: €51 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.

36. 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. 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 in-/outflows from the issuance/repayment of hybrid capital 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 the fiscal year, cash flows from operating activities include interest received amounting to €7,640 million (previous year: €7,047 million) and interest paid amounting to €2,604 million (previous year: €1,857 million). Cash flows from operating activities also include dividend payments (net of withholding tax) received from joint ventures and associates of €3,679 million (previous year: €3,315 million).

Dividends amounting to €2,419 million (previous year: €1,967 million) were paid to Volkswagen AG shareholders.

€ million	Dec. 31, 2019	Dec. 31, 2018
Cash, cash equivalents and time deposits as reported in the balance sheet	25,923	28,938
Time deposits	–1,593	–825
Cash and cash equivalents as reported in the cash flow statement	**24,329**	**28,113**

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, 2018	Cash-effective changes	NON-CASH CHANGES Foreign exchange differences	Changes in consolidated Group	Other changes	Dec. 31, 2018
Bonds	63,118	20,018	–193	–	–1,395	81,549
Other total third-party borrowings	99,875	7,740	–414	11	1,674	108,886
Finance lease liabilities	479	–29	–1	–	0	449
Total third-party borrowings	**163,472**	**27,730**	**–607**	**11**	**279**	**190,883**
Put options and compensation rights granted to noncontrolling interest shareholders	3,795	–2,132	–	–	190	1,853
Other financial assets and liabilities	–160	–121	27	–	72	–182
Financial assets and liabilities in financing activities	**167,107**	**25,477**	**–581**	**11**	**541**	**192,555**

€ million	Jan. 1, 2019	Cash-effective changes	NON-CASH CHANGES Foreign exchange differences	Changes in consolidated Group	Classified as held for sale	Other changes	Dec. 31, 2019
Bonds	81,549	6,132	496	–	–	452	88,629
Other total third-party borrowings	108,886	–3,392	1,616	–193	0	–287	106,630
Finance lease liabilities[1,2]	5,567	–957	81	16	9	1,513	6,210
Total third-party borrowings	**196,001**	**1,783**	**2,193**	**–177**	**9**	**1,678**	**201,468**
Put options and compensation rights granted to noncontrolling interest shareholders[3]	1,853	–1,135	–	–	–	–718	–
Other financial assets and liabilities	–182	18	–3	–	–	87	–81
Financial assets and liabilities in financing activities	**197,672**	**666**	**2,189**	**–177**	**9**	**1,046**	**201,387**

1 Value in the opening balance adjusted (see disclosures on IFRS 16).
2 Other changes in lease liabilities largely contain noncash additions of lease liabilities.
3 Other changes in put options/compensation rights granted to noncontrolling interest shareholders largely contain the reclassification of the residual liability to equity after the put options granted expired in the fiscal year.

37. 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 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. Some functions of the Scania, MAN and PHS subgroups are included in Group Treasury's operational risk management and control for risks relating to financial instruments. Subgroups have their own risk management structures.

For more information, please see the management report on pages 187 to 189.

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. Collateral is held predominantly for financial assets in the "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.

For level 3 and level 4 financial assets with objective indications of impairment as of the reporting date, the collateral provided led to a reduction in risk by €1.3 billion (previous year: €1.3 billion). Collateral of €285 million (previous year: €15 million) has been accepted for assets measured at fair value through profit or loss.

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 5.2% at the end of 2019 compared with 9.7% at the end of 2018. 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 34.2% at the end of 2019, as against 25.4% at the end of 2018. There were no other concentrations of credit and default risk exposures in individual countries.

LOSS ALLOWANCE

The Volkswagen Group consistently uses the expected credit loss model of IFRS 9 for all financial assets and other risk exposures.

The expected credit loss model under IFRS 9 takes in both loss allowances for financial assets for which there are no objective indications of impairment and loss allowances for financial assets that are already impaired. For the calculation of impairment losses, IFRS 9 distinguishes between the general approach and the simplified approach.

Under the general approach, financial assets are allocated to one of three stages, plus an additional stage for financial assets that are already impaired when acquired (stage 4). Stage 1 comprises financial assets that are recognized for the first time or for which the probability of default has not increased significantly. The expected credit losses for the next twelve months are calculated at this stage. Stage 2 comprises financial assets with a significantly increased probability of default, while financial assets with objective indications of default are allocated to stage 3. The lifetime expected credit losses are calculated at these stages. Stage 4 financial assets, which are already impaired when acquired, are subsequently measured by recognizing a loss allowance on the basis of the accumulated lifetime expected losses. Financial assets classified as impaired on acquisition remain in this category until they are derecognized.

The Volkswagen Group applies the simplified approach to trade receivables and contract assets with a significant financing component in accordance with IFRS 15. The same applies to receivables under operating or finance leases accounted for under IFRS 16. Under the simplified approach, the expected losses are consistently determined for the entire life of the asset.

The tables below show the reconciliation of the loss allowance for various financial assets and financial guarantees and credit commitments:

CHANGES IN LOSS ALLOWANCE FOR FINANCIAL ASSETS MEASURED AT AMORTIZED COST

€ million	Stage 1	Stage 2	Stage 3	Simplified approach	Stage 4	Total
Carrying amount at Jan. 1, 2018	**800**	**802**	**1,002**	**622**	**138**	**3,364**
Foreign exchange differences	–2	–7	–35	–15	–4	–63
Changes in consolidated Group	4	6	15	8	0	33
Newly extended/purchased financial assets (additions)	253	–	–	176	30	459
Other changes within a stage	–69	132	195	1	16	275
Transfers to						
Stage 1	22	–67	–13	–	–	–58
Stage 2	–102	275	–39	–	–	134
Stage 3	–33	–51	445	–	–	361
Financial instruments derecognized during the period (disposals)	–120	–148	–226	–127	–33	–653
Utilization	–	–	–459	–34	–1	–493
Changes to models or risk parameters	–1	4	10	3	–2	13
Carrying amount at Dec. 31, 2018	**750**	**946**	**896**	**634**	**146**	**3,372**

CHANGES IN LOSS ALLOWANCE FOR FINANCIAL ASSETS MEASURED AT AMORTIZED COST

€ million	Stage 1	Stage 2	Stage 3	Simplified approach	Stage 4	Total
Carrying amount at Jan. 1, 2019	**750**	**946**	**896**	**634**	**146**	**3,372**
Foreign exchange differences	6	4	3	3	0	16
Changes in consolidated Group	2	–	0	1	–	3
Newly extended/purchased financial assets (additions)	464	–	–	255	1	719
Other changes within a stage	–64	–222	157	–3	–32	–165
Transfers to						
Stage 1	39	–75	–12	–	–	–48
Stage 2	–91	206	–16	–	–	98
Stage 3	–45	–76	334	–	–	213
Financial instruments derecognized during the period (disposals)	–146	–106	–145	47	–4	–354
Utilization	–	–	–322	–177	–16	–516
Changes to models or risk parameters	–2	1	0	2	–	1
Classified as held for sale	0	–	–	–2	–	–2
Carrying amount at Dec. 31, 2019	**913**	**677**	**893**	**760**	**94**	**3,336**

CHANGES IN LOSS ALLOWANCE FOR FINANCIAL GUARANTEES AND CREDIT COMMITMENTS

€ million	Stage 1	Stage 2	Stage 3	Stage 4	Total
Carrying amount at Jan. 1, 2018	**11**	**4**	**1**	**0**	**16**
Foreign exchange differences	0	0	0	–	0
Changes in consolidated Group	–	–	–	–	–
Newly extended/purchased financial assets (additions)	11	–	–	1	12
Other changes within a stage	0	0	0	0	0
Transfers to					
Stage 1	0	0	0	–	0
Stage 2	–1	0	0	–	0
Stage 3	0	0	1	–	1
Financial instruments derecognized during the period (disposals)	–4	–4	0	–1	–9
Utilization	–	–	0	–	0
Changes to models or risk parameters	0	0	0	0	0
Carrying amount at Dec. 31, 2018	**18**	**1**	**1**	**0**	**19**

CHANGES IN LOSS ALLOWANCE FOR FINANCIAL GUARANTEES AND CREDIT COMMITMENTS

€ million	Stage 1	Stage 2	Stage 3	Stage 4	Total
Carrying amount at Jan. 1, 2019	**18**	**1**	**1**	**0**	**19**
Foreign exchange differences	0	0	0	0	0
Changes in consolidated Group	0	–	–	–	0
Newly extended/purchased financial assets (additions)	10	0	0	0	10
Other changes within a stage	0	0	–1	0	0
Transfers to					
Stage 1	0	0	–	–	0
Stage 2	–2	1	–	–	–1
Stage 3	0	0	–	–	0
Financial instruments derecognized during the period (disposals)	–9	0	–	0	–10
Utilization	–	–	0	–	0
Changes to models or risk parameters	0	0	–	–	0
Classified as held for sale	0	–	–	–	–
Carrying amount at Dec. 31, 2019	**17**	**2**	**0**	**0**	**18**

CHANGES IN LOSS ALLOWANCE FOR LEASE RECEIVABLES AND CONTRACT ASSETS

	SIMPLIFIED APPROACH	
€ million	2019	2018
Carrying amount at Jan. 1	**1,193**	**1,250**
Foreign exchange differences	14	–6
Changes in consolidated Group	6	–
Newly extended/purchased financial assets (additions)	249	450
Other changes	261	0
Financial instruments derecognized during the period (disposals)	–282	–465
Utilization	–88	–54
Changes to models or risk parameters	–42	18
Classified as held for sale	0	–
Carrying amount at Dec. 31	**1,312**	**1,193**

The loss allowance on assets measured at fair value in Stage 1 rose by €2 million in fiscal year 2019, resulting in a closing balance of €3 million. Of this amount, €2 million is attributable to Stage 1 (previous year: €2 million) and €1 million to Stage 2 (previous year €– million).

The amount contractually outstanding for financial assets that have been derecognized in the current year and are still subject to enforcement proceedings is €331 million (previous year: €293 million).

MODIFICATIONS

There were contract modifications to financial assets in the reporting period that did not lead to the derecognition of the asset. They were primarily attributable to credit ratings and relate to financial assets for which loss allowances were measured in the amount of the lifetime credit losses. For trade and lease receivables, the treatment is simplified by considering the credit rating-based modifications where the receivables are more than 30 days past due. Before the modification, amortized cost amounted to €120 million (previous year: €147 million). In the reporting period, contract modifications resulted in net income/net expenses of €–0.2 million (previous year: €1.8 million).

As of the reporting date, the gross carrying amounts of financial assets that have been modified since initial recognition and were simultaneously reclassified from stage 2 or 3 to stage 1 in the reporting period amounted to €28 million (previous year: €19 million). As a result, the measurement of the loss allowance for these financial assets was changed from lifetime expected credit losses to 12-month expected credit losses.

MAXIMUM CREDIT RISK

The table below shows the maximum credit risk to which the Volkswagen Group was exposed as of the reporting date, broken down by class to which the impairment model is applied:

MAXIMUM CREDIT RISK BY CLASS

€ million	Dec. 31, 2019	31.12.2018
Financial instruments measured at fair value	3,139	3,542
Financial instruments measured at amortized cost	149,045	143,466
Financial guarantees and credit commitments	5,988	4,640
not within the scope of IFRS 7	53,938	49,518
Total	**212,109**	**201,166**

RATING CATEGORIES

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. Risk class 3 comprises all defaulted receivables.

The table below presents the gross carrying amounts of financial assets by rating category:

GROSS CARRYING AMOUNTS OF FINANCIAL ASSETS BY RATING CATEGORY AS OF DECEMBER 31, 2018

€ million	Stage 1	Stage 2	Stage 3	Simplified approach	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	116,912	8,007	–	58,537	93
Credit risk rating grade 2 (receivables with credit risk – intensified loan management)	2,243	4,787	–	5,687	37
Credit risk rating grade 3 (cancelled receivables – non-performing loans)	–	–	1,719	1,017	467
Total	**119,155**	**12,794**	**1,719**	**65,241**	**597**

GROSS CARRYING AMOUNTS OF FINANCIAL ASSETS BY RATING CATEGORY AS OF DECEMBER 31, 2019

€ million	Stage 1	Stage 2	Stage 3	Simplified approach	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	120,926	8,272	–	66,344	89
Credit risk rating grade 2 (receivables with credit risk – intensified loan management)	3,240	5,031	–	3,226	43
Credit risk rating grade 3 (cancelled receivables – non-performing loans)	–	–	2,514	901	359
Total	**124,166**	**13,303**	**2,514**	**70,470**	**490**

Furthermore, the default risk exposure for financial guarantees and credit commitments is presented below:

DEFAULT RISK FOR FINANCIAL GUARANTEES AND CREDIT COMMITMENTS AS OF DECEMBER 31, 2018

€ million	Stage 1	Stage 2	Stage 3	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	4,243	304	–	1
Credit risk rating grade 2 (receivables with credit risk – intensified loan management)	76	15	–	0
Credit risk rating grade 3 (cancelled receivables – non-performing loans)	–	–	17	4
Total	**4,318**	**319**	**17**	**5**

DEFAULT RISK FOR FINANCIAL GUARANTEES AND CREDIT COMMITMENTS AS OF DECEMBER 31, 2019

€ million	Stage 1	Stage 2	Stage 3	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	5,693	178	–	0
Credit risk rating grade 2 (receivables with credit risk – intensified loan management)	100	25	–	0
Credit risk rating grade 3 (cancelled receivables – non-performing loans)	–	–	7	3
Total	**5,793**	**203**	**7**	**4**

Collateral that was accepted for financial assets in the current fiscal year was recognized in the balance sheet in the amount of €149 million (previous year: €134 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 €27.0 billion as of December 31, 2019 (previous year: €16.8 billion), of which €3.8 billion (previous year: €3.4 billion) was drawn down.

Local cash funds in certain countries (e.g. China, Brazil, Argentina, South Africa and India) 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

	Remaining contractual maturities				Remaining contractual maturities			
€ million	up to one year	within one to five years	more than five years	2019	up to one year	within one to five years	more than five years	2018
Put options and compensation rights granted to noncontrolling interest shareholders	–	–	–	–	1,853	–	–	1,853
Financial liabilities	90,137	96,135	25,542	211,814	91,891	84,965	23,380	200,235
Trade payables	22,745	0	–	22,745	23,607	0	–	23,607
Other financial liabilities	8,633	2,355	176	11,164	8,010	1,916	154	10,080
Derivatives	70,932	57,182	5,912	134,027	63,059	42,984	3,036	109,078
	192,447	**155,672**	**31,630**	**379,750**	**188,419**	**129,865**	**26,570**	**344,854**

The cash outflows on other financial liabilities include outflows on liabilities for tax allocations amounting to €19 million (previous year: €33 million).

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, 2019, the maximum potential liability under financial guarantees amounted to €425 million (previous year: €315 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 such risk by means of hedging. Generally, 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.

DISCLOSURES ON GAINS AND LOSSES FROM FAIR VALUE HEDGES

Fair value hedges involve hedging against the risk of changes in the carrying amount of balance sheet items. As of the reporting date, both hedging instruments and hedged items are measured at fair value in relation to the hedged risk, and the resulting changes in value are recognized on a net basis in the corresponding income statement item.

The following table shows the gains and losses from (fair value) hedges by risk type:

DISCLOSURES ON GAINS AND LOSSES FROM FAIR VALUE HEDGES

€ million	Dec. 31, 2019	Dec. 31, 2018
Hedging interest rate risk		
Other financial result	–	–
Other operating result	–5	34
Hedging currency risk		
Other financial result	–	–
Other operating result	–39	–30
Combined interest rate and currency risk hedging		
Other financial result	–	0
Other operating result	2	5

DISCLOSURES ON GAINS AND LOSSES FROM CASH FLOW HEDGES

Cash flow hedges are used to hedge against risks of fluctuations in future cash flows. These cash flows may arise from a recognized asset or liability, or from a highly probable forecast transaction. The following table shows the gains and losses from (cash flow) hedges by risk type:

DISCLOSURES ON GAINS AND LOSSES FROM CASH FLOW HEDGES

€ million	2019	2018
Hedging interest rate risk		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	–41	–38
Recognized in profit or loss	0	0
Reclassification from the cash flow hedge reserve to profit or loss		
Due to early discontinuation of the hedging relationships	–	–
Due to realization of the hedged item	–1	2
Hedging currency risk		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	–2,136	–1,367
Recognized in profit or loss	–1	–7
Reclassification from the cash flow hedge reserve to profit or loss		
Due to early discontinuation of the hedging relationships	4	–1
Due to realization of the hedged item	137	–1,074
Combined interest rate and currency risk hedging		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	–4	8
Recognized in profit or loss	2	0
Reclassification from the cash flow hedge reserve to profit or loss		
Due to early discontinuation of the hedging relationships	–	–
Due to realization of the hedged item	2	–8
Hedging commodities price risk		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	–	–5
Recognized in profit or loss	–	–
Reclassification from the cash flow hedge reserve to profit or loss		
Due to early discontinuation of the hedging relationships	–	–
Due to realization of the hedged item	–4	1

The table presents effects taken to equity, reduced by deferred taxes.

The gain or loss from changes in the fair value of hedging instruments used in hedge accounting corresponds to the basis for determining hedge ineffectiveness. The ineffective portion of a cash flow hedge is the income or expense resulting from changes in the fair value of the hedging instrument that exceed the changes in the fair value of the hedged item. This hedge ineffectiveness is attributable to parameter differences between the hedging instrument and the hedged item. Such income and expenses are recognized in other operating income/expenses or in 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.

DISCLOSURES ON HEDGING INSTRUMENTS IN HEDGE ACCOUNTING

The Volkswagen Group regularly enters into hedging instruments to hedge against changes in the carrying amount of balance sheet items. The summary below shows the notional amounts, fair values and base variables for determining the ineffectiveness of hedging instruments entered into to hedge against the risk of changes in carrying amounts in fair value hedges:

DISCLOSURES ON HEDGING TRANSACTIONS IN FAIR VALUE HEDGES IN 2018

€ million	Notional amount	Other assets	Other liabilities	Fair value changes to determine hedge ineffectiveness
Hedging interest rate risk				
Interest rate swaps	48,609	467	61	309
Hedging currency risk				
Currency forwards, currency options, cross-currency swaps	6,811	222	75	95
Combined interest rate and currency risk hedging				
Interest rate/currency swaps	901	58	0	108

DISCLOSURES ON HEDGING TRANSACTIONS IN FAIR VALUE HEDGES IN 2019

€ million	Notional amount	Other assets	Other liabilities	Fair value changes to determine hedge ineffectiveness
Hedging interest rate risk				
Interest rate swaps	55,443	650	97	586
Hedging currency risk				
Currency forwards, currency options, cross-currency swaps	6,807	74	111	–17
Combined interest rate and currency risk hedging				
Cross-currency interest rate swaps	580	13	1	12

In addition, hedging instruments are entered into to hedge against the risk of fluctuations in future cash flows. The table below shows the notional amounts, fair values and base variables for determining the ineffectiveness of hedging instruments designated as cash flow hedges:

DISCLOSURES ON HEDGING TRANSACTIONS IN CASH FLOW HEDGES IN 2018

€ million	Notional amount	Other assets	Other liabilities	Fair value changes to determine hedge ineffectiveness
Hedging interest rate risk				
Interest rate swaps	12,477	39	15	17
Hedging currency risk				
Currency forwards and cross-currency swaps	66,505	1,834	836	2,794
Currency options	17,956	187	91	69
Combined interest rate and currency risk hedging				
Cross-currency interest rate swaps	1,424	44	11	35

DISCLOSURES ON HEDGING TRANSACTIONS IN CASH FLOW HEDGES IN 2019

€ million	Notional amount	Other assets	Other liabilities	Fair value changes to determine hedge ineffectiveness
Hedging interest rate risk				
Interest rate swaps	14,017	6	48	–32
Hedging currency risk				
Currency forwards and cross-currency swaps	87,271	689	2,090	96
Currency options	15,198	73	68	1
Combined interest rate and currency risk hedging				
Cross-currency interest rate swaps	1,648	29	19	11

The change in the fair value to determine ineffectiveness corresponds to the change in fair value of the designated component.

DISCLOSURES ON HEDGED ITEMS IN HEDGE ACCOUNTING

In addition to disclosures on hedging instruments, disclosures are also required on the hedged items, broken down by risk category and type of designation for hedge accounting. Below follows a list of hedged items designated in fair value hedges, separately from those designated in cash flow hedges:

DISCLOSURES ON HEDGED ITEMS IN FAIR VALUE HEDGES IN 2018

€ million	Carrying amount	Cumulative hedge adjustments	Hedge adjustments current period/ fiscal year	Cumulative hedge adjustments from discontinued hedging relationships
Hedging interest rate risk				
Financial services receivables	19,311	–10	20	–
Other financial assets	–	17	17	–
Financial liabilities	31,670	220	127	–
Hedging currency risk				
Financial services receivables	–	–	–	3
Other financial assets	640	28	77	–
Financial liabilities	26	36	38	–
Combined interest rate and currency risk hedging				
Financial services receivables	–	4	4	–
Other financial assets	714	–32	–4	–
Financial liabilities	166	1	1	–

DISCLOSURES ON HEDGED ITEMS IN FAIR VALUE HEDGES IN 2019

€ million	Carrying amount	Cumulative hedge adjustments	Hedge adjustments current period/ fiscal year	Cumulative hedge adjustments from discontinued hedging relationships
Hedging interest rate risk				
Financial services receivables	20,680	17	32	–
Other financial assets	194	24	7	–
Financial liabilities	40,704	519	278	–
Hedging currency risk				
Financial services receivables	–	–	–	–
Other financial assets	991	–3	–55	–
Financial liabilities	1,595	32	–4	–
Combined interest rate and currency risk hedging				
Financial services receivables	–	–	–	–
Other financial assets	209	–26	2	–
Financial liabilities	48	3	3	–

DISCLOSURES ON HEDGED ITEMS IN CASH FLOW HEDGES IN 2018

€ million	Changes in fair value to determine hedge ineffectiveness	Reserve for: Active cash flow hedges	Reserve for: Discontinued cash flow hedges
Hedging interest rate risk			
Designated components	26	19	0
Non-designated components	–	–	–
Deferred taxes	–	–1	0
Total hedging interest rate risk	26	19	0
Hedging currency risk			
Designated components	2,526	2,524	0
Non-designated components	–	–885	–9
Deferred taxes	–	–478	1
Total hedging currency risk	2,526	1,162	–8
Combined interest rate and currency risk hedging			
Designated components	27	2	–26
Non-designated components	–	–	–
Deferred taxes	–	0	8
Total hedging combined interest rate and currency risk	27	1	–18
Hedging commodity price risk			
Designated components	–	–	7
Non-designated components	–	–	–
Deferred taxes	–	–	–2
Total hedging commodity price risk	–	–	5

DISCLOSURES ON HEDGED ITEMS IN CASH FLOW HEDGES IN 2019

€ million	Changes in fair value to determine hedge ineffectiveness	Reserve for: Active cash flow hedges	Reserve for: Discontinued cash flow hedges
Hedging interest rate risk			
Designated components	–29	–30	0
Non-designated components	–	–	–
Deferred taxes	–	7	0
Total hedging interest rate risk	–29	–23	0
Hedging currency risk			
Designated components	143	184	–5
Non-designated components	–	–1,380	–6
Deferred taxes	–	366	0
Total hedging currency risk	143	–830	–11
Combined interest rate and currency risk hedging			
Designated components	20	–2	–26
Non-designated components	–	–	–
Deferred taxes	–	1	8
Total hedging combined interest rate and currency risk	20	–2	–18
Hedging commodity price risk			
Designated components	–	–	1
Non-designated components	–	–	–
Deferred taxes	–	–	0
Total hedging commodity price risk	–	–	1

CHANGES IN THE RESERVE

When accounting for cash flow hedges, the designated effective portions of a hedging relationship are recognized in OCI I. Any changes in excess of the fair value of the designated component are recognized as ineffectiveness through profit or loss.

The tables below show a reconciliation to the reserve:

CHANGES IN THE RESERVE FOR CASH FLOW HEDGES (OCI I)

€ million	Interest rate risk	Currency risk	Interest rate/ currency risk	Commodity price risk	Total
Balance at Jan. 1, 2018	**55**	**3,533**	**–16**	**9**	**3,581**
Gains or losses from effective hedging relationships	–38	–414	8	–5	–450
Reclassifications due to changes in whether the hedged item is expected to occur	–	–1	–	–	–1
Reclassifications due to realization of the hedged item	2	–1,335	–8	1	–1,341
Balance at Dec. 31, 2018	**19**	**1,783**	**–17**	**5**	**1,790**

CHANGES IN THE RESERVE FOR CASH FLOW HEDGES (OCI I)

€ million	Interest rate risk	Currency risk	Interest rate/ currency risk	Commodity price risk	Total
Balance at Jan. 1, 2019	**19**	**1,783**	**–17**	**5**	**1,790**
Gains or losses from effective hedging relationships	–41	–1,092	–4	–	–1,137
Reclassifications due to changes in whether the hedged item is expected to occur	–	1	–	–	1
Reclassifications due to realization of the hedged item	–1	–557	2	–4	–561
Balance at Dec. 31, 2019	**–23**	**135**	**–20**	**1**	**93**

If expectations about the occurrence of the hedged item change, the arrangement is reclassified by terminating the hedging relationship prematurely. Changed expectations are primarily caused by a change in projections for hedging sales revenue.

Changes in the fair values of non-designated components of a derivative are likewise always recognized immediately through profit or loss. An exception from this principle is any change in the fair value attributable to non-designated time values of options, to the extent that they relate to the hedged item. Moreover, the Volkswagen Group initially recognizes in equity (hedging costs) changes in the fair values of non-designated forward components in currency forwards and currency hedges attributed to cash flow hedges. This means that the Volkswagen Group recognizes changes in the fair value of the non-designated component or parts thereof immediately through profit or loss only if there is ineffectiveness.

The tables below show a summary of changes in the reserve for hedging costs resulting from the non-designated portions of options and currency hedges:

CHANGES IN THE RESERVE FOR HEDGING COSTS – NON-DESIGNATED TIME VALUES OF OPTIONS

	CURRENCY RISK	
€ million	2019	2018
Balance at Jan. 1	**–1**	**63**
Gains and losses from non-designated time value of options		
Hedged item is recognized at a point in time	–71	–86
Reclassifications due to changes in whether the hedged item is expected to occur		
Hedged item is recognized at a point in time	0	–
Reclassification due to realization of the hedged item		
Hedged item is recognized at a point in time	38	23
Balance at Dec. 31	**–35**	**–1**

CHANGES IN THE RESERVE FOR HEDGING COSTS – NON-DESIGNATED FORWARD COMPONENT AND CROSS CURRENCY BASIS SPREAD (CCBS)

	CURRENCY RISK	
€ million	2019	2018
Balance at Jan. 1	**–628**	**–**
Gains and losses from non-designated forward elements and CCBS		
Hedged item is recognized at a point in time	–973	–866
Reclassification due to realization of the hedged item		
Hedged item is recognized at a point in time	656	238
Reclassification due to changes in whether the hedged item is expected to occur		
Hedged item is recognized at a point in time	3	0
Balance at Dec. 31	**–942**	**–628**

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 interest rate 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 2019 as part of foreign currency risk management were amongst others in 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, 2019:

€ million	DEC. 31, 2019 +10%	DEC. 31, 2019 –10%	DEC. 31, 2018 +10%	DEC. 31, 2018 –10%
Exchange rate				
EUR/GBP				
Hedging reserve	1,472	–1,472	960	–959
Earnings after tax	–172	172	–205	205
EUR/USD				
Hedging reserve	964	–979	1,329	–1,272
Earnings after tax	–473	473	–449	449
EUR/CNY				
Hedging reserve	739	–761	729	–725
Earnings after tax	–155	155	–159	159
EUR/CHF				
Hedging reserve	414	–396	312	–298
Earnings after tax	–1	1	12	–12
EUR/JPY				
Hedging reserve	342	–344	287	–285
Earnings after tax	–13	13	–18	18
EUR/SEK				
Hedging reserve	87	–85	94	–92
Earnings after tax	–122	122	–35	35
EUR/CAD				
Hedging reserve	190	–190	117	–113
Earnings after tax	–14	14	–30	30
EUR/CZK				
Hedging reserve	98	–98	65	–65
Earnings after tax	–62	62	–38	38
EUR/PLN				
Hedging reserve	–78	78	–54	54
Earnings after tax	–58	58	–52	52
CZK/GBP				
Hedging reserve	136	–136	135	–135
Earnings after tax	0	0	–1	1
EUR/BRL				
Hedging reserve	6	–6	8	–8
Earnings after tax	–111	111	–65	65
EUR/AUD				
Hedging reserve	87	–87	97	–97
Earnings after tax	–25	25	–32	32
CZK/PLN				
Hedging reserve	105	–105	34	–34
Earnings after tax	1	–1	1	–1
EUR/HUF				
Hedging reserve	0	0	0	0
Earnings after tax	–104	104	–63	63
EUR/KRW				
Hedging reserve	79	–78	33	–34
Earnings after tax	–19	19	–15	15

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 sometimes 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, 2019, equity would have been €98 million (previous year: €131 million) lower. If market interest rates had been 100 bps lower as of December 31, 2019, equity would have been €90 million (previous year: €66 million) higher.

If market interest rates had been 100 bps higher as of December 31, 2019, earnings after tax would have been €55 million (previous year: €24 million) higher. If market interest rates had been 100 bps lower as of December 31, 2019, earnings after tax would have been €47 million (previous year: €26 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_2 certificates and rubber.

Commodity price risk is limited by entering into forward transactions and swaps.

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, 2019, earnings after tax would have been €415 million (previous year: €197 million) higher (lower).

4.2.4 Equity and bond price risk

The 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, risks arising from the special funds are countered by ensuring a broad diversification of products, issuers and regional markets when investing funds, as stipulated by the Investment Guidelines of the Group. In addition, exchange rates are hedged 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, 2019, earnings after tax would have been €118 million (previous year: €16 million) higher and equity would have been €3 million (previous year: €4 million) higher. If share prices had been 10% lower as of December 31, 2019, earnings after tax would have been €175 million (previous year: €25 million) lower and equity would have been €3 million (previous year: €4 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, 2019, the value at risk was €147 million (previous year: €122 million) for interest rate risk and €172 million (previous year: €187 million) for foreign currency risk.

The entire value at risk for interest rate and foreign currency risk at the Volkswagen Financial Services subgroup was €170 million (previous year: €214 million).

5. METHODS FOR MONITORING HEDGE EFFECTIVENESS

Since the implementation of IFRS 9, the Volkswagen Group determines hedge effectiveness mainly on a prospective basis using the critical terms match method. Retrospective analysis of effectiveness uses effectiveness tests in the form of the dollar offset method. 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.

To this end, the accumulated changes in the fair value of the designated spot component of the hedging instrument and hedged item are compared. If the critical terms do not match, the same procedure is applied to the non-designated component.

For hedges involving interest rate or cross-currency swaps, the Volkswagen Group is exposed to uncertainty resulting from the IBOR reform, which may affect the timing, the amount of the IBOR-based cash flows, or the hedged risk of the hedged item or the hedging instrument. The Volkswagen Group applies the practical expedients allowed in connection with the amendments to the standard, irrespective of the remaining maturity of the hedged items and hedging instruments included in the hedges, to all hedges affected by the above-mentioned uncertainty arising from the IBOR reform.

The uncertainty relates to the following interest rate benchmarks: GBP LIBOR, AUD BBSW, NOK OIBOR, USD LIBOR and CAD CDOR. In the case of fair value hedges, the uncertainty relates to the identifiability of the risk component which results from the change in the fair value used to hedge against risks of changes in the carrying amounts of financial assets and financial liabilities. In cash flow hedges used to hedge against risks arising from changes in future cash flows, the uncertainty relates to the highly probable requirement for hedged future variable cash flows. The expected impact of the IBOR reform is being assessed on an ongoing basis and any measure required will be initiated promptly. By adapting systems and processes, the measures are intended to ensure that new interest rate benchmarks can be rolled out to replace the interest rate benchmarks discontinued as a result of the IBOR reform in a timely manner. The Volkswagen Group is currently focusing on the SONIA interest rate benchmark, because it has already become widely accepted and affects material transactions.

NOTIONAL AMOUNT OF DERIVATIVES

The notional amounts of hedging instruments exposed to the uncertainty from the IBOR reform described above are €35,389 million in total. Of this total, €13,112 million is attributable to GBP LIBOR, €2,675 million to AUD BBSW, €1,432 million to NOK OIBOR, €12,847 million to USD LIBOR and €3,990 million to CAD CDOR.

The summary below presents the remaining maturities profile of the notional amounts of the hedging instruments, which are accounted for under the Volkswagen Group's hedge accounting rules, and of derivatives to which hedge accounting is not applied:

NOTIONAL AMOUNT OF DERIVATIVES

€ million	REMAINING TERM up to one year	REMAINING TERM within one to five years	REMAINING TERM more than five years	TOTAL NOTIONAL AMOUNT Dec. 31, 2019	TOTAL NOTIONAL AMOUNT Dec. 31, 2018
Notional amount of hedging instruments within hedge accounting					
Hedging interest rate risk					
Interest rate swap	19,308	44,123	6,029	69,460	61,086
Hedging currency risk					
Currency forwards/Cross-currency swaps					
Currency forwards/Cross-currency swaps in CNY	6,886	3,983	–	10,869	9,412
Currency forwards/Cross-currency swaps in GBP	11,908	13,245	–	25,153	18,270
Currency forwards/Cross-currency swaps in USD	8,458	12,905	2,603	23,965	18,863
Currency forwards/Cross-currency swaps in other currencies	19,706	14,384	1	34,091	26,770
Currency options					
Currency options in USD	3,857	4,899	–	8,755	9,683
Currency options in CNY	2,047	–	–	2,047	4,062
Currency options in other currencies	1,692	2,703	–	4,395	4,210
Combined interest rate and currency risk hedging					
Cross-currency interest rate swaps	1,698	530	–	2,228	2,325
Notional amount of other derivatives					
Hedging Interest rate risk					
Interest rate swap	22,873	27,918	20,060	70,852	66,358
Hedging Currency risk					
Currency forwards/Cross-currency swaps					
Currency forwards/Cross-currency swaps in USD	6,293	4,620	585	11,498	12,403
Currency forwards/Cross-currency swaps in other currencies	19,740	1,362	4	21,105	17,537
Currency options					
Currency options in USD	188	–	–	188	–
Currency options in other currencies	487	–	–	487	215
Combined interest rate and currency risk hedging					
Cross-currency interest rate swaps	6,008	6,543	949	13,499	12,450
Hedging Commodity price risk					
Forward commodity contracts (aluminum)	1,148	1,894	–	3,041	2,131
Forward commodity contracts (copper)	293	663	–	956	686
Forward commodity contracts (nickel)	157	1,335	584	2,075	235
Forward commodity contracts (other)	101	87	–	188	201

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, mainly in connection with fund investments, with a notional amount of €18.2 billion (previous year: €3.8 billion) whose remaining maturity is under one year. Also in connection with fund investments, the Group held credit default swaps with a notional amount of €30.6 billion (previous year: €21.0 billion).

Existing cash flow hedges in the notional amount of €162 million (previous year: €53 million) were discontinued because of a reduction in the projections. 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. For cash flow hedges, the Volkswagen Group achieved an average hedging interest rate of 1.68% for hedging interest rate risk. In addition, currency risk was hedged at the following hedging exchange rates for the major currency pairs: EUR/USD at 1.20; EUR/GBP at 0.88; EUR/CNY at 8.14.

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	CAD	CHF	CNY	CZK	GBP	JPY	SEK	USD
Interest rate for six months	–0.3774	1.9480	–0.5622	2.9797	2.1445	0.7651	–0.1787	0.1852	1.8264
Interest rate for one year	–0.3674	1.9659	–0.5146	2.9918	2.2949	0.7386	–0.0877	0.1970	1.7630
Interest rate for five years	–0.1195	2.0300	–0.4360	3.4000	2.0600	0.8844	0.0250	0.3900	1.6866
Interest rate for ten years	0.2110	2.1150	–0.1120	4.1500	1.7250	1.0172	0.1263	0.6900	1.8350

38. 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 €5,691 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 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 14% 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 11.2%, which is above our minimum rate of return on invested capital of 9% and significantly exceeds the current cost of capital of 6.3%.

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	2019	2018
Automotive Division[1]		
Operating result after tax	13,019	11,438
Invested capital (average)	116,016	104,424
Return on investment (ROI) in %	**11.2**	**11.0**
Cost of capital in %	6.3	6.2
Opportunity cost of invested capital	7,328	6,474
Value contribution[2]	**5,691**	**4,964**
Financial Services Division		
Earnings before tax	3,219	2,782
Average equity	29,684	27,982
Return on equity before tax in %	**10.8**	**9.9**
Equity ratio in %	**12.8**	**12.7**

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.

39. Contingent liabilities

€ million	Dec. 31, 2019	Dec. 31, 2018
Liabilities under guarantees	574	511
Liabilities under warranty contracts	192	138
Assets pledged as security for third-party liabilities	19	18
Other contingent liabilities	7,708	8,607
	8,494	**9,274**

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 €419 million (previous year: €558 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 €3.7 billion (previous year: €5.4 billion), of which €3.4 billion (previous year: €3.4 billion) was attributable to investor lawsuits. Also included are certain elements of the class action lawsuits and proceedings/misdemeanor proceedings relating to the diesel issue 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. Where these lawsuits meet the definition of a contingent liability, no disclosure was normally required because it had not been possible to measure the amount involved.

In addition, other contingent liabilities include an amount of €0.7 billion for potential liabilities resulting from the risk of tax proceedings instituted by the Brazilian tax authorities against MAN Latin America.

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”.

40. Litigation

Volkswagen AG and the companies in which it is directly or indirectly invested are involved in a substantial number of legal disputes and governmental proceedings in Germany and abroad. Such legal disputes and other proceedings occur, among other things, in relation to or in connection with employees, public authorities, services, dealers, investors, customers, suppliers, products, or other contracting parties. For the companies in question, these disputes and proceedings may result in payments such as fines or in other obligations or consequences. In particular, substantial compensatory or punitive damages may have to be paid and cost-intensive measures may have to be implemented. In this context, specific estimation of the objectively likely consequences is often possible only to a very limited extent, if at all.

Risks may also emerge in connection with the adherence to regulatory requirements. This particularly applies in the case of regulatory gray areas where Volkswagen and the authorities responsible for the respective regulations may interpret the regulations differently. 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 based on existing information 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 material loss or damage not covered by the insured amounts and provisions cannot be ruled out. This applies particularly 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_x) emissions had been discovered in emissions tests on certain Volkswagen Group vehicles 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 various countries. We have since succeeded in making substantial progress and ending many of these proceedings.

In the USA, Volkswagen AG and certain affiliates reached settlement agreements with various government authorities and private plaintiffs, the latter represented by a Plaintiffs’ Steering Committee in a multidistrict litigation in the US state of California. These agreements resolved certain civil claims as well as criminal charges under US federal law and the laws of certain US states in connection with the diesel issue. As part of the agreements entered into with the US Department of Justice and the State of California (Plea Agreement and Third Partial Consent Decrees), a Compliance Monitor and Compliance Auditor was appointed for Volkswagen in 2017 for a term of three years. Although Volkswagen AG and its subsidiaries and affiliates are firmly committed to fulfilling the obligations arising from these agreements, a breach of these obligations cannot be completely ruled out. In the event of a violation, significant penalties could be imposed as stipulated in the agreements, in addition to the possibility of further monetary fines, criminal sanctions and injunctive relief.

The diesel issue is rooted in a modification of parts of the software of the relevant engine control units – which, according to Volkswagen AG’s legal position, is only unlawful under US law – 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 several years to follow, knowledge of the development and implementation of this software function.

In the months following publication of a study by the International Council on Clean Transportation in May 2014, Volkswagen AG’s Powertrain Development department checked the test set-ups on which the study was based for plausibility, confirming the unusually high NO_x emissions from certain US vehicles with type EA 189 2.0 l diesel engines. 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 engine control unit software of 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 products that have been 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.

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 in 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 EPA's publication of the “Notice of Violation” on September 18, 2015, which the Board of Management had not expected, especially at that time, then presented the situation in an entirely different light.

The AUDI AG Board of Management members in office at the time in question have likewise stated that they had no knowledge of the use of “defeat device” software that was prohibited by US law in the type V6 3.0 l TDI engines until the EPA issued its November 2015 “Notice of Violation.”

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- and eight-cylinder diesel engines such as the type V6 3.0 l and V8 4.2 l diesel engines.

In agreement with the respective responsible authorities, the Volkswagen Group is making technical measures available worldwide for virtually all diesel vehicles with type EA 189 engines. Within its area of responsibility, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) 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_2 emission figures, engine output, maximum torque, and noise emissions.

Following the studies carried out by AUDI AG to check all relevant diesel concepts for possible irregularities and retrofit potentials, measures proposed by AUDI AG have been adopted and mandated by the KBA in various recall orders pertaining to vehicle models with V6 and V8 TDI engines. Currently, AUDI AG assumes that the total cost, including the amount based on recalls, of the ongoing largely software-based retrofit program that began in July 2017 will be manageable and has recognized corresponding balance-sheet risk provisions. AUDI AG has in the meantime developed software updates for many of the affected powertrains and, after approval by the KBA, already installed these in the vehicles of a large number of affected customers. The approvals that are still outstanding are expected in the course of 2020.

In connection with the diesel issue, potential consequences for Volkswagen’s results of operations, financial position and net assets could emerge primarily in the following legal areas:

1. Criminal and administrative proceedings worldwide (excluding the USA/Canada)
Criminal investigations, regulatory offense proceedings, and/or administrative proceedings have been opened in some countries (in Germany for example by the Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin – Federal Financial Supervisory Authority). The public prosecutor's offices in Braunschweig and Munich are investigating the core issues of the criminal investigations.

In April 2019, the Braunschweig Office of the Public Prosecutor issued indictments, including one against a former Chairman of the Board of Management of Volkswagen AG, charging, among other things, fraud relating to Type EA 189 engines in connection with the diesel issue.

In September 2019, the Braunschweig Office of the Public Prosecutor furthermore indicted the current and a former Chairman of the Board of Management of Volkswagen AG as well as a former member of its Board of Management (currently Chairman of the Supervisory Board) on charges of market manipulation relating to capital market disclosure obligations in connection with the diesel issue. The Public Prosecutor's Office also requested that the court name Volkswagen AG as a collateral participant in the proceedings.

In July 2019, the Munich II Office of the Public Prosecutor issued indictments, including one against the former Chairman of the Board of Management of AUDI AG, charging, among other things, fraud relating to 3.0 TDI engines in connection with the diesel issue.

Based on the information available at the present time, no change in the risk situation of the Volkswagen Group results from these indictments.

The Stuttgart Office of the Public Prosecutor is conducting a criminal investigation relating to the diesel issue on suspicion of fraud and illegal advertising that also involves a member of the Board of Management of Dr. Ing. h.c. F. Porsche AG.

The respective Group companies appointed renowned law firms to clarify the matters underlying the public prosecutor's accusations. The Board of Management and Supervisory Board receive regular updates on the current status.

In an administrative fine order issued on May 7, 2019, the Stuttgart Office of the Public Prosecutor terminated the regulatory offense proceeding conducted against Dr. Ing. h.c. F. Porsche AG in connection with the diesel issue by finding a negligent breach of the obligation to supervise occurring in the organizational unit "Prüffeld Entwicklung Gesamtfahrzeug/Qualität" (Overall Vehicle Development/Quality - Testing Facility). The administrative order imposes a total fine of €535 million, consisting of a penalty payment of €4 million and the forfeiture of economic benefits in the amount of €531 million. After thorough examination, Dr. Ing. h.c. F. Porsche AG has accepted the fine and paid it in full, rendering the administrative fine order legally final. Further sanctions against or forfeitures by Dr. Ing. h.c. F. Porsche AG are therefore not to be expected in Europe in connection with the unitary factual situation underlying the administrative fine order.

As the type approval authority of proper jurisdiction, the KBA moreover continuously tests Audi, VW, and Porsche brand vehicles for problematic functions. If certain functions are deemed impermissible by the KBA, the affected vehicles are recalled pursuant to a recall order or they are brought back into compliance by means of a voluntary service measure.

Furthermore, additional administrative actions relating to the diesel issue are ongoing in other jurisdictions.

The companies of the Volkswagen Group continue to cooperate with the government authorities.

Whether the criminal and administrative proceedings will ultimately result in fines or other consequences for the Company, and if so what amounts these may entail, is currently subject to estimation risks. According to Volkswagen's estimates, the likelihood that a sanction will be imposed is 50% or less in the majority of these proceedings. Contingent liabilities have therefore been disclosed where the amount of such liabilities could be measured and the likelihood of a sanction being imposed was assessed at not lower than 10%. Provisions were recognized to a small extent.

2. Product-related lawsuits worldwide (excluding the USA/Canada)
In principle, it is possible that customers in the affected markets will file civil lawsuits or that importers and dealers will assert recourse claims against Volkswagen AG and other Volkswagen Group companies. Besides individual lawsuits, various forms of collective actions (i.e. assertion of individual claims by plaintiffs acting jointly or as representatives of a class) are available in various jurisdictions. Furthermore, in a number of markets it is possible for consumer and/or environmental organizations to bring suit to enforce alleged rights to injunctive relief, declaratory judgment, or damages.

Customer class action lawsuits and actions brought by consumer and/or environmental organizations are pending against Volkswagen AG and other Volkswagen Group companies in a number of countries including Australia, Belgium, Brazil, Germany, Italy, the Netherlands, Portugal, South Africa, and the United Kingdom. Alleged rights to damages and other relief are asserted in these actions. The pending actions include in particular the following:

In Australia, various class action lawsuits with opt-out provisions are currently pending against Volkswagen AG and other Volkswagen Group companies, including the Australian subsidiaries. Given the opt-out rule, the class actions have the potential to automatically cover all vehicles with type EA 189 engines unless the right to opt out is actively exercised. In all, approximately 100 thousand vehicles in the Australian market with type EA 189 engines are affected. In December 2019 Volkswagen AG reached agreements with the Australian class action plaintiffs that would terminate the litigation. The court must still approve the settlement. Depending on the number of claims filed under the class action settlement, Volkswagen AG anticipates payment of an amount of up to AUD 127.1 million plus litigation costs to settle the class action lawsuits. Two civil suits filed against Volkswagen AG and other Group companies by the Australian Competition and Consumer Commission (ACCC) were settled in the second half of 2019. The settlement is not yet legally final, however, as an appellate court has yet to rule on the amount of the fine. Depending on the appellate court decision, Volkswagen AG anticipates payment of a fine of up to AUD 125 million plus litigation costs.

In Belgium, the Belgian consumer organization Test Aankoop VZW has filed a class action to which an opt-out mechanism has been held to apply. The class action pertains to vehicles purchased by consumers on the Belgian market after September 1, 2014. The asserted claims are based on purported violations of unfair competition and consumer protection law as well as on alleged breach of contract.

In Brazil two class actions are pending. One of these pertains to approximately 17 thousand vehicles. In this litigation, an appeals judgment was rendered in May 2019 that only partially upheld the lower court's decision. This judgment initially reduced the damage liability of Volkswagen do Brasil considerably to around BRL 172 million plus interest. This amount can increase as a result of the adjudicated inflation rate and the assertion of individual claims alleging declines in the value of affected Amarok vehicles. The judgment remains non-final. In the second class action, compensation claims are made based on purported breaches of environmental regulations.

In Germany, the Verbraucherzentrale Bundesverband e.V. (Federation of Consumer Organizations) filed an action in November 2018 with the Braunschweig Higher Regional Court for model declaratory judgment against Volkswagen AG. The complaint is seeking a ruling that certain preconditions for potential consumer claims against Volkswagen AG are met; however, no specific payment obligations would result from any determinations the court may make. Individual claims would have to be established afterwards in subsequent separate proceedings. Oral argument in the consumer action for model declaratory judgment began in September 2019. Volkswagen AG intends to offer individual settlements to consumers who registered claims under the action for model declaratory judgment and meet the settlement criteria. The volume of such settlements amounts to approximately €830 million.

In addition, various actions have been brought against companies of the Volkswagen Group in several German Regional Courts by financialright GmbH, which is asserting rights assigned to it by a total of approximately 45 thousand customers in Germany, Slovenia, and Switzerland.

In England and Wales, suits filed in court by various law firms have been joined in a single collective action (group litigation). Because of the opt-in mechanism, not all vehicles with type EA 189 engines are automatically covered by the group litigation; potential claimants must instead take action in order to join. To date some 90 thousand plaintiffs have registered claims under the group litigation. The group litigation opt-in period has expired.

In Italy, a class action lawsuit filed by the consumer association Altroconsumo on behalf of Italian customers is pending before the Venice Regional Court. This litigation involves damage claims based on alleged breach of contract as well as claims based on purported violations of Italian consumer protection law. Some 82 thousand customers have registered for the class action, whereby the validity of roughly half of the registrations is still unclear. In Italy, the court decision dismissing the class action filed by the consumer association Codacons as inadmissible also became legally final in the reporting year.

In the Netherlands, Stichting Volkswagen Car Claim has brought an opt-out class action seeking declaratory rulings. Any individual claims would then have to be established afterwards in separate proceedings. In November 2019, the Regional Court in Amsterdam held the requests for relief to be inadmissible in part. Oral argument on the merits of the class action will take place in 2020.

A Portuguese consumer organization has filed a class action with opt-out mechanism in Portugal. There are potentially up to approximately 139 thousand vehicles affected in the Portuguese market. The complaint seeks vehicle return and alleges damages as well.

In South Africa, an opt-out class action seeking damages is pending that pertains to some 8 thousand vehicles with V6 and V8 TDI engines in addition to approximately 72 thousand vehicles with type EA 189 engines.

Furthermore, individual lawsuits and similar proceedings are pending against Volkswagen AG and other Volkswagen Group companies in various countries, most of which are seeking damages or rescission of the purchase contract. In Germany, there are over 70 thousand such individual lawsuits.

Volkswagen estimates the likelihood that the plaintiffs will prevail to be 50% or less in the great majority of customer class actions, complaints filed by consumer and/or environmental organizations, and individual lawsuits. Contingent liabilities are disclosed for these proceedings where the amount of such liabilities can be measured and the chance that the plaintiff will prevail was assessed as not implausible. Since most of these proceedings are still in an early stage, it is in many cases not yet possible to quantify the realistic risk exposure. In addition, provisions were recognized to the extent necessary based on the current assessment.

At this time it cannot be estimated how many customers will choose to file lawsuits in the future in addition to those already pending, given the consumer action for model declaratory judgment in Germany, among other things, and what their prospect of success will be.

3. 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 Regional Court in Braunschweig. In August 2016, the Regional Court in Braunschweig ordered that common questions of law and fact relevant to the lawsuits pending at the Regional Court in Braunschweig be referred to the Higher Regional Court in Braunschweig for binding declaratory rulings pursuant to the Kapitalanleger-Musterverfahrensgesetz (KapMuG – German Act on Model Case Proceedings in Disputes Regarding Capital Market Information). In this proceeding, common questions of law and fact relevant to these actions are to be adjudicated in a consolidated manner by the Higher Regional Court in Braunschweig (model case proceedings). All lawsuits at the Regional Court in Braunschweig will be stayed pending resolution of the common issues, unless the cases can be dismissed for reasons independent of the common issues that are to be adjudicated in the model case proceedings. The resolution in the model case proceedings of the common questions of law and fact will be binding for all pending cases that have been stayed in the described manner. Oral argument in the model case proceedings before the Braunschweig Higher Regional Court began in September 2018 and will be continued at subsequent hearings.

At the Regional Court in Stuttgart, further investor lawsuits have been filed against Volkswagen AG, in some cases along with Porsche SE as joint and several debtor.

Holding that the factual situation at issue is by and large already covered by the model case proceedings being heard by the Braunschweig Higher Regional Court and that these proceedings, being paramount in this regard, preclude further such actions, the Stuttgart Higher Regional Court in March 2019 refused to proceed with further capital investor model case proceedings (which include Porsche SE) that had been referred to it by the Stuttgart Regional Court. The plaintiff side has appealed one of these decisions to the Federal Court of Justice.

Further investor lawsuits have been filed at various courts in Germany and the Netherlands. 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 AG in connection with the diesel issue, with the claims totaling roughly €9.6 billion.

Volkswagen AG 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.

4. Proceedings in the USA/Canada

In the USA and Canada, the matters described in the EPA's "Notices of Violation" are the subject of various types of lawsuits and requests for information that have been filed in particular by customers, investors, salespersons, and various government agencies in Canada and the United States, including the attorneys general of several US states, against Volkswagen AG and other Volkswagen Group companies.

In the fiscal year, Volkswagen AG and certain affiliates settled the consumer protection claims asserted by the Attorney General of the US state of New Mexico, the last remaining state asserting consumer protection claims.

The attorneys general of five US states (Illinois, Montana, New Hampshire, Ohio, and Texas) and some municipalities have suits pending in state and federal courts against Volkswagen AG, Volkswagen Group of America, Inc. and certain affiliates, alleging violations of environmental laws. In the fiscal year, the environmental claims of two US states – Alabama and Tennessee – were dismissed in full by trial or appellate courts as preempted by federal law with no possibility of further appeal and the New Mexico Attorney General voluntarily dismissed its environmental claims. The claims asserted by Illinois, Hillsborough County (Florida), and Salt Lake County (Utah) have been dismissed in full, but the dismissals have been appealed. Certain claims asserted by Ohio, Texas, and two Texas counties have also been dismissed, but these suits are currently proceeding as to other claims.

In March 2019, the US Securities and Exchange Commission filed a lawsuit against Volkswagen AG, Volkswagen Group of America Finance, LLC, VW Credit, Inc. and a former Chairman of the Board of Management of Volkswagen AG, asserting claims under US federal securities law based among other things on alleged misstatements and omissions in connection with the offer and sale of certain bonds and asset-backed securities.

Furthermore, in December 2019, the Canadian federal environmental regulator filed charges against Volkswagen AG in respect of 2.0 l and 3.0 l Volkswagen and Audi diesel vehicles at the conclusion of its criminal enforcement-related investigation into the diesel emissions issue. Volkswagen AG cooperated with the investigation and agreed to a plea resolution addressing all of the charges. In January 2020, Volkswagen AG pleaded guilty to the charges and agreed to pay a penalty of CAD 196.5 million, which was approved by the court. Following this approval, the Ontario provincial environmental regulator withdrew its action against Volkswagen AG as to a quasi-criminal enforcement-related offense with respect to certain Volkswagen and Audi 2.0 l diesel vehicles. Additionally, a certified environmental class action is pending on behalf of residents in Quebec. This action was authorized on the sole issue of whether punitive damages could be recovered. The appeals filed by Volkswagen were denied. The case remains in the early stages.

To the extent a matter is not separately described above, an assessment is not yet possible at the current stage of the proceedings or has, in accordance with IAS 37.92, not been presented so as not to compromise the results of the proceedings and the interests of the Company.

5. Additional proceedings
With its ruling of 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 is to examine whether there was a breach of duties on the part of the members of the Board of Management and Supervisory Board of Volkswagen AG in connection with the diesel issue on or after June 22, 2006 and, if so, whether this resulted in damages for Volkswagen AG. The ruling by the Higher Regional Court of Celle is formally unappealable. However, Volkswagen AG has filed a constitutional complaint with the German Federal Constitutional Court alleging infringement of its constitutionally guaranteed rights. It is currently unclear when the Federal Constitutional Court will reach a decision on this matter. Following the formally unappealable ruling from the Higher Regional Court of Celle, the special auditor appointed by the court indicated that he was not available to conduct the special audit on grounds of age. In June 2019, the Hanover Regional Court denied the motion filed by the US funds to replace the special auditor. The opposing side has appealed this denial to the Celle Higher Regional Court; this appeal is still pending.

In addition, a second motion seeking appointment of a special auditor for Volkswagen AG to examine matters relating to the diesel issue has been filed with the Regional Court of Hanover. This proceeding has been stayed pending a decision by the Federal Constitutional Court in the initial special auditor litigation.

6. Risk assessment regarding the diesel issue
An amount of around €2.9 billion (previous year: €2.4 billion) has been included in the provisions for litigation and legal risks as of December 31, 2019 to protect against the currently known legal risks related to the diesel issue based on existing information and current assessments. Insofar as these can be adequately measured at this stage, contingent liabilities relating to the diesel issue were disclosed in the notes in an aggregate amount of €3.7 billion (previous year: €5.4 billion), whereby €3.4 billion (previous year: €3.4 billion) of this amount results from lawsuits filed by investors in Germany. The provisions recognized and the contingent liabilities disclosed as well as the other latent legal risks in the context of the diesel issue are in part subject to substantial estimation risks given that the fact-finding efforts have not yet been concluded, the complexity of the individual relevant factors and the ongoing coordination with the authorities. Should these legal or estimation risks materialize, this could result in further substantial financial charges. In particular, the possibility cannot be ruled out that the provisions recognized may have to be adjusted in light of knowledge acquired or future events.

Based on the information as it exists and has been established, there continue to be no conclusive findings or assessments available to the Board of Management of Volkswagen AG regarding the described facts that would suggest that a different assessment of the associated risks should have been made.

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 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 SE in 2008. The damages currently being sought based on allegedly assigned rights amounted to approximately €2.26 billion plus interest. In April 2016, the Regional 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 in October 2017 the court already indicated that it currently does not see claims against Volkswagen AG as justified, both for want of sufficiently specific pleadings and for reasons of law. 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 in question (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 Brazil, the Brazilian tax authorities commenced tax proceedings against MAN Latin America; at issue in these proceedings are the tax consequences of the acquisition structure chosen for MAN Latin America in 2009. In December 2017, a second instance judgment that was negative for MAN Latin America was rendered in administrative court proceedings. MAN Latin America initiated 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 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 fined Scania €0.88 billion. Scania has appealed to the European Court of Justice 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 were received from customers. 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.

In April 2019 the European Commission issued a statement of objections to Volkswagen AG, AUDI AG, and Dr. Ing. h.c. F. Porsche AG in connection with the Commission's antitrust investigation of the automobile industry. These objections state the European Commission's preliminary evaluation of the matter and afford the opportunity to comment. The subject matter of the proceedings is limited to the cooperation of German automobile manufacturers on technical questions in connection with the development and introduction of SCR systems and gasoline particulate filters for passenger cars that were sold in the European Economic Area. The manufacturers are not charged with any other misconduct such as price fixing or allocating markets and customers. After receiving access to the investigation files starting in July 2019, Volkswagen in December 2019 filed its reply to the European Commission's statement of objections. In the same matter, the Chinese Competition Authority has also issued information requests to Volkswagen AG, AUDI AG, and Dr. Ing. h.c. F. Porsche AG, and commenced an administrative action.

In the proceedings against a number of captive automobile finance companies regarding potential competition law infringements (alleged exchange of competitively sensitive information), the Italian Competition Authority assessed a fine of €163 million against Volkswagen AG and Volkswagen Bank GmbH in January 2019. Provisions were recognized by Volkswagen Bank GmbH. Volkswagen AG and Volkswagen Bank GmbH filed an appeal against this decision in March 2019. In the same context, an antitrust class action lawsuit has furthermore been filed by customers in Italy against Volkswagen Bank GmbH, among others.

In June 2019, the US District Court for the Northern District of California dismissed two putative class action complaints brought by purchasers of German luxury vehicles alleging that, since the 1990s, several automobile manufacturers, including Volkswagen AG and other Group companies conspired to unlawfully increase the prices of German luxury vehicles in violation of US antitrust and consumer protection law. The court held that the plaintiffs have not stated a claim for relief because the allegations in the complaints do not plausibly support the alleged anticompetitive agreements. Plaintiffs filed amended complaints, which Volkswagen moved to dismiss. Plaintiffs in Canada filed claims with similar allegations on behalf of putative classes of purchasers of German luxury vehicles against several automobile manufacturers, including Volkswagen Group Canada Inc., Audi Canada Inc., and other Group companies. Neither provisions nor contingent liabilities were stated because the early stage of proceedings makes an assessment currently impossible.

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.

Volkswagen has been responding to information requests from the US Environmental Protection Agency (EPA) and CARB related to automatic transmissions in certain vehicles with gasoline engines. In August 2019, Volkswagen agreed with the EPA to forfeit approximately 220 thousand Greenhouse Gas Emission Credits in response to the EPA's inquiry. Also in August 2019, Volkswagen and the Plaintiffs' Steering Committee announced the settlement of civil claims relating to approximately 98 thousand Volkswagen, Audi, Porsche and Bentley vehicles. Volkswagen's testing of these vehicles in connection with the information requests resulted in a 1 mile per gallon change, when rounded according to EPA rules, in the fuel economy disclosed on the "Monroney label" required by US regulations. In October 2019, the Court granted preliminary approval of the settlement.

Provisions were recognized by Volkswagen Bank GmbH and Volkswagen Leasing GmbH for possible claims in connection with financial services provided to consumers.

In February 2020, Volkswagen AG and another defendant were served with a lawsuit filed by GT Gettaxi Ltd. The lawsuit in particular alleges large damage claims. Volkswagen will evaluate the alleged claims and defend itself against them.

In addition, various proceedings are pending worldwide, particularly in the USA, in which customers are asserting purported claims either individually or in class actions. These claims are as a rule based on alleged vehicle defects, including defects alleged in vehicle parts supplied to the Volkswagen Group (for instance, in the Takata case).

Risks may also result from actions for infringement of intellectual property, including infringement of patents, trademarks or other third-party rights, particularly in Germany and the USA. These actions pertain among other things to patents for semiconductor technology used in vehicles, but may also extend to control, regulation or power-units, and communications technology as well. If Volkswagen is alleged or determined to have violated third-party intellectual property rights, it may have to pay damages, modify manufacturing processes, or redesign products and may be barred from selling certain products. Volkswagen could also face costly litigation. These risks could lead to delivery and production restrictions or interruptions.

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.

41. Other financial obligations

€ million	PAYABLE 2019	PAYABLE 2020 – 2023	PAYABLE from 2024	TOTAL Dec. 31, 2018
Purchase commitments in respect of				
property, plant and equipment	8,362	1,621	0	9,983
intangible assets	1,022	85	–	1,107
investment property	39	–	–	39
Obligations from				
loan commitments to unconsolidated subsidiaries	326	–	–	326
irrevocable credit commitments to customers	3,010	70	5	3,085
leasing and rental contracts	1,190	2,847	2,334	6,372
Miscellaneous other financial obligations	2,971	1,762	966	5,699

€ million	PAYABLE 2020	PAYABLE 2021 – 2024	PAYABLE from 2025	TOTAL Dec. 31, 2019
Purchase commitments in respect of				
property, plant and equipment	7,257	1,347	–	8,603
intangible assets	913	275	1	1,189
investment property	24	–	–	24
Obligations from				
loan commitments to unconsolidated subsidiaries	313	1	–	314
irrevocable credit commitments to customers	2,605	53	3	2,661
leasing and rental contracts	329	172	151	652
Miscellaneous other financial obligations	3,257	1,712	997	5,966

Other financial obligations include an amount of €1.2 billion for investments to which the Group has committed itself, both in the infrastructure for zero-emission vehicles and in initiatives to promote access to and awareness of these technologies. These commitments were made as part of the settlement agreements in the USA in connection with the diesel issue.

42. 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 Wirtschaftsprüfungsgesellschaft.

€ million	2019	2018
Financial statement audit services	19	20
Other assurance services	4	6
Tax advisory services	1	1
Other services	32	26
	56	**52**

The financial statement audit services were 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.

43. Personnel expenses

€ million	2019	2018
Wages and salaries	34,683	33,368
Social security, post-employment and other employee benefit costs	8,231	7,791
	42,913	**41,158**

44. Average number of employees during the year

	2019	2018
Performance-related wage-earners	265,092	256,684
Salaried staff	304,174	302,554
	569,266	**559,238**
of which in the passive phase of partial retirement	9,554	8,791
Vocational trainees	18,180	17,905
	587,446	**577,143**
Employees of Chinese joint ventures	80,302	78,579
	667,748	**655,722**

45. Events after the balance sheet date

On January 30, 2020, TRATON SE submitted an offer for the acquisition of all outstanding ordinary shares of Navistar that are not yet held by TRATON SE, at a price of USD 35.00 per share in cash. This corresponds to an offer price of around €2.6 billion. TRATON SE held around 16.8% of the outstanding ordinary shares of Navistar as of December 31, 2019.

Continuing restrictions due to the coronavirus could adversely affect the results of operations, financial position and net assets in 2020. In this context, please refer to our remarks found in the management report in the “Report on Expected Developments” and “Report on Risks and Opportunities” sections.

46. 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. The remuneration system of the Board of Management comprises non-performance-related and performance-related components. The performance-related remuneration now 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 mostly forward-looking three-year term (share-based payment). In addition, a bonus was converted into phantom preferred shares (phantom shares) in 2016; the payment was made in 2019.

The group of beneficiaries of the performance share plan was expanded at the end of 2018 by including members of top management and at the end of 2019 by adding all other members of management and selected participants below management level. Performance shares were first granted to members of top management at the beginning of 2019. All other beneficiaries will receive performance shares for the first time at the beginning of 2020. The function of the performance share plan for top management and other beneficiaries is largely identical to the performance share plan that was granted to the members of the Board of Management. When the performance share plan was launched, members of top management were guaranteed a minimum bonus amount for the first three years on the basis of the remuneration for 2018, while all other beneficiaries were given a guarantee for the first three years on the basis of the remuneration for 2019.

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 beneficiary as a pure calculation position.

For members of the Board of Management and of top management, the number of performance shares is definitively determined on the basis of a three-year, forward-looking performance period based on the degree of target achievement for the annual earnings per Volkswagen preferred share. For all other beneficiaries, the number is definitively determined on the basis of a three-year performance period with a forward-looking horizon of one year. As a departure from this, in 2020 the number will be determined on the basis of a one-year forward-looking performance period, and in 2021 on the basis of a two-year performance period with a forward-looking horizon of one year. After the end of the performance period, a cash settlement is made. The payment amount corresponds to the number of determined performance shares, multiplied by the closing reference price at the end of the period plus a dividend equivalent. The payment amount under the performance share plan is limited to 200% of the target amount.

BOARD OF MANAGEMENT

		Dec. 31, 2019	Dec. 31, 2018
Total expense of the reporting period	€ million	22	18
Carrying amount of the obligation	€ million	57	48
Intrinsic value of the obligation	€ million	31	34
Fair value on granting date	€ million	20	22
Granted performance shares	Shares	431,800	276,382
of which granted during the reporting period	Shares	155,418	134,956

TOP MANAGEMENT TIER

		Dec. 31, 2019	Dec. 31, 2018
Total expense of the reporting period	€ million	115	–
Carrying amount of the obligation	€ million	115	–
Intrinsic value of the obligation	€ million	104	–
Fair value at grant date	€ million	71	–
Granted performance shares	Shares	531,090	–
of which granted during the reporting period	Shares	531,090	–

MEMBERS OF MANAGEMENT AND SELECTED PARTICIPANTS BELOW MANAGEMENT LEVEL

If 100% of the targets agreed in each case are reached, the total target amount for all other beneficiaries will total €629 million (previous year: €– 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. In 2018, Mr. Stadler received a cash payment of the value of 8,633 shares in an amount of €1.0 million as part of the termination of his contract of service. The other phantom shares were settled as planned in fiscal year 2019. The payment amount totaled €5.3 million. In the fiscal year, changes in the value of the phantom shares led to the recognition of expenses of €0.3 million (previous year: income of €1.0 million).

47. 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 regularly conducted on an arm's length basis.

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:

> 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 disadvantages 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 reimburse Porsche SE for any tax advantages of Porsche Holding Stuttgart, Porsche AG and their legal predecessors and subsidiaries relating to tax assessment periods up to July 31, 2009. Based on the results of the external tax audit for the assessment periods 2006 to 2008, which has now been completed, and based on information for the 2009 assessment period available at the date of preparing these consolidated financial statements, a compensation obligation in the low triple-digit million euro range 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 certain 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.
> 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, 2020, the State of Lower Saxony and Hannoversche Beteiligungsgesellschaft Niedersachsen mbH, Hanover, held 20.00 % of the voting rights of Volkswagen AG on December 31, 2019. 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	
	2019	2018	2019	2018
Porsche SE and its majority interests	5	3	1	3
Supervisory Board members	5	4	1	2
Board of Management members	0	0	0	0
Unconsolidated subsidiaries	1,243	1,137	1,597	1,649
Joint ventures and their majority interests	16,627	16,724	646	491
Associates and their majority interests	181	194	1,312	1,267
Pension plans	1	1	3	2
Other related parties	0	0	1	1
State of Lower Saxony, its majority interests and joint ventures	10	10	4	8

€ million	Receivables from		Liabilities (including obligations) to	
	Dec. 31, 2019	Dec. 31, 2018	Dec. 31, 2019	Dec. 31, 2018
Porsche SE and its majority interests	4	4	0	1
Supervisory Board members	0	0	170	205
Board of Management members	0	0	91	78
Unconsolidated subsidiaries	1,497	1,319	1,667	1,869
Joint ventures and their majority interests	12,953	11,989	2,683	2,671
Associates and their majority interests	326	112	1,063	487
Pension plans	1	1	–	–
Other related parties	0	–	264	100
State of Lower Saxony, its majority interests and joint ventures	1	1	0	2

The tables above do not contain the dividend payments (net of withholding tax) of €3,679 million (previous year: €3,315 million) received from joint ventures and associates and dividends of €753 million (previous year: €601 million) paid to Porsche SE.

Receivables from joint ventures are primarily attributable to loans granted in an amount of €8,290 million (previous year: €7,606 million) as well as trade receivables in an amount of €4,375 million (previous year: €4,045 million). Receivables from non-consolidated subsidiaries also result primarily from loans granted in an amount of €938 million (previous year: €741 million) as well as trade receivables in an amount of €188 million (previous year: €214 million).

Impairment losses of €56 million (previous year: €56 million) were recognized on the outstanding related party receivables. In the fiscal year, expenses of €37 million (previous year: €29 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 €322 million (previous year: €239 million).

In the reporting period, the Volkswagen Group made capital contributions of €668 million (previous year: €298 million) to related parties.

The changes in supplies and services rendered to and received from joint ventures and their majority interests are primarily attributable to supply relationships with the Chinese joint ventures.

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 in the amount of €50.1 million (previous year: €64.8 million) granted to Board of Management members.

In addition to the amounts shown above, the following expenses were recognized for benefits and remuneration granted to members of the Board of Management and Supervisory Board of the Volkswagen Group in the course of their activities as members of these bodies:

€	2019	2018
Short-term benefits	36,307,352	32,417,428
Benefits based on performance shares and virtual shares	19,606,328	10,022,492
Post-employment benefits	12,901,219	10,519,369
Termination benefits	10,100,271	12,994,964
	78,915,169	**65,954,253**

Benefits paid on the basis of performance shares include the cost of €19.5 million (previous year: €10.6 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 and 2018, but also of a pro-rated amount for future share plans to be granted during the current employment contract.

In fiscal year 2019, the share price performance up to the settlement date led to the recognition of expense of €0.1 million (previous year: income of €0.6 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). In the previous year, due to investigations by the authorities, a review of the remuneration of some works council members were conducted. Prior to this and as a precaution, components of the remuneration of some works council members had been retained in this context until the matter was clarified. In fiscal year 2019, the matter was addressed and concluded as part of an arbitration procedure by two former judges from the German Federal Labour Court as well as by final settlements before a labor court. The previous remuneration was largely confirmed in the process.

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 Mr. Schot in connection with his early departure from the Board of Management on March 31, 2020.

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.

48. German Corporate Governance Code

On November 15, 2019, 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/en/InvestorRelations/corporate-governance/declaration-of-conformity.html.

On November 20, 2019, 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.

In December 2019, the Executive Board and Supervisory Board of TRATON SE likewise issued their declaration of conformity with the German Corporate Governance Code and made it permanently available to the shareholders at ir.traton.com/websites/traton/English/5000/corporate-governance.html.

In December 2019, 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/investor-relations/corporate-governance/corporate-governance-at-man/Corporate-Governance-at-MAN.html.

The Executive Board and Supervisory Board of RENK AG issued a declaration of conformity in December 2019 and made it permanently available to the shareholders at www.renk-ag.com/en/investor-relations/financial-reports.

49. Remuneration of the Board of Management and the Supervisory Board

€	2019	2018
Board of Management remuneration		
Non-performance-related remuneration	13,332,515	13,051,264
Performance-related remuneration	17,647,682	14,827,178
Long-term incentive component	14,414,075	22,457,869
	45,394,271	**50,336,310**
Supervisory Board remuneration		
Non-performance-related remuneration	4,547,188	4,004,372
Performance-related remuneration	779,967	534,614
	5,327,155	**4,538,986**

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. The fringe benefits relate to noncash benefits granted 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. For details on performance share plans for current members of the Board of Management, please refer to the information in the section entitled "Remuneration based on performance shares and phantom shares (share-based payment)".

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. For further details on the settlement of phantom shares, please refer to the information in the section entitled "Remuneration based on performance shares and phantom shares (share-based payment)".

Expenses for performance shares and phantom shares 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

The remuneration of the members of the Supervisory Board of Volkswagen AG is comprised entirely of non-performance-related remuneration components. Remuneration for supervisory board work at subsidiaries comprises a mix of non-performance-related and performance-related components.

PENSION ENTITLEMENTS AND BENEFITS TO RETIRED MEMBERS OF THE BOARD OF MANAGEMENT

On December 31, 2019, the pension provisions for members of the Board of Management amounted to €60.5 million (previous year: €55.8 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 higher increase.

For former members of the Board of Management and their surviving dependents €32.7 million (previous year: €44.0 million) were granted. Pension provisions in accordance with IFRSs for this group of individuals amounted to €373.7 million (previous year: €324.0 million).

In connection with his departure effective March 31, 2020, Mr. Schot was promised the following amounts:

- a non-performance-related component of €2.4 million (previous year: €– million),
- a performance-related component of €3.8 million (previous year €– million) and
- a long-term incentive component of €3.9 million (previous year: €– million) were recognized.

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 70. A comprehensive assessment of the individual remuneration components, including 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 18, 2020

Volkswagen Aktiengesellschaft
The Board of Management

Herbert Diess | Oliver Blume | Gunnar Kilian

Andreas Renschler | Abraham Schot | Stefan Sommer

Hiltrud Dorothea Werner | Frank Witter

Independent Auditor’s Report

On completion of our audit, we issued an unqualified auditor's report dated February 26, 2020 in German language. The following text is a translation of this auditor’s report. The German text is authoritative:

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 balance sheet as at December 31, 2019, and the income statement and the statement of comprehensive income, the statement of changes in equity and the cash flow statement for the financial year from January 1 to December 31, 2019, 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, 2019. In accordance with the German legal requirements, 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 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, 2019, and of its financial performance for the financial year from January 1 to December 31, 2019, 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 "Report on Risks and Opportunities" of the group management report with regard to the diesel issue including information about the allegations made and claims filed, the underlying causes, the non-involvement 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 2019 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, 2019. 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:

❶ Accounting treatment of risk provisions for the diesel issue
❷ Recoverability of goodwill and brand names
❸ Recoverability of capitalized development costs
❹ Completeness and measurement of provisions for warranty obligations arising from sales

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:

❶ 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 and Canada) 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 and customer-specific sales programs.

The Volkswagen Group recognizes the expenses directly related to the diesel issue in its operating income. The special items expensed in financial year 2019 amount to € 2.3 billion. These relate to fines paid (€ 0.5 billion) and to further additions to reserves for legal risks (€ 2.1 billion). The reversal of reserves for technical measures in the amount of € 0.3 billion had an inverse effect. In addition to provisions, contingent liabilities for legal risks in regard to the diesel issue in the amount of € 3.7 billion are reported as of December 31, 2019.

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 significance for our audit due to the material amounts of the provisions as well as the scope of assumptions and discretion on the part of the executive directors.

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 substantiations of independent experts, as presented to us. We used in particular 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 and the 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 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 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 "Report on Risks and Opportunities" in the group 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 sections entitled “Report on Risks and Opportunities”, sub-section “Legal risks” in the group management report.

❷ Recoverability of goodwill and brand names

① The intangible assets reported in the consolidated financial statements of VOLKSWAGEN AKTIENGESELLSCHAFT include € 23.2 billion in goodwill and € 16.8 billion in 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 the executive directors 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 the executive directors’ 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 the executive directors 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 the executive directors 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.

❸ Recoverability of capitalized development costs

① In the consolidated financial statements of VOLKSWAGEN AKTIENGESELLSCHAFT capitalized development costs amounting to € 24.0 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 in particular that sale of these products (in connection with other assets) 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 capitalized development 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. In the financial year, the Volkswagen Group adjusted the definition of cash-generating units for capitalized development costs. While the focus in the Passenger Cars division was previously on individual models or model groups, the Volkswagen Group has made the judgment that the required degree of independence of cash flows from models or model groups is no longer given due to the increasing tightening of CO_2 and emissions-related fleet requirements and other changes in the fourth quarter of 2019 and that brands must therefore now be regarded as the smallest identifiable group of assets that meet the definition criteria of a cash-generating unit.

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 the executive directors. 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.

Due to the adjusted definition of the cash-generating units a one-time write-up in an amount of € 1.1 billion resulted in the fourth quarter 2019, thereof € 0.9 billion from prior years that are recognized in the “other operating income” income statement line item. Furthermore, the “finance income” is increased by € 0.1 billion due to write-ups at the Chinese joint ventures accounted for at-equity

The result of this measurement depends to a large extent on the executive directors’ 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 the executive directors’ 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. With respect to completed development projects, we inquired the executive directors 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. As part of our audit, we also assessed whether the adjusted definition of the cash-generating units is in line with the relevant requirements of IAS 36. In our view, the measurement inputs and assumptions used by the executive directors, and the measurement model, were properly derived for the purposes of conducting impairment tests and the adjustment made to the definition of the cash-generating units are substantiated and reasonably documented.

③ Company's disclosures on capitalized development costs and the associated impairment testing and the adjustment of the cash-generating units are contained in sections entitled “Accounting policies” and “Intangible assets” in the notes to the consolidated financial statements.

❹ Completeness and measurement of provisions for warranty obligations arising from sales

① In the consolidated financial statements of the Volkswagen Group € 27.0 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 significance 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 executive directors.

② With the knowledge that estimated values result in an increased risk of accounting misstatements and that the measurement decisions made by the executive directors 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 the executive directors 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.

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, – 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 14, 2019. We were engaged by the supervisory board on May 20, 2019. 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 (long-form audit report).

GERMAN PUBLIC AUDITOR RESPONSIBLE FOR THE ENGAGEMENT

The German Public Auditor responsible for the engagement is Frank Hübner.

Hanover, February 26, 2020

PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft

Harald Kayser Wirtschaftsprüfer (German Public Auditor)	Frank Hübner Wirtschaftsprüfer (German Public Auditor)

Five-Year Review

	2019	2018	2017	2016	2015
Volume Data (thousands)					
Vehicle sales (units)	**10,956**	**10,900**	**10,777**	**10,391**	**10,010**
Germany	1,347	1,236	1,264	1,257	1,279
Abroad	9,609	9,664	9,513	9,135	8,731
Production (units)	**10,823**	**11,018**	**10,875**	**10,405**	**10,017**
Germany	2,112	2,303	2,579	2,685	2,681
Abroad	8,712	8,715	8,296	7,720	7,336
Employees (yearly average)	**671**	**656**	**634**	**619**	**604**
Germany	297	291	285	280	276
Abroad	374	365	350	339	329
Financial Data (in € million)					
Income Statement					
Sales revenue	**252,632**	**235,849**	**229,550**	**217,267**	**213,292**
Cost of sales	–203,490	–189,500	–186,001	–176,270	–179,382
Gross profit	**49,142**	**46,350**	**43,549**	**40,997**	**33,911**
Distribution expenses	–20,978	–20,510	–20,859	–22,700	–23,515
Administrative expenses	–9,767	–8,819	–8,126	–7,336	–7,197
Net other operating result	–1,437	–3,100	–745	–3,858	–7,267
Operating result	**16,960**	**13,920**	**13,818**	**7,103**	**–4,069**
Financial result	1,396	1,723	–146	189	2,767
Earnings before tax	**18,356**	**15,643**	**13,673**	**7,292**	**–1,301**
Income tax expense	4,326	–3,489	–2,210	1,912	–59
Earnings after tax	**14,029**	**12,153**	**11,463**	**5,379**	**–1,361**
Personnel expenses	**42,913**	**41,158**	**38,950**	**37,017**	**36,268**
Balance Sheet (at December 31)					
Noncurrent assets	300,608	274,620	262,081	254,010	236,548
Current assets	187,463	183,536	160,112	155,722	145,387
Total assets	**488,071**	**458,156**	**422,193**	**409,732**	**381,935**
Equity	123,651	117,342	109,077	92,910	88,270
of which: noncontrolling interests	1,870	225	229	221	210
Noncurrent liabilities	196,497	172,846	152,726	139,306	145,175
Current liabilities	167,924	167,968	160,389	177,515	148,489
Total equity and liabilities	**488,071**	**458,156**	**422,193**	**409,732**	**381,935**
Cash flows from operating activities	**17,983**	**7,272**	**–1,185**	**9,430**	**13,679**
Cash flows from investing activities attributable to operating activities	**20,076**	**19,386**	**18,218**	**16,797**	**15,523**
Cash flows from financing activities	**–865**	**24,566**	**17,625**	**9,712**	**9,068**

Financial Key Performance Indicators

%	2019	2018	2017	2016	2015
Volkswagen Group					
Gross margin	19.5	19.7	19.0	18.9	15.9
Personnel expense ratio	17.0	17.5	17.0	17.0	17.0
Operating return on sales	6.7	5.9	6.0	3.3	–1.9
Return on sales before tax	7.3	6.6	6.0	3.4	–0.6
Return on sales after tax	5.6	5.2	5.0	2.5	–0.6
Equity ratio	25.3	25.6	25.8	22.7	23.1
Automotive Division[1]					
Change in unit sales year-on-year[2]	+ 0.5	+ 1.1	+ 3.7	+ 3.8	–2.0
Change in sales revenue year-on-year	+ 5.7	+ 2.7	+ 5.3	+ 1.1	+ 3.6
Research and development costs as a percentage of sales revenue	6.7	6.8	6.7	7.3	7.4
Operating return on sales	6.5	5.5	5.7	2.5	–3.4
EBITDA (in € million)[3]	29,706	26,707	26,094	18,999	7,212
Return on investment (ROI)[4]	11.2	11.0	12.1	8.2	–0.2
Cash flows from operating activities as a percentage of sales revenue	14.5	9.2	6.0	10.9	12.9
Cash flows from investing activities attributable to operating activities as a percentage of sales revenue	9.4	9.4	9.0	8.6	8.1
Capex as a percentage of sales revenue	6.6	6.6	6.5	6.9	6.9
Net liquidity as a percentage of sales revenue	8.4	8.2	9.7	12.5	11.5
Ratio of noncurrent assets to total assets[5]	26.4	23.3	23.7	23.4	23.1
Ratio of current assets to total assets[6]	17.0	17.6	16.3	15.9	15.2
Inventory turnover[7]	4.8	5.0	5.1	5.5	5.8
Equity ratio	37.6	37.9	36.9	31.4	32.6
Financial Services Division					
Increase in total assets	7.9	11.2	6.0	8.3	13.9
Return on equity before tax[8]	10.8	9.9	9.8	10.8	12.2
Equity ratio	12.8	12.7	13.7	12.5	11.9

1 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.
2 Including the Chinese joint ventures. These companies are accounted for using the equity method.
3 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.
4 For details, see Value-based management on page 126.
5 Ratio of property, plant and equipment to total ass.
6 Ratio of inventories to total assets at the balance sheet date.
7 Ratio of sales revenue to average monthly inventories.
8 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.

Corporate Governance
International term for responsible corporate management and supervision driven by long-term value added.

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 Drive 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.

Test procedure
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 since fall 2018. The aim of this new test cycle is to state CO_2 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.

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.

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.

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.

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.

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.

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.

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.

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Scheduled Dates 2020

FINANCIAL CALENDER

March 17
Volkswagen AG Annual Media Conference
and Investor Conference

April 29
Interim Report January – March

May 7
Volkswagen AG Annual General Meeting

Juli 30
Half-Yearly Financial Report

Oktober 29
Interim Report January – September

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PUBLISHED BY
Volkswagen AG
Group Financial Publications, Letterbox 1848-2
38436 Wolfsburg, Germany
Phone + 49 (0) 5361 9-0
Fax + 49 (0) 5361 9-28282

This annual report is published in English and German.
Both versions of the report are available on the Internet
at www.volkswagenag.com/ir.
The German version is legally binding.

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CONCEPT, DESIGN AND REALIZATION
C3 Creative Code and Content GmbH

ENGLISH TRANSLATION
Leinhäuser Language Services GmbH, Unterhaching

FINANCIAL REPORT
Produced in-house with firesys

PHOTOGRAPHY
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