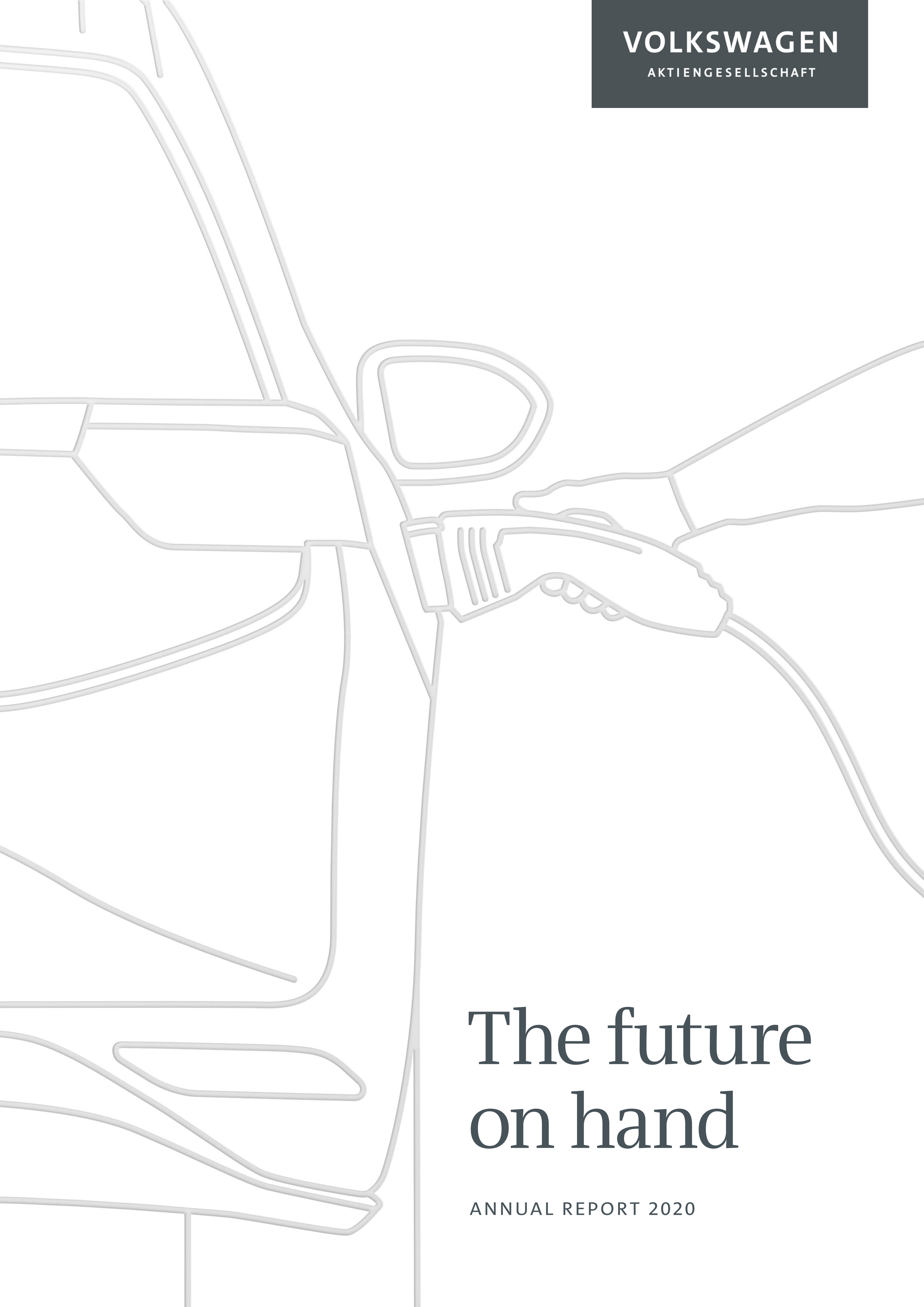
VOLKSWAGEN
AKTIENGESELLSCHAFT



The future on hand

ANNUAL REPORT 2020

Key Figures

VOLKSWAGEN GROUP

	2020	2019	%
Volume Data[1] in thousands			
Deliveries to customers (units)	9,305	10,975	−15.2
Vehicle sales (units)	9,157	10,956	−16.4
Production (units)	8,900	10,823	−17.8
Employees at Dec. 31	662.6	671.2	−1.3
Financial Data (IFRSs), € million			
Sales revenue	222,884	252,632	−11.8
Operating result before special items	10,607	19,296	−45.0
Operating return on sales before special items (%)	4.8	7.6	
Special items	−931	−2,336	−60.1
Operating result	9,675	16,960	−43.0
Operating return on sales (%)	4.3	6.7	
Earnings before tax	11,667	18,356	−36.4
Return on sales before tax (%)	5.2	7.3	
Earnings after tax	8,824	14,029	−37.1
Automotive Division[2]			
Total research and development costs	13,885	14,306	−2.9
R&D ratio (%)	7.6	6.7	
Cash flows from operating activities	24,721	30,733	−19.6
Cash flows from investing activities attributable to operating activities[3]	18,364	19,898	−7.7
of which: capex	11,065	14,007	−21.0
capex/sales revenue (%)	6.1	6.6	
Net cash flow	6,357	10,835	−41.3
Net liquidity at Dec. 31	26,796	21,276	+ 25.9
Return on investment (ROI) in %	6.5	11.2	
Financial Services Division			
Return on equity before tax[4] (%)	8.8	10.8	

VOLKSWAGEN AG

	2020	2019	%
Volume Data in thousands			
Employees at Dec. 31	118.7	119.2	−0.4
Financial Data (HGB), € million			
Sales revenue	67,535	80,621	−16.2
Net income for the fiscal year	6,338	4,958	+ 27.8
Dividends (€)			
per ordinary share	4.80	4.80	
per preferred share	4.86	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: €17,175 (19,182) 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
AKTIENGESELLSCHAFT

Audi

SEAT

ŠKODA

BENTLEY

BUGATTI

LAMBORGHINI

PORSCHE

DUCATI

Commercial
Vehicles

SCANIA

MAN

VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY

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ADDITIONAL INFORMATION

This annual report was published on the occasion of the Annual Media Conference on March 16, 2021.

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To our Shareholders

TO OUR SHAREHOLDERS

Letter to our Shareholders

Dear Shareholders,

We have had to perform the greatest balancing act in the Company's history in recent months – addressing the Covid-19 pandemic while pushing our transformation into a technology company. Of these two challenges, developing of new digital products, services and customer interfaces was and still is of greater existential significance for our Group.

Data and electricity are driving us now. We are improving the charging experience for our electric vehicles. We are providing over-the-air software updates – including new functions and assistance systems. We are establishing new sales processes, primarily online, and communicating directly with our customers – around the clock, if desired.

Data is the new driving force of prosperity for economies. Its usage strengthens customer orientation and provides safer and more convenient mobility. Digital upgrades and additional services relating to the entire vehicle are creating new areas of business that we are developing. Particularly in fully connected traffic, data will become the basis for autonomous driving, thus redefining individual mobility. This is why we are planning to invest €27 billion, representing about one-fifth of the Group's total capex expenditure, in digitalization over the next five years.

Two flagship projects will greatly speed up the new focus on software and data in the Volkswagen world. Audi will launch a new Group-wide software platform as part of the Artemis project in 2024, starting with the premium segment. The Volkswagen brand will follow suit in 2026 with the Trinity project in the volume segment. These two projects stand for entirely new and completely digitalized electric models. Since July 2020, our Car.Software Organisation has been programming the new vw.os operating system, which will be used for the first time in Artemis. Today, over 3,500 IT experts work in this organization and this number will rise to 10,000 in five years: coding is becoming part of the Volkswagen DNA. In the future, we will continue to keep all activities relating to the brains of the car in-house.

We find ourselves in a new playing field – up against companies that are entering the mobility market from the world of technology, often with virtually unlimited access to resources through the capital markets. Stock market players still regard the Volkswagen Group as part of the "old auto" world. By focusing consistently on software and efficiency, we are working to change this view. The world's most valuable company will become a mobility company once more – and Volkswagen enjoys one of the best starting positions in the "new auto" competition.

In the "old world" of vehicle construction, we have achieved an excellent standard: the construction quality, appeal and functionality of our vehicles are better than ever. The only way to successfully transform Volkswagen into a digital company is by maximizing the return from our traditional business. We intend to reduce the Group's fixed costs by 5% by 2023. Another area of focus is procurement, where we are working to reduce material costs by 7% over the next two years. The brands are improving their profitability through cost-cutting programs. And we are simplifying our portfolio – which is more diversified than ever before – in the right places.

Moreover, our focus on sustainable action will strengthen the Group's resilience. By 2050 at the latest, our Group will achieve net carbon neutrality worldwide – from supply chains to our plants and divisions up to the use of the vehicles by our customers. We have made substantial progress during the pandemic. This means one thing in particular – bringing out more electric vehicles. Overall, the Group tripled its sales of all-electric vehicles to 231,600 units.

The premiere of Volkswagen's ID. family played an important part in this sales growth. Production of the ID.3 and ID.4 began in Zwickau. Since November 2020, the ID.4 is also being manufactured at two newly constructed factories in China. When production of the ID.4 begins in the United States in 2022, the electric SUV will live up to its claim of being the electric 'world car'.

Data and electricity are driving us now.

– Herbert Diess –

With 56,000 units delivered, the Volkswagen ID.3 was the Group's most successful electric vehicle in 2020, followed by the Audi e-tron and the Porsche Taycan. We intend to invest around €35 billion in e-mobility over the next five years, plus another €11 billion in the hybridization of our model portfolio. Five years ago we gave the green light for e-mobility in the Group through the decision to develop the Modular Electric Drive Toolkit (MEB). Now this is a core business.

Last year, we significantly lowered the emissions of the Group's fleet in Europe compared with the previous year. In 2021, when the electric campaign is well underway with models such as the ŠKODA Enyaq iV, we will meet the EU's CO_2 fleet targets and will go from strength to strength in subsequent years – until we can trade our excess carbon credits for a profit in the near future.

We continued our 40-year success story in China, primarily with a view to achieving zero-emission mobility. By increasing our stake in the Volkswagen (Anhui) joint venture to 75%, we are accelerating electrification in our largest market. We announced our intention to become the largest shareholder in Chinese battery maker Gotion by acquiring 26% of this company. These and other endeavors are helping us to expand our battery expertise at a global level.

The new European Green Deal will increase Volkswagen's battery requirements in 2030. To achieve the political climate targets, all-electric vehicles will have to make up 55% of our deliveries in Europe – significantly more than previously projected. This also means that in addition to our battery manufacturing facility in Salzgitter, we will need two more battery plants in Europe. Volkswagen is prepared for this – and supports the Green Deal as well as the Paris Climate Agreement.

Our commercial vehicle division TRATON is planning to invest €1 billion in electrification by 2025. It is important to note that emissions can be reduced faster in freight transport and local public transport than in the car fleet – using only a fraction of the resources. The global champion strategy was advanced in 2020: TRATON established an e-mobility joint venture in Japan and announced the acquisition of US manufacturer Navistar, while Scania launched its first production facility in China. The groundwork for enhanced efficiency in Germany is being laid at the same time: MAN started to increase its competitiveness through restructuring to be better positioned for the transformation, because there will also be electric and self-driving trucks and buses.

In 2020, a year overshadowed by Covid-19, many of our employees worked for the common good to help contain the pandemic. Volkswagen South Africa converted a former factory into a hospital. In Spain, SEAT manufactured respiratory equipment. ŠKODA in the Czech Republic and Lamborghini in Italy produced surgical masks and face shields. The Group provided €40 million worth of relief supplies, sought out producers in China and arranged transport to Europe.

At the same time, we were able to ensure safe working conditions in production with a 100-point plan, maintain global supply chains, and safeguard our liquidity, primarily through targeted warehouse management. Volkswagen showed itself to be robust and capable of excellent performance in a year that saw the biggest crisis in decades. As of the close of the year, the Group recorded around 15% fewer deliveries year-on-year, but saw its global market share increase slightly. Operating profit before special items came to €10.6 billion in 2020. Net liquidity of €26.8 billion – an increase of 25.9% year-on-year – underscores the Group's outstanding solidity.

I am very proud of what our more than 660,000 employees have achieved in these challenging times. While balancing the pandemic and our transformation, we achieved the best sentiment rating in the annual employee survey. We have implemented positive changes in our corporate culture. This was also confirmed in September 2020 by the final report of the team of the US Monitorship, with which we worked for four years on improving processes, creating more transparency and reducing hierarchical thinking in the Group. I would like to sincerely thank our employees for their hard work. Thanks also to you, our shareholders, for your support.

In 2021, following changes on the boards of management of our brands and with Murat Aksel, Arno Antlitz and Thomas Schmall as new members of the Group Board of Management, we are starting out with a new, powerful team. I will consistently remain committed to securing a higher return from our traditional business and concentrating fully on software expertise. There is a lot to do at Volkswagen, to decide, to change – for we will undergo more transformation in the next ten years than we did in the last fifty.

The transformation to a climate-neutral, software-driven mobility group will progress quickly in 2021. I look forward to your continued support on this journey!

Sincerely,

H. Diess

Herbert Diess

The Board of Management

of Volkswagen Aktiengesellschaft

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

Hiltrud Dorothea Werner
Integrity and Legal Affairs

Murat Aksel
Purchasing

Gunnar Kilian
Human Resources and Truck & Bus

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

Frank Witter
Finance and IT

Markus Duesmann
Chairman of the Board of Management
of AUDI AG, Premium brand group

Thomas Schmall-von Westerholt
Technology,
Chairman of the Board of Management
of Volkswagen Group Components

Report of the Supervisory Board

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

Ladies and gentlemen,

The work of the Supervisory Board of Volkswagen AG and its committees in fiscal year 2020 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, which are set out in the information policy adopted by the Supervisory Board in 2018. The Board of Management provided us with information regularly, promptly and comprehensively both in writing and orally, 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. The Board of Management reported extensively and promptly, particularly on the impacts of the Covid-19 pandemic. It established a crisis management team to deal with this issue. Minutes of the meetings of the crisis management team were provided to the Chairman of the Supervisory Board without delay. The Supervisory Board was also provided with detailed information on the effects of the Covid-19 pandemic and action taken by the Board of Management. 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 work 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. Within reason, the Chairman of the Supervisory Board discussed Supervisory Board-specific topics with investors and, in consultation with the Board of Management, also discussed non-Supervisory Board-specific topics. The Chairman of the Supervisory Board informed the Supervisory Board of such discussions after they had taken place.

The Supervisory Board held a total of 13 meetings in fiscal year 2020. The average attendance rate was around 90.0%. In addition, resolutions on particularly urgent matters were adopted in writing or using electronic communications media. Particularly the challenges and restrictions resulting from the Covid-19 pandemic necessitated additional flexibility for the meetings of the Supervisory Board in fiscal year 2020. The Covid-19 pandemic also resulted in travel restrictions and presented additional challenges for the Supervisory Board members, who have special responsibilities in business and politics. Nevertheless, all members of the Supervisory Board except for Dr. Al Abdulla attended over half of the meetings of the Supervisory Board and the committees of which they are members. Supervisory Board members who could not attend a meeting were able to engage with the meeting topics using the preparatory documents.

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 Supervisory Board resolved on May 28, 2020 to increase the number of members of the Executive Committee in light of its growing responsibilities. Since May 29, 2020, the Executive Committee has been comprised of four shareholder representatives and four employee representatives (previously three). The shareholder representatives on the Executive Committee make up the Nomination Committee. The Special Committee on Diesel Engines is comprised of three shareholder representatives and three employee representatives. The remaining two committees are each composed of two shareholder representatives and two employee representatives. The members of these committees as of December 31, 2020 are given in the Group Corporate Governance Declaration.

The Executive Committee met 20 times in the reporting period. At its meetings, the Executive Committee meticulously prepared the resolutions of the Supervisory Board, discussed the composition of the Board of Management and took decisions on matters such as contractual issues concerning the Board of Management other than remuneration and consent 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 2020.

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

The Audit Committee held five meetings in 2020. 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 Audit Committee also discussed the creation of a system to monitor related-party transactions in line with new requirements of the Aktiengesetz (AktG – German Stock Corporation Act).

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 2020, 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 as well as the latest developments in the consumer action for model declaratory judgment brought by the Verbraucherzentrale Bundesverband (Federation of Consumer Organizations) and in various other legal proceedings.

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 30, 2020 and focused on the strategic direction of the Truck & Bus brand group, especially the sale of shares in RENK AG.

The agenda of the Supervisory Board meeting on February 14, 2020 included a report on the latest developments in the model declaratory proceedings involving the Verbraucherzentrale Bundesverband e.V.

The Supervisory Board held its next meeting on February 28, 2020. Following a detailed examination, we approved the consolidated financial statements and the annual financial statements of Volkswagen AG for 2019 prepared by the Board of Management. We examined the combined management report, the combined separate nonfinancial report for 2019

Hans Dieter Pötsch

and the precautionary 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, full acquisition of the shares of AUDI AG (squeeze out) and the agenda for the 60th Annual General Meeting of Volkswagen AG, particularly resolutions proposed by the Supervisory Board.

At the Supervisory Board meetings on April 27 and May 12, 2020, we discussed the status of the criminal proceedings against the Chairman of the Supervisory Board of Volkswagen AG, Hans Dieter Pötsch, and the Chairman of the Board of Management of Volkswagen AG, Dr. Herbert Diess, on suspicion of violation of the Securities Trading Act in connection with the diesel issue.

The Supervisory Board convened for its next meeting on May 28, 2020. In addition to the composition of the Board of Management and Supervisory Board, particularly with regard to the enlargement of the Executive Committee and the appointment of further Executive Committee members, there were also strategic issues on the agenda. These related to e-mobility and autonomous driving, including the stepping up of the electric campaign in China through an increased shareholding in the JAC Volkswagen joint venture and the global alliance with the Ford Motor Company. The agenda also covered the latest news on the diesel issue.

The main topic on the agenda of the Supervisory Board meeting on June 8, 2020 was the composition of the Board of Management, particularly the departure of Dr. Stefan Sommer from the Board of Management by mutual agreement.

At the Supervisory Board meeting on July 7, 2020, we discussed the composition of the Board of Management, especially the departure of Andreas Renschler from the Board of Management by mutual agreement. We also discussed strategic issues pertaining to the Truck & Bus brand group.

The Supervisory Board meeting on July 29, 2020 concentrated on minor amendments to the rules of procedure for the Audit Committee and a resolution on conducting the 60th Annual General Meeting of Volkswagen AG as a virtual Annual General Meeting on September 30, 2020.

At the Supervisory Board meeting on September 25, 2020, we discussed in detail the final report of the independent monitor and received an updated overview of the integrity and compliance program Together4Integrity. We discussed and decided on strategic decisions for which our consent was required, particularly the acquisition of the image processing business of Hella and the Artemis project (development of next-generation electric cars). We also prepared the 2020 Annual General Meeting. In addition, we deliberated on the current state of affairs with respect to the diesel issue and the Investigations against a number of individuals relating to remuneration granted to the Chairman of the General and Group Works Councils that might have been excessive under the provisions of the Betriebsverfassungsgesetz (BetrVG – German Works Constitution Act). We also discussed the monitoring of related-party transactions in line with new requirements of the AktG.

On November 7, 2020, the Supervisory Board held a meeting largely to discuss the strategic direction of the Truck & Bus brand group, particularly with regard to the takeover of Navistar, Inc. by TRATON SE as part of the TRATON Global Championship strategy.

At the Supervisory Board meeting on November 13, 2020, we discussed the principles of the enhanced remuneration system for Board of Management members. We also held in-depth discussions on the Volkswagen Group's investment and financial planning for the period from 2021 to 2025. Another agenda item for the meeting was the current state of affairs with respect to the diesel issue. We also submitted the annual declaration of conformity with the Code together with the Board of Management.

The last Supervisory Board meeting of the reporting year took place on December 14, 2020. At this meeting, we adopted the enhanced remuneration system for Board of Management members and discussed additional issues in relation to Board of Management remuneration. We also covered the composition of the Board of Management, especially the appointment of Mr. Murat Aksel, Dr. Arno Antlitz and Mr. Thomas Schmall-von Westerholt as Board of Management members and a redistribution of responsibilities.

In the reporting period, we voted in writing on matters such as the extension of Mr. Frank Witter's appointment as a member of the Board of Management, the principles for answering questions at the virtual Annual General Meeting and the request for the court appointment of Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft (EY) as the auditor for the half-yearly financial report and the interim report for the third quarter, necessitated by the postponement of the Annual General Meeting.

The following table shows the number of meetings of the full Board and the committees as well as the individual participation of the members of the Supervisory Board in 2020:

	Meetings of the full Supervisory Board	Meetings of the Committees
Hans Dieter Pötsch	11 out of 13	17 out of 21
Jörg Hofmann	13 out of 13	19 out of 20
Dr. Hussain Ali Al Abdulla	3 out of 13	–
Dr. Hessa Sultan Al Jaber	9 out of 13	–
Dr. Bernd Althusmann	12 out of 13	2 out of 2
Kai Bliesener (since June 20, 2020)	6 out of 6	–
Dr. Hans-Peter Fischer	13 out of 13	–
Marianne Heiß	12 out of 13	5 out of 5
Johan Järvklo (until May 29, 2020)	4 out of 6	–
Ulrike Jakob	13 out of 13	–
Dr. Louise Kiesling	13 out of 13	–
Peter Mosch	13 out of 13	22 out of 22
Bertina Murkovic	13 out of 13	15 out of 15
Bernd Osterloh	12 out of 13	27 out of 27
Dr. Hans Michel Piëch	13 out of 13	13 out of 13
Dr. Ferdinand Oliver Porsche	13 out of 13	7 out of 7
Dr. Wolfgang Porsche	13 out of 13	23 out of 23
Conny Schönhardt	13 out of 13	5 out of 5
Athanasios Stimoniaris	13 out of 13	–
Stephan Weil	9 out of 13	18 out of 21
Werner Weresch	13 out of 13	–

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 participate in the Supervisory Board meetings on April 27, 2020 and May 12, 2020, in which we discussed the status of the criminal proceedings against the Chairman of the Supervisory Board and the Chairman of the Board of Management of Volkswagen AG on suspicion of violation of the Securities Trading Act in connection with the diesel issue. Mr. Pötsch left the room when additional information was provided on this topic at the Supervisory Board meeting on May 28, 2020. At the meeting of the Supervisory Board on February 28, 2020, Mr. Pötsch and Mr. Stephan Weil did not take part in the deliberations and resolution on the termination of the proceedings brought by the Verbraucherzentrale für Kapitalanleger e.V. against resolutions of the 2017 Annual General Meeting approving the actions of Mr. Pötsch and Mr. Weil among other Board members.

Starting in autumn 2016, the public prosecutor’s office in Braunschweig launched criminal investigations against a number of individuals relating to remuneration granted to the Chairman of the General and Group Works Councils of Volkswagen AG Mr. Bernd Osterloh, and other works council members that might have been excessive under the provisions of the Betriebsverfassungsgesetz (BetrVG – German Works Constitution Act). 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 related to remuneration granted to him that might have been excessive under the provisions of the German Works Constitution Act. This included the Supervisory Board meeting on September 25, 2020, for example.

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

CORPORATE GOVERNANCE AND DECLARATION OF CONFORMITY

The Supervisory Board meeting on November 13, 2020 focused on the implementation of the recommendations and suggestions of the Code in the Volkswagen Group. We discussed the Code’s guidance in detail and issued the annual declaration of conformity with the recommendations of the Code in accordance with section 161 of the AktG together with the Board of Management.

The joint declarations of conformity by the Board of Management and the Supervisory Board are permanently available at www.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 Group Corporate Governance Declaration.

The Supervisory Board, and particularly the Audit Committee, also discussed the new provisions of the German Act on the Implementation of the Second Shareholders' Rights Directive (ARUG II – Gesetz zur Umsetzung der zweiten Aktionärsrechterichtlinie) regarding the treatment of related-party transactions. To this end, the Audit Committee agreed a suitable procedure with the Board of Management for ongoing monitoring of the Volkswagen Group’s related party transactions. The Audit Committee commissioned EY to regularly review, on a spot check basis, whether related-party transactions were conducted at arm’s length in accordance with proper business practice. No disclosures or approval decisions on the part of the Supervisory Board were required for related-party transactions under statutory provisions in the reporting year.

MEMBERS OF THE SUPERVISORY BOARD AND BOARD OF MANAGEMENT

Mr. Johan Järvklo, Secretary-General of the European and Global Group Works Council of Volkswagen AG, stepped down from his post on the Supervisory Board of Volkswagen AG effective May 29, 2020. Mr. Järvklo had been a member of the Supervisory Board since November 22, 2015. He has been succeeded by Mr. Kai Bliesener, Head of Vehicle Construction and Automotive and Supplier Industry Coordinator at IG Metall, who was appointed by the court to succeed Mr. Järvklo effective June 20, 2020.

The term of office of Dr. Hussain Ali Al Abdulla on the Supervisory Board of Volkswagen AG duly ended at the close of the 60th Annual General Meeting. The Annual General Meeting elected Dr. Al Abdulla to the Supervisory Board for another full term of office as a shareholder representative.

Effective April 1, 2020, Mr. Markus Duesmann took up his post as a member of the Board of Management of Volkswagen AG and as a member and the Chairman of the Board of Management of AUDI AG. He succeeded Abraham Schot, who left the Company by mutual agreement effective March 31, 2020. On the Volkswagen AG Board of Management, Mr. Duesmann is responsible, in particular, for the Premium brand group.

Effective June 30, 2020, Dr. Stefan Sommer left the Volkswagen AG Board of Management. Dr. Sommer had been a member of the Board of Management since September 1, 2018 and was most recently responsible for Components and Procurement. He left the Company at his own request and by mutual agreement. Mr. Frank Witter, member of the Board of Management responsible for Finance and IT, took over Components and Procurement on an acting basis. Effective January 1, 2021, the Supervisory Board appointed Mr. Murat Aksel and Mr. Thomas Schmall-von Westerholt as new members of the Board of Management. The Supervisory Board also decided to split the Components and Procurement Board of Management position into two new Board positions: Technology and Purchasing. Mr. Schmall-von Westerholt is responsible for Technology effective January 1, 2021. Mr. Aksel took over the Purchasing Board position on the same date. In addition, the Supervisory Board decided to appoint Dr. Arno Antlitz as a member of the Board of Management to replace Frank Witter, who is due to leave the Board of Management. Dr. Arno Antlitz will be responsible for his divisions.

Effective July 15, 2020, Mr. Andreas Renschler left the management boards of Volkswagen AG and TRATON SE by mutual agreement. The Truck & Bus brand group, for which Mr. Renschler was responsible on the Volkswagen AG Board of Management, was taken over by Mr. Gunnar Kilian, member of the Board of Management for Human Resources and Truck & Bus.

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

AUDIT OF THE ANNUAL AND CONSOLIDATED FINANCIAL STATEMENTS

In line with our proposal, the Annual General Meeting of Volkswagen AG on September 30, 2020 elected Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft (EY) as auditors and Group auditors for fiscal year 2020. 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 also commissioned EY to conduct an external limited assurance review of the content of the combined separate nonfinancial report for 2020.

In addition, the auditors analyzed the risk management and internal control system, 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 (dependent company report) for the period from January 1 to December 31, 2020 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 documentation 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 EY on the external content-related audit of the combined separate nonfinancial report for 2020 in good time for their meetings on February 25 and February 26, 2021, respectively. The auditors reported extensively at both meetings on the material findings of their audit and were available to provide additional information. The Chairman of the Audit Committee was also in close contact with the auditors, including between the meetings and during preparation for the Audit Committee meetings.

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 2020, and reported on these at the Supervisory Board meeting on February 26, 2021. 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.

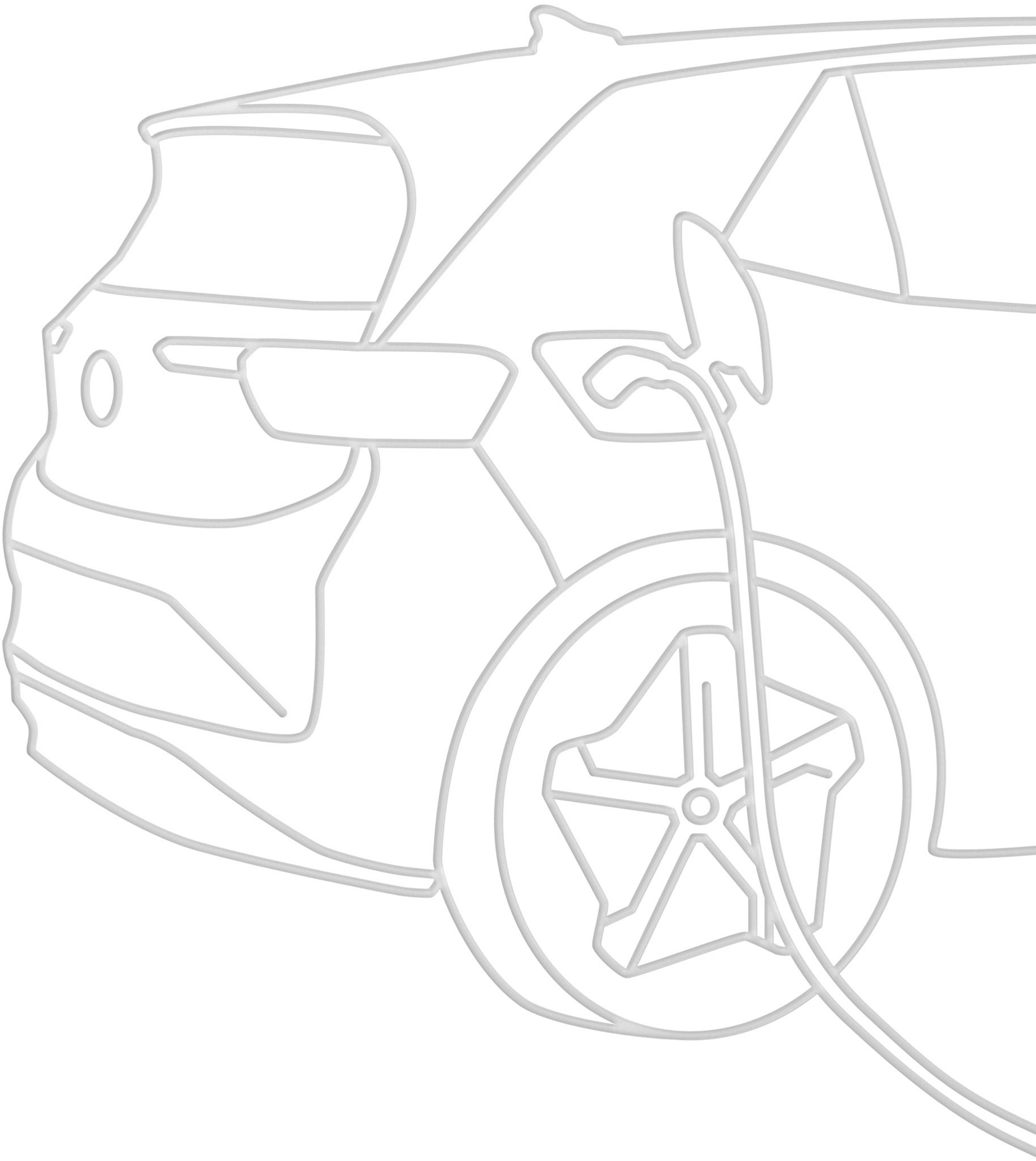
We therefore concurred with the auditors' findings and approved the annual financial statements and the consolidated financial statements prepared by the Board of Management at our meeting on February 26, 2021, which the auditors also attended for the agenda items relating to the annual and consolidated 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. EY conducted an external audit of the content in the combined separate nonfinancial report for 2020 to attain limited assurance and issued an unqualified report. At our meeting on February 26, 2021, EY also took part in the discussions on the agenda items relating to the combined separate nonfinancial report for 2020. Upon completion of its own independent examination of the combined separate nonfinancial report for 2020, 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 2020. In the face of the new and unprecedented challenges brought by the Covid-19 pandemic, they all showed great personal commitment and responsibility, thereby making a decisive contribution to the successful 2020 fiscal year that the Volkswagen Group can look back on.

Wolfsburg, February 26, 2021

H. D. Pötsch

Hans Dieter Pötsch
Chairman of the Supervisory Board



2
Divisions

DIVISIONS

Brands and Business Fields

The Volkswagen Group was heavily impacted by the Covid-19 pandemic in fiscal year 2020, which led to lower unit sales, sales revenue and profit. The diesel issue resulted in negative special items.

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, engines and vehicle software, and the production and sale of passenger cars, light commercial vehicles, trucks, buses and motorcycles, as well as businesses for genuine parts, large-bore diesel engines, turbomachinery, special gear units and propulsion components. 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 Financial Services Division's activities comprise dealer and customer financing, vehicle leasing, direct banking and insurance activities, fleet management and mobility services.

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			
Others			

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

KEY FIGURES BY MARKET

In 2020, the Covid-19 pandemic had a strong impact on business at the Volkswagen Group and its brands; this led to lower figures in terms of unit sales, sales revenue and profit throughout the Group. The Volkswagen Group generated an operating profit before special items of €10.6 (19.3) billion in the reporting year. Special items resulting from the diesel issue weighed on operating profit in the amount of €–0.9 (–2.3) billion.

The Volkswagen Group's unit sales fell to 9.2 (11.0) million vehicles in the past fiscal year due to the pandemic. Sales revenue declined by 11.8% to €222.9 billion.

In the Europe/Other markets region, unit sales decreased by 19.1% year-on-year to 3.9 million vehicles. The impact of the Covid-19 pandemic acted as a drag on business, particularly from the end of the first quarter onwards. Sales revenue fell to €133.5 (154.0) billion due to volume effects. Moreover, exchange rate effects had a negative impact, while a favorable mix made a positive contribution.

In the North American markets, the negative effects caused by the spreading of the SARS-CoV-2 virus became apparent somewhat later, namely at the beginning of the second quarter. At 744 thousand vehicles in the reporting period, our unit sales there were down 22.1% on the previous year's figure. Sales revenue amounted to €36.8 (43.4) billion.

In the markets of the South America region, we sold 471 thousand vehicles in the year 2020. This was 22.4% less than in the previous year. The Covid-19 pandemic dampened demand in the second and third quarter in particular. Declining volumes and an unfavorable exchange rate trend resulted in sales revenue falling by 23.6% to €8.6 billion.

In the Asia-Pacific region, the first to be affected by the Covid-19 pandemic at the beginning of the year, demand increased again as the year went on. In fiscal year 2020, the Volkswagen Group's unit sales – including those of the Chinese joint ventures – amounted to 4.0 (4.5) million vehicles. Sales revenue rose to €44.3 (44.0) billion. This figure does not include the sales revenue of our equity-accounted Chinese joint ventures.

Hedging transactions relating to sales revenue in foreign currency decreased the Volkswagen Group's sales revenue by €345 million in the reporting year. In the previous year, they increased sales revenue by €11 million.

KEY FIGURES BY BRAND AND BUSINESS FIELD

Thousand vehicles/€ million	VEHICLE SALES 2020	VEHICLE SALES 2019	SALES REVENUE 2020	SALES REVENUE 2019	OPERATING RESULT 2020	OPERATING RESULT 2019
Volkswagen Passenger Cars	2,835	3,677	71,076	88,407	454	3,785
Audi	1,017	1,200	49,973	55,680	2,739	4,509
ŠKODA	849	1,062	17,081	19,806	756	1,660
SEAT	484	667	9,198	11,496	–339	445
Bentley	11	12	2,049	2,092	20	65
Porsche Automotive[1]	265	277	26,086	26,060	4,021	4,210
Volkswagen Commercial Vehicles	345	456	9,358	11,473	–454	510
Scania Vehicles and Services[2]	73	101	11,521	13,934	748	1,506
MAN Commercial Vehicles	118	143	10,838	12,663	–631	402
Power Engineering	–	–	3,640	3,997	–268	159
VW China[3]	3,577	4,048	–	–	–	–
Other[4]	–418	–685	–26,573	–30,931	759	–917
Volkswagen Financial Services	–	–	38,637	37,957	2,803	2,960
Volkswagen Group before special items	**–**	**–**	**–**	**–**	**10,607**	**19,296**
Special items	–	–	–	–	–931	–2,336
Volkswagen Group	**9,157**	**10,956**	**222,884**	**252,632**	**9,675**	**16,960**
Automotive Division[5]	9,157	10,956	182,106	212,473	6,664	13,748
of which: Passenger Cars Business Area	8,965	10,713	156,311	182,031	7,224	12,188
Commercial Vehicles Business Area	191	243	22,156	26,444	–79	1,653
Power Engineering Business Area	–	–	3,640	3,997	–482	–93
Financial Services Division	–	–	40,778	40,160	3,012	3,212

1 Porsche (including Financial Services): sales revenue €28,695 (28,518) million, operating profit before special items €4,176 (4,396) million.
2 Scania (including Financial Services): sales revenue €11,950 (14,391) million, operating profit €855 (1,648) million.
3 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 €3,602 (4,425) million.
4 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.
5 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.

KEY FIGURES BY MARKET

Thousand vehicles/€ million	VEHICLE SALES 2020	VEHICLE SALES 2019	SALES REVENUE 2020	SALES REVENUE 2019
Europe/Other markets	3,929	4,856	133,499	153,999
North America	744	956	36,810	43,351
South America	471	607	8,632	11,297
Asia-Pacific[1]	4,012	4,538	44,288	43,974
Hedges on sales revenue	–	–	–345	11
Volkswagen Group[1]	**9,157**	**10,956**	**222,884**	**252,632**

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.

In 2020, Volkswagen Passenger Cars celebrated the debut of the ID.3, the first model based on the Modular Electric Drive Toolkit. The brand also expanded its portfolio of electric vehicles through the addition of an all-electric SUV, the ID.4.

BUSINESS DEVELOPMENT

The Volkswagen Passenger Cars brand aims to move you, and as such the TRANSFORM 2025+ strategy centers on a global model initiative through which the brand aims to lead innovation, technology and quality in the volume segment.

In fiscal year 2020, Volkswagen Passenger Cars launched the ID.3, the first model based on the Modular Electric Drive Toolkit (MEB). This efficient and fully connected all-electric car represents a milestone on the path towards zero-emission mobility for a broad customer base. Following on its heels in late 2020 was the ID.4, the brand's first fully electric SUV. Powerful proportions, sleek lines and a sculptured rear are the hallmarks of its exterior and give the all-rounder an outstanding aerodynamic quality. The interior impresses with generous space, puristic design and sustainable upholstery materials. The ID.4 is to be built and sold in the core markets of Europe and China in the future and later on in the United States as well. There were several additions to the popular Golf family in the reporting period. These derivatives, based on the eighth generation of the bestselling model, include the spacious Golf Estate, the robust Golf Alltrack and the sporty, iconic Golf GTI. With the Arteon Shooting Brake, Volkswagen Passenger Cars brought out a new body version of the Arteon series in 2020 that is a completely new interpretation of the estate concept and expands the brand's model range in the mid-size segment. In addition, the brand pushed the electrification of its portfolio with the introduction of plug-in hybrid versions of the Golf, Tiguan, Arteon, Arteon Shooting Brake and Touareg models.

The Volkswagen Passenger Cars brand delivered 5.3 million vehicles worldwide in fiscal year 2020 (–15.1%). Sales figures were below the previous year's level in almost all markets due to the pandemic. Sales of the T-Cross increased, thus bucking the trend, and the new Atlas Cross Sport was also very popular.

The Volkswagen Passenger Cars brand sold 2.8 (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 5.1 (6.2) million vehicles worldwide in 2020. At the Zwickau plant, the last vehicle with a combustion engine rolled off the assembly line in 2020. With the ID.3 and the ID.4, only electric models from Volkswagen Passenger Cars are produced there now, and models from the Audi and SEAT brands are to follow in the future.

SALES REVENUE AND EARNINGS

The Volkswagen Passenger Cars brand's sales revenue fell by 19.6% year-on-year in 2020 to €71.1 billion. Operating profit before special items decreased to €0.5 (3.8) billion. Lower fixed costs and better price positioning were unable to compensate for the impact of lower volumes due to the Covid-19 pandemic or for negative exchange rate effects. The operating return on sales before special items amounted to 0.6 (4.3)%. The diesel issue gave rise to special items of €–0.8 (–1.9) billion.

5.1 million

Vehicles produced worldwide

PRODUCTION

Units	2020	2019
Tiguan	754,276	910,926
Passat/Magotan	477,892	543,706
Polo/Virtus	467,765	706,052
Jetta/Sagitar	422,908	541,715
Lavida	416,209	514,698
Golf	408,528	679,351
Bora	329,263	345,077
T-Cross	285,824	274,071
T-Roc	285,299	328,069
Atlas/Teramont	178,954	183,648
Santana	174,966	244,132
JETTA	165,681	68,612
Tharu/Taos	149,781	136,899
Gol	117,471	151,241
Lamando	65,730	92,903
ID.3	64,259	50
up!	59,786	108,676
Touran	56,833	90,366
Arteon/CC	55,899	51,868
Saveiro	41,146	54,941
Touareg	41,136	52,859
Sharan/Viloran	32,142	25,681
Fox/Suran	12,184	44,275
Phideon	10,344	13,750
ID.4	6,487	–
Beetle	–	20,580
	5,080,763	**6,184,146**

VOLKSWAGEN PASSENGER CARS BRAND

	2020	2019	%
Deliveries (thousand units)	5,328	6,279	–15.1
Vehicle sales	2,835	3,677	–22.9
Production	5,081	6,184	–17.8
Sales revenue (€ million)	71,076	88,407	–19.6
Operating result before special items	454	3,785	–88.0
Operating return on sales (%)	0.6	4.3	

ID.3

DELIVERIES BY MARKET

in percent

Europe/Other markets 28.1 %
North America 8.8 %
South America 7.4 %
Asia-Pacific 55.8 %

FURTHER INFORMATION www.volkswagen.com

Audi aspires to spearhead the Group both technically and technologically. A fascinating new electric vehicle – the e-tron Sportback – was presented in the reporting period.

BUSINESS DEVELOPMENT

"Vorsprung" is Audi's global brand promise 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 developing innovative technologies, Audi plays an influential role in the Group, not least with the Premium Platform Electric (PPE) for all-electric premium vehicles. With Artemis, Audi has also created an agile unit for new vehicle projects. The initial focus of the team of passionate specialists, who have been given a large degree of freedom, is to develop a highly efficient electric car. As such, Artemis is also to be the pilot and role model for the future development of vehicle projects in the Group. In the reporting period, Audi rolled out the second model in its e-tron product line. The Audi e-tron Sportback is a dynamic SUV coupé that combines the power of a spacious SUV with the elegance of a four-door coupé and the progressive character of an electric car. The all-electric drive provides up to 300 kW (408 PS) of power, while the high-performance version, the e-tron S Sportback, is capable of delivering up to 370 kW (503 PS). The e-tron Sportback's digital matrix LED headlights are a new optional feature now available for the first time in a large-scale production vehicle. The light is broken down into tiny pixels and can be controlled with exceptional precision. This makes safe lane centering easier on narrow stretches of road and shows the position of the vehicle in the lane. Production of the all-electric e-tron GT commenced at the end of the year 2020. The Q4 e-tron and the Q4 Sportback e-tron will expand the portfolio of electric vehicles in 2021. New model generations were launched in the popular A3 series during the reporting year.

Amid a difficult market environment, the Audi brand delivered a total of 1.7 million vehicles to customers in 2020 (–8.3%). The recovery of important core markets in the second half of the year was able to largely compensate for the volume losses that occurred in the first half of the year due to the pandemic.

Unit sales made by the Audi brand in the reporting period came to 1.0 (1.2) million vehicles. The Chinese joint venture FAW-Volkswagen sold a further 656 (620) thousand locally produced Audi vehicles. The Q3, A6 and e-tron models were in especially high demand. Unit sales at Automobili Lamborghini S.p.A. amounted to 7,460 (8,290) vehicles.

In 2020, Audi produced 1.7 (1.8) million units worldwide. Lamborghini manufactured 7,250 (8,664) vehicles.

SALES REVENUE AND EARNINGS

The Audi brand's sales revenue in fiscal year 2020 amounted to €50.0 (55.7) billion. The decrease in volumes and negative exchange rate effects reduced operating profit before special items to €2.7 (4.5) billion. Reduced fixed costs, the deconsolidation effect from the divestment of Autonomous Intelligent Driving GmbH (AID) as well as other effects from the Audi.Zukunft and Audi Transformation Plan programs had a positive effect. The diesel issue resulted in special items of €–0.2 billion in the reporting year. The operating return on sales before special items was 5.5 (8.1)%. The financial key performance indicators for the Lamborghini and Ducati brands are included in the financial figures for the Audi brand.

€50 billion

Sales revenue in 2020

PRODUCTION

Units	2020	2019
Audi		
A4	243,566	323,387
Q5	275,888	286,365
A3	206,482	240,795
A6	271,679	232,569
Q3	219,662	195,566
Q2	124,346	130,225
Q7	65,574	63,633
A1	62,099	81,287
A5	56,786	93,077
e-tron	43,157	43,376
Q8	37,845	44,727
A8	20,591	23,826
A7	18,083	17,068
TT	8,646	14,999
R8	1,517	2,121
	1,655,921	**1,793,021**
Lamborghini		
Urus	4,364	5,233
Huracán Coupé	1,258	1,495
Huracán Spyder	752	931
Aventador Roadster	595	219
Aventador Coupé	281	786
	7,250	**8,664**
Audi brand	**1,663,171**	**1,801,685**
Ducati, motorcycles	44,827	51,723

AUDI BRAND

	2020	2019	%
Deliveries (thousand units)	1,700	1,854	–8.3
Audi	1,693	1,846	–8.3
Lamborghini	7	8	–9.4
Vehicle sales	1,017	1,200	–15.2
Production	1,663	1,802	–7.7
Sales revenue (€ million)	49,973	55,680	–10.2
Operating result before special items	2,739	4,509	–39.3
Operating return on sales (%)	5.5	8.1	

e-tron Sportback S

DELIVERIES BY MARKET
in percent

FURTHER INFORMATION www.audi.com

In 2020, ŠKODA presented its first MEB model, the Enyaq iV, taking the next step in the Czech brand's 125-year history in the systematic implementation of its e-mobility strategy.

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 AUTO celebrated its 125th anniversary as a company in 2020, as well as the 115th anniversary of when the company started automobile production. Founded in 1895, ŠKODA is one of the world's oldest operating automakers.

In fiscal year 2020, ŠKODA took the next step in the systematic implementation of its e-mobility strategy and presented the brand's first all-electric production vehicle, the Enyaq iV. The completely battery-electric MEB-based SUV boasts emotive and dynamic design language, and its striking ŠKODA profile is also available with an illuminated radiator grille as an option. It combines rear or all-wheel drive with a range of up to 510 km that is suited for everyday usability. ŠKODA also continues its emotive design language in the interior: the innovative SUV features the brand's typical spaciousness and a completely new concept for the interior. ŠKODA launched another electric model in 2020 – the Octavia iV with a plug-in hybrid drive, which is also available as a sporty, dynamic RS version. In the Octavia family, the Octavia G-Tec, which runs on compressed natural gas and the robust off-road Octavia Scout Combi were also brought onto the market.

The ŠKODA brand delivered 1.0 (1.2) million vehicles worldwide in the reporting period. China remained the largest individual market. However, deliveries there fell by 38.7%. Sales were also down on the previous year's levels in the other markets due to the pandemic, with the exception of Turkey (+56.3%) and Russia (+6.8%).

ŠKODA sold 0.8 (1.1) million vehicles in the past fiscal year. The Scala, Kamiq and Octavia Combi models were in especially 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.

In fiscal year 2020, ŠKODA produced 0.9 million vehicles worldwide, a decrease of 24.3% versus 2019.

SALES REVENUE AND EARNINGS

The ŠKODA brand's sales revenue decreased by 13.8% in 2020 to €17.1 billion. Operating profit declined by €904 million to €756 million. Lower volumes due to Covid-19, negative exchange rate effects and emissions-related expenses were offset by cost optimization. The operating return on sales amounted to 4.4%, contrasting with 8.4% in the previous year.

125 years

Company history

PRODUCTION

Units	2020	2019
Octavia	233,902	358,356
Rapid/Scala	219,401	207,724
Karoq/Kamiq/Yeti	172,999	203,688
Kodiaq	117,825	177,163
Fabia	100,425	166,237
Superb	80,880	102,592
Citigo	14,482	27,306
Enyaq iV	939	–
	940,853	**1,243,066**

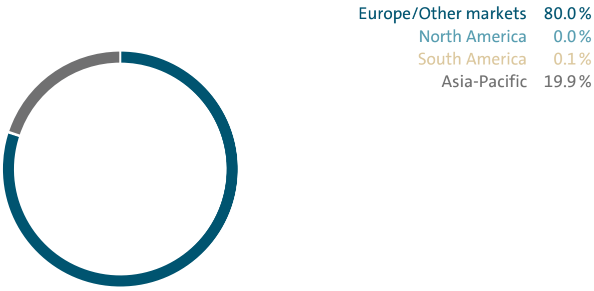
ŠKODA BRAND

	2020	2019	%
Deliveries (thousand units)	1,005	1,243	–19.1
Vehicle sales	849	1,062	–20.0
Production	941	1,243	–24.3
Sales revenue (€ million)	17,081	19,806	–13.8
Operating result	756	1,660	–54.4
Operating return on sales (%)	4.4	8.4	

Enyaq iV

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.skoda-auto.com

SEAT is a company with two clearly defined brands: SEAT and CUPRA. Both brands launched a large product initiative in 2020 with the new Leon family and the Formentor, the first model developed exclusively for CUPRA.

BUSINESS DEVELOPMENT

The journey of the world-renowned Spanish car company began 70 years ago: SEAT was founded on May 9, 1950 and quickly brought mobility to the whole of Spain. Throughout its 70-year history, the company has demonstrated that it is capable of reinventing itself time and again and successfully overcoming challenges. SEAT has harnessed the power of change to transform itself from a pure car manufacturer into a robust technology and industrial company. An urban mobility hub was opened in the center of Barcelona in 2020 with CASA SEAT. The software development center SEAT:CODE was also further expanded and hired around 100 new employees.

SEAT is the Group brand with Europe's youngest customer profile and offers strikingly designed vehicles "Created in Barcelona." In 2020, SEAT brought out the new Leon, the brand's biggest seller. The vehicle impresses with a fresh design, clear lines, harmonious proportions and innovative lighting. The wide range of advanced drive concepts make the SEAT Leon even more efficient and for the first time, it offers PHEV and mild hybrid versions. In addition, the Leon is SEAT's first vehicle with complete digital connectivity.

CUPRA is an unconventional and emotionally-charged brand, which is defined by the progressive design and the performance of its electric models. Numerous new vehicles were launched in the reporting year: the CUPRA Leon family, the CUPRA Ateca and the CUPRA Formentor – a powerful SUV and coupé crossover and the first model developed specifically for CUPRA. With a total of seven high-performance and efficient drive systems, including two plug-in hybrid versions, its comprehensive connectivity functions and modern safety and comfort systems, the Formentor is equipped with state-of-the-art technology.

As a result of the Covid-19 pandemic, SEAT's deliveries to customers fell by 25.6% in fiscal year 2020 to 427 thousand vehicles. Sales figures fell year-on-year on almost all markets. The CUPRA brand recorded an increase of 11.1% to 27 thousand vehicles and was therefore one of the few brands that grew in Europe.

Unit sales at SEAT stood at 484 thousand vehicles in the past fiscal year, down 27.5% on the figure for 2019. This figure also includes the A1 manufactured for Audi. The Arona and Ateca SUV models and the Leon were in high demand.

In the reporting year, 406 thousand SEAT and CUPRA vehicles were manufactured; a decrease of 31.3% year-on-year.

SALES REVENUE AND EARNINGS

Sales revenue for SEAT in 2020 came to €9.2 billion, falling 20.0% short of the record figure achieved in the previous year. Operating result decreased to €–339 (445) million, mainly due to lower volumes as a result of the pandemic. Emissions-related expenses were also an adverse factor. The SEAT brand's operating return on sales declined to –3.7 (3.9)%.

70 years

SEAT company

PRODUCTION

Units	2020	2019
Leon	124,323	153,837
Arona	78,823	134,611
Ateca	76,710	98,397
Ibiza	74,564	130,243
Tarraco	18,726	38,721
Alhambra	14,672	23,015
CUPRA Formentor	11,041	–
Mii	7,593	11,479
Toledo	–	1,506
	406,452	**591,809**

SEAT

	2020	2019	%
Deliveries (thousand units)	427	574	–25.6
Vehicle sales	484	667	–27.5
Production	406	592	–31.3
Sales revenue (€ million)	9,198	11,496	–20.0
Operating result	–339	445	x
Operating return on sales (%)	–3.7	3.9	

CUPRA Formentor

DELIVERIES BY MARKET
in percent

FURTHER INFORMATION www.seat.com

BENTLEY

In 2020, Bentley presented the extensively upgraded and popular Bentayga, which was rolled out by the British brand five years ago as the first luxury SUV on the market. In spite of the pandemic, deliveries rose year-on-year.

BUSINESS DEVELOPMENT

The Bentley brand is defined by exclusivity, elegance and power. In 2020, Bentley unveiled the update to its successful Bentayga, which was rolled out by the British brand around five years ago as the first luxury SUV on the market. Like its predecessor, the new Bentayga combines the abilities of a high-performance grand tourer with the characteristics of a luxury limousine, a spacious family car and an off-roader. The exterior design of the front and rear adopts the current Bentley design DNA, giving the vehicle a fascinatingly dynamic appearance and an air of elegance. The interior impresses with a next-generation infotainment system that is seamlessly integrated into the handcrafted dashboard. In addition to the V8 version that features a 405 kW (550 PS) twin-turbocharged 4.0 l petrol engine, the Bentayga is also available as the range-topping Bentayga Speed model with a 467 kW (635 PS) 6.0 l W12 engine, as well as an efficient plug-in hybrid. Bentley likewise attracted attention in 2020 with the exclusive and strictly limited Bacalar. The two-seater was presented by Bentley Mulliner, a specialist customization company whose roots date back to the 16th century. The roofless luxury grand tourer, whose design draws upon the spectacular EXP 100 GT concept car from the year 2019, offers open-air motoring with a powerful double-turbocharged W12 engine producing 485 kW (659 PS). Exquisite materials and smart use of technology round off this exclusive vehicle concept.

In spite of the pandemic, deliveries by the Bentley brand in 2020 rose slightly to 11,206 (11,006) units, a new record figure. Bentley saw growth in the USA (+5.7%) and China (+48.5%).

In fiscal year 2020, Bentley sold 11,296 (11,631) vehicles worldwide. Demand for the new Flying Spur was particularly strong.

The Bentley brand produced 10,693 vehicles in the reporting period, 14.0% less than in the previous year.

SALES REVENUE AND EARNINGS

In 2020, Bentley's sales revenue fell by 2.1% year-on-year to €2.0 billion. Operating profit decreased to €20 (65) million, mainly due to higher depreciation and amortization charges, one-off expenses for restructuring measures and exchange rate effects. The operating return on sales was 1.0 (3.1)%.

1.8%

Increase in deliveries in 2020

PRODUCTION

Units	2020	2019
Bentayga	3,946	5,232
Flying Spur	3,381	102
Continental GT Coupé	1,995	3,903
Continental GT Convertible	1,244	2,750
Mulsanne	127	443
	10,693	**12,430**

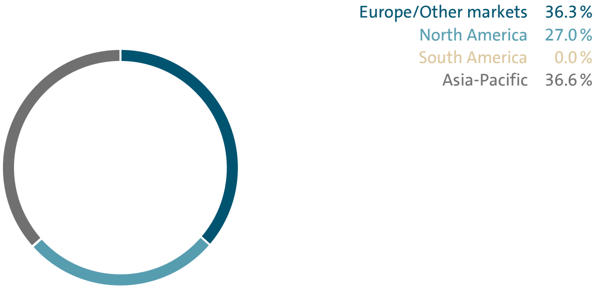
BENTLEY BRAND

	2020	2019	%
Deliveries (units)	11,206	11,006	+1.8
Vehicle sales	11,296	11,631	–2.9
Production	10,693	12,430	–14.0
Sales revenue (€ million)	2,049	2,092	–2.1
Operating result	20	65	–70.1
Operating return on sales (%)	1.0	3.1	

Bentayga

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.bentleymotors.com

Porsche launched the new Panamera in fiscal year 2020. In spite of the challenges presented by the Covid-19 pandemic, the sports car manufacturer achieved its strategic target return.

BUSINESS DEVELOPMENT

Exclusivity and social acceptance, innovation and tradition, performance and everyday usability, design and functionality – these are the brand values of sports car manufacturer Porsche. In fiscal year 2020, Porsche presented its extensively revamped Panamera, which combines the performance of a sports car with the comfort of an exclusive saloon and now covers an even wider range: with its top model, the 463 kW (630 PS) Panamera Turbo S, the sports car manufacturer is underscoring its high standard of best-in-class performance. The Panamera 4S E-Hybrid is a consistent continuation of Porsche's E-Performance strategy and constitutes a new addition to the range of plug-in hybrids, offering a completely new drive system with 412 kW (560 PS). Compared with the previous hybrid models, the all-electric range has been boosted by up to 30%. Porsche celebrated the world premiere of the 911 Targa 4 and 911 Targa 4S models in 2020, completing its new generation of the 911 with the third vehicle body variant. The innovative, fully automatic roof system remains a distinguishing feature on all versions of the Targa; and just like the legendary original Targa model from 1965, it features the characteristic wide bar as well as an automated retractable roof section above the front seats and a wraparound rear window. An eight-speed dual-clutch transmission and intelligent all-wheel drive Porsche Traction Management deliver compelling performance and sporty driving pleasure. In the 911 series, the new generation of the 911 Turbo S has also been available in Coupé and Cabriolet versions since 2020. The new range-topping 911 offers unprecedented power, driving dynamics and luxury. It is being launched with a new 3.8 l boxer engine that delivers 478 kW (650 PS) of power, a whopping 51 kW (70 PS) more than its predecessor. The 911 Turbo S sprints from 0 to 100 km/h in just 2.7 seconds, while top speed is 330 km/h.

Porsche delivered 272 thousand sports vehicles to customers in fiscal year 2020, 3.1% fewer than in the previous year. China remained the largest single market, and Porsche was able to increase its sales there by 2.6% to 89 thousand vehicles.

Porsche's unit sales amounted to 265 thousand vehicles in the reporting period. This was 4.2% fewer than in the previous year. The 718 and the Taycan saw growth.

Porsche produced a total of 263 thousand vehicles in 2020, 4.1% fewer than in fiscal year 2019.

SALES REVENUE AND EARNINGS

Porsche Automotive's sales revenue was on a level with the previous year at €26.1 (26.1) billion in fiscal year 2020. Operating profit decreased by 4.5% to 4.0 billion (prior-year figure before special items); this was attributable to lower vehicle sales and to cost increases, especially for digitalization and electrification. Changes in exchange rates also had a negative impact. Despite the Covid-19 pandemic, early countermeasures, cost discipline and very good market performance in the second half of the year meant it was possible to achieve an operating return of 15.4 (16.2)% (prior-year figure before special items), which even slightly exceeded the target return.

15.4%

Operating return on sales in 2020

PRODUCTION

Units	2020	2019
Cayenne	82,137	95,293
Macan	78,490	89,744
Taycan	29,450	1,386
911 Coupé/Cabriolet	28,672	37,585
718 Boxster/Cayman	22,655	19,263
Panamera	21,832	31,192
	263,236	**274,463**

PORSCHE AUTOMOTIVE[1]

	2020	2019	%
Deliveries (thousand units)	272	281	–3.1
Vehicle sales	265	277	–4.2
Production	263	274	–4.1
Sales revenue (€ million)	26,086	26,060	+0.1
Operating result before special items	4,021	4,210	–4.5
Operating return on sales (%)	15.4	16.2	

1 Porsche (Automotive and Financial Services): sales revenue €28,695 (28,518) million, operating profit (in the prior-year before special items) €4,176 (4,396) million.

Panamera

DELIVERIES BY MARKET
in percent

Europe/Other markets 32.2 %
North America 24.2 %
South America 1.3 %
Asia-Pacific 42.3 %

FURTHER INFORMATION www.porsche.com

Commercial
Vehicles

The Volkswagen Commercial Vehicles brand celebrated its 25th anniversary in 2020. The new Caddy was introduced as a completely new version of the bestselling model, also available for the first time as a California compact camper van.

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. That is why the brand is the Volkswagen Group's leader in autonomous driving as well as in mobility services such as Mobility-as-a-Service and Transport-as-a-Service. For these solutions, Volkswagen Commercial Vehicles will develop special-purpose vehicles such as robo-taxis and robo-vans in the future to keep the world of tomorrow moving with all its requirements for clean, intelligent and sustainable mobility. This is what Volkswagen Commercial Vehicle stands for with its brand promise: We transport success, freedom and the future.

The establishment of Volkswagen Commercial Vehicles was announced in Hanover on November 9, 1995 – then the Group's fifth brand along with Volkswagen Passenger Cars, Audi, SEAT and ŠKODA. The idea was to sharpen the focus of the Volkswagen Group's commercial vehicle activities, bringing product planning, development, purchasing, production and sales together under the umbrella of Volkswagen Commercial Vehicles. In 2020, the brand looked back at 25 years of success. Its product highlight was the launch of the new Caddy. The completely new all-rounder excels as a transporter and family van with high versatility. It is based on the MQB for the first time. The MQB brings new technologies to the model range such as Travel Assist, Trailer Assist and the lane-change assistant. For the first time, the Caddy is also available as a Caddy California compact camper van. This multi-functional, comfortable travel companion with many innovative and detailed solutions completes the series of camper vans along with the California and the Crafter-based Grand California. With the new generation of the Multivan, the Amarok's successor and the all-electric ID. BUZZ, many exciting vehicle projects are planned in the years to come.

At 372 thousand units, deliveries by Volkswagen Commercial Vehicles in fiscal year 2020 were below the prior-year (–24.4%). Turkey (+31.7%) and Argentina (+1.9%) registered growth.

Volkswagen Commercial Vehicles sold 345 thousand vehicles in the reporting period, 24.3% fewer than in the previous year.

In 2020, the Volkswagen Commercial Vehicles brand produced 344 thousand vehicles, falling 28.0% short of the figure for 2019. Production of the Amarok pickup at the main plant in Hanover ended.

SALES REVENUE AND EARNINGS

Sales revenue by Volkswagen Commercial Vehicles in fiscal year 2020 amounted to €9.4 (11.5) billion. Operating result declined to €–454 (510) million due to the pandemic-related fall in volume and the excess emissions premium that entered into force this year. Moreover, higher upfront expenditures and write-downs for new products as well as less favorable exchange rates had a negative effect on the operating result. However, product cost optimizations and mix effects had a positive impact. The operating return on sales fell to –4.9 (4.4)%.

25 years

Volkswagen Commercial Vehicles brand

PRODUCTION

Units	2020	2019
Caravelle/Multivan, Kombi	71,813	96,533
Transporter	66,357	91,585
Caddy Kombi	61,998	81,466
Crafter	58,235	72,906
Caddy	48,799	66,780
Amarok	36,343	68,010
	343,545	**477,280**

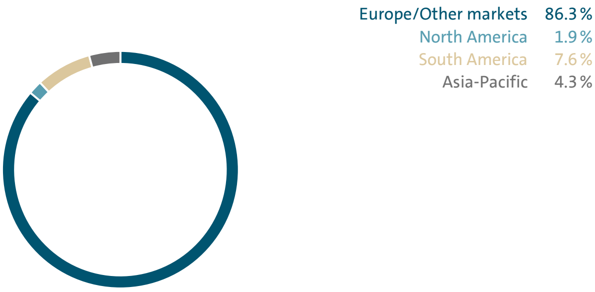
VOLKSWAGEN COMMERCIAL VEHICLES BRAND

	2020	2019	%
Deliveries (thousand units)	372	492	–24.4
Vehicle sales	345	456	–24.3
Production	344	477	–28.0
Sales revenue (€ million)	9,358	11,473	–18.4
Operating result	–454	510	x
Operating return on sales (%)	–4.9	4.4	

Caddy

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.volkswagen-commercial-vehicles.com

The TRATON GROUP aims to become a global champion of the commercial vehicle industry and consistently pursued this goal in 2020. New partnerships are making future technologies workable for the commercial vehicle business.

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”.

The TRATON GROUP reached new milestones in its global champion strategy in 2020. In the all-important North American market, a strategic partnership with the US manufacturer of commercial vehicles Navistar has existed since 2017. At the end of January 2020, the board of management of the TRATON GROUP decided to take the next logical step in the US market by submitting a takeover bid for Navistar, thus rising to the challenges posed by new regulations and dynamically evolving technologies in the fields of digital connectivity, drive systems and autonomous driving. Combining TRATON’s strong position in Europe and substantial presence in South America with Navistar’s status in North America provides the opportunity to create a leading company with global reach and complementary capabilities. In November 2020, the two partners reached an agreement that TRATON SE would acquire all outstanding shares of Navistar at a cash price of USD 44.50 per share. Expected to be completed in mid-2021, the transaction is subject to the approval of Navistar shareholders, the usual closing conditions and regulatory approvals.

Driving innovation is another pillar of the global champion strategy. In the forward-looking field of alternative drive technologies and as part of their strategic partnership, TRATON and Hino Motors signed a joint venture agreement in 2020 in order to plan and provide e-mobility products. The aim is to persue the development of electric mobility including battery electric vehicles, fuel cell vehicles and relevant components and to create a common platform for electric vehicles including software and interfaces. Through their collaboration TRATON and Hino Motors hope to shorten lead times for future e-mobility products with battery and fuel cell technology.

To play a leading part in the autonomous transport of the future, TRATON also entered into a global partnership with the US start-up TuSimple in 2020. The partnership is the first of its kind in Europe, bringing together a global commercial vehicle manufacturer and a producer of technology for highly automated driving at level 4 autonomy. In a joint development program, TRATON and TuSimple aim to operate a test route between Södertälje and Jönköping in Sweden where Scania trucks are to drive using level 4 driverless systems that almost exclusively take over the driving permanently. As part of the partnership, TRATON has also taken a minority stake in TuSimple.

190 thousand

Commercial vehicles delivered in 2020

PRODUCTION

Units	2020	2019
Trucks	156,297	201,115
Buses	16,729	21,387
Light Commercial Vehicles	18,340	15,903
	191,366	**238,405**

DELIVERIES

Units	2020	2019
Trucks	156,378	205,936
Buses	16,174	21,496
Light Commercial Vehicles	17,635	14,789
	190,187	**242,221**

Strong brands

DELIVERIES BY MARKET
in percent

Europe/Other markets 67.2 %
North America 0.8 %
South America 26.0 %
Asia-Pacific 6.0 %

FURTHER INFORMATION www.traton.com

Scania unveiled its first fully electric truck in 2020, underpinning its position as one of the leading companies in the commercial vehicle industry for alternative drive technologies.

BUSINESS DEVELOPMENT

The Swedish brand Scania follows its values “Customer first”, “Respect for the individual”, “Elimination of waste”, “Determination”, “Team Spirit” and “Integrity”. In rolling out its first fully electric truck, Scania underpinned its position as one of the leading companies in the commercial vehicle industry for alternative drive technologies in 2020. Scania’s E-Truck was designed for urban operation and has an electric range of up to 250 km. In the reporting year, Scania also presented a hybrid truck with an electric range of up to 60 km. The new products will help Scania achieve its climate targets of reducing the carbon footprint from its business activities by 50% by 2025, and cutting emissions from Scania products by 20% in the same period. Vehicles with hydrogen technology are also playing their part: the Norwegian wholesaler ASKO is currently testing hydrogen-powered Scania trucks with fuel cell electric drives.

To electrify its model range, Scania plans to invest well over SEK 1 billion in a battery assembly plant in Södertälje, Sweden, in the coming years. The plant, which will be built adjacent to the chassis assembly plant in Södertälje, is to assemble battery modules and packs tailored to Scania vehicles.

To gain a firmer foothold in the Asian and especially the Chinese market, Scania is investing in a wholly owned truck production facility in Rugao in Jiangsu Province. Series production is scheduled to start in early 2022. In the long term, the company also plans to step up its research and development activities in the world’s largest commercial vehicle market.

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

Orders received at the Scania brand increased by 4.7% year-on-year to 93 thousand vehicles in fiscal year 2020. The number of vehicles delivered worldwide fell to 72 (99) thousand due to the pandemic; the number of buses delivered included in this figure declined to 5 (8) thousand units. Demand for services and replacement parts was also impacted by the Covid-19 pandemic, but the drop was comparatively smaller. New contracts signed at Scania Financial Services were also down on the prior-year figure, due mainly to lower unit sales.

Scania manufactured 73 (97) thousand commercial vehicles in the past fiscal year, including 5 (8) thousand buses.

SALES REVENUE AND EARNINGS

Scania Vehicles and Services generated sales revenue of €11.5 (13.9) billion in fiscal year 2020. Operating profit fell by 50.3% to €0.7 billion owing to the pandemic and exchange rate effects; in addition, steps were taken to realign the production facilities. A favorable product mix and cost savings had a positive effect. The operating return on sales amounted to 6.5 (10.8)% in the reporting period.

4.7%

Increase in orders received

PRODUCTION

Units	2020	2019
Trucks	67,106	89,276
Buses	5,430	7,719
	72,536	**96,995**

SCANIA VEHICLES AND SERVICES[1]

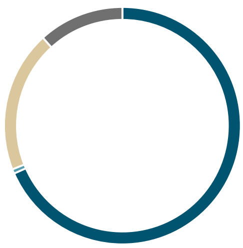
	2020	2019	%
Orders received (thousand units)	93	89	+4.7
Deliveries	72	99	–27.5
Vehicle sales	73	101	–27.1
Production	73	97	–25.2
Sales revenue (€ million)	11,521	13,934	–17.3
Operating result	748	1,506	–50.3
Operating return on sales (%)	6.5	10.8	

1 Scania (including Financial Services): sales revenue €11,950 (14,391) million, operating profit €855 (1,648) million.

BEV Truck

DELIVERIES BY MARKET

in percent



FURTHER INFORMATION www.scania.com

MAN revealed its extensively upgraded truck generation in 2020 and received the prestigious International Truck of the Year 2021 award for the TGX. The MAN Lion's City 18 E all-electric articulated bus starts scheduled operations.

BUSINESS DEVELOPMENT

Customer focus, enthusiasm for the product, and efficiency are the core values at MAN. In fiscal year 2020 , MAN revealed its extensively upgraded truck generation, which is consistently designed to meet the changing needs of the transportation industry, setting the standards for assistance systems, driver orientation and digital connectivity. The improvements to the drivetrain, aerodynamics and the MAN EfficientCruise efficiency assistant reduce fuel consumption in the new truck generation by up to 8% compared with the previous generation. The MAN TGX was named International Truck of the Year 2021 by 24 industry journalists. The award is one of the most prestigious in the transportation industry.

In the bus segment, the all-electric MAN Lion's City 18 E optimized for urban transportation was launched in 2020. The 18-meter articulated bus can carry up to 120 passengers and generates zero local emissions. The MAN Lion's City 18 E will begin scheduled operations in 2021 in Barcelona, Spain, and Cologne, Germany.

MAN teamed up with partner companies during the Covid-19 pandemic to convert its TGE model into an innovative diagnostic vehicle. With the molecular diagnostic PCR test equipment on board the MAN TGE, the results of nasal or throat swabs are available in just 39 minutes. Up to 800 tests can be carried out per day and analyzed directly in the vehicle.

In South America, Volkswagen Caminhões e Ônibus expanded its product portfolio in 2020 with its largest truck model to date. The Meteor is used in the heavy-duty sector, which is enjoying especially strong growth in the Brazilian market. In addition to the new Meteor, the successful VW Constellation model also celebrated its premiere with the new generation of the 13 l D26 engine. In 2021 in the field of alternative drive systems, Volkswagen Caminhões e Ônibus plans to begin with the supply of 100 "e-Delivery" electric trucks to Ambev, Latin America's largest beverage company. Ambev intends to deploy the e-Delivery in São Paulo and Rio de Janeiro starting in the second half of the year.

Incoming orders at MAN Commercial Vehicles decreased in fiscal year 2020 by 11.0% year-on-year to 123 thousand vehicles; the market decline anticipated for 2020 – especially in the EU27+3 region – was exacerbated by the Covid-19 pandemic. In America, MAN Commercial Vehicles recorded lower demand with its Volkswagen Caminhões e Ônibus brand, particularly in Brazil and Mexico. A total of 118 (143) thousand commercial vehicles were delivered to customers, of which 11 (14) thousand were buses.

MAN produced a total of 119 (141) thousand commercial vehicles in 2020, including 11 (14) thousand buses.

SALES REVENUE AND EARNINGS

Sales revenue at MAN Commercial Vehicles decreased by 14.4% in 2020 to €10.8 billion. The operating result dropped to €–631 (402) million as a consequence of the pandemic. This was attributable not only to lower vehicle sales but also to depreciation and amortization charges, as well as additional costs incurred in connection with the launch of the new truck generation. Measures to achieve consistent cost savings in all areas were unable to compensate for this decline. The operating return on sales was –5.8 (3.2)%.

8%

Fuel savings in the new truck generation

PRODUCTION

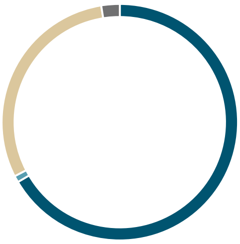
Units	2020	2019
Trucks	89,191	111,839
Buses	11,299	13,668
Light Commercial Vehicles	18,340	15,903
	118,830	**141,410**

MAN COMMERCIAL VEHICLES

	2020	2019	%
Orders received (thousand units)	123	139	–11.0
Deliveries	118	143	–17.3
Vehicle sales	118	143	–17.3
Production	119	141	–16.0
Sales revenue (€ million)	10,838	12,663	–14.4
Operating result	–631	402	x
Operating return on sales (%)	–5.8	3.2	

TGX

DELIVERIES BY MARKET
in percent



FURTHER INFORMATION www.man.eu

Volkswagen Group China

In the Chinese market, Volkswagen continued to put all its energies into the strategic direction of e-mobility in 2020. The negative impact of the Covid-19 pandemic on business operations remained limited.

BUSINESS DEVELOPMENT

China remained the largest single market for Volkswagen in 2020. In the Chinese market, the Group offers more than 160 imported and locally produced models from the Volkswagen Passenger Cars, JETTA, Audi, ŠKODA, Porsche, Bentley, Lamborghini, Bugatti, Volkswagen Commercial Vehicles, MAN, and Scania brands as well as motorcycles by the Ducati brand. At 3.8 (4.2) million units (including imports), we delivered fewer vehicles to customers in 2020 than in the previous year in a Chinese market distinctly weakened by the pandemic. However, the Volkswagen Group remained the clear number one with Chinese customers with a market share of 19.3%. New models achieved a good market performance, including the new Volkswagen Passenger Cars flagship Touareg e-hybrid, the Viloran, the JETTA SUV VS7, the Porsche Taycan and the Audi Q2 and Q3 models. The new Tayron and Tharu models quickly took the lead in the A-SUV market. As part of the SUV campaign, we launched ten new models in 2020. They contributed to increased deliveries in the SUV segment and helped us to maintain our number one position. The new energy vehicle (NEV) segment was the fastest growing segment in China in 2020. The seven new NEV models increased the Group's portfolio to 22 electrified models in China. The premium brands Audi, Porsche and Bentley again delivered strong sales figures, and the young entry-level brand JETTA also attracted a large number of customers in its first full year of sales.

In spite of the Covid-19 pandemic, Volkswagen continued to put all its energies into the strategic direction of e-mobility in China in 2020: the two MEB plants in Foshan and Anting celebrated the start of production on schedule, adding a production capacity of 600,000 units per year to the Group. The ID.4 X model from SAIC VOLKSWAGEN and the ID.4 CROZZ model from FAW-Volkswagen are the first vehicles whose production started in 2020. Three further models in the ID. family are to follow in 2021. By 2023, Volkswagen Passenger Cars will offer eight models in the ID. family on the Chinese market, which plays a decisive role in the Group's global e-mobility strategy. In 2020, Volkswagen increased its stake in Volkswagen (Anhui), formerly JAC Volkswagen, from 50 to 75%. The investment also included the acquisition of 50% of the shares in JAG, the parent company of Volkswagen's joint venture partner JAC. The Volkswagen (Anhui) plant for all-electric vehicles has a maximum production capacity of 350 thousand units per year and should be finished by the end of 2022. Series production of MEB-based models should start there in 2023. Volkswagen has found another partner to secure future requirements for battery capacity for its Chinese e-models: with a 26% stake, Volkswagen (China) Investment Co. Ltd. wants to become the largest shareholder in Gotion High-Tech Co., Ltd. and thus the first international automotive manufacturer to directly invest in a Chinese battery supplier. The Audi brand is working with joint venture partner FAW to jointly establish a company for the production of all-electric vehicles based on the Premium Platform Electric (PPE) from 2024, the next major step for local production of e-vehicles. The Group also strengthened the production of electric drive components in China in 2020 in order to be prepared for rapidly growing demand for e-mobility.

19.3%

The Group's share of the market in China

Thousand units	2020	2019	%
Deliveries	3,849	4,234	–9.1
Vehicle sales[1]	3,577	4,048	–11.6
Production	3,575	3,948	–9.5

1 Produced locally.

EARNINGS

€ million	2020	2019
Operating result (100%)	9,744	11,110
Operating result (proportionate)	3,602	4,425

Our joint ventures produced a total of 3.6 (3.9) million vehicles in fiscal year 2020. 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 Santana and Teramont).

The proportionate operating result of the joint ventures in the reporting year stood at €3.6 (4.4) billion. The negative impacts of pandemic-related lower unit sales and more intense market competition were offset by improvements in the mix and 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.

ID.4 family

LOCAL PRODUCTION

Units	2020	2019
Volkswagen Passenger Cars	2,751,717	3,066,807
Audi	671,659	614,753
ŠKODA	151,245	266,377
Total	**3,574,621**	**3,947,937**

VOLKSWAGEN FINANCIAL SERVICES

THE KEY TO MOBILITY

Volkswagen Financial Services delivered a robust performance in 2020, which proved to be a difficult year. The diverse product portfolio has been enhanced by the addition of interesting alternatives for individual mobility.

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. The key companies are Volkswagen Financial Services AG and its affiliated companies such as Volkswagen Leasing GmbH, as well as Volkswagen Bank GmbH, Porsche Financial Services and the financial services companies in the United States and Canada, the only exceptions being the financial services business of the Scania brand and of Porsche Holding Salzburg.

BUSINESS DEVELOPMENT

Volkswagen Financial Services and Naturschutzbund Deutschland e.V. (NABU) are expanding their successful collaboration in the field of nature conservation and climate action. To this end, the provider of financial and mobility services in the Volkswagen Group is providing €450 thousand for the nature conservation organization to restore the Aller river in the district of Verden between Hülsen and the mouth of the Weser River. The aim is to create more natural conditions for the riverbed and floodplain to increase biodiversity, but also to improve flood protection. Along with moorland protection, the restoration of watercourses is a further focus of the financial services provider's involvement.

Volkswagen Financial Services introduced a car subscription service (Auto-Abo) to its customers in 2020, and in doing so further expanded its mobility offering. Customers can book various vehicle classes and conclude a contract for a minimum of three months. Thereafter, this contract can be terminated on a monthly basis. Subscribers pay only for the use of the vehicle and for fuel. All other relevant costs such as registration, servicing, insurance and taxes are covered by the monthly mobility rate. In the dynamic market for mobility products, the financial service provider is responding to the customer's desire for a high degree of flexibility and comprehensive cost control with its Auto-Abo car subscription service.

Volkswagen Financial Services is supporting the Volkswagen Group's electric mobility offensive with its Lease&Care package solution, starting with the sales launch of the ID.3. This product offers customers a choice of various modular service options, allowing them to maintain full cost transparency when running their new electric vehicle. Volkswagen Financial Services is deliberately focusing on the advantages of leasing for electric mobility and assumes that around 80% of Volkswagen Group electric vehicles will be leased or financed through Financial Services.

Volkswagen Financial Services took over the business travel start-up Voya in 2020, adding business travel management to its mobility offering for fleet customers. Voya offers a digital travel assistant for companies as a smartphone app and for desktop use. Given that fleet and travel management are gradually converging in many companies, Volkswagen Financial Services aims to provide its fleet customers with a corresponding offering based on Voya in the future.

€2.8 billion

Operating profit for 2020

Following its launch in Germany and the United Kingdom, the online platform heycar was successfully rolled out in Spain in fiscal year 2020. Guaranteed used cars of all major automobile brands will now also be offered in Spain under the umbrella of Mobility Trader Spain S.L..

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 2020, Volkswagen Financial Services AG issued three bonds with different terms and a total volume of €2.15 billion. Due to the Covid-19 pandemic and the related turmoil in the money and capital markets, risk premiums were higher than in previous issuances. However, the high demand from investors attests to confidence in the business model.

Other bond transactions were conducted in countries such as the United Kingdom, Japan, Sweden and Norway. In addition to this, private placements were issued in various currencies.

Volkswagen Bank did not enter into any transactions with unsecured bonds in the reporting period.

In fiscal year 2020, Volkswagen Leasing GmbH placed two ABS transactions secured by lease receivables with a volume of €1 billion and €1.1 billion, respectively. The issuances met the quality criteria of the STS Securitization Regulation for particularly high-value securitizations and were oversubscribed several times.

Outside Germany, Volkswagen Financial Services issued a total of six ABS transactions in the United States, China, Spain and Japan. Driver China eleven represented the successful placement by Volkswagen Financial Services of its largest-ever auto ABS in Chinese renminbi (RMB). The transaction has a volume of over RMB 8 billion (around €1.0 billion) in receivables and is backed by financing contracts concluded with Volkswagen Finance (China). China is one of the most important markets for Volkswagen Financial Services with a current contract portfolio of more than 1.2 million units.

Auto-Abo

Volkswagen Financial Services was heavily impacted by the Covid-19 pandemic in fiscal year 2020. To avert and cushion the economic impact of the pandemic for customers, pinpointed stabilization measures were put in place together with the Group brands; these included payment deferrals and support for the dealer organization. The measures taken with the brands to promote sales had a positive effect on vehicle sales as well as on new contracts at Volkswagen Financial Services.

The number of new financing, leasing, service and insurance contracts signed in fiscal year 2020 fell by 6.9% year-on-year to 7.9 million. As of December 31, 2020, the total number of contracts was 21.9 million, up 1.9% from the year before. The number of contracts in the Customer Financing/Leasing area increased by 1.1% to 11.3 million. There were 10.6 million contracts in the Service/Insurance area, 2.7% 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 35.2 (34.2)%.

At the end of the reporting period, Volkswagen Bank GmbH managed 1.4 (1.3) million deposit accounts. Volkswagen Financial Services employed 14,560 people worldwide, including 7,299 in Germany, as of year-end 2020.

SALES REVENUE AND EARNINGS

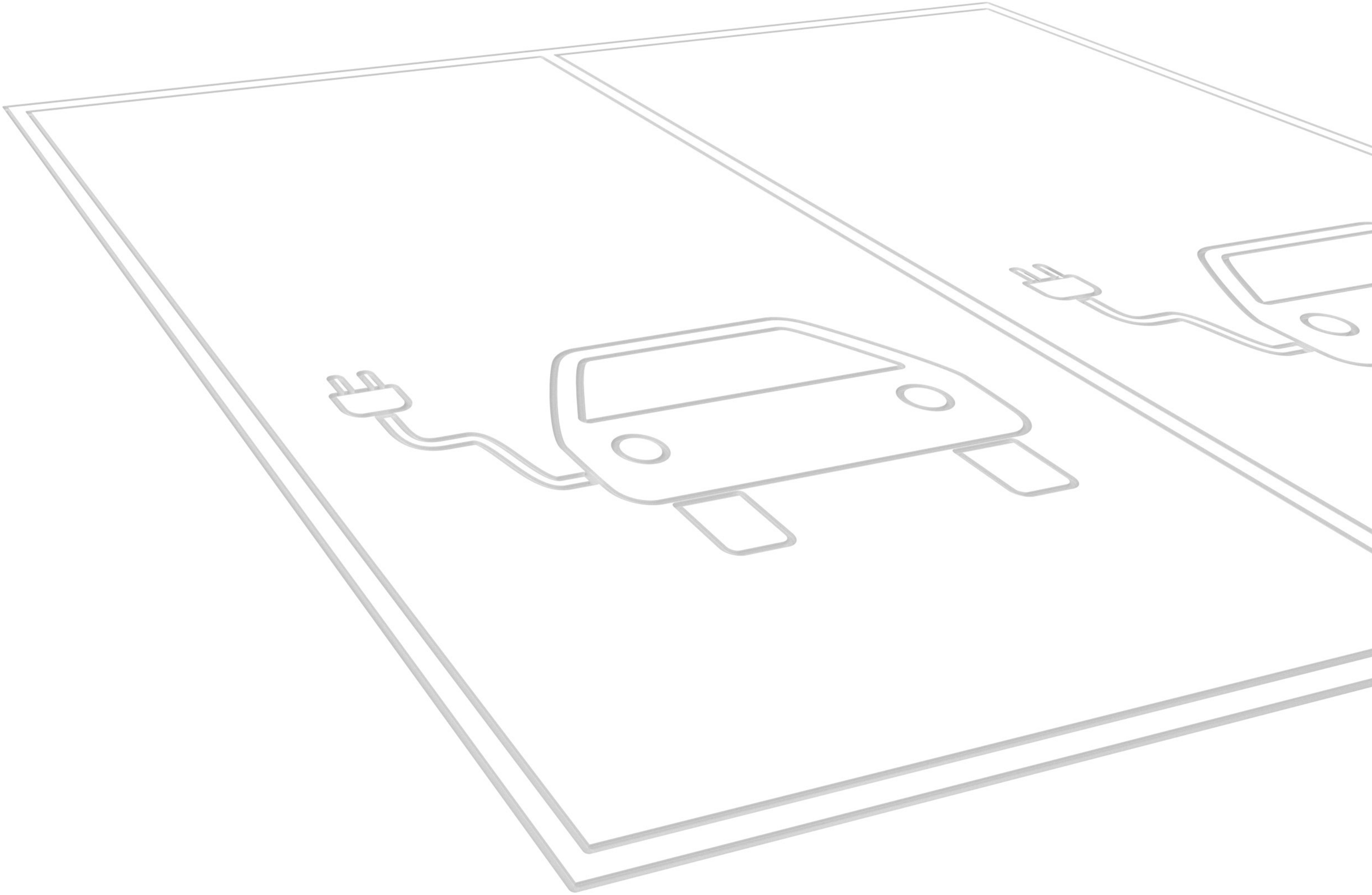
The sales revenue of Volkswagen Financial Services in the reporting year amounted to €38.6 billion, a slight increase of 1.8% on the previous year. Operating profit decreased to €2.8 (3.0) billion, particularly due to risk costs.

VOLKSWAGEN FINANCIAL SERVICES

		2020	2019	%
Number of contracts	thousands	21,907	21,498	+1.9
Customer financing		6,635	6,585	+0.8
Leasing		4,692	4,616	+1.6
Service/Insurance		10,580	10,297	+2.7
Lease assets	€ million	49,653	47,222	+5.1
Receivables from	€ million			
Customer financing		69,380	68,517	+1.3
Dealer financing		18,448	23,093	–20.1
Leasing agreements		45,379	46,276	–1.9
Direct banking deposits	€ million	27,734	31,330	–11.5
Total assets	€ million	225,608	223,536	+0.9
Equity	€ million	29,406	28,428	+3.4
Liabilities[1]	€ million	187,545	187,092	+0.2
Equity ratio	%	13.0	12.7	+2.6
Return on equity before tax[2]	%	8.9	10.8	–17.5
Leverage[3]		6.4	6.6	–3.4
Operating result	€ million	2,803	2,960	–5.3
Earnings before tax	€ million	2,577	2,968	–13.2
Employees at Dec. 31		14,560	14,394	+1.2

1 Excluding provisions and deferred tax liabilities.
2 Earnings before tax as a percentage of average equity (continuing operations).
3 Liabilities as a percentage of equity.

ADDITIONAL INFORMATION
www.vwfsag.com



3
Corporate Governance

CORPORATE GOVERNANCE

Group Corporate Governance Declaration

The following chapter contains the content of the Group Corporate Governance Declaration required by sections 289f and 315d of the HGB and the recommendations and principles of the German Corporate Governance Code.

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

Corporate governance provides the regulatory framework for corporate management and supervision. This includes a company's organization and values, and the principles and guidelines for its business policy. The German Corporate Governance Code (the Code) contains principles, recommendations and suggestions for corporate management and supervision. Its recommendations and suggestions were prepared by a dedicated government commission on the basis of the material provisions and nationally and internationally accepted standards of sound, responsible corporate governance. In the interests of best practice, the government commission regularly reviews the Code's relevance in light of current developments and updates it as necessary. The Board of Management and the Supervisory Board of Volkswagen AG base their work on the principles, recommendations and suggestions of the Code. We consider good corporate governance to be a key prerequisite for achieving a lasting increase in the Company's value. It helps strengthen the trust of our shareholders, customers, employees, business partners and investors in our work and enables us to meet the steadily increasing demand for information from national and international 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 13, 2020 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 2017 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 15 November 2019 until the entry into force of the reformed Code in the version dated 16 December 2019 on 20 March 2020, with the exception of the sections and the stated reasons and periods listed below.

> a) 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 section 5.3.2(3) sentence 2 of the 2017 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.

> b) 5.4.1(6 to 8) (disclosure regarding election proposals)
  With regard to the recommendation in section 5.4.1(6 to 8) of the 2017 Code according to which certain circumstances shall be disclosed when the Supervisory Board makes election proposals to the General Meeting, the guidelines in the Code are vague and the definitions unclear. Purely as a precautionary measure, we therefore declare a deviation from the Code in this respect.

> c) 5.4.5 sentence 2 (a maximum of three supervisory board mandates in non-group listed corporations or comparable companies)

The Chairman of the Supervisory Board is on the supervisory boards of three listed companies of the VOLKSWAGEN Group, 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 Board of Management 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 would involve similar requirements to those of a supervisory board mandate in a listed company, and as the precise method of counting the mandates is unclear, we therefore declare a deviation from section 5.4.5 sentence 2 of the 2017 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 fulfil the duties related to his mandate.

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

The recommendations of the Government Commission of the German Corporate Governance Code in the version dated 16 December 2019 (the 2020 Code) that was published by the German Ministry of Justice in the official section of the Federal Gazette (Bundesanzeiger) on 20 March 2020 was complied with in the period since the entry into force of this version of the Code and will continue to be complied with, with the exception of the recommendations and their stated reasons and periods listed below.

> a) Recommendation B.3 (Duration of first-time appointments to the Board of Management)
As it has done in the past, the Supervisory Board will determine the duration of first-time appointments to the Board of Management as it deems fitting for each individual case and the good of the company.

> b) Recommendation C.5 (Mandate ceiling regarding Board of Management mandate)
The Chairman of the Supervisory Board is on the supervisory boards of three listed companies of the VOLKSWAGEN Group, namely VOLKSWAGEN AG, AUDI AG and TRATON SE (also as Chairman), as well as on the Supervisory Board of Bertelsmann SE & Co. KGaA. He is also Chairman of the Board of Management of Porsche Automobil Holding SE. Porsche Automobil Holding SE is not part of the same group as AUDI AG, VOLKSWAGEN AG and TRATON SE. We are, however, confident that the Chairman of the Supervisory Board of VOLKSWAGEN AG has sufficient time at his disposal to fulfil the duties related to his mandate.

> c) Recommendation C.10 sentence 1 (Independence of the Chair of the Supervisory Board and Chair of the committee)
According to this recommendation of the 2020 Code, the Chair of the Supervisory Board and the Chair of the committee that addresses Management Board remuneration shall be independent from the company and the Management Board. According to the criteria listed in Recommendation C.7, there is indication of a lack of independence if a member of the Supervisory Board was a member of the Management Board in the two years prior to their appointment to the Supervisory Board. The Chairman of the Supervisory Board, who is also the Chairman of the committee that addresses Board of Management remuneration, transferred directly from the Board of Management to the Supervisory Board at the time of his appointment to the Supervisory Board.

> d) Recommendation C.10 sentence 2 (Farther-reaching independence of the Chair of the Audit Committee)
It is unclear from the wording of this recommendation whether the Chair of the Audit Committee is “independent from the controlling shareholder” within the meaning of this recommendation. Such “independence” could be considered lacking in view of the fact that the Chair of the Audit Committee, in addition to other members of the Porsche and Piëch families, who are also related to each other, has 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.

> e) Recommendation C.13 (Disclosure regarding election proposals)
With regard to this recommendation, according to which certain circumstances shall be disclosed when the Supervisory Board makes election proposals to the General Meeting, the guidelines in 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.

> f) Recommendation D.1 (Rules of Procedure for the Supervisory Board)
The Rules of Procedure for the Supervisory Board were published on the Company’s internet site on 6 April 2020.

> g) Recommendation D.4 (Independence of the Chair of the Audit Committee)
Regarding justification, we refer to the statements made above regarding Recommendation C.10 sentence 2. If the Chair of the Audit Committee is not independent from the controlling shareholder, according to the definition of Recommendation C.6, sentence 2, he/she is also not independent within the meaning of Recommendation D.4.

> h) Recommendations G.1 and G.2 (Remuneration system and target total remuneration)
The Supervisory Board introduced a new remuneration system in 2017, which takes into account all recommendations of the 2017 Code. The recommendations are significantly different in the reformed 2020 Code. The remuneration system from 2017 does not comply with these

amended recommendations in some aspects. The Supervisory Board is planning to introduce a new remuneration system that complies with the amended recommendations of the 2020 Code. Until this has been carried out, the deviations will be described here and in the following text. The Supervisory Board has not yet passed a resolution on a remuneration system within the meaning of Recommendation G.1. The justification from the Commission on Recommendation G.1 also establishes the following: the total remuneration is the sum of all remuneration components for the year in question, including the past service cost within the meaning of IAS 19. This will also apply to the maximum remuneration. The remuneration ceilings within our remuneration system were established without taking into account pension scheme expenses or fringe benefits and therefore do not represent maximum remuneration within the meaning of Recommendation G.1. Using the remuneration system in place to date, it is not possible to deduce the relative proportions of the individual remuneration components of target total remuneration, within the meaning of the recommendation. Furthermore, contrary to Recommendation G.2, the Supervisory Board has not yet passed a resolution on specific target total remuneration for the individual members of the Board of Management within the meaning of Recommendation G.1.

> i) Recommendation G.10 sentence 2 (Four-year commitment period)
According to this recommendation, granted long-term variable remuneration components shall be accessible to members of the Board of Management only after a period of four years. As our current Performance Share Plan has a three-year term and there is a cash settlement at the end of this term, this remuneration component is available to the members of the Board of Management after only three years.

> j) Recommendation G.11 sentence 2 (Clawback provision)
Contrary to sentence 2 of this recommendation, the current remuneration system makes no provision for the company to retain or reclaim variable remuneration from the members of the Board of Management. "

The current declaration of conformity and previous declarations of conformity are also published on our website www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html.

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

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

Our listed indirect subsidiaries TRATON SE and MAN SE have also each issued declarations of conformity with the German Corporate Governance Code. These can be accessed at the websites shown below.

The suggestions of the 2020 Code are complied with. The following applies to the suggestions that were not implemented in the past under the 2017 Code: The suggestions previously contained in section 5.1.2(2) sentence 1 ("Duration of first-time appointments") and section 4.2.3(2) sentence 9 ("No early disbursements of variable remuneration components") of the 2017 Code have been turned into recommendations in the 2020 Code. The deviation from the recommendation on the duration of first-time appointments to the Management Board (B.3 in the 2020 Code) is included in the above declaration of conformity. The recommendation that variable remuneration components should not be disbursed early (G.12 in the 2020 Code) is now complied with. The suggestions previously contained in section 2.3.2 sentence 2 ("Accessibility of the voting proxy during the Annual General Meeting") and section 2.3.3 ("Broadcast of the Annual General Meeting") of the 2017 Code have not been included in the 2020 Code.

BOARD OF MANAGEMENT

The Volkswagen AG Board of Management has sole responsibility for managing the Company in the Company's best interests, in accordance with the Articles of Association and the rules of procedure for the Board of Management issued by the Supervisory Board.

Accordingly, responsibilities were divided between eight Board of Management positions until December 31, 2020. In addition to the Chairman of the Board of Management, which also includes the Volume brand group, the other Board positions were: Components and Procurement, Finance and IT, Human Resources and Truck & Bus, Integrity and Legal Affairs, Premium, Sport & Luxury as well as China. As of December 31, 2020, the board member for Finance & IT was also responsible for Components and Procurement on a temporary basis, and the Chairman of the Board of Management was also responsible for China.

In December 2020, the Supervisory Board decided to split up the responsibility for Components and Procurement from January 1, 2021, replacing it with two new Board positions: Purchasing and Technology. The new Technology Board position will be responsible for all Group Components activities worldwide, the marketing of the Volkswagen toolkits to third parties, the development and manufacturing of battery cells as well as the associated procurement, the areas of charging and charging systems and the corresponding joint ventures worldwide.

Information on the composition of the Board of Management can be found in the "Members of the Board of Management" section.

Working procedures of the Board of Management

In accordance with Article 6 of the Articles of Association, Volkswagen AG's Board of Management consists of at least three people, with the precise number determined by the Supervisory Board. As of December 31, 2020, there were six members of the Board of Management.

The Board of Management generally meets weekly. Its rules of procedure require it to meet at least twice a month. Meetings of the Board of Management are convened by the Chairman of the Board of Management. The Chairman is required to convene a meeting if requested by any member of the Board of Management. The Chairman of the Board of Management chairs the Board of Management meetings. In matters of general or fundamental importance, the decisions are taken by the entire Board of Management. The Board of Management takes decisions only after prior debate and/or using the written circulation procedure. Resolutions of the Board of Management are adopted by a majority vote. In the event of a tie, the Chairman of the Board of Management casts the deciding vote.

Each Board of Management member manages his Board position independently, without prejudice to the collective responsibility of the Board of Management. All Board of Management members must keep each other informed of events within their Board position.

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 and the individual brands in accordance with the framework laid down by law.

Board of Management committees

Board of Management committees exist at Group level on the following topic areas: investments, digital transformation, management issues, human resources, integrity and compliance, risk management, products and technology. Alongside the responsible members of the Board of Management, the relevant central departments and the relevant functions of the divisions are represented on the committees.

Cooperation with the Supervisory Board

The Supervisory Board advises and monitors the Board of Management with regard to the management of the Company. Through the requirement for the Supervisory Board to provide consent, it is directly involved in decisions of fundamental importance to the Company. In addition, the Supervisory Board of Volkswagen AG and the Board of Management regularly discuss factors affecting 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 particularly with regard to strategy, planning, the development of the business, the risk situation, risk management and compliance.

The Chairman of the Board of Management is responsible for dealings with the Supervisory Board. He is in regular contact with the Chairman of the Supervisory Board and reports to him on all matters of particular significance without delay.

The Supervisory Board has set out the Board of Management's obligations to provide information and reports in an information policy. The Board of Management must report conscientiously and faithfully to the Supervisory Board or its committees. With the exception of the immediate reports from the Chairman of the Board of Management to the Chairman of the Supervisory Board on matters of particular importance, the Board of Management reports to the Supervisory Board in writing as a rule.

For transactions of fundamental importance, the Supervisory Board must provide its consent. The documents required for decision-making purposes are provided to the Supervisory Board members in good time in advance of the meeting.

Diversity concept and succession planning for the Board of Management

The Supervisory Board has laid down the following diversity concept for the composition of the Board of Management (section 289f(2) no. 6 HGB):

The Supervisory Board must also take diversity into account when considering who would be the best persons to appoint to the Board of Management as a body. The Supervisory Board understands diversity, as an assessment criterion, to mean in particular different yet complementary specialist profiles and professional and general experience, also in the international domain, with both genders being appropriately represented. The Supervisory Board will also take the following aspects into account in this regard, in particular:

- Members of the Board of Management should have many years of management experience.
- Members of the Board of Management should, if possible, have experience based on different training and professional backgrounds.
- The Board of Management as a whole should have technical expertise, especially knowledge of and experience in the manufacture and sale of vehicles and engines of any kind as well as other technical products, and experience in the international domain.
- The Board of Management as a whole should have many years of experience in research and development, production, sales, finance and human resources management, as well as law and compliance.
- Women should comprise a certain proportion of the Board of Management. Based on the statutory provisions, the Supervisory Board regularly sets targets for the proportion of women and deadlines for achieving them.

- The Board of Management should also have a sufficient mix of ages.

The aim of the diversity concept is for the Board of Management members to embody a range of expertise and perspectives. This diversity promotes a good understanding of Volkswagen AG's organizational and business affairs. Particularly, it enables the members of the Board of Management to be open to new ideas by avoiding groupthink. In this way, it contributes to the successful management of the Company.

In deciding who should be appointed to a specific Board of Management position, the Supervisory Board takes into account the interests of the Company and all the circumstances of the specific case. In taking this decision and in long-term succession planning, the Supervisory Board orients itself on the diversity concept. The Supervisory Board is of the view that the diversity concept is reflected by the current composition of the Board of Management. The members of the Board of Management have many years of professional experience, particularly in an international context, and cover a broad spectrum of educational and professional backgrounds. The Board of Management as a whole has outstanding technical knowledge and many years of collective experience in research and development, production, sales, finance and human resources management, as well as law and compliance. There is also a sufficient mix of ages and a gender balance that meets the requirements set by the Supervisory Board.

The Supervisory Board also took into account the diversity concept that it had laid down upon appointing both of the new members of the Board of Management Murat Aksel and Thomas Schmall-von Westerholt with effect from January 1, 2021. Both of the new members of the Board of Management complement the existing broad spectrum of educational and professional backgrounds and have outstanding knowledge and expertise in the areas that have been assigned to them – Purchasing and Technology.

Long-term succession planning within the meaning of Recommendation B.2 of the 2020 Code is achieved through regular discussions between the Chairman of the Board of Management and the Chairman of the Supervisory Board as well as regular discussions in the Executive Committee. The contract terms for existing Board of Management members are discussed, along with potential extensions and potential successors. In particular, the discussions look at what knowledge, experience and professional and personal competencies should be represented on the Board of Management with regard to the corporate strategy and current challenges, and to what extent the current composition of the Board of Management already reflects this. Long-term succession planning is based on the corporate strategy and corporate culture and takes into account the diversity concept determined by the Supervisory Board.

As a rule, members of the Board of Management should be appointed for a term of office ending no later than their 65th birthday. Board of Management members may be appointed to serve beyond their 65th birthday until no later than their 68th birthday, provided this is agreed by a two-thirds majority of the Supervisory Board.

SUPERVISORY BOARD

The Volkswagen AG Supervisory Board performs its role through its members working together. It advises and monitors the Board of Management with regard to the management of the Company and, through the requirement for the Supervisory Board to provide consent, is directly involved in decisions of fundamental importance to the Company.

Information on the composition of the Supervisory Board and the Supervisory Board committees and their chairs as well as on the terms of office of the individual Supervisory Board members can be found in the "Members of the Supervisory Board and committees" section. Further information on support for Supervisory Board members upon induction and with respect to education and training as well as on the work of the Supervisory Board and the Chairman of the Supervisory Board's discussions with investors can be found in the Report of the Supervisory Board.

Overview

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

The business of the Supervisory Board is managed by a dedicated office of the Supervisory Board Chairman. The Chairman of the Supervisory Board ensures the independence of the office of the Supervisory Board Chairman and its staff and exercises the right to appoint and supervise staff in consultation with the responsible Board of Management members.

The Supervisory Board appoints the Board of Management members and, on the basis of the Executive Committee's recommendations, decides on a clear and comprehensible system of remuneration for the Board of Management members. It presents this system to the Annual General Meeting for approval every time there is a material change, but at least once every four years.

Each member of the Supervisory Board of Volkswagen AG is obliged to act in the Company's best interests. Supervisory Board members are not permitted to delegate their responsibilities to others.

Every Supervisory Board member is obliged to disclose any conflicts of interest to the Chairman of the Supervisory Board without delay. In its report to the Annual General Meeting, the Supervisory Board informs the Annual General Meeting of any conflicts of interest that have arisen and how these were dealt with. Material and not merely temporary conflicts of interest on the part of a Supervisory Board member should result in a termination of the member's mandate.

Supervisory Board members should not hold board or advisory positions at major competitors of Volkswagen AG or major competitors of a company dependent on Volkswagen AG and should not be in a personal relationship involving a major competitor.

Members of the Supervisory Board receive appropriate support from the Company upon induction as well as with respect to education and training. Education and training measures are outlined in the Report of the Supervisory Board.

Working procedures of the Supervisory Board

As a rule, the Supervisory Board adopts its resolutions in meetings of all its members. It must hold at least two meetings in both the first and second halves of the calendar year. The Supervisory Board generally holds five meetings a year. The main topics of these meetings are described in the Report of the Supervisory Board.

The Chairman of the Supervisory Board coordinates the work within the Supervisory Board. He represents the interests of the Supervisory Board externally and represents the Company to the Board of Management on behalf of the whole Supervisory Board. Within reason, the Chairman of the Supervisory Board discusses Supervisory Board-specific topics with investors and, in consultation with the Board of Management, may also discuss non-Supervisory Board-specific topics. More details can be found in the Report of the Supervisory Board.

To underline the importance of environmental sustainability, social responsibility and good corporate governance, the Supervisory Board has appointed an ESG (environmental, social and governance) officer. This role is currently performed by Hans Dieter Pötsch.

The Supervisory Board should meet regularly also without the Board of Management. Each Supervisory Board meeting generally ends in a debate. Board of Management members are not present during this part of the meeting. The Chairman of the Supervisory Board convenes and chairs the Supervisory Board meetings. If he is unable to do so, the Deputy Chairman performs these tasks.

The Supervisory Board is only quorate if at least ten members participate in passing the resolution. The Chairman of the Supervisory Board or of the relevant committee decides the form of the meeting and the voting procedure for the Supervisory Board and its committees. Should the Chairman so decide in individual cases, meetings may also be held using telecommunications technology, or members may participate in meetings using this technology. The Chairman may also decide that members can participate in the Supervisory Board's decision making in writing, by telephone or in another, similar form. Supervisory Board resolutions require a majority of votes cast, unless legislative provisions or the Articles of Association stipulate otherwise. Decisions to establish or relocate production sites require a two-thirds majority of the Supervisory Board members. If a vote results in a tie, the vote is repeated. If this vote is also tied, the Chairman of the Supervisory Board casts two votes. Minutes must be taken of each meeting of the Supervisory Board and its committees. Minutes of a meeting must record the time and location of the meeting, the participants, the items on the agenda, the material content of the discussions and the resolutions adopted.

In individual cases, the Supervisory Board may decide to call upon experts and other appropriate individuals to advise on individual matters.

Supervisory Board committees

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 currently comprises four shareholder representatives and four employee representatives and the Special Committee on Diesel Engines three shareholder representatives and three employee representatives, respectively. 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.

At its meetings, the Executive Committee meticulously prepares the resolutions of the Supervisory Board, discusses the composition of the Board of Management and takes decisions on matters such as contractual issues concerning the Board of Management other than remuneration and consent to ancillary activities by members of the Board of Management. The Executive Committee supports and advises the Chairman of the Supervisory Board. It works with the

Chairman of the Board of Management to ensure long-term succession planning for the Board of Management.

The Nomination Committee proposes suitable candidates for the Supervisory Board to recommend to the Annual General Meeting for election. Before presenting such proposals, it ensures that the candidates can commit the expected time to their role and identifies the personal and business relationships of the candidates to Volkswagen AG and its Group companies, to Volkswagen AG's corporate bodies and to shareholders who directly or indirectly hold more than 10% of the voting shares in Volkswagen AG. In its proposals to the Supervisory Board, the Nomination Committee also takes into account the requirement for the Supervisory Board to adhere, in its proposals to the Annual General Meeting, to the specific targets it has set for the composition of the Supervisory Board and to the profile of skills and expertise it has decided on for the Board as a whole; the Nomination Committee also takes into account the diversity concept for the composition of the Supervisory Board.

The Mediation Committee has the task of submitting proposals to the Supervisory Board for an appointment or revocation of appointment if there is no majority for the relevant measure on the Supervisory Board in the first vote. The majority involves at least two-thirds of all Supervisory Board members.

Among other things, the Audit Committee discusses the auditing of financial accounting, including the annual and consolidated financial statements, as well as monitoring of the accounting process, and the examination thereof by the auditors. It also discusses compliance, the effectiveness of the risk management system, internal control system and internal audit system. In addition, the Audit Committee particularly concerns itself with the Volkswagen Group's quarterly reports and half-yearly financial report.

The Special Committee on Diesel Engines is responsible for supporting the investigations in connection with the manipulation of emissions figures for Volkswagen Group diesel engines and preparing Supervisory Board resolutions for necessary consequences at Supervisory Board level. To this end, the Special Committee on Diesel Engines is provided with regular information by the Board of Management. The Chairman of the Special Committee on Diesel Engines reports regularly on the Committee's work to the Supervisory Board.

Objectives for the composition of the Supervisory Board, profile of skills and expertise and diversity concept

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.
> In addition, at least four of the shareholder representatives should be persons who, in line with the criteria of Recommendations C.7 to C.9 of the 2020 Code, are independent within the meaning of Recommendation C.6 of the 2020 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.
> Proposals for election should not normally include persons who have reached the age of 75 on the date of the election.

The above criteria have been met. Numerous members of the Supervisory Board embody the criterion of internationality to a particularly high degree; various nationalities are represented on the Supervisory Board and numerous members have international professional experience. Several members of the Supervisory Board contribute to the Board's diversity to a particularly high degree, especially Ms. Hessa Sultan Al Jaber, Ms. Marianne Heiß, Ms. Bertina Murkovic and Mr. Hussain Ali Al Abdulla. The Supervisory Board comprises members of various generations. Independent Supervisory Board members within the meaning of Recommendation C.6 of the 2020 Code currently comprise at least the following: Ms. Hessa Sultan Al Jaber, 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 Supervisory Board has also specified the following diversity concept for its composition:

- The Supervisory Board must be comprised such that its members collectively have the knowledge, skills, and professional experience needed to properly perform their duties.
- It has therefore set targets for its composition that also take into account the recommendations of the German Corporate Governance Code. The targets set by the Supervisory Board for its composition also describe the concept through which the Supervisory Board as a whole strives to achieve a diverse composition (diversity concept in accordance with section 289f(2) no. 6 of the HGB). Attention should also be generally paid to diversity when seeking qualified individuals to strengthen the specialist and managerial expertise of the Supervisory Board as a whole in line with these targets. In preparing proposals for appointments to the Supervisory Board, it should be considered in each case how the work of the Supervisory Board will benefit from a diversity of expertise and perspectives among its members, from professional profiles and experience that complement one another (including in the international domain) and from an appropriate gender balance. A wide range of experience and specialist knowledge should be represented on the Supervisory Board. In addition, the Supervisory Board should collectively have an extensive range of opinions and knowledge in order to develop a good understanding of the status quo and the longer-term opportunities and risks in connection with the Company's business activities.
- In proposing candidates to the Annual General Meeting for the election of shareholder representatives to the Supervisory Board, the Supervisory Board should take its diversity concept into account in such a way that the corresponding election of these candidates by the Annual General Meeting would contribute to the implementation of this concept. However, the Annual General Meeting is not obliged to accept the candidates nominated.
- The aim of the diversity concept is for the Supervisory Board to embody a range of expertise and perspectives. This diversity promotes a good understanding of Volkswagen AG's organizational and business affairs. It also enables the Supervisory Board members to challenge the Board of Management's decisions constructively and to be more open to new ideas by avoiding groupthink. In this way, it contributes to the effective supervision of the management.
- The Supervisory Board and Nomination Committee, in particular, are called upon to implement the profile of skills and expertise and the diversity concept within the context of their candidate proposals to the Annual General Meeting. The Supervisory Board also recommends to employee representatives and unions (which have the right to submit proposals in employee representative elections) and the State of Lower Saxony (which has a right to appoint Supervisory Board members) that the diversity concept, composition targets and profile of skills and expertise should be taken into account. The same applies to individuals entitled to make proposals should a court-appointed replacement be necessary.

The current composition of the Supervisory Board fulfills both the diversity concept and the profile of skills and expertise. The Supervisory Board collectively has outstanding knowledge of the manufacture and sale of vehicles and engines, of the automotive sector and of the technologies relevant for Volkswagen AG. Moreover, numerous Supervisory Board members have extensive experience in managerial and supervisory functions. All the relevant expertise in the further individual areas specified in the profile of skills and expertise is represented on the Supervisory Board. Further details can be found in the curriculum vitae of the Supervisory Board members. The curriculum vitae of the members of the Supervisory Board are available online at www.volkswagenag.com/en/group/executive-bodies.html.

In their proposal to the Annual General Meeting in 2020 for the election of a new Supervisory Board member, the Nomination Committee and Supervisory Board took into account the diversity concept, specific composition targets and profile of skills and expertise. The composition targets, diversity concept and profile of skills and expertise were also taken into account in the appointment of a new Supervisory Board member by the employee representatives in 2020.

Self-evaluation of the Supervisory Board

The Supervisory Board regularly evaluates every two years how effectively the Board and its committees are performing their tasks. This initially involves distributing a questionnaire to all Supervisory Board members, in which they are able to give their view of the effectiveness of the work of the Supervisory Board and its committees and suggest possible improvements. Following analysis of the questionnaires, the findings and potential improvements are usually discussed at the next regular meeting of the full Board. The most recent self-evaluation took place from late 2019 to early 2020.

DISCLOSURES UNDER THE EQUAL PARTICIPATION ACT

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, 2020.

In accordance with the rules pertaining to the proportion of females on the Board of Management as defined by the FührposGleichberG, the Supervisory Board set a target quota of 11.1% for the period after December 31, 2016. The new deadline set for achievement of this target is December 31, 2021. The proportion of female members on the Board of Management at Volkswagen AG as of December 31, 2020 was 16.7%, 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, 2020, the proportion of women in the active workforce at the first level of management was 10.9 (11.4)% and at the second level of management it was 16.7 (16.4)%.

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 of the 2020 annual report, in the notes to Volkswagen's 2020 consolidated financial statements and in the notes to the 2020 annual financial statements of Volkswagen AG.

CORPORATE PRACTICES APPLIED IN ADDITION TO STATUTORY REQUIREMENTS

Compliance & risk management

To ensure the Volkswagen Group's lasting success, we use forward-looking risk management and a uniform Group-wide framework based on the compliance management system. This includes:

> Compliance. Adherence to statutory provisions, internal company policies, ethical principles and our own values in order to protect the Company and its brands.

> 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.

> Business and human rights. Volkswagen fully recognizes its corporate responsibility for human rights. We essentially orient ourselves on the UN (United Nations) Guiding Principles on Business and Human Rights that are available on the website of the UN (United Nations Global Compact), the content of which particularly relates to the Universal Declaration of Human Rights and the core conventions of the ILO (International Labor Organization) that can be accessed on the website of the ILO.

> Risk management and internal control system. A comprehensive risk management and internal control system (RMS/ICS) helps the Volkswagen Group deal with risks in a responsible manner. 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) and can be accessed on the COSO website. Uniform Group principles are used as the basis for managing risks in a transparent and appropriate manner.

Voluntary commitments and principles

The Volkswagen Group has committed itself to sustainable, transparent and responsible corporate governance.

We coordinate our sustainability activities across the entire Group and have put in place a forward-looking system of risk management and a clear framework for dealing with environmental issues in a future-oriented manner, for employee responsibility and for social commitment across our brands and in the regions in which we operate.

Voluntary commitments and principles that apply across the Group are the basis and backbone of our sustainability management. These documents are publicly accessible on the Company's internet site in the section entitled "Sustainability."

Code of Collaboration and Together4Integrity

The Code of Collaboration, along with our integrity and compliance program Together4Integrity (T4I), is a central pillar of the Group strategy TOGETHER 2025+. 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 management, creating a common path toward a new corporate culture.

MEMBERS OF THE BOARD OF MANAGEMENT

(Appointments: as of December 31, 2020 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 (until June 30, 2020),
Volume brand group,
China
July 1, 2015[1], appointed until 2023
Nationality: Austrian
Appointments:
○ FC Bayern München AG, Munich

MURAT AKSEL (*1972)
Purchasing (since January 1, 2021),
January 1, 2021[1], appointed until 2023
Nationality: German

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

MARKUS DUESMANN (*1969)
Chairman of the Board of Management of AUDI AG,
Premium brand group
April 1, 2020[1], appointed until 2025
Nationality: German

GUNNAR KILIAN (*1975)
Human Resources and Truck & Bus
(since July 15, 2020)
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 – July 15, 2020[1]
Nationality: German
Appointments (as of July 15, 2020):
○ Deutsche Messe AG, Hanover

THOMAS SCHMALL-VON WESTERHOLT (*1964)
Technology (since January 1, 2021),
Chairman of the Board of Management of
Volkswagen Group Components,
January 1, 2021[1], appointed until 2023
Nationality: German, Brazilian

ABRAHAM SCHOT (*1961)
Chairman of the Board of Management of AUDI AG,
Premium brand group
January 1, 2019 – March 31, 2020[1]
Nationality: Dutch

DR.-ING. STEFAN SOMMER (*1963)
Components and Procurement
September 1, 2018 – June 30, 2020[1]
Nationality: German

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

FRANK WITTER (*1959)
Finance and IT,
Components and Procurement
(acting, July 1 – December 31, 2020)
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 COMPOSITION OF THE COMMITTEES

(Appointments: as of December 31, 2020 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)
Board Member of the Qatar Investment Authority
April 22, 2010[1], elected until 2025
Nationality: Qatari
Appointments:
- ⊙ Gulf Investment Corporation, Safat/Kuwait (Board member)
- ⊙ Qatar Investment Authority, Doha (Board member)
- ⊙ Qatar Supreme Council for Economic Affairs and Investment, Doha (Board member)

DR. HESSA SULTAN AL JABER (*1959)
Former 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)

KAI BLIESENER (*1971)
Head of Vehicle Construction and Automotive and Supplier Industry Coordinator at IG Metall
June 20, 2020[1], appointed until 2022
Nationality: German

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

JOHAN JÄRVKLO (*1973)
Secretary-General of the European and Global Group Works Council of Volkswagen AG
November 22, 2015 – May 29, 2020[1]
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)
Entrepreneur
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 Group Services GmbH
- ⊙ 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, MAN Truck & Bus SE and TRATON SE
May 10, 2017[1], appointed until 2022
Nationality: German
Appointments:
- ○ MAN SE, Munich
- ○ MAN Truck & Bus SE, Munich
- ○ MAN Truck & Bus Deutschland GmbH, 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)
Member of the Executive Committee of the Works Council of Porsche Automobil Holding SE and 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, 2020

Members of the Executive Committee
Hans Dieter Pötsch (Chairman)
Jörg Hofmann (Deputy Chairman)
Peter Mosch
Bertina Murkovic
Bernd Osterloh
Dr. Hans Michel Piëch
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. Hans Michel Piëch
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.

Remuneration Report

(Part of the Group Management 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, 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.

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. In addition to the statutory requirements of the Aktiengesetz (AktG – German Stock Corporation Act), the Supervisory Board took into account the recommendations of the German Corporate Governance Code (the Code) in the version dated February 7, 2017 in the existing remuneration system. In particular, the remuneration structure is focused on ensuring sustainable business development. The Supervisory Board revised the remuneration system for the members of the Board of Management in fiscal year 2020 and adopted the enhanced remuneration system on December 14, 2020 with effect from January 1, 2021. The enhanced remuneration system implements the requirements of the AktG as amended by the German Act on the Implementation of the Second Shareholders' Rights Directive (ARUG II – Gesetz zur Umsetzung der zweiten Aktionärsrechterichtlinie) and takes into account the recommendations of the Code in the version dated December 19, 2019 (that took effect on March 20, 2020). The Supervisory Board will submit the revised remuneration system to the Annual General Meeting for approval in 2021 in line with the requirements of the AktG as amended by the ARUG II. For Board of Management members already appointed, substantial parts of the enhanced remuneration system will apply from January 1, 2021. The remainder of the enhanced remuneration system will apply from the time of reappointment and for first time appointees to the Board of Management. The enhanced remuneration system particularly implements environmental, social and governance targets (ESG targets), introduces penalty and clawback rules for variable remuneration components and extends the assessment period for performance share plans to four years.

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 chapter, we provide an overview of the Board of Management's remuneration system in the reporting year 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).

Board of Management members who also have duties as members of other corporate bodies within the Volkswagen Group generally do not receive separate remuneration for these.

Annual minimum remuneration of €3.5 million (sum of fixed remuneration, annual bonus, LTI and any special payments) was contractually agreed with Mr. Sommer. This applied pro rata for fiscal year 2020 due to his departure from the Board of Management.

Non-performance-related remuneration

The non-performance-related remuneration comprises fixed remuneration and fringe benefits. 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.

Mr. Duesmann received compensation of entitlements lost due to his change of employer in the amount of €7.3 million.

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). The components of performance-related/variable remuneration reflect both positive and negative 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.

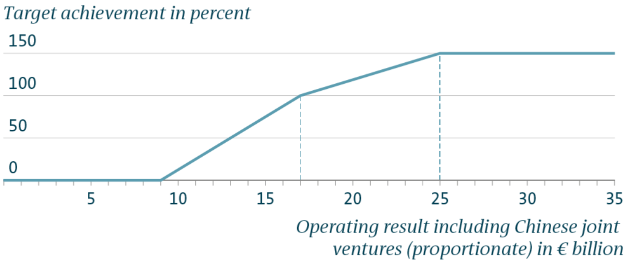
The payment amount for the annual bonus is capped at 180% of the target amount for the annual bonus. The cap arises from 150% of the maximum financial target achievement and a performance factor of a maximum of 1.2. For fiscal year 2020, the Supervisory Board has established the performance factor of 1.2 for existing Board of Management members. This was primarily due to the Board of Management members' outstanding pandemic management and the fact that complete attainment of the transformation target would have been expected under non-pandemic-related conditions.

The annual bonus is payable following approval of the consolidated financial statements for the respective financial year. Deferral is generally not allowed.

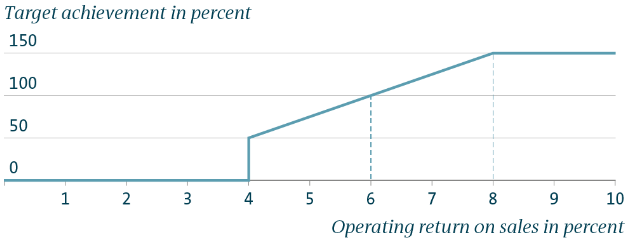
CALCULATION OF THE PAYMENT AMOUNT FOR THE ANNUAL BONUS

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	2019	2020
Maximum threshold	25.0	25.0
100% level of target	17.0	17.0
Minimum threshold	9.0	9.0
Actual	21.4	13.3
Target achievement (in %)	127	53

COMPONENT 2: OPERATING RETURN ON SALES

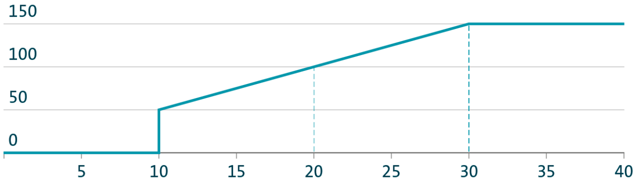
%	2019	2020
Maximum threshold	8.0	8.0
100% level of target	6.0	6.0
Minimum threshold	4.0	4.0
Actual	6.7	4.3
Target achievement (in %)	118	58

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

Target achievement in percent



EPS per preferred share in euros

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	2020
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	23.63	26.66	16.66
Target achievement (in %)	118	133	83

PERFORMANCE PERIOD 2019–2021

€	2019	2020
Maximum threshold	30.0	30.0
100% level of target	20.0	20.0
Minimum threshold	10.0	10.0
Actual	26.66	16.66
Target achievement (in %)	133	83

PERFORMANCE PERIOD 2020–2022

€	2020
Maximum threshold	30.0
100% level of target	20.0
Minimum threshold	10.0
Actual	16.66
Target achievement (in %)	83

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.

The performance share plan is focused exclusively on cash payment. Stock options are not part of the Volkswagen AG remuneration system. Consequently, there is no obligation to hold shares for members of the Board of Management.

	PERFORMANCE-PERIOD			
	2017 – 2019	2018 – 2020	2019 – 2021	2020 – 2022
Initial reference price	127.84	169.42	147.08	177.44
Closing reference price	177.44	149.14	– [1]	– [1]
Dividend equivalent				
2017	2.06	–	–	–
2018	3.96	3.96	–	–
2019	4.86	4.86	4.86	–
2020	–	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%. The Supervisory Board may cap the LTI in the event of extraordinary developments.

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 non-vested 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 to 2020 performance period onwards. In connection with the reappointment of Mr. Witter, the expiry rule applies from the 2020 to 2022 performance period onwards.

In the introductory phase of the performance share plan, the members of the Board of Management who were Board members as of December 31, 2016 generally received advances of 80% of their target amount for the 2017 to 2019 and 2018 to 2020 performance periods. Mr. Blume receives corresponding advances for the performance periods 2018 to 2020 (proportionate) and 2019 to 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

TARGET

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Initial reference price

Provisional performance shares (number)

PERFORMANCE MEASUREMENT

Final number determined for 1/3 of provisional performance shares multiplied by annual target achievement EPS per preferred share

⅓ × | ⅓ × | ⅓ ×

Target achievement EPS per preferred share

Fiscal year 1 | Fiscal year 2 | Fiscal year 3

Final performance shares (number) ×

PRICE PERFORMANCE AND DIVIDENDS

Closing reference price plus dividend over term =

LTI

Payment amount

INFORMATION ON THE PERFORMANCE SHARES

€	PERFORMANCE-PERIOD 2017 – 2019	PERFORMANCE-PERIOD 2018 – 2020	PERFORMANCE-PERIOD 2019 – 2021		PERFORMANCE-PERIOD 2020 – 2022	
	Number of performance shares allocated at the grant date	Number of performance shares allocated 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	19,212	26,040	3,350,046	21,585	3,584,837
Oliver Blume	–	7,614	12,238	1,574,419	10,144	1,684,716
Markus Duesmann (since April 1, 2020)	–	–	–	–	7,608	1,088,933
Gunnar Kilian	–	7,614	12,238	1,574,419	10,144	1,684,716
Andreas Renschler (until July 15, 2020)	14,080	10,624	12,238	1,574,419	5,495	912,610
Abraham Schot (until March 31, 2020)	–	–	12,238	1,574,419	2,536	421,179
Stefan Sommer (until June 30, 2020)	–	3,541	12,238	1,574,419	–	–
Hiltrud Dorothea Werner	12,907	10,624	12,238	1,574,419	10,144	1,684,716
Frank Witter	14,080	10,624	12,238	1,574,419	10,144	1,684,716
Total	**55,147**	**69,853**	**111,706**	**14,370,977**	**77,800**	**12,746,420**

€	Provision as of Dec. 31, 2020	Intrinsic value as of Dec. 31, 2020	Comprehensive income 2020 arising from performance shares	Provision as of Dec. 31, 2019	Intrinsic value as of Dec. 31, 2019	Comprehensive income 2019 arising from performance shares
Herbert Diess	6,019,320	2,060,142	4,300,115	3,504,374	3,687,200	3,490,713
Oliver Blume	775,860	355,226	1,231,600	984,260	–	1,614,937
Markus Duesmann (since April 1, 2020)	321,159	–	321,159	–	–	–
Gunnar Kilian	3,247,860	1,387,226	1,231,600	2,016,260	–	1,614,937
Andreas Renschler (until July 15, 2020)	3,351,992	3,351,992	– 235,112	5,572,774	3,879,394	1,713,961
Abraham Schot (until March 31, 2020)	2,398,671	2,398,671	110,408	3,925,694	–	3,925,694
Stefan Sommer (until June 30, 2020)	–	–	– 707,720	1,415,440	–	1,317,674
Hiltrud Dorothea Werner	4,025,798	1,935,604	1,963,018	5,019,403	2,782,969	2,852,956
Frank Witter	3,550,948	2,501,995	– 1,644,971	6,981,087	3,879,394	2,054,256
Total	**23,691,608**	**13,990,856**	**6,570,097**	**29,419,292**	**14,228,957**	**18,585,127**

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 the amount of the obligation, the provisional performance shares determined or allocated for the performance periods 2018 to 2020, 2019 to 2021 and 2020 to 2022 were taken into account. The intrinsic value of the obligation 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, 2020. 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, 2020, 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 2020 is recorded in "Comprehensive income 2020 arising from performance shares" according to the IFRSs. Those members who left during the year were shown pro rata.

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. In fiscal year 2019, changes in the value of the phantom shares led to the recognition of expenses of €0.1 million.

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 in the version dated February 7, 2017, 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, the total remuneration cap and the individual targets. Among other things, the Supervisory Board performs a vertical comparison with the remuneration and employment terms of the Company's employees and a horizontal comparison with the remuneration and employment terms of other companies' management board members. The Supervisory Board uses an appropriate peer group of other companies to assess how customary the Board of Management members' specific total remuneration is when measured against other businesses. This peer group is regularly reviewed and adjusted, most recently in February and December 2020. The peer group currently comprises the following companies: BMW, Daimler, Ford, General Motors, PSA Groupe, Nissan Motor Corporation, Toyota, BYD, Tesla (excluding CEO), hp, IBM, Uber, SAP, Samsung, General Electric, Siemens, Hitachi and Boeing.

Other agreements

Members of the Board of Management are entitled to payment of their normal remuneration for six months in the event of illness. 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.

Members of the Board of Management and the Supervisory Board generally have the opportunity to obtain loans from Group companies.

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

	2020				2019
€	Non-performance-related component	Performance-related component	Long-term incentive component	Total remuneration	Total remuneration
Herbert Diess	2,322,725	2,027,285	3,584,837	7,934,847	9,850,742
Oliver Blume	1,420,701	1,038,796[1]	1,684,716	4,144,213	4,894,440
Markus Duesmann (since April 1, 2020)	8,475,236[2]	674,097	1,088,933	10,238,266	–
Gunnar Kilian	1,435,899	898,796	1,684,716	4,019,411	4,938,205
Andreas Renschler (until July 15, 2020)	802,746	466,563	912,610	2,181,919	5,085,259
Abraham Schot (until March 31, 2020)	417,122	–	421,179	838,301	5,285,583
Stefan Sommer (until June 30, 2020)	809,815	–	–	809,815	5,344,523
Hiltrud Dorothea Werner	1,472,776	898,796	1,684,716	4,056,288	4,940,663
Frank Witter	1,421,549	898,796	1,684,716	4,005,061	4,888,285
Members of the Board of Management who left in the previous year	–	–	–	–	166,574
Total	**18,578,569**	**6,903,129**	**12,746,420**	**38,228,118**	**45,394,272**

1 Includes a special bonus by Porsche AG in the amount of €140,000.
2 Includes compensation of entitlements lost due to a change of employer in the amount of €7.3 million.

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 tables in accordance with the Code in the version dated February 7, 2017 correspond, in principle, to the amounts paid out for the fiscal year in question.

In 2020, Mr. Blume received an advance on the target amount for the 2019 to 2021 performance period. In accordance with the Code, this was reported in the tables in 2019 as benefits for the fiscal year.

The amounts shown as “Benefits granted” in the Board of Management remuneration tables in accordance with the Code in the version dated February 7, 2017 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. In the case of the performance share plan, the respective tranches are only payable to the Board of Management members at the end of the respective performance period (except for the advance described above). It is not until this time that the tranches are available to the Board of Management members. However, the tranches are shown as “Benefits granted” in the fiscal year in which they are allocated.

REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE IN THE VERSION DATED FEBRUARY 7, 2017

HERBERT DIESS

Chairman of the Board of Management of Volkswagen AG,
Chairman of the Brand Board of Management of Volkswagen Passenger Cars (until June 30, 2020),
Volume brand group,
China

	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	2,125,000	2,125,000	2,125,000	2,125,000	2,125,000	2,125,000
Fringe benefits	197,725	87,694	87,694	197,725	197,725	197,725
Total	**2,322,725**	**2,212,694**	**2,212,694**	**2,322,725**	**2,322,725**	**2,322,725**
One-year performance-related remuneration	2,027,285	4,288,002	3,045,000	3,045,000	–	5,481,000
Multiyear performance-related remuneration	1,785,168	540,445	3,350,046	3,584,837	–	7,660,000
LTI (performance share plan 2017–2019)	1,785,168	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	–	3,350,046	–	–	–
LTI (performance share plan 2020–2022)	–	–	–	3,584,837	–	7,660,000
Phanton shares	–	540,445	–	–	–	–
Total	**6,135,178**	**7,041,141**	**8,607,740**	**8,952,562**	**2,322,725**	**15,463,725**
Pension expense	1,568,053	1,354,053	1,354,053	1,568,053	1,568,053	1,568,053
Total remuneration	**7,703,231**	**8,395,194**	**9,961,793**	**10,520,615**	**3,890,778**	**17,031,778**

OLIVER BLUME

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

	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	70,701	68,936	68,936	70,701	70,701	70,701
Total	**1,420,701**	**1,418,936**	**1,418,936**	**1,420,701**	**1,420,701**	**1,420,701**
One-year performance-related remuneration[1]	1,038,796	1,901,085	1,500,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	–	1,440,000	1,574,419	1,684,716	–	7,200,000
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	1,440,000	1,574,419	–	–	3,600,000
LTI (performance share plan 2020–2022)	–	–	–	1,684,716	–	3,600,000
Total	**2,459,497**	**4,760,021**	**4,493,355**	**4,455,417**	**1,420,701**	**11,050,701**
Pension expense	997,938	808,544	808,544	997,938	997,938	997,938
Total remuneration	**3,457,435**	**5,568,565**	**5,301,899**	**5,453,355**	**2,418,639**	**12,048,639**

1 In 2019, Mr. Blume was granted a performance-related bonus payment by Porsche AG up to an amount of €150,000, which led to benefits received of €140,000 in 2020. The bonus payment was 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 IN THE VERSION DATED FEBRUARY 7, 2017

	MARKUS DUESMANN					
	Chairman of the Board of Management of AUDI AG, Premium brand group					
	Joined: April 1, 2020					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2019 (minimum)	2019 (maximum)
Fixed remuneration	8,277,583[1]	–	–	8,277,583	8,277,583	8,277,583
Fringe benefits	197,653	–	–	197,653	197,653	197,653
Total	**8,475,236**	**–**	**–**	**8,475,236**	**8,475,236**	**8,475,236**
One-year performance-related remuneration	674,097	–	–	1,012,500	–	1,822,500
Multiyear performance-related remuneration	–	–	–	1,088,933	–	2,700,000
LTI (performance share plan 2020–2022)	–	–	–	1,088,933	–	2,700,000
Total	**9,149,333**	**–**	**–**	**10,576,669**	**8,475,236**	**12,997,736**
Pension expense	849,934	–	–	849,934	849,934	849,934
Total remuneration	**9,999,267**	**–**	**–**	**11,426,603**	**9,325,170**	**13,847,670**

1 Includes compensation for entitlements lost due to a change of employer in the amount of €7.3 million, which is not taken into consideration in the total remuneration cap.

	GUNNAR KILIAN					
	Human Resources and Truck & Bus (since July 15, 2020)					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	85,899	112,701	112,701	85,899	85,899	85,899
Total	**1,435,899**	**1,462,701**	**1,462,701**	**1,435,899**	**1,435,899**	**1,435,899**
One-year performance-related remuneration	898,796	1,901,085	1,350,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	–	–	1,574,419	1,684,716	–	3,600,000
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	–	1,574,419	–	–	–
LTI (performance share plan 2020–2022)	–	–	–	1,684,716	–	3,600,000
Total	**2,334,695**	**3,363,786**	**4,387,120**	**4,470,615**	**1,435,899**	**7,465,899**
Pension expense	1,170,535	886,559	886,559	1,170,535	1,170,535	1,170,535
Total remuneration	**3,505,230**	**4,250,345**	**5,273,679**	**5,641,150**	**2,606,434**	**8,636,434**

REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE IN THE VERSION DATED FEBRUARY 7, 2017

	ANDREAS RENSCHLER					
	Chairman of the Board of Management of TRATON SE, Truck & Bus brand group					
	Left: July 15, 2020					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	731,250	1,350,000	1,350,000	731,250	731,250	731,250
Fringe benefits	71,496	259,755	259,755	71,496	71,496	71,496
Total	**802,746**	**1,609,755**	**1,609,755**	**802,746**	**802,746**	**802,746**
One-year performance-related remuneration	466,563	1,901,085	1,350,000	731,250	–	1,316,250
Multiyear performance-related remuneration	1,785,168	990,754	1,574,419	912,610	–	1,950,000
LTI (performance share plan 2017–2019)	1,785,168	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	–	1,574,419	–	–	–
LTI (performance share plan 2020–2022)	–	–	–	912,610	–	1,950,000
Phanton shares	–	990,754	–	–	–	–
Total	**3,054,477**	**4,501,594**	**4,534,174**	**2,446,606**	**802,746**	**4,068,996**
Pension expense	–	5,025,570	5,025,570	–	–	–
Total remuneration	**3,054,477**	**9,527,164**	**9,559,744**	**2,446,606**	**802,746**	**4,068,996**

	ABRAHAM SCHOT					
	Chairman of the Board of Management of AUDI AG, Premium brand group					
	Left: March 31, 2020					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	337,500	1,350,000	1,350,000	337,500	337,500	337,500
Fringe benefits	79,622	460,079	460,079	79,622	79,622	79,622
Total	**417,122**	**1,810,079**	**1,810,079**	**417,122**	**417,122**	**417,122**
One-year performance-related remuneration	–	1,901,085	1,350,000	–	–	–
Multiyear performance-related remuneration	–	–	1,574,419	421,179	–	900,000
LTI (performance share plan 2019–2021)	–	–	1,574,419	–	–	–
LTI (performance share plan 2020–2022)	–	–	–	421,179	–	900,000
Total	**417,122**	**3,711,164**	**4,734,498**	**838,301**	**417,122**	**1,317,122**
Pension expense	56,049	2,222,572	2,222,572	56,049	56,049	56,049
Total remuneration	**473,171**	**5,933,736**	**6,957,070**	**894,350**	**473,171**	**1,373,171**

REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE IN THE VERSION DATED FEBRUARY 7, 2017

	STEFAN SOMMER					
	Components and Procurement					
	Left: June 30, 2020					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	675,000	1,350,000	1,350,000	675,000	675,000	675,000
Fringe benefits	134,815	519,019	519,019	134,815	134,815	134,815
Total	**809,815**	**1,869,019**	**1,869,019**	**809,815**	**809,815**	**809,815**
One-year performance-related remuneration	–	1,901,085	1,350,000	–	–	–
Multiyear performance-related remuneration	–	–	1,574,419	–	–	–
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	–	1,574,419	–	–	–
LTI (performance share plan 2020–2022)	–	–	–	–	–	–
Total[1]	**809,815**	**4,019,019**	**4,793,438**	**809,815**	**809,815**	**809,815**
Pension expense	447,742	761,437	761,437	447,742	447,742	447,742
Total remuneration	**1,257,557**	**4,780,456**	**5,554,875**	**1,257,557**	**1,257,557**	**1,257,557**

1 Benefits received for 2019 included a top-up amount on the minimum remuneration of €3.5 million.

	HILTRUD DOROTHEA WERNER					
	Integrity and Legal Affairs					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	122,776	115,159	115,159	122,776	122,776	122,776
Total	**1,472,776**	**1,465,159**	**1,465,159**	**1,472,776**	**1,472,776**	**1,472,776**
One-year performance-related remuneration	898,796	1,901,085	1,350,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	2,956,624	–	1,574,419	1,684,716	–	3,600,000
LTI (performance share plan 2017–2019)	2,956,624	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	–	1,574,419	–	–	–
LTI (performance share plan 2020–2022)	–	–	–	1,684,716	–	3,600,000
Total	**5,328,196**	**3,366,244**	**4,389,578**	**4,507,492**	**1,472,776**	**7,502,776**
Pension expense	1,149,571	956,364	956,364	1,149,571	1,149,571	1,149,571
Total remuneration	**6,477,767**	**4,322,608**	**5,345,942**	**5,657,063**	**2,622,347**	**8,652,347**

REMUNERATION OF THE MEMBERS OF THE BOARD OF MANAGEMENT (BENEFITS RECEIVED AND BENEFITS GRANTED) IN ACCORDANCE WITH THE GERMAN CORPORATE GOVERNANCE CODE IN THE VERSION DATED FEBRUARY 7, 2017

	FRANK WITTER Finance and IT Components and Procurement (acting July 1, 2020 – December 31, 2020)					
	Benefits received		Benefits granted			
€	2020	2019	2019	2020	2020 (minimum)	2020 (maximum)
Fixed remuneration	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000	1,350,000
Fringe benefits	71,549	62,781	62,781	71,549	71,549	71,549
Total	**1,421,549**	**1,412,781**	**1,412,781**	**1,421,549**	**1,421,549**	**1,421,549**
One-year performance-related remuneration	898,796	1,901,085	1,350,000	1,350,000	–	2,430,000
Multiyear performance-related remuneration	1,785,168	249,128	1,574,419	1,684,716	–	3,600,000
LTI (performance share plan 2017–2019)	1,785,168	–	–	–	–	–
LTI (performance share plan 2018–2020)	–	–	–	–	–	–
LTI (performance share plan 2019–2021)	–	–	1,574,419	–	–	–
LTI (performance share plan 2020–2021)	–	–	–	1,684,716	–	3,600,000
Phanton shares	–	249,128	–	–	–	–
Total	**4,105,513**	**3,562,994**	**4,337,200**	**4,456,265**	**1,421,549**	**7,451,549**
Pension expense	1,008,664	886,120	886,120	1,008,664	1,008,664	1,008,664
Total remuneration	**5,114,177**	**4,449,114**	**5,223,320**	**5,464,929**	**2,430,213**	**8,460,213**

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, or in Mr. Duesmann's case when he reaches the age of 65. From July 16, 2022, Mr. Renschler is entitled to a pension of 70% of his fixed level of remuneration in 2017.

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. Duesmann, 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. Duesmann, Mr. Kilian, Mr. Schot 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.

On December 31, 2020, the pension obligations for members of the Board of Management in accordance with IAS 19 amounted to €36.6 (60.5) million. €7.7 (13.7) million was added to the provision in the reporting period in accordance with IAS 19. Other benefits such as surviving dependents' pensions and the use of company cars are also factored into the measurement of pension provisions. The pension obligations measured in accordance with German GAAP amounted to €26.6 (44.8) million. €6.4 (14.5) million was added to the provision in the reporting year in accordance with German GAAP.

Retired members of the Board of Management and their surviving dependents received €35.9 (14.5) million in the year now ended. Obligations for pensions for this group of persons measured in accordance with IAS 19 amounted to €396.3 (373.7) million, or €317.8 (300.5) million measured in accordance with German GAAP.

A one-year post-contractual restraint on competition has been agreed with Mr. Duesmann. For the duration of this post-contractual restraint, Mr. Duesmann will receive compensation. The compensation will count towards current benefits from the pension scheme.

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 are limited to a maximum of two years' remuneration, in accordance with G.13 sentence 1 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.

The post-contractual restraint on competition agreed with Mr. Duesmann will also generally apply in the event of early termination. The compensation will count towards any settlement.

Under the termination agreement with Mr. Schot, he will participate in the 2019 to 2021, 2020 to 2022 and 2021 to 2023 performance periods without any pro rata reductions. It has been agreed with Mr. Renschler that the tranche for the 2020 to 2022 performance period will be reduced on a pro rata basis in line with the date of his departure (July 15, 2020) and that no bad-leaver case will apply. It has been agreed with Mr. Sommer that the performance shares allocated to him for the 2018 to 2020, 2019 to 2021 and 2020 to 2022 performance periods will expire.

Please refer to notes 46 and 48 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 2020.

PENSIONS OF THE MEMBERS OF THE BOARD OF MANAGEMENT IN 2020 (PRIOR-YEAR FIGURES IN BRACKETS)

€	Pension expense	Present values as of December 31[1]
Herbert Diess	1,568,053	7,694,544
	(1,354,053)	(5,592,969)
Oliver Blume	997,938	3,023,360
	(808,544)	(1,743,034)
Markus Duesmann (since April 1, 2020)	849,934	849,934
	(–)	(–)
Gunnar Kilian	1,170,535	3,702,669
	(886,559)	(2,102,717)
Andreas Renschler (until July 15, 2020)	–	–
	(5,025,570)	(29,609,167)
Abraham Schot (until March 31, 2020)	56,049	–
	(2,222,572)	(2,222,572)
Stefan Sommer (until June 30, 2020)	447,742	–
	(761,437)	(1,228,940)
Hiltrud Dorothea Werner	1,149,571	5,071,366
	(956,364)	(3,482,194)
Frank Witter	1,008,664	16,277,467
	(886,120)	(14,474,204)
	–	–
Members of the Board of Management who left in the previous year	(–)	(–)
Total	**7,248,486**	**36,619,340**
	(12,901,219)	**(60,455,797)**

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 remuneration system for the members of the Supervisory Board to the 2017 Annual General Meeting, which was approved on May 10, 2017 with 99.98% of the votes cast. The Board of Management and Supervisory Board will submit the remuneration system for the members of the Supervisory Board to the Annual General Meeting for approval in 2021 in line with the requirements of the AktG as amended by the ARUG II. 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 to comprise partly non-performance-related and partly performance-related components.

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

> The members of the Supervisory Board will receive fixed remuneration of €100,000 per fiscal year.

> The Chairman of the Supervisory Board will receive fixed remuneration of €300,000, and his deputy will receive remuneration of €200,000.

> For their work in the Supervisory Board committees, the members of the Supervisory Board will 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.

> The work on a maximum of two committees shall be included in calculating the remuneration. If this maximum is exceeded the two most highly remunerated functions shall be decisive for the respective remuneration.

> Supervisory Board members who belonged to the Supervisory Board or one of its committees for only part of the fiscal year receive remuneration on a pro rata temporis basis.

> 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 take place on the same 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 2020, the members of the Supervisory Board received €5,341,196 (5,327,155). Of this figure, €2,294,167 related to the work of the Supervisory Board and €1,008,889 related to the work in the committees.

REMUNERATION OF THE MEMBERS OF THE SUPERVISORY BOARD

€	FIXED REMUNERATION	WORK IN THE COMMITTEES	OTHER[1]	TOTAL 2020	TOTAL 2019
Hans Dieter Pötsch	300,000	100,000	500,000	900,000	925,500
Jörg Hofmann[2]	200,000	75,000	24,000	299,000	289,000
Hussain Ali Al Abdulla	100,000	–	3,000	103,000	105,000
Hessa Sultan Al Jaber	100,000	–	9,000	109,000	107,000
Bernd Althusmann[3]	100,000	50,000	13,000	163,000	157,000
Kai Bliesener[2] (since June 20, 2020)	53,056	–	6,000	59,056	–
Hans-Peter Fischer[2]	100,000	–	13,000	113,000	107,000
Marianne Heiß	100,000	50,000	89,500	239,500	250,500
Johan Järvklo[2] (until February 29, 2020)	41,111	–	4,000	45,111	107,000
Ulrike Jakob[2]	100,000	–	13,000	113,000	106,000
Louise Kiesling	100,000	–	13,000	113,000	107,000
Peter Mosch[2]	100,000	100,000	168,500	368,500	390,500
Bertina Murkovic[2]	100,000	79,444	21,000	200,444	157,000
Bernd Osterloh[2]	100,000	125,000	172,000	397,000	387,000
Hans Michel Piëch	100,000	29,444	185,000	314,444	289,000
Ferdinand Oliver Porsche	100,000	150,000	164,000	414,000	435,000
Wolfgang Porsche	100,000	150,000	192,390	442,390	433,500
Conny Schönhardt[2] (since June 21, 2019)	100,000	50,000	17,000	167,000	81,389
Athanasios Stimoniaris[2]	100,000	–	324,250	424,250	482,040
Stephan Weil[3]	100,000	50,000	20,000	170,000	163,000
Werner Weresch[2] (since February 21, 2019)	100,000	–	86,500	186,500	165,352
Members of the Supervisory Board who left in the previous year	–	–	–	–	82,374
Total	**2,294,167**	**1,008,889**	**2,038,140**	**5,341,196**	**5,327,155**

1 Attendance fees, membership of other Group bodies (non-performance-related: €792,888; performance-related: €571,002).
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.

4

Group Management Report

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

GROUP MANAGEMENT REPORT

Goals and Strategies

With the 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.

With the TOGETHER 2025+ Group strategy that we enhanced in 2019, 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 will 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 becoming a carbon-neutral company by 2050. This includes our vehicles, plants and processes.

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 with which we put 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 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.

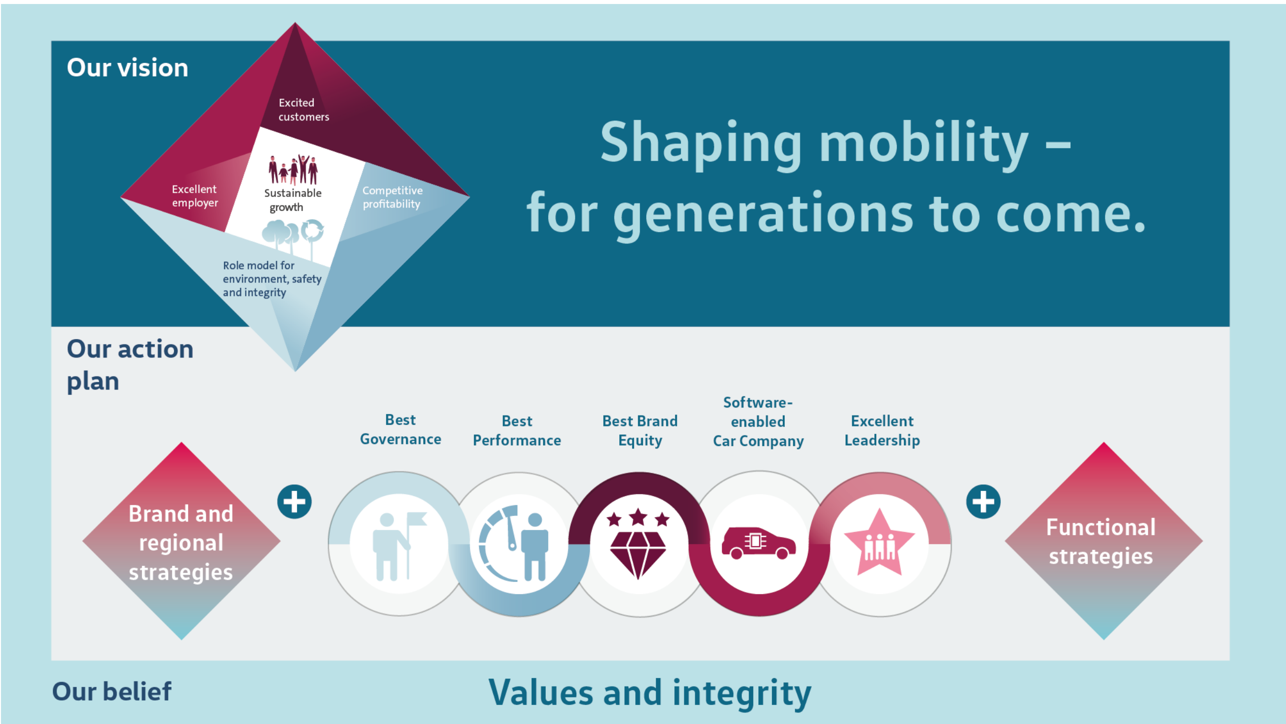
These modules are namely Best Governance, Best Performance, Best Brand Equity, Software-enabled Car Company and Excellent Leadership. We continuously review the status and progress of these initiatives in order to analyze the target achievement, importance and suitability of the measures defined. This 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. We will strive to establish a leading position in our industry in international ESG rankings – specifically in the fields of environment, social issues and governance – in the future.

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 increased 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 to enable a significant increase in the value of our Group brands. We are defining the profiles, brand missions and core competitors of the Volkswagen Group brands in a more nuanced and distinctive way. This will enable the Group to better serve the market as a whole. 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. Going forward, all new vehicle models across the Group will be based on our own cross-brand software platform. This approach will provide the opportunity 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 is based on three main areas: communication, human resources development and collaboration. To remain competitive and fit for the future, we will accelerate the transformation to a more open, more partnership-based and more value-based leadership culture. We are developing digital and dialogue-based communication formats to enable a more timely flow of information and integrate all brands and regions even more strongly. We are completely restructuring management development and training and taking 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 specified and enhanced 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 chapter entitled "Sustainable Value Enhancement".

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 commitment should be 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%

1 2015 before special items.

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 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 most significant performance indicators, known as the 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, namely 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 in the future. 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.

Structure and Business Activities

This chapter describes the legal and organizational structure of the Volkswagen Group and explains the material changes in 2020 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 as a group together with its subsidiaries.

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

The Commercial Vehicles Business Area primarily comprises the development, production and sale of trucks and buses 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 within TRATON SE, which is listed on the stock exchange.

The Power Engineering Business Area combines the large-bore diesel engines, turbomachinery, special gear units, and propulsion components businesses. Until October 2020, it also included the business of Renk.

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, Poland, Turkey and Mexico.

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

Accordingly, responsibilities were divided between eight Board of Management positions until December 31, 2020. In addition to the Chairman of the Board of Management, which also includes the Volume brand group, the other Board positions were: Components and Procurement, Finance and IT, Human Resources and Truck & Bus, Integrity and Legal Affairs, Premium, Sport & Luxury as well as China. As of December 31, 2020, the board member for Finance and IT was also responsible for Components and Procurement on a temporary basis, and the Chairman of the Board of Management was also responsible for China.

In December 2020, the Supervisory Board decided to split up the responsibility for Components and Procurement from January 1, 2021, replacing it with two new Board positions: Purchasing and Technology. The new Technology Board position will be responsible for all Group Components activities worldwide, the marketing of the Volkswagen platforms to third parties, the development and manufacturing of battery cells as well as the associated procurement, the areas of charging and charging systems and the corresponding joint ventures worldwide.

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. Bentley will be allocated to the Premium brand group as of March 1, 2021. The Truck & Bus brand group is the umbrella for the Scania and MAN brands.

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, improving collaboration between the brands and the Group as a whole, leveraging synergies 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.

In addition, at Group level, Board of Management committees address key strategic issues relating to products, technologies, investments, digital transformation, integrity and compliance, risk management, human resources and management issues. We constantly revise and optimize the committees in order to review their relevance and further increase the efficiency of their decision making. This reduces complexity and reinforces governance within the Group.

The Best Governance module of our future program TOGETHER 2025+ 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. The establishment of the Car.Software Organisation was just one way of further enhancing management of the Group in the reporting year.

MATERIAL CHANGES IN EQUITY INVESTMENTS

As part of the planned squeeze-out at AUDI AG under the German Stock Corporation Act, Volkswagen AG announced on June 16, 2020 that the cash settlement for the transfer of shares held by minority shareholders had been set at €1,551.53 per share. On July 31, 2020, the Annual General Meeting of AUDI AG approved the squeeze-out under stock corporation law at AUDI AG and thus the transfer of all outstanding Audi shares to Volkswagen AG. This resolution took effect upon its entry in the commercial register on November 16, 2020. In December 2020, a former shareholder of AUDI AG initiated award proceedings against Volkswagen AG at the Munich I Regional Court, asking the court to review the amount of the cash settlement offered by Volkswagen AG.

On October 6, 2020, the Volkswagen Group completed the sale of its 76% interest in Renk AG following the required regulatory approvals. The sale price was €0.5 billion.

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.

GROUP CORPORATE GOVERNANCE DECLARATION

The Group Corporate Governance Declaration can be found in this annual report and is permanently available on our website at www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html.

VOLKSWAGEN AG SHAREHOLDINGS
www.volkswagenag.com/en/InvestorRelations/news-and-publications/Financial_Statements.html

GROUP CORPORATE GOVERNANCE DECLARATION
www.volkswagenag.com/en/InvestorRelations/corporate-governance/declaration-of-conformity.html

Disclosures Required Under Takeover Law

This chapter 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, 2020. 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 and information about its composition are described in the Group Corporate Governance Declaration.

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.

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

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 currently runs until December 2025. 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.

Volkswagen AG and the Ford Motor Company entered into a Master Collaboration Agreement in January 2019. This agreement sets out a framework of obligations, which are to apply to the further co-operation agreements entered into between the parties, including those entered into in fiscal year 2020. It also covers the Development Agreement concluded 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 global economy recorded negative growth in fiscal year 2020 due to the impact of the Covid-19 pandemic. Global demand for vehicles was lower than in the previous year. Amid these challenging market conditions, the Volkswagen Group delivered 9.3 million vehicles to customers.

GLOBAL SPREAD OF CORONAVIRUS (SARS-COV-2)

At the end of 2019, initial cases of a potentially fatal respiratory disease became known in Wuhan, in the Chinese province of Hubei. This disease is attributable to a novel coronavirus. Infections also appeared outside China from mid-January 2020. In Europe, the number of people infected rose continuously in the course of February, and especially in March and April 2020. While many European countries recorded declining numbers of new infections as the second quarter of 2020 progressed, the rate of new infections continued to rise in North, Central and South America, Africa and parts of Asia. In the second quarter, many of the measures taken to contain the Covid-19 pandemic were gradually eased, especially in Europe. This included partially lifting border controls and travel restrictions and easing lockdowns as well as the reopening of businesses and public facilities. In addition, the European Commission and numerous European governments approved aid packages to support the economy. In other regions, too, governments introduced measures aimed at shoring up the economy to counteract the enormous disruption to everyday life and economic activity caused by the Covid-19 pandemic. During the third quarter, and particularly during the fourth quarter of 2020, many regions outside China and around the world saw a renewed – and in some cases very rapid – increase in new infections, which led to the easing of restrictions being reversed in certain situations.

Throughout the whole of 2020, the global spread of the SARS-CoV-2 virus brought enormous disruption to all areas of everyday life and the economy.

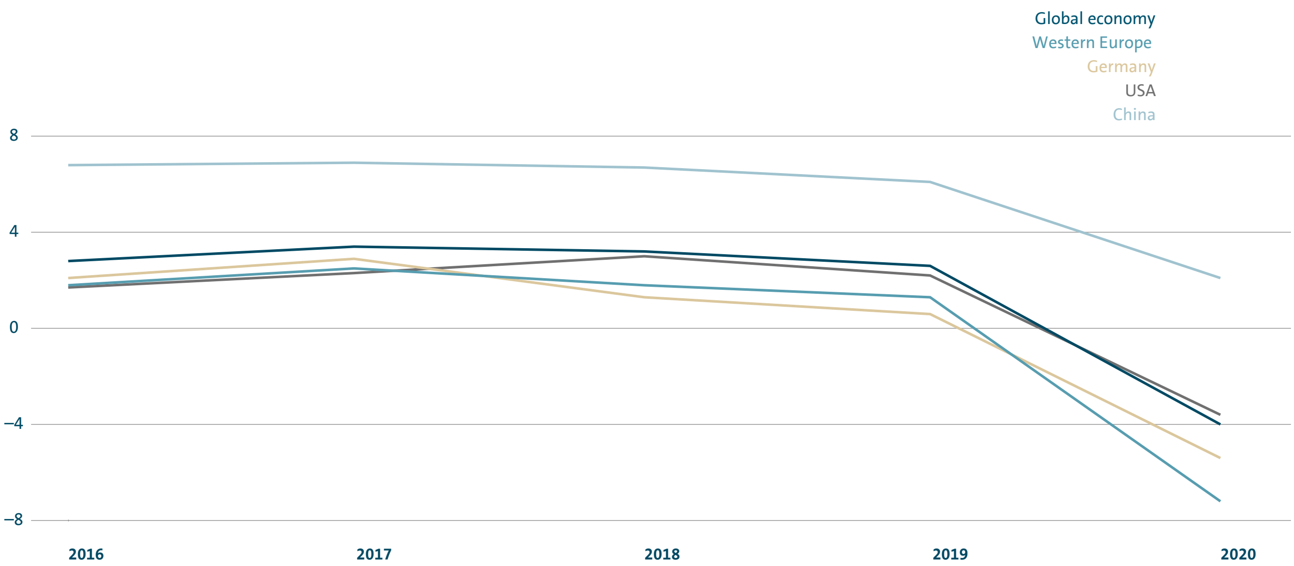
DEVELOPMENTS IN THE GLOBAL ECONOMY

The global spread of the SARS-CoV-2 virus, the associated restrictions, and the resulting downturn in demand and supply meant that growth in the world economy was negative in 2020, at –4.0 (2.6)%. The average rate of expansion of gross domestic product (GDP) was far below the previous year's level in both the advanced economies and the emerging markets. At country level, performance in the reporting period depended on the extent to which the negative impact of the Covid-19 pandemic was already materializing. The governments and central banks of numerous countries responded in some cases with substantial fiscal and monetary policy measures. This meant cuts in the already relatively low interest rates. There was a significant drop in prices for energy resources, while other commodity prices increased slightly year-on-year on average. On a global average, consumer prices rose at a slower pace than in 2019, and global trade in goods declined in the reporting period.

Europe/Other Markets

At –7.2 (1.3)%, the economies of Western Europe as a whole, recorded a sharp fall in growth in 2020. This trend was seen in nearly all countries in Northern and Southern Europe. The impact of national measures to contain the pandemic, including border closures and physical distancing, caused deep cuts. In some states, the measures severely restricted everyday life and also had grave economic consequences. Governments of many countries in this region subsequently started to lift some of the restrictions imposed, spawning a gradual economic recovery.

ECONOMIC GROWTH
Percentage change in GDP



Due to the renewed increase in case numbers in many countries as the year went on, several of these measures were tightened again, or at least left in place. In addition, the uncertain outcome of the Brexit negotiations between the United Kingdom and the European Union (EU) generated uncertainty in fiscal year 2020, as did the related question of what form this relationship would take in the future.

The economies in Central and Eastern Europe reported a marked decline in the real absolute GDP in 2020 at –3.7 (2.5)%, with economic output falling by –3.4 (2.9)% in Central Europe and by –4.0 (2.0)% in Eastern Europe. The same trend was observed in Russia; economic output in Eastern Europe's largest economy contracted by –4.1 (1.3)%.

Turkey was unable to sustain the recovery seen in the first quarter, with GDP growth declining to 0.2 (1.0)% for 2020 as a whole but remaining in positive territory. South Africa's GDP trend declined sharply in the reporting period to –7.3 (0.2)% amid persistent structural deficits and political challenges.

Germany

Germany's economic output showed a significantly negative trend in the reporting year at –5.3 (0.6)%. The labor market was in a favorable situation at the start of the year, but the pandemic led many companies to introduce short-time working (Kurzarbeit) throughout the course of the year. The temporary easing of restrictions in everyday life and economic activity as well as government assistance packages enacted to support the economy led to improved confidence among consumers and companies as the year progressed. However, it only occasionally matched the previous years' levels.

North America

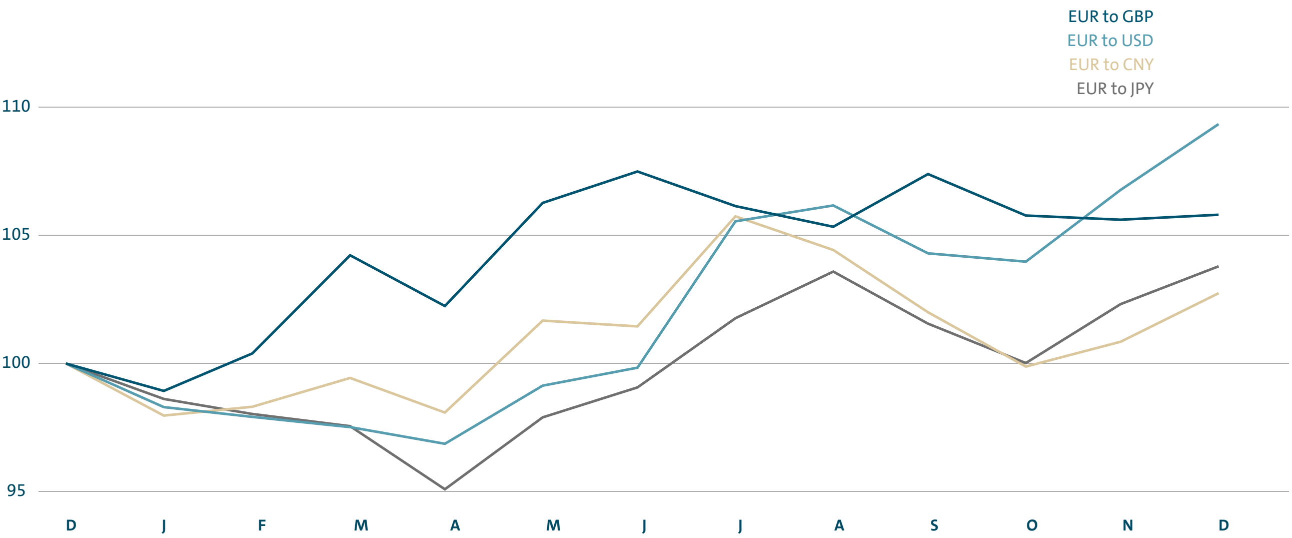
US economic output declined by –3.6 (2.2)% in the reporting year as rates of infection soared. To strengthen the economy in light of the disruption caused by the Covid-19 pandemic, the US government passed comprehensive stimulus packages. The US Federal Reserve cut interest rates twice, alongside other measures to support the economy. The weekly number of people filing new claims for unemployment benefits rose by several million before declining but still remaining at a relatively high level. This was reflected accordingly in the unemployment rate, which more than doubled year-on-year to 8.1 (3.7)% in the reporting period. GDP fell by –5.7 (1.9)% in neighboring Canada and by –9.0 (0.0)% in Mexico.

South America

Brazil's economy recorded a decline of –4.6 (1.4)% in 2020, resulting from the dynamic rate of infection caused by the Covid-19 pandemic. At –11.1 (–2.1)%, the economic downturn in Argentina intensified amid continued high inflation and substantial depreciation of the local currency compared with the previous year.

EXCHANGE RATE MOVEMENTS FROM DECEMBER 2019 TO DECEMBER 2020

Index based on month-end prices: as of December 31, 2019 = 100



Asia-Pacific

The Chinese economy, which had been exposed to the negative effects of the Covid-19 pandemic earlier than other economies and benefited from a relatively small number of new infections as the year progressed, recorded positive growth rates from the second quarter onwards, expanding by 2.1 (6.1)% overall. Growth in India fell sharply to −8.9 (4.2)% amid relatively high infection rates. Japan also recorded negative growth of −5.4 (0.3)% compared with the same period of the previous year owing to the negative impact of the Covid-19 pandemic.

TRENDS IN THE MARKETS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

In fiscal year 2020, the global market volume of passenger cars fell significantly below the prior-year level due to the Covid-19 pandemic, decreasing to 67.7 million vehicles (–15.2%). This marked a decline for the third year in a row. All regions were affected by this slump. The overall markets of Western Europe, South America and Africa recorded above-average losses, while the decline in Asia-Pacific and the Middle East was smaller in percentage terms.

Global demand for light commercial vehicles in the reporting period was down significantly 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 in 2020. 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 industries 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 down substantially by as much as –24.5% on the prior-year figure, at 10.9 million vehicles. The negative impact from the spread of the SARS-CoV-2 virus was noticeable in all countries in the region as early as March. After the drastic decline at the beginning of the second quarter, recovery started in the months that followed, and by the end of the third quarter, figures even matched those of the prior year. The fourth quarter of 2020 witnessed a lateral movement in the market, keeping volumes noticeably below the previous year's level. New registrations saw declines on a similar scale in all major individual markets and were in negative territory at year-end: France (–25.4%), Italy (–27.9%), the UK (–29.4%) and Spain (–32.1%).

The volume of new registrations of light commercial vehicles in Western Europe fell significantly below the prior-year figure, essentially due to the pandemic.

In the Central and Eastern Europe region, the market volume of passenger cars in fiscal year 2020 was down 15.9% on the prior-year level at 2.8 million vehicles. Following the slump in the second quarter and the recovery in the third quarter, the volume of new vehicle registrations flatlined in the fourth quarter and was moderately short of the previous year's figure. The development of demand in the reporting period differed from market to market. In Central Europe, the number of new registrations dropped substantially by 23.3% to 1.1 million units. By contrast, the decline in sales of passenger cars in Eastern Europe (–10.1%) was weaker, due in particular to demand in Russia slowing less sharply (–8.8%).

Registration volumes for light commercial vehicles in Central and Eastern Europe were down significantly year-on-year. In Russia, the number of vehicles sold in the reporting period was also significantly lower than in the previous year.

At 0.6 million units, the volume of the passenger car market in Turkey in the reporting period was up by over 50% on the very low prior-year level. The increase in demand was boosted in particular by the strong growth in the third quarter of 2020. In South Africa, the pandemic meant that the number of new passenger car registrations was down sharply on the comparatively poor results of the previous year (–30.4%).

Germany

New passenger car registrations in Germany in fiscal year 2020 fell significantly short of the previous year's high level, declining to 2.9 million units (–19.1%). Exacerbated by the Covid-19 pandemic and its fallout, demand for passenger cars fell to its lowest level since the German reunification despite a temporary reduction in value-added tax and higher purchase premiums for electric vehicles.

Owing to the mandated temporary shutdowns driven by the pandemic and weak demand in important foreign markets, domestic production and exports in the reporting period again fell short of the comparable prior-year figures: passenger car production decreased by –24.6% to 3.5 million vehicles, largely due to the –24.1% drop in passenger car exports to 2.6 million units.

Demand for light commercial vehicles in Germany in the reporting period was significantly lower than in 2019.

North America

At 17.1 million vehicles, sales of passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America in fiscal year 2020 were down significantly on the prior-year figure (–15.9%). The negative effects of the Covid-19 pandemic were also very noticeable in this region. After a drastic decline in demand at the beginning of the second quarter and a steady recovery in the months that followed, until the prior-year level was reached in September, the region witnessed volatile market performance in the last quarter of 2020. In December, a new recovery set in and the previous year's figure was exceeded. The market volume in the USA remained markedly lower than the 2019 level, falling to 14.6 million units (–14.5%). The decline affected both the passenger car segment (–28.3%) and light commercial vehicles (–11.9%) such as SUVs and pickup models. In the Canadian automotive market, the Covid-19 pandemic significantly accelerated the downward trend that began in 2018 (–19.7%). In Mexico, sales of passenger cars and light commercial vehicles declined sharply (–28.0%), falling short of the prior-year figure for the fourth year in a row.

South America

In the markets of the South America region, the volume of new registrations for passenger cars and light commercial vehicles in 2020 was much lower (–28.1%) at 3.1 million units following the drastic decline in the second quarter, a strong recovery in the third quarter and a lateral movement in the fourth quarter, though falling short of the levels recorded in the previous year. The South America region saw the most severe negative impact of the Covid-19 pandemic on the automotive markets in terms of percentage. In Brazil, the recovery in vehicle demand that began in 2017 was interrupted in the reporting year; at 2.0 million vehicles (–26.7%), the number of new registrations was sharply lower than in the prior-year period. Exports of vehicles manufactured in Brazil continued to decline, falling by –24.3% to 324 thousand. In the Argentinian market, too, the spread of the SARS-CoV-2 virus negatively impacted the demand for passenger cars and light commercial vehicles. In 2020, there was a sharp –26.6% fall in sales to 0.3 million units.

Asia-Pacific

In the Asia-Pacific region, too, the reporting period was adversely impacted by the spread of the SARS-CoV-2 virus. After the very sharp decline in the first three months, the rapid rebound in the second quarter and a return to prior-year levels in the third quarter, demand in the last quarter of 2020 was moderately up on the previous year. The market volume of passenger cars was noticeably lower than the prior-year level at 30.9 million units (–9.6%). This was also partly due to developments in the Chinese passenger car market, where the volume of demand fell distinctly short of the previous year to 19.9 million units (–6.5%) as a result of the Covid-19 pandemic. Following the severe losses in the first three months of 2020, there were clear signs of a recovery in the overall market there as the year went on. In India, sales of passenger cars dwindled significantly year-on-year, falling by –17.3% to 2.3 million units. In the Japanese passenger car market, vehicle demand in the reporting period of 3.8 million units (–11.2%) was down markedly on the previous year due not only to the Covid-19 pandemic, but also to the increase in VAT as of October 1, 2019.

There was a significant year-on-year decline in demand for light commercial vehicles in the Asia-Pacific region. Registration volumes in China, the region's dominant market and the largest market worldwide, fell distinctly year-on-year. The number of new vehicle registrations was significantly below the previous year's level in Japan and drastically lower in India.

TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

In the markets that are relevant for the Volkswagen Group, global demand for mid-sized and heavy trucks with a gross weight of more than six tonnes was down substantially year-on-year in fiscal year 2020 due to the spread of the SARS-CoV-2 virus: 460 thousand new vehicles were registered (–20.1%). Despite the ongoing uncertainty generated by the Covid-19 pandemic, a recovery could be seen in almost all of the markets that are relevant for the Volkswagen Group in the second half of 2020 compared with the first six months.

In the 27 EU states excluding Malta, but plus the United Kingdom, Norway and Switzerland (EU27+3), the number of new truck registrations was sharply down on the prior-year figure, dropping –27.4% to a total of 273 thousand vehicles. Registrations in Germany, the largest market in this region, fell substantially year-on-year. The previously anticipated downturn in the market for 2020 was amplified by the Covid-19 pandemic, especially in the second quarter of the year. The Russian market also deteriorated noticeably as a consequence of the Covid-19 pandemic and the related economic fallout. Turkey saw new registrations more than double compared to an admittedly very low prior-year figure. By contrast, the South African market declined considerably. In Brazil, the largest market in the South America region, demand for trucks was significantly below the level seen in the previous year as a result of the pandemic.

Demand for buses in the markets that are relevant for the Volkswagen Group was much lower than in the previous year as a consequence of the pandemic. All key markets within the EU27+3 contributed to this trend, with the market for coaches in particular virtually grinding to a halt. Demand was very much lower in Brazil and was less than half the prior-year level in Mexico.

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 2020, the marine market contracted to a significantly lower level than in the previous year. Demand was curbed predominantly by the global impact of the Covid-19 pandemic and uncertainty about future emissions regulations, and in merchant shipping by the negative impact of the ongoing trade disputes between the USA and China. Demand for cruise ships virtually ceased entirely due to the difficult liquidity situation, resulting from the Covid-19 pandemic. The passenger ferry segment – similarly affected by a loss of revenue resulting in part from project postponements – was also impacted by a decline in demand. The special market for government vessels, which is driven by state investment, continued on a stable trajectory. In the offshore sector, the existing overcapacity and low oil prices virtually stifled investment in offshore oil production. China, South Korea and Japan remained the dominant shipbuilding countries, accounting for a global market share of around 85% measured in terms of the number of ships. Since market volumes are still low, all sectors in the marine market were continuing to experience significant competition and strong pricing pressure as a result.

The market for power generation was unable to continue its growth trend in 2020 due to the Covid-19 pandemic and declined significantly overall. Most projects were postponed as a result of the spread of the SARS-CoV-2 virus and the pandemic-related uncertainty, with some being canceled altogether. Due to the collapse in oil prices and low equipment prices, there was a short-term rise in demand for stock engines run on HFO (heavy fuel oil) in developing countries, though the trend away from oil-fired power plants towards dual-fuel and gas-fired power plants continued. Demand for new energy solutions such as hydrogen, battery or solar technologies remained high, with a strong trend towards greater flexibility and decentralized availability. Due to the negative consequences of the SARS-CoV-2 virus, inventories in the reporting period increased, intensifying continued pressure from competition and pricing.

In 2020, the market for turbo machinery showed a significant deterioration year-on-year. The Covid-19 pandemic had a delayed negative impact on demand for turbo compressors in the raw materials, oil, gas and processing industry and varied in severity depending on market segment and region. Investments in oil production facilities remained at the prior-year level despite substantial, short-term price fluctuations. Demand for turbo compressors for industrial gases also remained slightly below the previous year's level. By contrast, demand in the raw materials and processing industry dropped substantially. As a consequence of the Covid-19 pandemic, nearly all regions except for China recorded a severe downturn in demand compared with the previous year. The steam and gas turbine business continued to be dominated by overcapacity on the part of electricity producers. In addition, the pandemic-induced uncertainty and the continued pressure from competition and pricing compared with the prior-year period brought about a substantial dip in demand.

The after-sales business for diesel engines performed positively on the whole in 2020 compared with the previous year, benefiting from a continued increase in interest in long-term maintenance contracts and retrofitting solutions. The Covid-19 pandemic reduced demand for standard products, however, and decisions about capital-intensive modifications were delayed owing to cash-flow difficulties on the part of the customers. After undergoing a marked recovery in the previous year, the after-sales market for turbo machinery collapsed sharply in 2020 due to the Covid-19 pandemic. Here, too, capital-intensive modifications were postponed or canceled due to financial difficulties.

TRENDS IN THE MARKETS FOR FINANCIAL SERVICES

Demand for automotive financial services was at a high level in 2020, particularly in the first three months, due in part to the persistently low key interest rates in the main currency areas. Nevertheless, the Covid-19 pandemic put pressure on the demand for financial services in almost all regions during the reporting period. The effects of the Covid-19 pandemic were noticeable worldwide, especially in the second quarter of 2020. Markets for automotive financial services staged a partial recovery in the third and fourth quarters.

The European passenger car market was affected by the Covid-19 pandemic especially in the second quarter of 2020, which led to a significant decline in demand in the automotive business over the reporting period as a whole. Amid this challenging market environment, the share of lease and financing contracts to vehicle sales was expanded further in the European markets although the absolute number of contracts declined year-on-year. Demand increased for integrated mobility services such as parking, refueling and charging. The business with after-sales products such as servicing, maintenance and spare parts agreements, as well as automotive-related insurance was maintained at the prior-year level in the current market environment.

Germany saw a year-on-year drop in the number of loan-financed and leased new vehicles in 2020 due to the challenges of the Covid-19 pandemic. In the leasing business with individual customers, the shift from financing to lease contracts that began in 2019 continued.

In South Africa, demand for financing and insurance products stabilized in the second half of 2020 after declining in the first half, but was down year-on-year in the reporting period. Lower interest rates led to an increase in cash purchases. Non-vehicle loans were also used to buy vehicles.

A drop in demand for new vehicles has been seen across the entire North American region as a consequence of the Covid-19 pandemic. In the United States, however, demand for financial services rose slightly and increased as a proportion of vehicle sales. A shift from lease to financing contracts was observed here along with an increase in sales of used vehicles. The proportion of lease and financing contracts in Canada in 2020 was also up on the prior-year level. Absolute numbers of contracts decreased, however, due to the decline in deliveries. A downward trend was observed in Mexico, both for the absolute number of financing contracts and for the percentage share, which was attributable in part to the currently limited fleet business.

In South America, demand for vehicles and automotive financial services in the reporting year was down on the previous year. It recovered at the end of 2020 after dipping in the second and third quarters as a consequence of the pandemic. In Brazil, the trend toward fleet business and long-term leases continued to strengthen, with the number of long-term lease contracts exceeding the prior-year level. In a difficult macroeconomic environment, customers in Argentina purchased their vehicles mostly in cash; demand for automotive financial services decreased year-on-year.

China's passenger car market started to recover from the Covid-19 pandemic from the second quarter of 2020 onwards. The easing of restrictions continuously led to increasing numbers of new contracts being signed for automotive-related financial services, which were up slightly overall on the prior-year level. In Japan, the effects of the Covid-19 pandemic were perceptible in the form of weaker new car sales, with a related fall in demand for financing and leasing products. In India, demand for financial services was below the previous year but rose again in the course of the year as lending rates in the new and used vehicle segments stabilized.

The Covid-19 pandemic also led to substantial declines in demand for new and used vehicles in the commercial vehicles business area in 2020. As a result, there was an equal fall in the number of lease and financing contracts in Europe; however, there was a rise in the penetration rate of these financial products in Brazil.

NEW GROUP MODELS IN 2020

Thanks to a broad portfolio of products – 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 – covering almost all key segments and body types, Volkswagen Group customers are able to choose the vehicle tailored to their needs. In fiscal year 2020, we added further attractive vehicles to this range, whereby one focus was on electric vehicles.

In 2020, the Volkswagen Passenger Cars brand brought out the compact ID.3, the first vehicle based on the Modular Electric Drive Toolkit (MEB). It also expanded its range of electric vehicles by adding the new ID.4, an all-electric SUV designed for urban use. The first vehicles from the ID. family have suitable ranges and come fitted with forward-looking equipment such as the augmented reality head-up display. 2020 also saw the launch of the eighth generation of the new Golf including its derivatives, the Golf GTI, Golf R and Golf Estate. The up!, the Tiguan and the Arteon all received product upgrades. The T-Roc Cabriolet and the Arteon Shooting Brake were also rolled out, the latter combining exclusivity and practicability at a high level. In addition, the first Tiguan R model was launched. The Volkswagen Passenger Cars brand continued rolling out its plug-in hybrid offensive with derivatives of the Golf and Touareg. In the USA, the successful Atlas received an update and the Atlas Cross Sport was launched. In the South American market, the Nivus SUV coupé developed in Brazil was rolled out along with sporty versions of the Polo and Virtus models. In the Chinese market, the new Tiguan X and Tayron X crossover models cater to the growing demand for lifestyle vehicles. The Viloran seven-seater van, designed to meet the needs of regional markets and customers, and the Tacqua compact SUV were also launched. The CC and the Phideon were upgraded. The electrification offensive was continued with the electric Tharu, and the Tayron as a plug-in hybrid. JETTA brought out the VS7 SUV.

The Audi brand also added further all-electric vehicles to its product range in fiscal year 2020. The Audi e-tron Sportback, for example, celebrated its market launch with a new interpretation of the coupé design. The range of plug-in hybrid vehicles was also expanded. Audi also introduced S models of the Q7 and Q8 in 2020 and, for the first time, also of the electric vehicles e-tron and e-tron Sportback. In addition, successors to models from the A3 series that is especially popular with customers were brought out. The A5, Q2 and Q5 model series were updated.

Launched in early 2020, the all-electric Citigo^{e} iV kicked off the electrification of the ŠKODA portfolio. In addition, the successor models from the popular Octavia series celebrated their market launch. The Octavia and the Superb are also available as plug-in hybrids, both as a saloon and as an estate. Along with these, the Rapid received an update in China and Russia.

The SEAT brand launched the successors to the Leon and the Leon Sportstourer in 2020. Moreover, both the SEAT brand and CUPRA expanded their product ranges through the addition of two plug-in hybrid versions of the Leon in each case. The Ateca received a comprehensive product upgrade at both SEAT and CUPRA. CUPRA enhanced its model range by adding its first completely standalone model, the Formentor SUV coupé.

Following the unveiling of the all-electric Taycan in the preceding fiscal year, Porsche launched new Taycan derivatives in 2020 including the top-of-the range Turbo S. The updated Panamera was also released. The Cayenne GTS Coupé rounds off the Cayenne family.

In the growing SUV segment, Bentley launched the extensively upgraded Bentayga in fiscal year 2020. Presented in 2019, the successor to the Flying Spur luxury saloon is now also available with a V8 engine. The luxurious spearhead of the model series became available at the end of 2020 with the Continental GT Mulliner.

Since 2020, Lamborghini's Huracán RWD with rear-wheel drive has been on the market as the upgraded EVO model.

Bugatti presented the DIVO hyper sports car in 2020, limited to only 40 vehicles. The new Chiron Pur Sport also celebrated its market premiere.

The Volkswagen Commercial Vehicles brand completely redesigned the Caddy, which now boasts technologies from the Modular Transverse Toolkit (MQB).

Scania reached a milestone in the electrification of the brand in 2020: a plug-in hybrid drive is now also available for the L and P series, a purely electric drive system was presented for these models.

MAN brought out the visually and technically revamped TGX, which received the International Truck of the Year 2021 award for its reliability and efficiency.

Ducati introduced the new Streetfighter V4 in 2020 as well as updated models of the Panigale V2 and V4, the Multistrada 1260S Grand Tour and the Diavel 1260S. The Icon Dark expanded the Scrambler family.

VOLKSWAGEN GROUP DELIVERIES

The Volkswagen Group delivered 9,305,372 vehicles to customers worldwide in fiscal year 2020. The decrease of 15.2% or 1,669,925 units year-on-year was due almost exclusively to the Covid-19 pandemic and the measures taken worldwide to contain its spread. Sales figures for both the Passenger Cars Business Area and the Commercial Vehicles Business Area declined as a result of the fall in demand. The chart on the page after next illustrates the trend in deliveries from month to month, comparing 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]

	2020	2019	%
Passenger Cars	9,115,185	10,733,077	−15.1
Commercial Vehicles	190,187	242,220	−21.5
Total	**9,305,372**	**10,975,297**	**−15.2**

1 Prior-year deliveries have been updated to reflect subsequent statistical trends. 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, Poland, Turkey and Mexico.

Global demand for Volkswagen Group passenger cars and light commercial vehicles fell in the reporting year by 15.1% year-on-year to 9,115,185 units as a consequence of the debilitating market conditions arising from the uncertainty and the measures taken worldwide to tackle the Covid-19 pandemic. In connection with the pandemic, our deliveries to customers were affected by differing temporal and geographical effects. Following in some cases drastic losses at the end of the first quarter and the start of the second quarter, demand for Group models recovered as the reporting year went on, with declines becoming weaker. We registered declining demand year-on-year in nearly all regions. The sole exception was the Middle East region, largely driven by the positive trend in sales figures in Turkey. Bentley was the only Volkswagen Group brand that did not fall short of its prior-year figures.

Our e-mobility offensive had a positive impact on Group sales: we delivered 231,624 fully electric vehicles to customers globally – more than three times as many as in 2019. Our plug-in hybrid models were also very popular with customers; sales amounted to 190,644 vehicles. The Group's most successful all-electric vehicles included the ID.3, the e-Golf and the e-up! from Volkswagen Passenger Cars as well as the Audi e-tron and Porsche Taycan. The Passat and the Golf from Volkswagen Passenger Cars, the Audi Q5, the ŠKODA Superb and the Porsche Cayenne were among the most popular plug-in hybrid models.

In a significantly declining overall global market, our passenger car market share increased slightly to 13.0 (12.9)%.

The table at the end of this section 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.

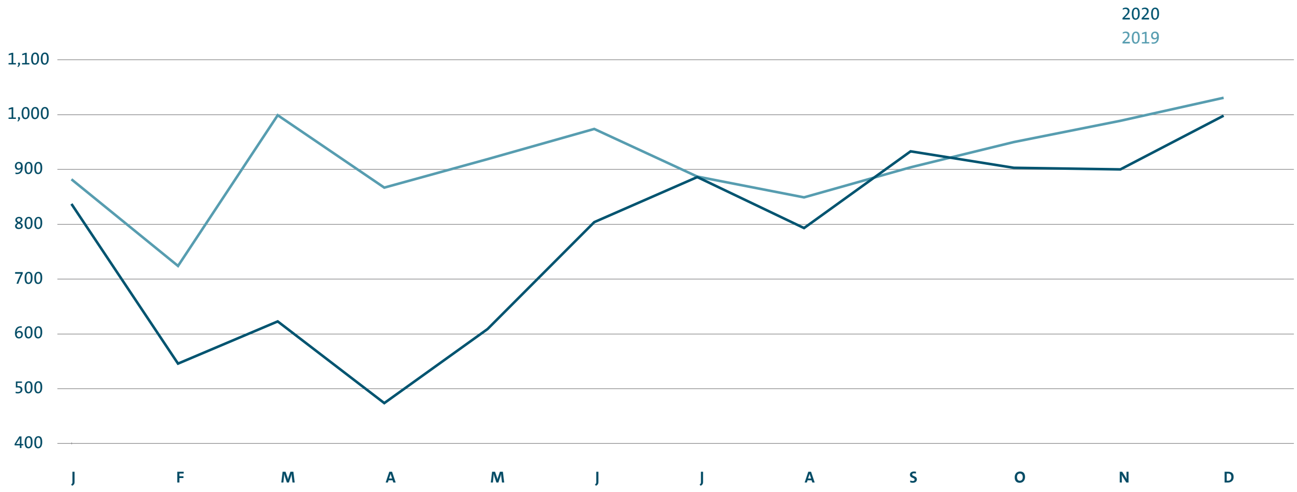
Deliveries in Europe/Other Markets

In Western Europe, the Volkswagen Group delivered 2,848,861 passenger cars and light commercial vehicles to customers in fiscal year 2020 in a substantially contracting overall market. This was 21.5% fewer than in the previous year. The increasing spread of the SARS-CoV-2 virus and the measures taken to contain it sent demand for Group vehicles into a tailspin during the first quarter and at the beginning of the second quarter. All of the major individual markets demonstrated very similar declines in demand for Group vehicles. By the end of the first half of the year, the declines had tapered off. In the second half of the year, demand for Group vehicles in individual markets was once again up on a monthly basis compared with the relevant prior-year figure. The Group models with the highest volume of demand were the Golf, Polo, T-Roc and Tiguan from the Volkswagen Passenger Cars brand. In addition, the T-Cross from Volkswagen Passenger Cars, the Q3 Sportback, Q7 and e-tron from Audi, the Scala and Kamiq from ŠKODA, the Mii electric from SEAT, and the Porsche Cayenne Coupé and Porsche Taycan, all of which had been introduced as new or successor models over the course of the previous year, were very popular with customers. Some of the models successfully launched on the market during the reporting year as new or successor models were the up!, T-Roc Cabriolet, Golf, Tiguan and Arteon Shooting Brake and the first all-electric production models, the ID.3 and ID.4, from Volkswagen Passenger Cars, the A3 saloon, A3 Sportback, A5 and e-tron Sportback from Audi, the Citigo[e] iV, Superb iV and Octavia from ŠKODA, the Leon, Leon Sportstourer and Ateca from SEAT and the Caddy from Volkswagen Commercial Vehicles. The Volkswagen Group's share of the passenger car market in Western Europe rose to 23.7 (22.8)%.

With a decline of 14.9%, the number of vehicles handed over to customers in the reporting year in the Central and Eastern Europe region fell less sharply than the global average. This was largely attributable to the trend in deliveries in Russia, which almost reached the prior-year level. Demand developed encouragingly for the T-Cross from Volkswagen Passenger Cars, for the Audi Q3 Sportback, for ŠKODA's Scala, Kamiq and Karoq models and for the Porsche Cayenne Coupé. The Volkswagen Group's share of the passenger car market in the Central and Eastern Europe region increased to 22.0 (21.5)%.

In Turkey, the Volkswagen Group continued to benefit from the catch-up effects in the overall market, raising the number of vehicles handed over to customers in 2020 by 54.8% compared with the previous year. The Passat saloon was the most sought-after Group model from the Volkswagen Passenger Cars brand. In the sharply contracting South African market, the number of Group models sold fell by

VOLKSWAGEN GROUP DELIVERIES BY MONTH
Vehicles in thousands



28.9%. The Polo from Volkswagen Passenger Cars continued to be the most frequently sold Group model there.

Deliveries in Germany

In Germany, demand for vehicles from the Volkswagen Group was down 19.6% year-on-year at 1,065,811 units in 2020 in an overall market that was suffering a significant decline. As with the overall market in Western Europe, the decrease was attributable to the negative impact of the spread of the SARS-CoV-2 virus. The Group models with the highest volume of demand were the Golf and Passat Estate from the Volkswagen Passenger Cars brand. Also in high demand from customers were the T-Cross from Volkswagen Passenger Cars, the Q3 Sportback, Q7 and e-tron from Audi, the Scala and Kamiq from ŠKODA, the Mii electric from SEAT, and the Porsche Cayenne Coupé and Porsche Taycan, all of which had been introduced as new or successor models over the course of the previous year. Seven Group models led the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) registration statistics in their respective segments: the Golf, T-Roc, Tiguan, Touran, Passat, Porsche 911 and Caddy. In addition, the Golf continued to top the list of the most popular passenger cars in Germany in terms of registrations.

Deliveries in North America

In North America, demand for Volkswagen Group models fell by 17.3% year-on-year to 784,299 units in the reporting year, a decrease largely mirroring the trend in the market as a whole. The impact of the Covid-19 pandemic became apparent in this region somewhat later, intensifying at the beginning of the second quarter. The month-on-month declines diminished again as the year went on. The Group's market share was 4.6 (4.7)%. The Tiguan Allspace and Jetta from Volkswagen Passenger Cars were the most sought-after Group models in North America.

In the considerably weaker US market, the Volkswagen Group delivered 12.1% fewer vehicles to customers in fiscal year 2020 than in the prior-year period. The Group models to record the greatest increases included the Passat and Arteon from Volkswagen Passenger Cars, the Audi Q3 and e-tron, and the Porsche 911 Cabriolet. The Atlas and the Atlas Cross Sport from the Volkswagen Passenger Cars brand, Audi's A4, A5, Q7 and e-tron Sportback models, and the Porsche Taycan and Cayenne Coupé were successfully launched on the market as new or successor models during the reporting period.

In Canada, the number of deliveries to Volkswagen Group customers fell by 25.6% year-on-year in 2020. The market as a whole experienced a lesser decline during this period. The Audi Q3 in particular recorded encouraging growth in demand.

In the Mexican market, which was diminishing sharply overall, the Volkswagen Group delivered 30.8% fewer vehicles to customers in the reporting year than in the previous year. The Group models with the highest volume of demand were the Vento and Jetta from the Volkswagen Passenger Cars brand.

WORLDWIDE DELIVERIES OF THE MOST SUCCESSFUL GROUP MODEL RANGES IN 2020
Vehicles in thousands

Deliveries in South America

In the South American passenger car and light commercial vehicles market, which recorded a strong contraction overall, the number of Group models delivered to customers in fiscal year 2020 was down by 20.2% year-on-year to 440,326 units. The effects of the Covid-19 pandemic became apparent in this region somewhat later, intensifying at the beginning of the second quarter before weakening again on a monthly basis over the rest of the year. The new T-Cross that was launched in the previous year and the Gol from Volkswagen Passenger Cars were the Group models in highest demand. The Nivus SUV coupé was successfully launched on the market in the reporting year. The Volkswagen Group's share of the passenger car market in South America rose to 14.1 (12.7)%.

The recovery of the Brazilian market was interrupted by the outbreak of the Covid-19 pandemic. The Volkswagen Group delivered 20.0% fewer vehicles to customers there than in the previous year. Along with the Gol and the Polo, the new T-Cross from Volkswagen Passenger Cars was in especially high demand.

In Argentina, the number of vehicles delivered to Volkswagen Group customers in 2020 was 18.4% down on the prior-year figure in a sharply declining overall market. The Gol and T-Cross from Volkswagen Passenger Cars and the Amarok from Volkswagen Commercial Vehicles saw the highest demand of all Group models.

Deliveries in the Asia-Pacific region

In fiscal year 2020, the Volkswagen Group saw demand taper off in the overall market of the Asia-Pacific region, which witnessed a noticeable decline due primarily to the Covid-19 pandemic, and handed over 4,110,782 vehicles to customers, 9.1% fewer than in the year before. The Group's market share in the Asia-Pacific region amounted to 13.2 (13.1)%.

China, the world's largest single market and the main growth driver of the Asia-Pacific region for many years, was distinctly weaker in the past fiscal year, mainly due to the spread of the SARS-CoV-2 virus. The Volkswagen Group delivered 9.1% fewer vehicles to customers there than in the preceding year. Following very high declines in volumes in the first quarter, we recorded a slight increase in most of the following months compared with the respective prior-year figure. The T-Cross and Teramont X from the Volkswagen Passenger Cars brand, the VA3 and VS5 from the JETTA brand, the Audi A6L and Audi Q8, the ŠKODA Kamiq GT and the Porsche Cayenne Coupé, all of which had been introduced as new or successor models over the course of the previous year, were in especially high demand. In addition, the Tayron and the Tharu from Volkswagen Passenger Cars, the Audi Q2L, Q2L e-tron and Q5, and the Porsche Panamera saloon saw encouraging growth in demand. The Tacqua, Golf, Tayron X, Tiguan X, CC, Viloran and Phideon models from Volkswagen Passenger Cars, the VS7 from the JETTA brand, the Audi Q7 and Audi e-tron and the ŠKODA Rapid were successfully launched on the market as new or successor models in the reporting year.

In the Indian passenger car market, which registered a significant decline, the Volkswagen Group saw 44.9% less demand in the reporting year than in the preceding year. The Polo from the Volkswagen Passenger Cars brand and the Rapid from ŠKODA were the most sought-after Group models there.

In a significantly weaker overall market in Japan, the number of Group models handed over to customers in fiscal year 2020 decreased by 15.6% year-on-year. The Group model to record the highest demand was the Volkswagen T-Cross.

PASSENGER CAR DELIVERIES TO CUSTOMERS BY MARKET[1]

	DELIVERIES (UNITS)		CHANGE
	2020	2019	(%)
Europe/Other Markets	**3,779,778**	**4,712,746**	**– 19.8**
Western Europe	**2,848,861**	**3,628,314**	**– 21.5**
of which: Germany	1,065,811	1,324,942	– 19.6
France	222,522	307,847	– 27.7
United Kingdom	409,064	544,117	– 24.8
Italy	239,167	310,944	– 23.1
Spain	213,700	305,494	– 30.0
Central and Eastern Europe	**652,813**	**766,810**	**– 14.9**
of which: Czech Republic	112,589	136,377	– 17.4
Russia	221,811	223,454	– 0.7
Poland	126,883	165,530	– 23.3
Other Markets	**278,104**	**317,622**	**– 12.4**
of which: Turkey	121,129	78,251	+ 54.8
South Africa	64,693	90,968	– 28.9
North America	**784,299**	**948,275**	**– 17.3**
of which: USA	574,822	654,118	– 12.1
Canada	83,531	112,247	– 25.6
Mexico	125,946	181,910	– 30.8
South America	**440,326**	**551,734**	**– 20.2**
of which: Brazil	336,773	420,880	– 20.0
Argentina	57,555	70,496	– 18.4
Asia-Pacific	**4,110,782**	**4,520,322**	**– 9.1**
of which: China	3,844,679	4,228,841	– 9.1
India	28,423	51,541	– 44.9
Japan	66,935	79,268	– 15.6
Worldwide	**9,115,185**	**10,733,077**	**– 15.1**
Volkswagen Passenger Cars	5,328,029	6,279,007	– 15.1
Audi	1,692,773	1,845,573	– 8.3
ŠKODA	1,004,816	1,242,767	– 19.1
SEAT	427,035	574,078	– 25.6
Bentley	11,206	11,006	+ 1.8
Lamborghini	7,430	8,205	– 9.4
Porsche	272,162	280,800	– 3.1
Bugatti	77	82	– 6.1
Volkswagen Commercial Vehicles	371,657	491,559	– 24.4

1 Prior-year deliveries have been updated to reflect subsequent statistical trends. The figures include the Chinese joint ventures.

COMMERCIAL VEHICLE DELIVERIES

In the period from January to December 2020, the Volkswagen Group handed over 21.5% fewer commercial vehicles to customers worldwide than in the previous year. We delivered a total of 190,187 commercial vehicles to customers. Trucks accounted for 156,378 units (–24.1%) and buses for 16,174 units (–24.8%). A total of 17,635 (14,788) vehicles from the MAN TGE van series were delivered. The decline in the truck and bus business was due to a slump in our core markets, which was exacerbated by the ongoing uncertainty generated by the Covid-19 pandemic.

In the 27 EU states excluding Malta, but plus the United Kingdom, Norway and Switzerland (EU27+3), sales were down by 26.0% on the same period of the previous year to a total of 105,131 units, of which 81,727 were trucks and 6,098 were buses. Here, the MAN brand delivered 17,306 light commercial vehicles.

In Russia, sales fell by 16.2% year-on-year to 8,486 units, comprising 8,267 trucks and 219 buses.

Deliveries in Turkey increased to 2,681 (707) vehicles in fiscal year 2020. Trucks accounted for 2,457 units and buses for 99 units, while 125 vehicles from the MAN TGE van series were sold. In South Africa, deliveries of Volkswagen Group commercial vehicles decreased by 30.2% year-on-year to a total of 3,111 units; of this figure 2,789 were trucks and 322 were buses.

Sales in North America declined in fiscal year 2020 to 1,502 vehicles (–53.3%), which were delivered almost exclusively to customers in Mexico; of this figure 1,110 units were trucks and 392 were buses.

Deliveries in South America fell to a total of 49,372 vehicles (–13.1%), of which 42,283 were trucks and 7,089 were buses. Sales in Brazil decreased by 17.5% in fiscal year 2020. Of the units delivered, 35,738 were trucks and 5,117 were buses.

In the Asia-Pacific region, the Volkswagen Group sold 11,420 vehicles to customers in the reporting period; among these, 10,331 were trucks and 1,075 were buses. Overall, this was 14.4% less than in the previous year.

COMMERCIAL VEHICLE DELIVERIES TO CUSTOMERS BY MARKET[1]

	DELIVERIES (UNITS)		CHANGE
	2020	2019	(%)
Europe/Other Markets	**127,893**	**168,831**	**– 24.2**
of which: EU27+3	105,131	142,058	– 26.0
of which: Germany	31,859	39,059	– 18.4
Russia	8,486	10,123	– 16.2
Turkey	2,681	707	x
South Africa	3,111	4,455	– 30.2
North America	**1,502**	**3,219**	**– 53.3**
of which: Mexico	1,498	3,218	– 53.4
South America	**49,372**	**56,826**	**– 13.1**
of which: Brazil	40,855	49,551	– 17.5
Asia-Pacific	**11,420**	**13,344**	**– 14.4**
Worldwide	**190,187**	**242,220**	**– 21.5**
Scania	72,085	99,457	– 27.5
MAN	118,102	142,763	– 17.3

1 Prior-year deliveries have been updated to reflect subsequent statistical trends.

DELIVERIES IN THE POWER ENGINEERING SEGMENT

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

Sales revenue in the Power Engineering segment was largely driven by Engines & Marine Systems and Turbomachinery, which together generated more than two-thirds of overall sales revenue. Until October 2020, this included the business of Renk.

ORDERS RECEIVED IN THE PASSENGER CARS SEGMENT IN WESTERN EUROPE

In the reporting year, orders received in Western Europe fell by 17.8% compared with the previous year as a result of the pandemic. All key markets fell short of the previous year's level. The scale of decline varied from country to country: while Germany was markedly down on the previous year, the United Kingdom, France, Italy and Spain were significantly or sharply below the equivalent prior-year figure.

ORDERS RECEIVED FOR COMMERCIAL VEHICLES

Orders received for mid-sized and heavy trucks, for buses and for commercial vehicles from the MAN TGE van series decreased by 4.8% year-on-year to 216,251 vehicles in 2020. The decline was attributable to both the truck and bus markets. The overall market downturn expected for 2020 was amplified by the uncertainty arising from the Covid-19 pandemic, especially in the second quarter of the year. However, there was a noticeable recovery in the second half of 2020.

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 2020 amounted to €3.4 (4.3) billion. Engines & Marine Systems and Turbomachinery generated more than two-thirds of the order volume in a persistently difficult market environment. Until October 2020, this included the business of Renk.

In the marine business, for example, orders for 30 dual fuel engines were placed in 2020 in a project for five ice-breaking LNG tankers. In the power plant business, orders were won for 35 engines of different types with an aggregate output of 350 MW. For turbomachinery, we received several orders for compressor trains and floating production and storage units, as well as two engineering orders for carbon capture and storage in the North Sea.

VOLKSWAGEN GROUP FINANCIAL SERVICES

The Financial Services Division covers 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. It also includes the contracts concluded by our international joint ventures in its figures.

The Financial Services Division's products and services were popular in fiscal year 2020, although the Covid-19 pandemic weighed on demand. At 8.6 (9.3) million, the number of new financing, leasing, service and insurance contracts worldwide was below the previous year's level. The ratio of leased or financed vehicles to Group deliveries (penetration rate) in the Financial Services Division's markets increased to 35.5 (34.5)% as the Group's deliveries fell at a higher rate than the number of contracts signed. As of December 31, 2020, the total number of contracts was 24.1 million, up 1.8% from year-end 2019. The number of contracts in the customer financing/leasing area climbed 1.2% to 11.9 million, while it increased by 2.4% to 12.2 million in the service/insurance area.

In Europe/Other Markets, the financial services business was impacted by the Covid-19 pandemic, particularly in the second quarter. The number of new contracts signed here in 2020 fell by 9.4% to 6.3 million. The penetration rate was 50.1 (48.5)%. At 17.6 million, the total number of contracts at the end of the reporting year slightly exceeded the 2019 figure of 17.5 million. The customer financing/leasing area accounted for 7.6 million of these contracts (–1.3%), while 10.0 million (+2.3%) related to the service/insurance area.

At 936 thousand, the number of new contracts signed in North America was 2.1% down on the previous year. The ratio of leased or financed vehicles to Group deliveries in North America was 67.0 (59.3)%. The number of contracts here on December 31, 2020 was 3.1 million, an increase of 2.2% compared with the previous year. The customer financing/leasing area accounted for 1.9 million contracts (+4.7%) and 1.2 million contracts (–1.7%) were owing to the service/insurance area.

The South America region was impacted by the Covid-19 pandemic in the second and third quarter in particular. The number of new contracts signed here in the reporting year fell to 318 (386) thousand. The penetration rate declined to 32.7 (38.4)%. The total number of contracts as of December 31, 2020 increased by 2.6% year-on-year to 721 thousand. The contracts mainly related to the customer financing/leasing area.

In Asia-Pacific, where the SARS-CoV-2 virus spread first, the number of new contracts signed in the past fiscal year rose by 5.3% to 1.1 million. The ratio of leased or financed vehicles to Group deliveries was 17.7 (15.5)%. The total number of contracts amounted to 2.6 million at the end of the reporting year, 9.1% more than at year-end 2019. The customer financing/leasing area grew by 9.6% to 1.9 million contracts, and the service/insurance area by 7.8% to 0.7 million contracts.

SALES TO THE DEALER ORGANIZATION

The Volkswagen Group's unit sales to the dealer organization decreased by 16.4% to 9,156,612 units (including the Chinese joint ventures) in the reporting year. This decline was essentially due to the negative effects of the Covid-19 pandemic. Ongoing uncertainty in connection with this and national measures introduced to contain the pandemic, such as mobility restrictions and store closures, were accompanied by a fall in customer demand. Above-average decreases in demand were recorded especially in Europe and in North and South America. Overall, the unit sales volumes fell by 16.2% outside Germany and unit sales decreased by 17.8% in Germany. At 12.1 (12.3)%, the proportion of the Group's total unit sales accounted for by Germany was lower than in 2019.

The Tiguan, Polo, Passat, Golf, Jetta, T-Cross and T-Roc from the Volkswagen Passenger Cars brand were our biggest sellers last year. The largest increases in unit sales were recorded by the e-up, T-Cross and Tharu from the Volkswagen Passenger Cars brand, the e-tron, A6 saloon and Q3 Sportback from Audi, the ŠKODA Rapid and the Bentley Flying Spur. The Porsche Taycan and Boxster also achieved a strong growth rate.

PRODUCTION

In fiscal year 2020, the Volkswagen Group's global production declined by 17.8% to a total of 8,900,154 vehicles due to the measures taken to contain the spread of the SARS-CoV-2 virus. The impact of national measures to contain the pandemic led to a disruption of supply chains and consequently to production stoppages within the Volkswagen Group. The production figures for the locations in China have seen a year-on-year recovery since the second quarter of 2020; in total, our Chinese joint ventures manufactured 9.5% fewer units than in the year before. By contrast, the delayed impact of the Covid-19 pandemic at the other locations worldwide caused declines in production in the first three quarters of 2020.

In Germany, production contracted by 22.7% to a total of 1,633,239 vehicles. The percentage of the Group's total production accounted for by Germany fell to 18.4 (19.5)%.

INVENTORIES

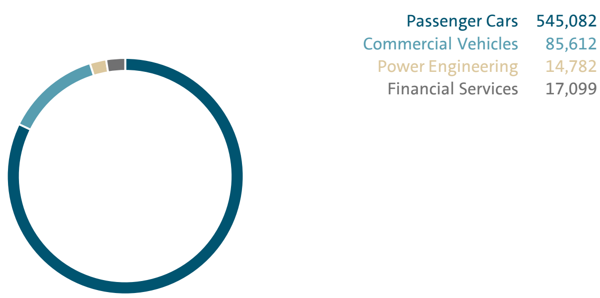
Global inventories at Group companies and in the dealer organization were significantly lower at the end of the reporting period than at year-end 2019.

EMPLOYEES

Including the Chinese joint ventures, the Volkswagen Group employed an average of 665,445 people in fiscal year 2020, a decrease of –0.3% year-on-year. In Germany, we employed 295,133 people on average; at 44.4 (44.1)%, their share of the total headcount was slightly above the level of the previous year.

The number of active employees in the Volkswagen Group fell by 1.3% to 633,364 as of December 31, 2020. In addition, 11,272 employees were in the passive phase of their partial retirement and 17,939 young people were in vocational traineeships. At the end of the reporting period, the Volkswagen Group had a total of 662,575 employees worldwide. Due to market conditions and employees leaving the Group not being replaced, this was slightly below the year- end 2019 figure. A total of 294,510 people were employed in Germany (–1.0%) and 368,065 outside Germany (–1.5%).

EMPLOYEES BY DIVISION/BUSINESS AREA
as of December 31, 2020



Shares and Bonds

Following the sharp fall in share prices triggered by the Covid-19 pandemic, trading in Volkswagen AG's ordinary and preferred shares recovered as the year went on, but fell short of the year-end 2019 figure. To refinance projects connected with e-mobility, green bonds were successfully placed on the market for the first time.

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

Following the sharp fall in share prices in the first quarter of 2020, which was triggered by the Covid-19 pandemic and its severe negative economic implications, international stock markets started to recover during the second quarter, with some even reporting a strong upward trend. At the end of 2020, many equity markets even recorded closing levels above the prior-year levels.

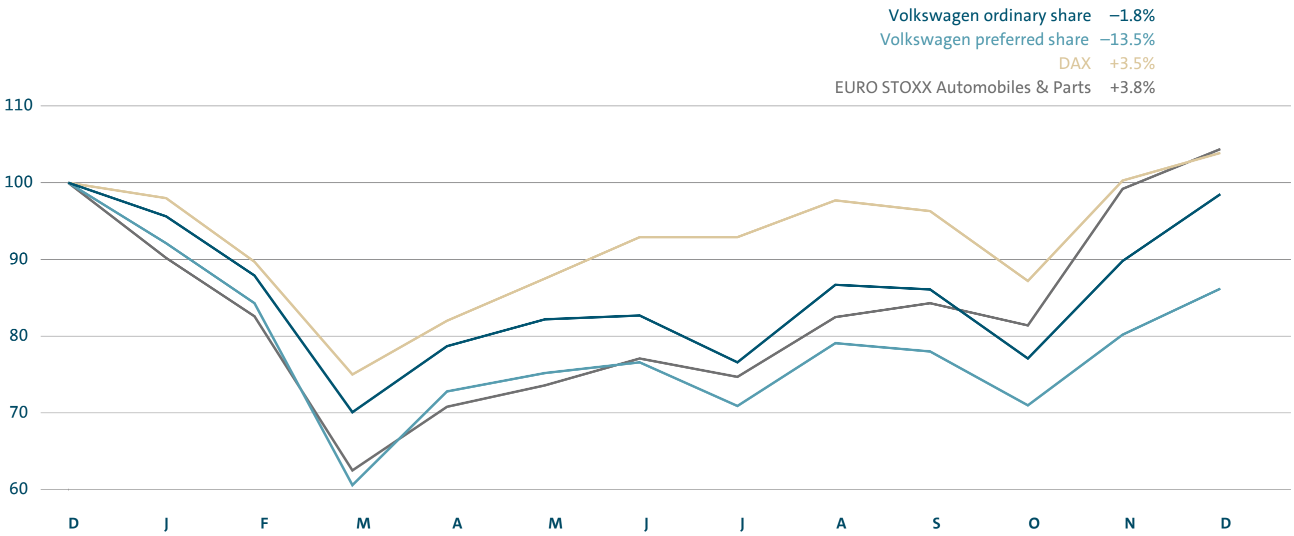
The DAX recorded an increase of 3.5% compared with the end of 2019. After an initially good start to the new financial year with a record high in February, share prices collapsed with the increasing spread of the SARS-CoV-2 virus. Starting from the low reached in March, the leading German stock index then again gained in value and recouped its losses in the fourth quarter. This development was fueled considerably by economic stimulus measures from central banks and governments throughout the world and the resulting hopes of a more rapid global economic recovery. The upward trend lost momentum in the second half of the year, with the impact of the second wave of infections weighing on share price performance, although hopes of a vaccine had a positive effect.

After the losses incurred in the first quarter of 2020, the prices of Volkswagen AG's preferred and ordinary shares also regained ground in the months that followed, but still fell short of the year-end 2019 figures by 14% and 2% respectively. Uncertainties surrounding the development of the global demand for automobiles caused by the Covid-19 pandemic placed shares under pressure. In addition, negative effects arose from the automotive industry's current period of transition that requires large-scale investment. Moreover, the impending US punitive tariffs on European vehicles, the uncertain outcome of the negotiations on the United Kingdom's exit from the EU Single Market including the form the future relationship takes, and the appreciation of the euro against the US dollar since May 2020 all had a negative impact. Positive momentum came from the incipient recovery of the Chinese automotive market and investors' hopes of improved economic activity in the wake of eased restrictions worldwide, government assistance measures, and hopes that the Covid-19 pandemic would subside.

VOLKSWAGEN SHARE KEY FIGURES AND MARKET INDICES FROM JANUARY 1 TO DECEMBER 31, 2020

		High	Low	Closing
Ordinary share	Price (€)	183.10	101.50	170.10
	Date	Jan. 10	Mar. 18	Dec. 30
Preferred share	Price (€)	185.52	87.20	152.42
	Date	Jan. 10	Mar. 18	Dec. 30
DAX	Price	13,790	8,442	13,719
	Date	Dec. 28	Mar. 18	Dec. 30
ESTX Auto & Parts	Price	509	255	505
	Date	Dec. 28	Mar. 18	Dec. 30

PRICE DEVELOPMENT FROM DECEMBER 2019 TO DECEMBER 2020
Index based on month-end prices: December 31, 2019 = 100



DIVIDEND POLICY

Our dividend policy matches our financial strategy. In the interests of all stakeholders, we aim for continuous dividend growth that allows our shareholders to participate appropriately in 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)” of this annual report. The Board of Management and Supervisory Board of Volkswagen AG are proposing a dividend of €4.80 per ordinary share and €4.86 per preferred share for fiscal year 2020. On this basis, the total dividend amounts to €2.4 (2.4) billion. The payout ratio is based on the Group’s earnings after tax attributable to Volkswagen AG shareholders. This amounts to 29.0% for the reporting period and stood at 18.1% in the previous year. In our Group strategy, we have set ourselves the goal of achieving a payout ratio of at least 30%.

DIVIDEND YIELD

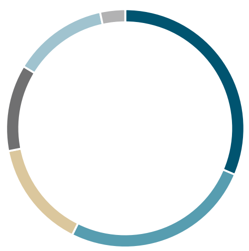
Based on the dividend proposal for the reporting period, the dividend yield on Volkswagen ordinary shares is 2.8 (2.8)%, measured by the closing price on the last trading day in 2020. The dividend yield on preferred shares is 3.2 (2.8)%.

EARNINGS PER SHARE

Basic earnings per ordinary share were €16.60 (26.60) in fiscal year 2020. Basic earnings per preferred share were €16.66 (26.66). 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 “Earnings per share” in the notes to the consolidated financial statements for the calculation of earnings per share.

SHAREHOLDER STRUCTURE AS OF DECEMBER 31, 2020
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	

SHAREHOLDER STRUCTURE AS OF DECEMBER 31, 2020

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, 2020 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 53.3% 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 9.7% 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.

VOLKSWAGEN SHARE KEY FIGURES

Dividend development		2020	2019	2018	2017	2016
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	€	4.80	4.80	4.80	3.90	2.00
per preferred share	€	4.86	4.86	4.86	3.96	2.06
Dividend paid[1]	€ million	2,419	2,419	2,419	1,967	1,015
on ordinary shares	€ million	1,416	1,416	1,416	1,151	590
on preferred shares	€ million	1,002	1,002	1,002	817	425

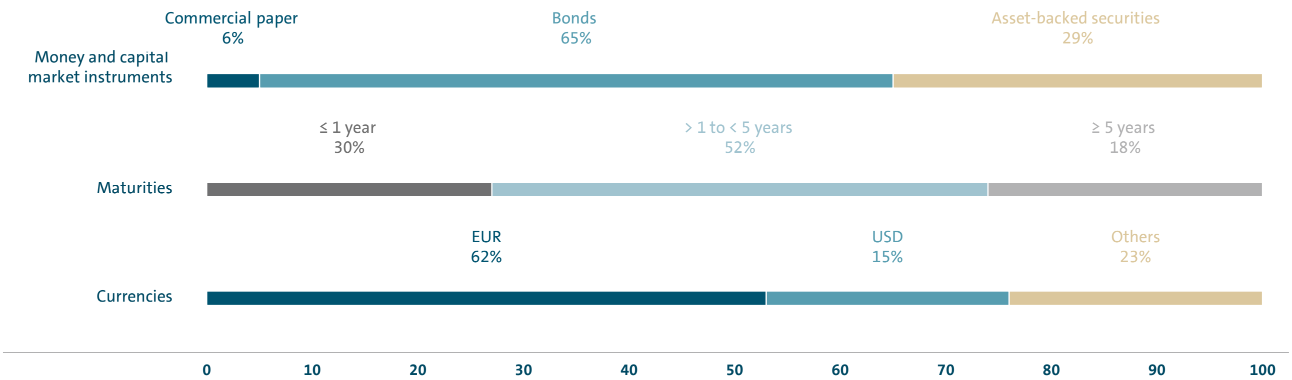
Share price development[2]		2020	2019	2018	2017	2016
Ordinary share						
Closing	€	170.10	173.25	139.10	168.70	136.75
Price performance	%	– 1.8	+ 24.6	– 17.5	+ 23.4	–3.9
Annual high	€	183.10	182.50	188.00	173.95	144.20
Annual low	€	101.50	135.60	131.10	128.70	108.95
Preferred share						
Closing	€	152.42	176.24	138.92	166.45	133.35
Price performance	%	– 13.5	+ 26.9	– 16.5	+ 24.8	–0.3
Annual high	€	185.52	184.24	188.50	178.10	138.80
Annual low	€	87.20	134.76	133.70	125.35	94.00
Beta factor[3]	factor	1.26	1.17	1.17	1.12	1.22
Market capitalization at Dec. 31	€ billion	81.6	87.5	69.7	84.1	67.9
Equity attributable to Volkswagen AG share-holders and hybrid capital investors at Dec. 31	€ billion	127.0	121.8	117.1	108.8	92.7
Ratio of market capitalization to equity	factor	0.64	0.72	0.60	0.77	0.73

Key figures per share		2020	2019	2018	2017	2016
Earnings per ordinary share[4]						
basic	€	16.60	26.60	23.57	22.28	10.24
diluted	€	16.60	26.60	23.57	22.28	10.24
Equity attributable to Volkswagen AG share-holders and hybrid capital investors at Dec. 31	€	253.44	242.93	233.63	217.13	184.90
Price/earnings ratio[5]						
Ordinary share	factor	10.2	6.5	5.9	7.5	13.4
Preferred share	factor	9.1	6.6	5.9	7.3	13.0
Dividend yield[6]						
Ordinary share	%	2.8	2.8	3.5	2.3	1.5
Preferred share	%	3.2	2.8	3.5	2.4	1.5

Stock exchange turnover[7]		2020	2019	2018	2017	2016
Turnover of Volkswagen ordinary shares	€ billion	3.1	3.3	4.3	3.5	3.3
	million shares	21.6	20.9	28.0	23.6	25.4
Turnover of Volkswagen preferred shares	€ billion	49.8	41.0	54.1	45.1	41.1
	million shares	361.2	266.0	346.6	312.3	347.0
Volkswagen share of total DAX turnover	%	4.7	4.6	5.4	5.4	5.0

1 Figures for the years 2016 to 2019 relate to dividends paid in the following year. For 2020, the figures relate to the proposed dividend.
2 Xetra prices.
3 For the calculation see chapter "Results of Operations, Financial Position and Net Assets" of this annual report.
4 For the calculation see "Earnings per share" in the notes to the consolidated financial statements. 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, 2020



REFINANCING

The Volkswagen Group used a variety of instruments and markets for its refinancing activities in 2020.

In September 2020, the Automotive Division of the Volkswagen Group successfully placed its first green bonds on the market, with a principal amount of €2.0 billion and terms of eight and twelve years. The green bonds are based on the Green Finance Framework presented in March 2020 for sustainability-oriented financial instruments. The resources will be allocated specifically to refinancing the Modular Electric Drive Toolkit (MEB) and the new completely battery-electric vehicles, the ID.3 and ID.4.

We strengthened net liquidity through the placement of unsecured subordinated hybrid notes with an aggregate principal amount of €3.0 billion. The notes are perpetual. One note with a principal amount of €1.5 billion can only be canceled by the issuer after five years, while the other with a principal amount of €1.5 billion cannot be canceled until nine years have elapsed. The transactions will be partly used to refinance the hybrid note with a principal amount of €1.25 billion that was issued in 2014 and canceled as of March 24, 2021.

In the US capital market, bonds with an aggregate principal amount of USD 4.0 billion each were placed with investors in May and November 2020. Notes with a volume of CAD 1.0 billion were issued in the Canadian refinancing market. In addition, private placements were placed under the automotive issuance program for the first time since 2015.

Official euro benchmark bonds with an aggregate volume of €2.15 billion were issued for the Financial Services Division. In addition to this, private placements were issued in various currencies and regions.

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 approximately €3.2 billion were publicly placed in Europe. In addition, ABS transactions were issued in the USA, China and Japan.

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

The proportion of fixed-rate instruments in the past year was more than twice 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, 2020 and illustrates the financial flexibility of the Volkswagen Group:

Programs	Authorized volume € billion	Amount utilized on Dec. 31, 2020 € billion
Commercial paper	43.8	8.2
Bonds	164.3	94.7
of which hybrid issues		15.5
Asset-backed securities	92.0	41.1

RATINGS

	VOLKSWAGEN AG			VOLKSWAGEN FINANCIAL SERVICES AG			VOLKSWAGEN BANK GMBH		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
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	negative	stable	stable	negative	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	A1
outlook	negative	stable	stable	negative	stable	stable	negative	stable	stable

Volkswagen AG's syndicated credit line of €10.0 billion agreed in December 2019 was drawn down during 2020. Furthermore, the syndicated credit line was extended by one year by making use of the first extension option. There is an option to extend the term by a further year until 2026 at the latest, subject to the banks' approval. This credit facility was unused as of the end of 2020.

Of the syndicated credit lines with a total of €12.7 billion at other Group companies, €1.3 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 €4.8 billion, of which €0.6 billion was drawn down.

RATINGS

In March 2020, rating agency 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. Due to risks associated with the duration of the Covid-19 pandemic and their effects on the global automotive industry, the outlook for Volkswagen AG and Volkswagen Financial Services AG was downgraded from "stable" to "negative". The outlook for Volkswagen Bank GmbH was left at "negative".

In March, Moody's Investors Service had announced that the ratings would be reviewed due to possible effects of the Covid-19 pandemic, but in June subsequently left the 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 downgraded from "stable" to "negative".

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 in relation to the Group strategy TOGETHER 2025⁺, 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 2020, 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 Covid-19 pandemic had a strong negative impact on business at the Volkswagen Group in the reporting year, and this led to lower sales revenue and operating profit. Despite further charges and cash outflows in connection with the diesel issue, net liquidity in the Automotive Division was above the 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.

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 Financial Services Division corresponds to the Financial Services segment.

SPECIAL ITEMS

Special items consist of certain items in the financial statements whose separate disclosure the Board of Management believes can enable a better assessment of our economic performance.

In fiscal year 2020, negative special items in connection with the diesel issue amounting to €–0.9 (–2.3) billion affected operating profit in the Passenger Cars Business Area. These items resulted mainly from legal risks.

CONTRIBUTION OF AUTONOMOUS INTELLIGENT DRIVING

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 involves the provision of financial resources totaling USD 1.0 billion, spread over several years, and the contribution by Volkswagen of its consolidated subsidiary Autonomous Intelligent Driving (AID).

KEY FIGURES FOR 2020 BY SEGMENT

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue	175,984	22,156	3,640	40,778	242,557	−19,673	222,884
Segment profit or loss (operating result)	8,381	−79	−482	3,012	10,832	−1,157	9,675
as a percentage of sales revenue	4.8	−0.4	−13.2	7.4			4.3
Capex, including capitalized development costs	15,677	1,309	147	208	17,340	405	17,745

Furthermore, Volkswagen acquired 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, was executed as of June 1, 2020. After proportional profit elimination, the contribution of AID to Argo AI at fair value resulted in noncash income of €0.8 billion, which was recognized in the other operating result. Argo AI will be accounted for as a joint venture and included in the consolidated financial statements using the equity method.

SQUEEZE-OUT UNDER THE GERMAN STOCK CORPORATION ACT AGREED AT AUDI AG

On July 31, 2020, the Annual General Meeting of AUDI AG approved the squeeze-out under stock corporation law at AUDI AG and thus the transfer of all outstanding Audi shares to Volkswagen AG. This resolution took effect upon its entry in the commercial register on November 16, 2020. The resulting cash outflow of €0.2 billion is presented in the "capital transactions with noncontrolling interests" item.

SALE OF INTEREST IN RENK AG

On October 6, 2020, the Volkswagen Group completed the sale of its 76% interest in Renk AG following the required regulatory approvals. The sale price was €0.5 billion. The transaction generated operating income of €0.1 billion, which is reported in other operating income. It also resulted in an increase in net liquidity of €0.4 billion.

ACQUISITION OF ALL SHARES IN NAVISTAR

In November 2020, TRATON SE and Navistar International Corporation (Navistar), a leading US truck manufacturer, announced the signing of a binding merger agreement. Under this agreement, TRATON will acquire all outstanding shares in Navistar not already owned by TRATON in return for cash payment at a price of USD 44.50 per share (total: approximately USD 3.7 billion). As of December 31, 2020, TRATON already held a 16.7% interest in Navistar. The completion of the transaction, through which TRATON will become Navistar's sole owner, is intended for mid-2021. Since the merger agreement contains conditions precedent, the payment of the purchase price cannot be recorded as a liability in the balance sheet at present and is instead reported under other financial obligations.

CAPITAL INCREASE AT QUANTUMSCAPE CORPORATION

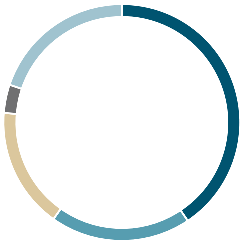
In fiscal year 2020, the Volkswagen Group took part in a capital increase at QuantumScape Corporation, a US-based company that develops solid-state batteries, entering into forward purchase agreements for new shares. The capital contribution comprises two tranches of USD 100 million each. The first tranche was already paid in December 2020.

INCOME STATEMENT BY DIVISION

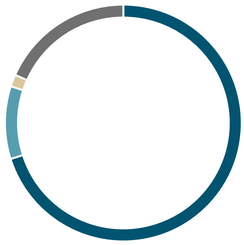
	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
€ million	2020	2019	2020	2019	2020	2019
Sales revenue	**222,884**	**252,632**	**182,106**	**212,473**	**40,778**	**40,160**
Cost of sales	−183,937	−203,490	−150,507	−170,477	−33,430	−33,014
Gross profit	**38,947**	**49,142**	**31,599**	**41,996**	**7,348**	**7,146**
Distribution expenses	−18,407	−20,978	−17,267	−19,712	−1,140	−1,266
Administrative expenses	−9,399	−9,767	−7,147	−7,522	−2,252	−2,245
Net other operating result	−1,466	−1,437	−522	−1,014	−944	−423
Operating result	**9,675**	**16,960**	**6,664**	**13,748**	**3,012**	**3,212**
Operating return on sales (%)	**4.3**	**6.7**	**3.7**	**6.5**	**7.4**	**8.0**
Share of profits and losses of equity-accounted investments	2,756	3,349	2,697	3,278	60	71
Interest result and Other financial result	−765	−1,953	−469	−1,889	−296	−64
Financial result	**1,991**	**1,396**	**2,227**	**1,389**	**−236**	**7**
Earnings before tax	**11,667**	**18,356**	**8,891**	**15,137**	**2,776**	**3,219**
Income tax expense	−2,843	−4,326	−2,228	−3,491	−615	−836
Earnings after tax	**8,824**	**14,029**	**6,663**	**11,646**	**2,161**	**2,383**
Noncontrolling interests	−43	143	−98	79	55	64
Earnings attributable to Volkswagen AG hybrid capital investors	533	540	533	540	–	–
Earnings attributable to Volkswagen AG shareholders	**8,334**	**13,346**	**6,227**	**11,027**	**2,106**	**2,319**

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

SHARE OF SALES REVENUE BY MARKET 2020
in percent



SHARE OF SALES REVENUE BY DIVISION/BUSINESS AREA 2020
in percent



Payment of the second tranche is subject to a technical milestone being reached. Since there has meanwhile been a merger with a special purpose acquisition company (SPAC), which resulted in a listing on the New York Stock Exchange, the forward purchases are measured with reference to the share price of QuantumScape Corporation until the contribution has been made and the new shares have been issued. This measurement and realization resulted in noncash income of €1.4 billion in fiscal year 2020, which are reported in the other financial result.

RESULTS OF OPERATIONS

Results of operations of the Group

In fiscal year 2020, the Volkswagen Group generated sales revenue of €222.9 billion. The year-on-year decrease of 11.8% was mainly attributable to falling volumes as a result of the Covid-19 pandemic, as well as the negative effects of changes in exchange rates. Improvements in the mix and in price positioning had a positive impact. 80.8 (80.6)% of the Volkswagen Group's sales revenue originated abroad.

Gross profit amounted to €38.9 billion, €10.2 billion lower than in 2019. This figure also included risk provisions for any non-compliance with legal emissions limits. Positive special items amounting to €0.1 (0.3) billion recognized here in both periods due to the reversal of provisions for technical measures in connection with the diesel issue had an offsetting effect. The gross margin stood at 17.5 (19.5)%; excluding special items, it amounted to 17.4 (19.3)%.

The persistent negative impact of the spread of the SARS-CoV-2 virus was the main factor driving the €8.7 billion decline in the Volkswagen Group's operating profit before special items to €10.6 billion in the reporting year. The operating return on sales before special items fell to 4.8 (7.6)%. In addition to lower unit sales due to the pandemic-related decline in customer demand, turbulence in the capital markets meant that the measurement of receivables and liabilities denominated in foreign currencies had a negative effect. One-off expenses for restructuring measures of €0.5 billion also contributed to the reduction in profit. Positive factors were lower costs. The contribution of the consolidated subsidiary Autonomous Intelligent Driving (AID) to Argo AI, a company that is working on the development of a system for autonomous driving, led to income of €0.8 billion. This figure also includes the income from the sale of Renk. Special items in connection with the diesel issue weighed on operating profit, reducing this item by €–0.9 (–2.3) billion. The Volkswagen Group's operating profit was €9.7 (17.0) billion, while the operating return on sales fell to 4.3 (6.7)%.

The financial result increased by €0.6 billion year-on-year to €2.0 billion. The interest expenses included in the financial result were down, mainly for measurement-related reasons caused by a change in discount rates applied in the measurement of liabilities, while changes in share prices, also as a response to the Covid-19 pandemic, weighed on net income from securities and funds. The share of the result of equity-accounted investments was lower than in the previous year. The decline was primarily due to lower profit generated by the Chinese joint ventures, which were affected by the spread of the SARS-CoV-2 virus especially in the first quarter of 2020. The other financial result includes the measurement and realization of forward purchase agreements for new shares in QuantumScape Corporation, which led to noncash income of €1.4 billion in fiscal year 2020.

The Volkswagen Group's profit before tax amounted to €11.7 (18.4) billion. The return on sales before tax decreased to 5.2 (7.3)%. Income taxes resulted in an expense of

€2.8 (4.3) billion in fiscal year 2020, which in turn led to a tax rate of 24.4 (23.6)%. Profit after tax decreased by €5.2 billion to €8.8 billion.

Results of operations in the Automotive Division

In the period from January to December 2020, the Automotive Division recorded sales revenue of €182.1 billion, down 14.3% on the prior-year period. Profit was weighed down especially by the decline in volumes resulting from the Covid-19 pandemic, while changes in exchange rates also had a negative effect. In contrast, mix effects and improved price positioning made a positive contribution. Since our Chinese joint ventures are accounted for using the equity method, the Group's business performance in the Chinese passenger car market is primarily reflected in the Group's sales revenue only through deliveries of vehicles and vehicle parts.

Lower volumes led to a decrease in cost of sales, although its ratio to sales revenue rose year-on-year. Positive special items recognized here in both periods due to the reversal of provisions for technical measures in connection with the diesel issue had a favorable effect. Higher depreciation and amortization charges due to the large capex volume of previous years and provisions for any non-compliance with legal emissions limits were set against lower research and development costs recognized in profit or loss. Despite the reduction in their absolute amount, total research and development costs as a percentage of the Automotive Division's sales revenue (research and development ratio or R&D ratio) increased to 7.6 (6.7)% in fiscal year 2020 compared to the prior-year period, due to the decline in sales revenue. 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.

Factors such as exchange rate effects led to a year-on-year decline in both distribution and administrative expenses in the reporting period, although their ratio to sales revenue rose. The other operating result amounted to €–0.5 (–1.0) billion. The main items to be recognized here were negative special items in connection with the diesel issue in an amount of €–1.0 (–2.6) billion. Other adverse factors were the negative effects of the measurement of receivables and liabilities denominated in foreign currencies and one-off expenses for restructuring measures. The income from the contribution of AID to the Argo AI joint venture and from the sale of the shares in Renk was also included in this item. In the prior-year period, the reversal of impairment losses following the remeasurement of development costs had a positive effect.

The Automotive Division's operating profit was €6.7 (13.7) billion in 2020. Its operating return on sales fell to 3.7 (6.5)%. Compared with the previous year, lower unit sales caused by the Covid-19 pandemic had a negative impact, as did the measurement of receivables and liabilities denominated in foreign currencies. One-off expenses for restructuring measures of €0.5 billion also contributed to the reduction in profit. Positive factors were lower costs as well as the income from the contribution of AID and from the sale of Renk; negative special items declined compared with the previous year, in which the reversal of impairment losses following the remeasurement of development costs had a positive impact. The operating profit before special items decreased by €8.5 billion to €7.6 billion, while the operating return on sales before special items went down to 4.2 (7.6)%.

Our operating profit largely benefits from the business performance of our Chinese joint ventures only through deliveries of vehicles and vehicle parts and through license income, as the joint ventures are accounted for using the equity method and therefore included in the financial result.

RESULTS OF OPERATIONS IN THE PASSENGER CARS BUSINESS AREA

€ million	2020	2019
Sales revenue	156,311	182,031
Operating result	7,224	12,188
Operating return on sales (%)	4.6	6.7

The Passenger Cars Business Area reported sales revenue of €156.3 billion in fiscal year 2020, 14.1% less than in the previous year. The year-on-year decrease was mainly attributable to falling volumes as a result of the Covid-19 pandemic. Moreover, changes in exchange rates had a negative effect, while the contribution of mix effects and better price positioning was positive. The Passenger Cars Business Area's operating profit was down €5.0 billion to €7.2 billion. The spread of the SARS-CoV-2 virus led to a drop in vehicle sales and caused the measurement of receivables and liabilities denominated in foreign currencies to have a negative effect. One-off expenses for restructuring measures also weighed on operating profit. Lower costs and the income from the contribution of AID led to higher profit. Special items recognized in connection with the diesel issue in an amount of €–0.9 (–2.3) billion were lower than in fiscal year 2019. The prior-year figure had also included the reversal of impairment losses following the remeasurement of development costs. The operating return on sales decreased to 4.6 (6.7)%.

RESULTS OF OPERATIONS IN THE COMMERCIAL VEHICLES BUSINESS AREA

€ million	2020	2019
Sales revenue	22,156	26,444
Operating result	–79	1,653
Operating return on sales (%)	–0.4	6.3

In the period from January to December 2020, the Commercial Vehicles Business Area recorded sales revenue of €22.2 billion; this was a significant year-on-year drop of 16.2%, due primarily to falling volumes as a result of the Covid-19 pandemic. Again due mainly to the pandemic-related decline in customer demand, as well as exchange rate-related factors, the Commercial Vehicles Business Area's operating result decreased by €1.7 billion to €–0.1 billion year-on-year. Improvements in the mix, in price positioning and in fixed costs had a beneficial impact. The operating return on sales fell to –0.4 (6.3)%.

RESULTS OF OPERATIONS IN THE POWER ENGINEERING BUSINESS AREA

€ million	2020	2019
Sales revenue	3,640	3,997
Operating result	–482	–93
Operating return on sales (%)	–13.2	–2.3

Following the sale of Renk as of October 6, 2020, the Power Engineering Business Area now comprises MAN Energy Solutions and the purchase price allocation made to the segment. The result of Renk's operating activities for 2020 is therefore included in the Power Engineering Business Area only for the first nine months.

The Power Engineering Business Area generated sales revenue of €3.6 (4.0) billion in the reporting year. The operating loss amounted to €–0.5 (–0.1) billion. The main reasons were falling volumes and in particular one-off expenses for restructuring measures of €0.4 billion. Cost reductions and improvements in the mix had a positive effect. The operating return on sales was at –13.2 (–2.3)%.

Results of operations in the Financial Services Division

The Financial Services Division reported sales revenue of €40.8 billion in fiscal year 2020, 1.5% more than in the previous year. Due to the Financial Services Division's business model, the negative effect of the Covid-19 pandemic on sales revenue is less severe here than in the Automotive Division.

Cost of sales increased by 1.3% to €33.4 billion. When taken together, distribution expenses, administrative expenses and the other operating result were up; their ratio to sales revenue also increased overall. The other operating result was weighed down particularly by higher risk costs.

The Financial Services Division's operating profit was 6.2% lower, at €3.0 billion, primarily for pandemic-related reasons. The operating return on sales amounted to 7.4 (8.0)%. The return on equity before tax of 8.8 (10.8)% was down on the prior-year figure.

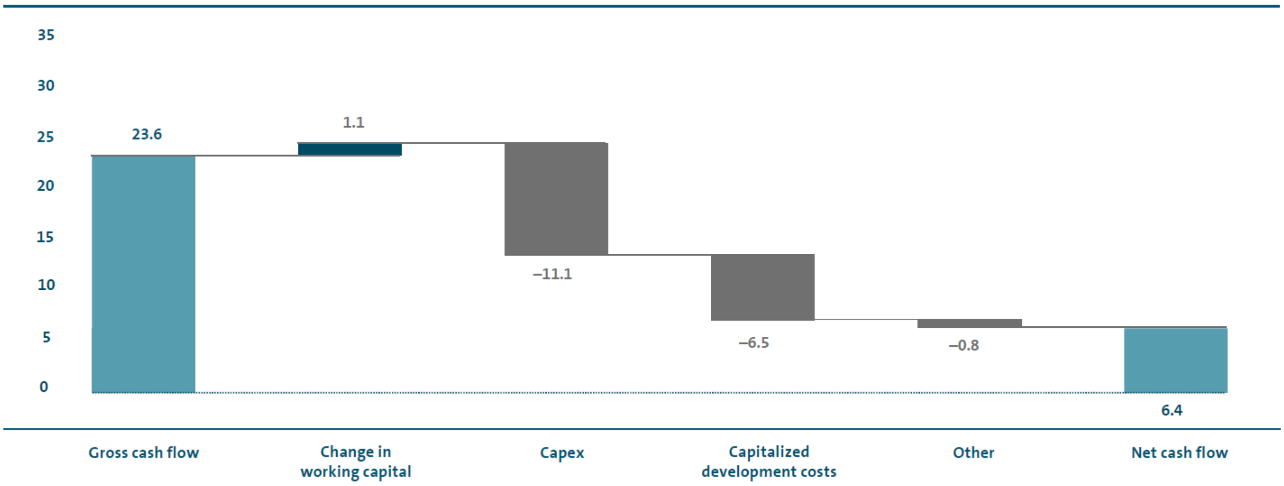
Principles and goals of financial management

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 MAN Energy Solutions, Porsche Holding Salzburg and TRATON 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 overriding aim of currency, interest rate and commodity risk management is to hedge, using derivative financial instruments and commodity forwards, the prices on which investment, production and sales plans are based when making planning assumptions 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 the so-called 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

AUTOMOTIVE DIVISION NET CASH FLOW 2020

€ billion



of financial management, please refer to the chapter on "Financial risk management and financial instruments" in the notes to the consolidated financial statements.

FINANCIAL POSITION

Financial position of the Group

The Volkswagen Group's gross cash flow decreased to €35.0 (39.9) billion in the reporting year, mainly due to the pandemic-related decline in profit. The change in working capital amounted to €–10.1 (–22.0) billion. The effects of the Covid-19 pandemic included a reduction in receivables, including in the financial services business, lower inventories because of downscaled production, a decline in other provisions and a smaller rise in liabilities. Cash outflows attributable to the diesel issue were higher than in fiscal year 2019. Cash flows from operating activities improved significantly year-on-year, to €24.9 (18.0) billion.

The Volkswagen Group's investing activities attributable to operating activities amounted to €18.4 (20.1) billion in fiscal year 2020; this was down on the previous year, mainly due to lower capex.

Financing activities accounted for total cash inflows of €7.6 billion in the reporting year, primarily to boost gross liquidity; a cash outflow of €–0.9 billion had been recorded in the previous year. Financing activities primarily include the issuance and redemption of bonds and changes in other financial liabilities. In June 2020, hybrid notes totaling €3.0 billion were placed successfully. In September 2020, Volkswagen issued green bonds in an amount of €2.0 billion. The dividend payment to the shareholders of Volkswagen AG led to a cash outflow in October 2020 in the same amount as in the previous year. The figure for fiscal year 2019 had included the acquisition of MAN shares tendered as a result of the termination of the control and profit and loss transfer agreement, and the cash inflow resulting from the IPO of TRATON.

At the end of the reporting period, the Volkswagen Group's cash and cash equivalents reported in the cash flow statement amounted to €33.4 (24.3) billion.

On December 31, 2020, the Volkswagen Group's net liquidity stood at €–137.4 billion, compared with €–148.0 billion at the end of 2019.

Financial position of the Automotive Division

In the period from January to December 2020, the Automotive Division's gross cash flow was €23.6 billion, down €5.5 billion on the previous year due to earnings-related factors. Working capital, which underwent very different changes in the individual quarters, amounted to €1.1 (1.6) billion. The effects of the Covid-19 pandemic included lower inventories because of downscaled production, a reduction in receivables as well as lower liabilities and a decline in other provisions. Cash outflows attributable to the diesel issue were higher than a year earlier. Consequently, cash flows from operating activities were down €6.0 billion to €24.7 billion.

Investing activities attributable to operating activities decreased by €18.4 billion to €1.5 billion. Investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs (capex) included in this figure declined by €2.9 billion to €11.1 billion. Despite a drop in sales revenue as a result of the pandemic, the ratio of capex to sales revenue was 6.1 (6.6)% down on the prior-year figure due to a significant fall in

CASH FLOW STATEMENT BY DIVISION

€ million	VOLKSWAGEN GROUP 2020	VOLKSWAGEN GROUP 2019	AUTOMOTIVE[1] 2020	AUTOMOTIVE[1] 2019	FINANCIAL SERVICES 2020	FINANCIAL SERVICES 2019
Cash and cash equivalents at beginning of period	**24,329**	**28,113**	**18,098**	**23,354**	**6,231**	**4,759**
Earnings before tax	11,667	18,356	8,891	15,137	2,776	3,219
Income taxes paid	−2,646	−2,914	−2,009	−2,187	−637	−726
Depreciation and amortization expense[2]	27,069	24,439	17,798	15,958	9,272	8,480
Change in pension provisions	806	342	767	320	39	23
Share of the result of equity-accounted investments	536	460	584	520	−48	−59
Other noncash income/expense and reclassifications[3]	−2,461	−734	−2,388	−651	−73	−83
Gross cash flow	**34,971**	**39,950**	**23,642**	**29,097**	**11,329**	**10,853**
Change in working capital	**−10,070**	**−21,966**	**1,079**	**1,636**	**−11,148**	**−23,603**
Change in inventories	1,334	−674	1,406	−345	−72	−329
Change in receivables	712	−893	45	−1,176	668	283
Change in liabilities	540	2,297	−138	1,564	678	733
Change in other provisions	−2	1,304	−214	1,400	211	−96
Change in lease assets (excluding depreciation)	−12,914	−13,204	52	−110	−12,966	−13,095
Change in financial services receivables	260	−10,796	−72	303	332	−11,099
Cash flows from operating activities	**24,901**	**17,983**	**24,721**	**30,733**	**180**	**−12,750**
Cash flows from investing activities attributable to operating activities	**−18,372**	**−20,076**	**−18,364**	**−19,898**	**−8**	**−178**
of which: investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs	−11,273	−14,230	−11,065	−14,007	−208	−223
capitalized development costs	−6,473	−5,171	−6,473	−5,171	–	–
acquisition and disposal of equity investments	−1,037	−913	−1,188	−716	151	−196
Net cash flow[4]	***6,529***	***−2,093***	***6,357***	***10,835***	***172***	***−12,928***
Change in investments in securities, loans and time deposits	−4,319	−1,069	−3,015	−5,018	−1,304	3,949
Cash flows from investing activities	**−22,690**	**−21,146**	**−21,379**	**−24,916**	**−1,312**	**3,771**
Cash flows from financing activities	**7,637**	**−865**	**2,938**	**−11,278**	**4,699**	**10,413**
of which: capital transactions with noncontrolling interests	−238	1,368	−238	1,368	–	–
capital contributions/capital redemptions	2,984	–	2,952	−970	33	970
MAN noncontrolling interest shareholders: compensation payments and acquisition of shares tendered	2	−1,109	2	−1,109	–	–
Effect of exchange rate changes on cash and cash equivalents	−745	243	−619	205	−125	38
Change of loss allowance within cash & cash equivalents	−0	1	−0	1	0	−0
Net change in cash and cash equivalents	**9,103**	**−3,784**	**5,660**	**−5,256**	**3,443**	**1,472**
Cash and cash equivalents at Dec. 31[5]	**33,432**	**24,329**	**23,758**	**18,098**	**9,674**	**6,231**
Securities, loans and time deposits	32,645	29,099	15,868	13,458	16,777	15,641
Gross liquidity	**66,078**	**53,428**	**39,626**	**31,556**	**26,451**	**21,872**
Total third-party borrowings	−203,457	−201,468	−12,830	−10,280	−190,627	−191,189
Net liquidity[6]	**−137,380**	**−148,040**	**26,796**	**21,276**	**−164,176**	**−169,316**

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).

capex. Capex was primarily allocated to our production facilities and to models that we launched in 2020 or are planning to launch in 2021, or for which production is set to start. These are primarily vehicles in the ID. family and in the Golf, Audi Q4 e-tron, Audi Q6 e-tron, Audi e-tron GT, ŠKODA Enyaq model series, the new generation of the ŠKODA Fabia, the SEAT Leon family, as well as the CUPRA Formentor, the Porsche Taycan, the Porsche Macan and Bentley's Bentayga. Other investment priorities included the ecological focus of our model range, product electrification and digitalization, and our modular toolkits. The increase in capitalized development costs to €6.5 (5.2) billion is primarily due to product impairment tests, which have had to be performed at brand level since the end of 2019. The "acquisition and disposal of equity investments" item went up by €0.5 billion to €1.2 billion as a result of strategic investments in a number of companies, in particular the Argo AI joint venture; this was offset by the cash provided by the sale of Renk.

The Automotive Division's net cash flow fell by €4.5 billion to €6.4 billion in the reporting period.

Financing activities relate to the issuance and redemption of bonds and changes in other financial liabilities; the total cash inflow in this item was €2.9 billion in fiscal year 2020. This helped boost gross liquidity and resulted in higher liabilities to banks. The hybrid notes with a principal amount of €3.0 billion, which were successfully issued via Volkswagen International Finance N.V. in June 2020, led to cash inflows. The first one is a €1.5 billion note that has a coupon of 3.5% and can first be called after five years, and the other is a €1.5 billion note that has a coupon of 3.875% and can first be called after nine years. Both notes have perpetual maturities and increase equity, net of transaction and other costs. An amount of €3.0 billion of the hybrid notes was eligible to be classified as a capital contribution and led to a rise in net liquidity. In addition, the green bonds of €2.0 billion issued in September 2020 are included in financing activities. A dividend of €2.4 (2.4) billion was distributed to the shareholders of Volkswagen AG in October 2020. The "capital transactions with noncontrolling interests" item includes the cash outflow of €0.2 billion for the transfer of all outstanding Audi shares to Volkswagen AG. In the previous year, financing activities accounted for cash outflows of €11.3 billion. This figure also included the acquisition of MAN shares tendered as a result of the termination of the control and profit and loss transfer agreement with MAN SE, which was set against the cash inflow resulting from the IPO of TRATON.

At the end of the reporting year, the Automotive Division's net liquidity was up €5.5 billion, at €26.8 billion. Driven by the increase in net liquidity and the decrease in sales revenue, the Automotive Division's net liquidity accounted for 12.0 (8.4)% of consolidated sales revenue in the reporting period.

FINANCIAL POSITION IN THE PASSENGER CARS BUSINESS AREA

€ million	2020	2019
Gross cash flow	21,823	25,474
Change in working capital	331	3,053
Cash flows from operating activities	22,154	28,528
Cash flows from investing activities attributable to operating activities	−16,762	−20,254
Net cash flow	5,392	8,273

Due to the pandemic-related decline in profit, the gross cash flow generated by the Passenger Cars Business Area was €21.8 billion in fiscal year 2020, having experienced a decline of €3.7 billion compared with the previous year. The change in working capital amounted to €0.3 (3.1) billion. The effects of the Covid-19 pandemic included lower inventories, a reduction in receivables, lower liabilities and a decline in other provisions. The cash outflows attributable to the diesel issue were higher in the reporting period than a year earlier. Cash flows from operating activities were down by €6.4 billion to €22.2 billion. Investing activities attributable to operating activities in the Passenger Cars Business Area decreased to €16.8 (20.3) billion. Capex was lower, while capitalized development costs increased. The "acquisition and disposal of equity investments" item went up due to strategic investments in a number of companies, in particular the joint venture Argo AI. The Passenger Cars Business Area's net cash flow declined by €2.9 billion to €5.4 billion.

FINANCIAL POSITION IN THE COMMERCIAL VEHICLES BUSINESS AREA

€ million	2020	2019
Gross cash flow	1,845	3,357
Change in working capital	159	−1,249
Cash flows from operating activities	2,004	2,108
Cash flows from investing activities attributable to operating activities	−1,328	603
Net cash flow	676	2,711

In the period from January to December 2020, the Commercial Vehicles Business Area's gross cash flow went down by €1.5 billion to €1.8 billion due to earnings-related factors driven by the Covid-19 pandemic. The change in working capital amounted to €0.2 (−1.2) billion. Cash flows from operating activities declined by €0.1 billion to €2.0 billion. Investing activities attributable to operating activities were up on the previous year, in which the intragroup sale of the power engineering business had led to a cash inflow. Net cash flow dropped to €0.7 (2.7) billion.

FINANCIAL POSITION IN THE POWER ENGINEERING BUSINESS AREA

€ million	2020	2019
Gross cash flow	−25	265
Change in working capital	588	−168
Cash flows from operating activities	562	98
Cash flows from investing activities attributable to operating activities	−274	−247
Net cash flow	289	−150

In the reporting year, gross cash flow in the Power Engineering Business Area declined to €0.0 (0.3) billion year-on-year, primarily as a result of a deterioration in profit. Due to a reduction in receivables and restructuring expenses that have not yet led to cash outflows, the change in working capital amounted to €0.6 (−0.2) billion. Cash flows from operating activities rose by €0.5 billion year-on-year, to €0.6 billion. Investing activities attributable to operating activities increased by 10.6% to €0.3 billion. Net cash flow improved by €0.4 billion to €0.3 billion.

Financial position in the Financial Services Division

In the period from January to December 2020, the Financial Services Division generated gross cash flow of €11.3 (10.9) billion. Given a decrease in funds tied up in working capital caused by the lower business volume in response to the decline in demand following the spread of the SARS-CoV-2 virus, the change in working capital amounted to €−11.1 (−23.6) billion. Cash flows from operating activities improved by €12.9 billion to €0.2 billion.

At €0.0 (0.2) billion, investing activities attributable to operating activities were below the prior-year figure.

The Financial Services Division's financing activities relate primarily to the issuance and redemption of bonds and other financial liabilities; there was a total cash inflow of €4.7 billion to refinance the business volume in the reporting period, compared with €10.4 billion in the previous year.

At the end of the reporting period, the Financial Services Division's negative net liquidity, which is common in the industry, stood at €−164.2 billion, compared with €−169.3 billion on December 31, 2019.

NET ASSETS

Consolidated balance sheet structure

At the end of fiscal year 2020, the Volkswagen Group had total assets of €497.1 billion, 1.9% more than at the end of the prior year. The rise is mostly attributable to the boost in gross liquidity and the successful issue of hybrid notes in the second quarter of 2020. It was offset by exchange rate effects. A chart showing the structure of the consolidated balance sheet as of the reporting date can be found in this chapter. The Volkswagen Group's equity increased by €5.1 billion to €128.8 billion. The equity ratio was 25.9 (25.3)%.

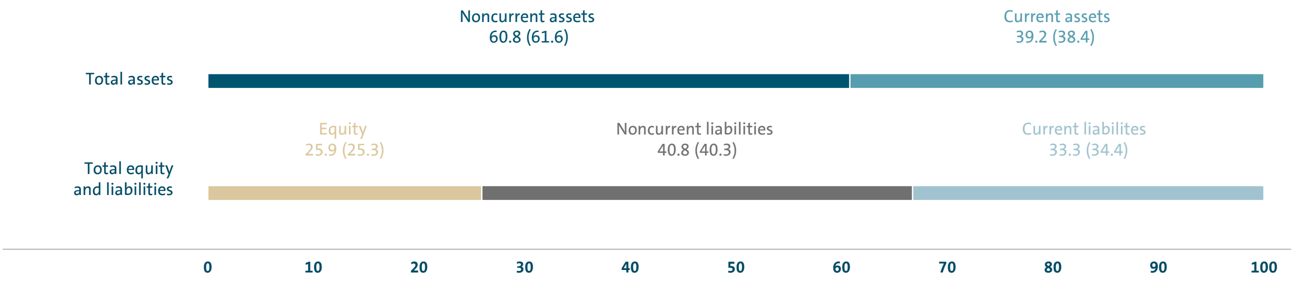
As of the end of fiscal year 2020, the Group had off-balance-sheet commitments in the form of contingent liabilities in the amount of €8.6 (8.5) billion and in the form of financial guarantees in the amount of €0.4 (0.4) billion. In addition, there were other financial obligations of €22.0 billion, which exceeded the prior-year figure of €20.0 billion. The contingent liabilities relate primarily to legal risks in connection with the diesel issue, as well as to 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. They also include commitments to invest 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. The other financial obligations include an amount of €0.9 billion for this purpose. In addition, this item reflects the payment of the purchase price for the acquisition of all of Navistar's outstanding shares totaling around USD 3.7 billion, as the merger agreement between TRATON and Navistar contains conditions precedent and the purchase price payment cannot be recorded as a liability in the balance sheet at present.

CONSOLIDATED BALANCE SHEET BY DIVISION AS OF DECEMBER 31

	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
€ million	2020	2019	2020	2019	2020	2019
Assets						
Noncurrent assets	**302,170**	**300,608**	**156,861**	**153,736**	**145,309**	**146,873**
Intangible assets	67,968	66,214	67,781	66,010	187	204
Property, plant and equipment	63,884	66,152	62,807	65,043	1,077	1,110
Lease assets	50,686	48,938	1,512	2,084	49,174	46,853
Financial services receivables	82,565	86,973	−377	−390	82,942	87,363
Investments, equity-accounted investments and other equity investments, other receivables and financial assets	37,067	32,331	25,137	20,989	11,930	11,342
Current assets	**194,944**	**187,463**	**97,236**	**93,081**	**97,708**	**94,382**
Inventories	43,823	46,742	39,055	41,898	4,768	4,844
Financial services receivables	58,006	58,615	−557	−640	58,562	59,255
Other receivables and financial assets	38,044	38,620	17,012	17,803	21,033	20,817
Marketable securities	21,162	16,769	17,503	13,546	3,658	3,223
Cash, cash equivalents and time deposits	33,909	25,923	24,222	19,679	9,687	6,243
Assets held for sale	–	795	–	795	–	–
Total assets	**497,114**	**488,071**	**254,097**	**246,816**	**243,017**	**241,255**
Equity and liabilities						
Equity	**128,783**	**123,651**	**96,733**	**92,774**	**32,050**	**30,877**
Equity attributable to Volkswagen AG shareholders	111,336	109,117	79,913	78,872	31,423	30,246
Equity attributable to Volkswagen AG hybrid capital investors	15,713	12,663	15,713	12,663	–	–
Equity attributable to Volkswagen AG shareholders and hybrid capital investors	127,049	121,781	95,626	91,535	31,423	30,246
Noncontrolling interests	1,734	1,870	1,107	1,239	627	631
Noncurrent liabilities	**202,921**	**196,497**	**93,523**	**90,822**	**109,398**	**105,675**
Financial liabilities	114,809	113,556	15,637	17,592	99,173	95,965
Provisions for pensions	45,081	41,389	44,207	40,631	874	759
Other liabilities	43,031	41,551	33,680	32,600	9,352	8,951
Current liabilities	**165,410**	**167,924**	**63,840**	**63,220**	**101,569**	**104,703**
Financial liabilities	88,648	87,912	−2,806	−7,312	91,454	95,224
Trade payables	22,677	22,745	19,539	19,603	3,137	3,142
Other liabilities	54,085	56,896	47,107	50,559	6,978	6,337
Liabilities associated with assets held for sale	–	370	–	370	–	–
Total equity and liabilities	**497,114**	**488,071**	**254,097**	**246,816**	**243,017**	**241,255**

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

CONSOLIDATED BALANCE SHEET STRUCTURE 2020
in percent



Automotive Division balance sheet structure

As of December 31, 2020, the Automotive Division's intangible assets increased slightly compared with fiscal year 2019, driven among other factors by a rise in capitalized development costs. Property, plant and equipment declined due to exchange rate factors and depreciation in excess of additions. Equity-accounted investments were up as the year-on-year decline in the business results of the Chinese joint ventures was offset by resolutions to pay lower dividends and by additions to the interests held in entities such as Argo AI, QuantumScape, Anhui Jianghuai Automobile Group Holdings and Northvolt. Noncurrent other receivables and financial assets increased. Total noncurrent assets were up €3.1 billion to €156.9 billion.

Current assets were higher than at the end of 2019, amounting to €97.2 (93.1) billion. As a result of downscaled production in response to the pandemic and due to exchange rate effects, the inventories included in this item were lower. The Automotive Division's securities and cash and cash equivalents rose by €8.5 billion to €41.7 billion.

In the previous year, the "Assets held for sale" item included the carrying amounts of assets to be derecognized as a result of the contribution of AID to the Argo AI joint venture and those relating to the sale of Renk.

At the end of the reporting year, the Automotive Division's equity amounted to €96.7 billion, 4.3% more than a year earlier. The increase was mainly attributable to the profit generated, the hybrid notes issued in June 2020, and the positive effects from the measurement of derivatives recognized directly in equity. Currency translation, the dividend payment to the shareholders of Volkswagen AG resolved by the Annual General Meeting, and higher actuarial losses from the remeasurement of pension plans reduced equity. Noncontrolling interests are primarily held by the noncontrolling interest shareholders of TRATON. The equity ratio was 38.1 (37.6)%.

Noncurrent liabilities increased by €2.7 billion to €93.5 billion. The decrease in noncurrent financial liabilities included in this item was driven primarily by reclassifications from noncurrent to current liabilities to reflect shorter remaining maturities and by exchange rate effects; the issuance of green bonds in September 2020 had an offsetting impact on this item. Pension provisions were significantly higher than the comparative 2019 figure, due mainly to the actuarial remeasurement following a change in the discount rate.

At €63.8 (63.2) billion, current liabilities were on a level with the previous year. Current financial liabilities amounted to €–2.8 (–7.3) billion due primarily to reclassifications from noncurrent to current liabilities. 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. Current other liabilities were down, primarily due to the effects of the measurement of derivatives and to lower liabilities from buyback transactions. Other provisions decreased, due mainly to utilizations in connection with the diesel issue.

At the end of fiscal year 2020, the Automotive Division's total assets amounted to €254.1 billion, up 2.9% compared with the figure on December 31, 2019.

PASSENGER CARS BUSINESS AREA
BALANCE SHEET STRUCTURE

€ million	Dec. 31, 2020	Dec. 31, 2019
Noncurrent assets	130,237	126,387
Current assets	83,180	75,459
Total assets	**213,417**	**201,846**
Equity	81,423	75,773
Noncurrent liabilities	82,263	78,679
Current liabilities	49,731	47,394

COMMERCIAL VEHICLES BUSINESS AREA
BALANCE SHEET STRUCTURE

€ million	Dec. 31, 2020	Dec. 31, 2019
Noncurrent assets	24,777	25,143
Current assets	11,256	13,420
Total assets	**36,033**	**38,563**
Equity	13,389	14,115
Noncurrent liabilities	10,592	11,367
Current liabilities	12,052	13,081

At the end of 2020, intangible assets in the Passenger Cars Business Area were higher than at the 2019 balance sheet date. This was attributable among other factors to an increase in capitalized development costs. Exchange rate factors and depreciation in excess of additions led to a decrease in property, plant and equipment. Equity-accounted investments rose compared with December 31, 2019: the year-on-year decline in the business results of the Chinese joint ventures was set against resolutions to pay lower dividends in the Chinese joint ventures, as well as additions to the interests held in entities such as Argo AI, QuantumScape, Anhui Jianghuai Automobile Group Holdings and Northvolt. Overall, noncurrent assets increased by 3.0% compared with the end of 2019. Current assets rose by 10.2%. The inventories included in this item were lower as a result of downscaled production in response to the pandemic and due to exchange rate effects. Total securities and cash and cash equivalents in the Passenger Cars Business Area significantly exceeded the figure recorded at the end of 2019. On December 31, 2020, the Passenger Cars Business Area had total assets amounting to €213.4 (201.8) billion.

At €81.4 (75.8) billion, the Passenger Cars Business Area's equity was up on the figure for December 31, 2019, mainly for earnings-related reasons. Total noncurrent liabilities were 4.6% higher than at the end of 2019. The noncurrent financial liabilities included in this item increased, and pension provisions rose, mainly due to the actuarial remeasurement following a change in the discount rate. A rise in current financial liabilities was the main factor driving the 4.9% increase in current liabilities compared with the end of 2019. This was offset in particular by lower other provisions, whose decline was driven by factors such as utilizations in connection with the diesel issue.

At the end of the reporting period, property, plant and equipment in the Commercial Vehicles Business Area was up slightly, while lease assets were down. In total, noncurrent assets were slightly lower than at the last balance sheet date in 2019, amounting to €24.8 (25.1) billion. Current assets declined by 16.1%. The inventories included in this item were lower as a result of downscaled production in response to the pandemic. Total securities and cash and cash equivalents decreased in the reporting year. At €36.0 billion, total assets were again €2.5 billion lower than in the previous year.

The Commercial Vehicles Business Area's equity was down on the previous year, amounting to €13.4 (14.1) billion. Noncurrent liabilities were 6.8% lower overall than on December 31, 2019. There was a decline in other noncurrent liabilities. Current liabilities dropped by a total of 7.9%. The current other liabilities included in this item were lower than on the previous year's balance sheet date.

POWER ENGINEERING BUSINESS AREA BALANCE SHEET STRUCTURE

€ million	Dec. 31, 2020	Dec. 31, 2019
Noncurrent assets	1,847	2,206
Current assets	2,800	4,202
Total assets	**4,647**	**6,408**
Equity	1,922	2,885
Noncurrent liabilities	668	777
Current liabilities	2,057	2,746

The Power Engineering Business Area's intangible assets and property, plant and equipment were lower on December 31, 2020 than on the prior-year balance sheet date. Noncurrent assets dropped by a total of 16.3%. Current assets decreased by 33.4%, with a significant reduction in the cash and cash equivalents included in this item. In the previous year, the "Assets held for sale" item had included the carrying amounts of assets derecognized as a result of the sale of Renk completed in October 2020. As a result, total assets in the Power Engineering Business Area went down to €4.6 (6.4) billion at the end of fiscal year 2020.

At the end of 2020, the Power Engineering Business Area's equity amounted to €1.9 (2.9) billion. Overall, noncurrent liabilities were lower than a year earlier. Current liabilities also declined compared with the end of 2019. The financial liabilities included here fell significantly, while other provisions went up because of provisions recognized for restructuring measures. Current liabilities as of the end of 2019 had also included the carrying amounts of the liabilities of Renk, which were derecognized as a result of the sale of Renk in 2020.

Financial Services Division balance sheet structure

On December 31, 2020, the Financial Services Division had total assets of €243.0 (241.3) billion, slightly more than at the balance sheet date in 2019.

Noncurrent assets declined by 1.1% to €145.3 billion compared with the end of the prior year; the property, plant and equipment included in this item was virtually unchanged. Lease assets increased, while non-current financial services receivables were down because volumes and exchange rates were affected by the Covid-19 pandemic.

Current assets expanded to €97.7 (94.4) billion. Current financial services receivables were lower than at the end of 2019, primarily for pandemic-related reasons. At €13.3 billion, total securities and cash and cash equivalents in the Financial Services Division exceeded the figure recorded at the end of 2019 by €3.9 billion.

On December 31, 2020, the Financial Services Division accounted for around 48.9 (49.4)% of the Volkswagen Group's assets.

At the end of the reporting year, the Financial Services Division's equity stood at €32.0 billion, 3.8% more than a year earlier. Negative exchange rate effects were offset by positive earnings. The equity ratio was 13.2 (12.8)%.

Noncurrent liabilities increased by 3.5% overall, mainly due to a rise in noncurrent financial liabilities and higher other provisions. A reduction in current financial liabilities, offset by higher other current liabilities, led to a net decrease in total current liabilities.

Deposits from the direct banking business amounted to €28.9 (32.5) billion, and were therefore below the figure recorded at the end of 2019.

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. Based on our companies' income tax rates, which vary from country to country, 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 – is 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 weekly basis followed by the subsequent calculation of the average. A beta factor of 1.26 (1.17) was determined for 2020.

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 6.5 (6.3)% for 2020.

COST OF CAPITAL AFTER TAX IN THE AUTOMOTIVE DIVISION

%	2020	2019
Risk-free rate	−0.2	0.0
Market risk premium	7.5	7.5
Volkswagen-specific risk premium	2.0	1.3
(Volkswagen beta factor)	(1.26)	(1.17)
Cost of equity after tax	**9.3**	**8.8**
Cost of debt	1.4	1.9
Tax	−0.4	−0.6
Cost of debt after tax	**1.0**	**1.3**
Proportion of equity	66.7	66.7
Proportion of debt	33.3	33.3
Cost of capital after tax	**6.5**	**6.3**

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

At €7,450 (13,019) million, the Automotive Division's operating profit after tax, including the proportionate operating profit of the Chinese joint ventures, was down on the prior-year figure in fiscal year 2020, mainly due to the persistently negative impact of the spread of the SARS-CoV-2 virus. In addition particularly to the decline in revenue resulting from the pandemic-related fall in customer demand, turbulence in the capital markets led to negative effects from the measurement of receivables and liabilities denominated in foreign currencies. One-off expenses for restructuring measures also reduced earnings. A positive impact was made by lower costs. In addition, income was generated from the contribution of AID to the Argo AI joint venture and from the sale of Renk. Negative special items weighed on the operating profit, but to a lesser extent than in the previous year. The effect of purchase price allocation on earnings and assets is not taken into account as this cannot be influenced by management in the course of business operations.

In the reporting year, the invested capital fell to €114,907 (116,016) million, partly due to exchange rates. The decrease was due primarily to lower inventory levels and lower property, plant and equipment, offset by higher 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. Due to earnings-related factors as a result of the Covid-19 pandemic, ROI declined year-on-year; at 6.5 (11.2)% it was below our defined minimum required rate of return on invested capital of 9%.

At €7,504 (7,328) million, the opportunity cost of capital (invested capital multiplied by cost of capital) slightly exceeded the prior-year figure. After deduction of the opportunity cost of invested capital, the operating result after tax – which was negatively impacted by the pandemic – led to a negative value contribution of €–54 (5,691) 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	2020	2019
Operating result after tax	**7,450**	**13,019**
Invested capital (average)	114,907	116,016
Return on investment (ROI) in %	**6.5**	**11.2**
Cost of capital in %	6.5	6.3
Opportunity cost of invested capital	**7,504**	**7,328**
Value contribution	**–54**	**5,691**

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.

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 given the context created by the extensively and persistently negative impact of the spread of the SARS-CoV-2 virus.

Throughout the entire reporting period, the Covid-19 pandemic had a strong impact on business at the Volkswagen Group and led to lower figures in terms of deliveries, sales revenue and profit, as well as to deviations from the original forecast. In this environment, which was also dominated by fierce competition, technological change in our industry and growing environmental awareness, we delivered 9.3 million vehicles to customers. The Group's sales revenue also fell significantly by 11.8% as a result of lower volumes and exchange rate effects. This reduced operating profit before special items to €10.6 billion. At 4.8%, the operating return on sales before special items fell short of the originally forecast range of 6.5 to 7.5%. The operating return on sales, including special items related to the diesel issue, amounted to 4.3%.

The research and development costs reflect our activities to safeguard the Company's future viability; despite the countermeasures taken, the R&D ratio in the Automotive Division came to 7.6% and, as ultimately expected, was therefore higher than in the previous year owing to the decline in sales revenue caused by the pandemic.

Due to a significant fall in capex, the Automotive Division's ratio of capex to sales revenue declined to 6.1% and was within the originally expected range. At €6.4 billion, the net cash flow came in clearly positive despite the Covid-19 pandemic, the year-on-year decline was driven particularly by the lower profits and by higher cash outflows attributable to the diesel issue. Net liquidity improved beyond the forecast to €26.8 billion, partly due to the successful placement of hybrid notes.

The return on investment (ROI) in the Automotive Division decreased to 6.5% as a consequence of the pandemic and fell short of the minimum required rate of return on invested capital.

FORECAST VERSUS ACTUAL FIGURES

	Actual 2019	Original forecast for 2020	Adjusted forecast for 2020	Actual 2020
Deliveries to customers (units)	11.0 million	around the prior-year level	considerable decline	9.3 million
Volkswagen Group				
Sales revenue	€252.6 billion	increase of up to 4%	considerable decline	€222.9 billion
Operating return on sales before special items	7.6%	6.5–7.5 %	positive, <6.5%	4.8%
Operating return on sales	6.7%	6.5–7.5 %	positive, <6.5%	4.3%
Operating result before special items	€19.3 billion	in forecast range	severe decline, positive	€10.6 billion
Operating result	€17.0 billion	in forecast range	severe decline, positive	€9.7 billion
Passenger Cars Business Area				
Sales revenue	€182.0 billion	moderate increase	considerable decline	€156.3 billion
Operating return on sales before special items	8.0%	6.5–7.5 %	in forecast range, <6.5%	5.2%
Operating return on sales	6.7%	6.5–7.5 %	in forecast range, <6.5%	4.6%
Operating result before special items	€14.5 billion	in forecast range	severe decline	€8.2 billion
Operating result	€12.2 billion	in forecast range	severe decline	€7.2 billion
Commercial Vehicles Business Area				
Sales revenue	€26.4 billion	moderate decline	considerable decline	€22.2 billion
Operating return on sales	6.3%	4.0–5.0%	in forecast range, <4.0%	–0.4%
Operating result	€1.7 billion	in forecast range	severe decline	€–79 million
Power Engineering Business Area				
Sales revenue	€4.0 billion	at prior-year level	considerable decline	€3.6 billion
Operating result	€–93 million	smaller loss	considerably higher loss	€–482 million
Financial Services Division				
Sales revenue	€40.2 billion	around the prior-year level	at prior-year level	€40.8 billion
Operating result	€3.2 billion	around the prior-year level	considerable decline	€3.0 billion
R&D ratio in the Automotive Division	6.7%	6.0–6.5%	increase, >6.5%	7.6%
Capex/sales revenue in the Automotive Division	6.6%	6.0–6.5%	at prior-year level	6.1%
Net cash flow in the Automotive Division	€10.8 billion	noticeable decline, clearly positive	considerable decline, positive	€6.4 billion
Net liquidity in the Automotive Division	€21.3 billion	distinct increase	around the prior-year level	€26.8 billion
Return on investment (ROI) in the Automotive Division	11.2%	slight increase, >9%	decline, positive, <9%	6.5%

Volkswagen AG

(Condensed, in accordance with the German Commercial Code)

Unit sales of Volkswagen AG in 2020 were down on the previous year due to the negative impact of the Covid-19 pandemic, while profit increased.

ANNUAL RESULT

Additional special items in connection with the diesel issue amounting to €0.8 billion were recognized in fiscal year 2020. This was mainly due to further provisions for legal risks. Special items had an impact of €–0.8 (–1.8) billion on net other operating result.

At €67.5 billion, sales in the reporting period were down 16.2% year-on-year largely due to the pandemic and the measures taken to contain the spread of the SARS-CoV-2 virus. Sales generated abroad accounted for a share of €40.7 billion or 60.3%. Cost of sales decreased by 15.1% to €63.4 billion. Gross profit on sales fell accordingly to €4.1 (5.9) billion.

At €7.3 billion, distribution, general and administrative expenses were down €0.7 billion on the prior-year figure.

The net other operating result was €1.3 billion higher, at €0.4 billion. The rise was due particularly to lower expenses for legal and litigation risks.

The €0.7 billion increase in the financial result to €9.8 billion resulted mainly from lower write-downs of long-term financial assets.

Taxes on income declined to €–0.7 (–1.2) billion, particularly due to lower current tax expense and tax refunds for prior years, taking net income for fiscal year 2020 to €6.3 (5.0) billion.

INCOME STATEMENT OF VOLKSWAGEN AG

€ million	2020	2019
Sales	67,535	80,621
Cost of sales	−63,418	−74,700
Gross profit on sales	**4,117**	**5,921**
Distribution, general and administrative expenses	−7,269	−7,948
Net other operating result	398	−914
Financial result[1]	9,787	9,115
Taxes on income	−693	−1,215
Earnings after tax	**6,338**	**4,958**
Net income for the fiscal year	**6,338**	**4,958**
Retained profits brought forward	855	0
Appropriations to revenue reserves	−3,165	−1,685
Net retained profits	**4,028**	**3,273**

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

BALANCE SHEET OF VOLKSWAGEN AG AS OF DECEMBER 31

€ million	2020	2019
Fixed assets	130,377	120,823
Inventories	6,542	5,554
Receivables[1]	38,766	35,856
Cash-in-hand and bank balances	8,803	5,639
Total assets	**184,488**	**167,872**
Equity	39,549	35,629
Special tax-allowable reserves	18	18
Long-term debt	43,086	39,206
Medium-term debt	36,348	35,983
Short-term debt	65,487	57,036

1 Including prepaid expenses.

NET ASSETS AND FINANCIAL POSITION

Total assets amounted to €184.5 billion on December 31, 2020, up €16.6 billion on the prior-year figure. Property, plant and equipment was up by €0.6 billion, with capital expenditure exceeding depreciation charges. The rise in financial assets to €121.6 (112.8) billion was mainly the result of an increase in shares held in affiliated companies.

Fixed assets accounted for a share of 70.7 (72.0)% of total assets.

Current assets (including prepaid expenses) amounted to €54.1 (47.0) billion on December 31, 2020. Inventories went up due primarily to the addition of precious metals. Receivables were higher, mainly because of financing provided to subsidiaries. Cash instruments increased, driven mostly by raising restricted short-term time deposits.

At the end of the reporting period, equity was at €39.5 billion; the increase was due particularly to the positive net income for the year. The equity ratio was 21.4 (21.2)%.

Other provisions decreased by €1.5 billion to €19.9 (21.4) billion due mainly to the utilization of provisions in connection with the diesel issue. Provisions for pensions and similar obligations rose by €1.2 billion to €19.0 billion, primarily as a result of a change in measurement inputs, while provisions for taxes increased by €0.5 billion to €4.3 billion.

The €12.5 billion increase in total liabilities (including deferred income) to €101.7 billion is attributable primarily to higher liabilities to affiliated companies.

Volkswagen AG's cash funds, comprising cash instruments with a maturity of less than three months, less bank liabilities repayable on demand and cash pooling liabilities, improved year-on-year from €–7.6 billion to €–5.1 billion. The interest-bearing portion of debt amounted to €89.8 (78.2) billion. In our assessment, given the context created by the extensive and persistent negative impact of the spread of the SARS-CoV-2 virus, 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 that allows our shareholders to benefit appropriately from 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 have set ourselves the goal of achieving a payout ratio of at least 30%. The payout ratio is based on the Group's earnings after tax attributable to Volkswagen AG shareholders. This amounts to 29.0% for the reporting period and stood at 18.1% in the previous year.

DIVIDEND PROPOSAL

In fiscal year 2020, net retained profits amounted to €4.0 billion. The Board of Management and Supervisory Board are proposing to pay a total dividend of €2.4 billion, i.e. €4.80 per ordinary share and €4.86 per preferred share.

PROPOSAL ON THE APPROPRIATION OF NET PROFIT

€	2020
Dividend payout on subscribed capital (€1,283 million)	2,418,589,589.10
of which on: ordinary shares	1,416,431,126.40
preferred shares	1,002,158,462.70
Balance (carried forward to new account)	1,609,493,827.80
Net retained profits	**4,028,083,416.90**

EMPLOYEE PAY AND BENEFITS AT VOLKSWAGEN AG

€ million	2020	%	2019	%
Direct pay including cash benefits	7,477	70.6	8,421	70.7
Social security contributions	1,379	13.0	1,502	12.6
Compensated absence	1,099	10.4	1,310	11.0
Retirement benefits	634	6.0	682	5.7
Total expense	**10,588**	**100.0**	**11,916**	**100.0**

VEHICLE SALES

Volkswagen AG sold a total of 1,941,821 (2,580,553) vehicles in fiscal year 2020. This decrease is essentially due to the negative impact of the Covid-19 pandemic. Vehicles sold abroad accounted for a share of 64.9 (67.6)%.

PRODUCTION

Volkswagen AG produced a total of 792,393 vehicles at its vehicle production plants in Wolfsburg, Hanover and Emden in the reporting period (–25.9%).

EMPLOYEES

As of December 31, 2020, a total of 118,673 (119,204) people were employed at the sites of Volkswagen AG, excluding staff employed at subsidiaries. Of this figure, 4,848 (5,029) were vocational trainees. 6,210 (5,254) employees were in the passive phase of their partial retirement.

Female employees accounted for 17.8 (17.6)% of the workforce. Volkswagen AG employed 7,002 (6,551) part-time workers. The percentage of foreign employees was 6.4 (6.4)%. In the reporting period, 83.1 (83.2)% of the employees in Volkswagen AG's production area were in possession of vocational or additional training. The proportion of graduates was 20.7 (20.1)% in the same period. The average age of employees in fiscal year 2020 was 44.5 (44.2) years.

RESEARCH AND DEVELOPMENT

Volkswagen AG's research and development costs as defined in the German Commercial Code amounted to €5.9 (6.1) billion in the reporting period. 13,547 (13,378) 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 already reduce the environmental impact during the production process. In 2020 we invested primarily in climate protection and in soil and water pollution control.

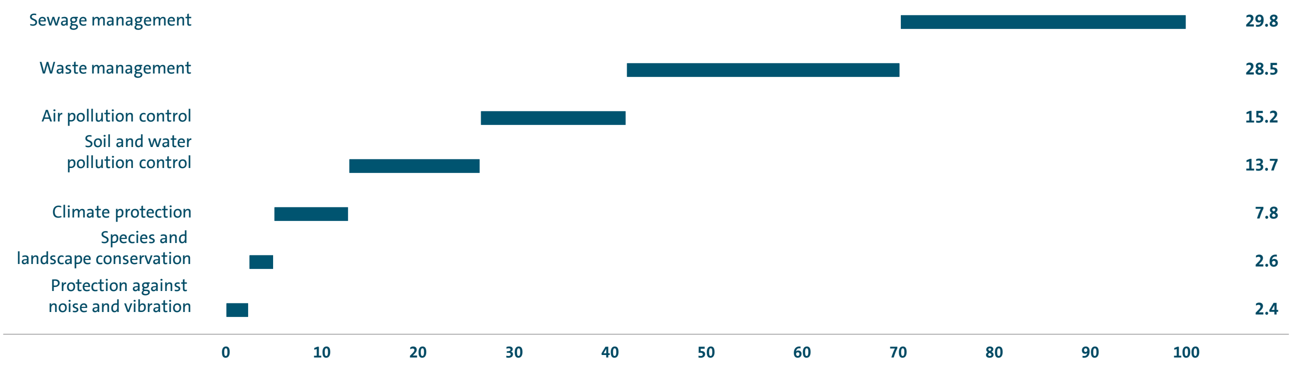
The recognized operating costs relate to measures that protect the environment against harmful factors by avoiding, reducing, or eliminating emissions by the Company. Resources are also conserved. For example, these include expenditures incurred to operate equipment that protects the environment, as well as expenditures for measures not relating to such equipment. As in previous years, the emphasis in 2020 was on sewage and waste management.

VOLKSWAGEN AG EXPENDITURE ON ENVIRONMENTAL PROTECTION

€ million	2020	2019	2018	2017	2016
Investments	4	9	13	17	11
Operating costs	225	233	230	227	223

OPERATING COSTS FOR ENVIRONMENTAL PROTECTION AT VOLKSWAGEN AG 2020

Share of environmental protection areas in percent



BUSINESS DEVELOPMENT OF VOLKSWAGEN AG

As the parent of the Volkswagen Group, Volkswagen AG is fundamentally subject to the same expected developments and risks and opportunities. The forecast is explained in the chapter entitled "Report on Expected Developments" and the risks and opportunities in the chapter entitled "Report on Risks and Opportunities" 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 in the chapter "Report on Risks and Opportunities" 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. With our vision "Shaping mobility – for generations to come", part of our TOGETHER 2025+ Group strategy, 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

Sustainability means maintaining intact environmental, social and economic systems with long-term viability at a global, regional and local level. The Volkswagen Group can influence these systems in various ways and actively takes responsibility to make a contribution to their sustainability. 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 660 thousand employees and 118 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 net-carbon-neutral company by 2050. We are assuming a pioneering role by making this voluntary commitment based on the Paris Climate Agreement. We are guided in this by the specifications of the Task Force on Climate-Related Financial Disclosures (TCFD) For more information, please see our Sustainability Report for fiscal year 2020.

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 devise a forward-looking human resources strategy that takes our employees along this path of change, trains them accordingly, and ensures that their jobs are secure.

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.

On this basis, our objective is to attain 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 Labour 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.

Management and coordination

The structure and workflows of Group-wide sustainability management were expanded in the reporting period. The related structures, processes and responsibilities are codified in a separate Group policy. We view sustainability management as a continuous improvement process. 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 implementation of the Group Sustainability Steering Committee as a top management committee. The members of this steering committee include managers from central Board of Management positions 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 the responsibility of the Group's Sustainability function.

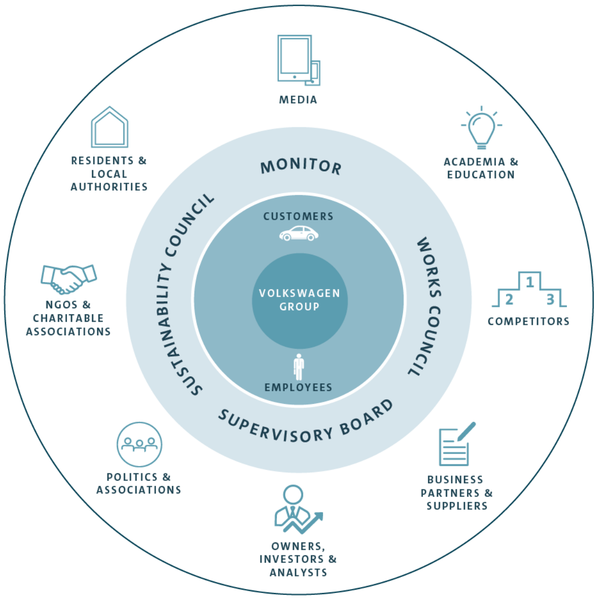
Strategic stakeholder management

Our stakeholders are individuals, groups, or organizations who have an influence on or are 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 stakeholder groups of equal value around this core. The Group's supervisory and advisory bodies such as the Supervisory Board, the Works Council and the Sustainability Council act as a special interface between internal and external stakeholders. The Monitor appointed by the US Department of Justice until the termination of his duties in September 2020 was a stakeholder of the Volkswagen Group as well.

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 latter took a break in 2020 due to the pandemic. 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 STAKEHOLDERS



Sustainability Council

The Sustainability Council set up in 2016 provides assistance to the Volkswagen Group with important, strategic sustainability issues and 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. In the reporting year, the Volkswagen Group extended its collaboration with the Sustainability Council by two more years.

In 2020, the agenda for the intensified dialogue between Volkswagen and the Sustainability Council included the CEO Alliance for Europe's Recovery, Reform and Resilience, jointly initiated by the Chairman of the Board of Management of Volkswagen AG and the Council in support of the EU Green Deal, aspects of corporate governance and integrity, decarbonization, employment in times of advancing digitalization and e-mobility, and sustainable action in international markets.

The Council also launched two new projects: a research project on the distribution effects of climate-related fiscal and transport policies with the Mercator Research Institute on Global Commons and Climate Change, building on the preceding project on climate-conscious transport policies, and a study with the Fraunhofer Institut für Arbeitswirtschaft und Organisation (IAO – Fraunhofer Institute for Industrial Engineering) to examine the effects of digitalization and e-mobility on employment. The Open Source Lab on Sustainable Mobility concluded its work in 2020 with the publication of the project results.

Materiality analysis

In 2020, we forged ahead with the overhaul of our materiality analysis begun in the previous year and established a new binding sustainability strategy with the development of a sustainability narrative for the Volkswagen Group. Some 60 stakeholders were involved in this process, including decision-makers from various business areas and brands as well as representatives of the Sustainability Council.

The materiality process is used to identify and evaluate the most important sustainability issues for the Group. The decisive factors here are the impact on the environment and society, stakeholder expectations, the business model of Volkswagen AG and adherence to legal provisions and internationally established reporting standards.

The sustainability strategy developed based on the materiality analysis focuses on the key sustainability issues within the Group strategy TOGETHER 2025+, which is supported by the vision "Shaping Mobility – for generations to come" and the seven Group principles. The sustainability narrative clearly illustrates how the Volkswagen Group intends to achieve its overarching strategic objective of sustainable growth. Not only will it lay the foundation for performance management and improvement in environmental, social and governance performance, but it will also boost confidence among stakeholders and in the financial markets.

To implement the transformation with a holistic approach and run our business responsibly along the value chain, we prioritized four focus areas that are essential for our core business.

> Decarbonization
> Circular economy
> Responsibility in supply chains and in business
> Workforce transformation

The focus areas are each underpinned by forward-looking ambition and are developed and implemented within the framework of programs and initiatives.

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 2020, the brands and companies launched or continued around 700 projects and initiatives worldwide.

i CSR-PROJECTS
https://www.volkswagenag.com/en/sustainability/reporting/cc-projects.html

TOGETHER4INTEGRITY

1. Integrity and compliance are central to our business strategy
2. Integrity and compliance risks are identified, owned, managed and mitigated
3. Our leaders at all levels across our organization build and sustain a culture of integrity
4. We encourage, protect and value the reporting of concerns and suspected wrongdoing
5. We take action and hold ourselves accountable when wrongdoing occurs

Together4Integrity
We keep our word

HOLISTIC INTEGRITY AND COMPLIANCE MANAGEMENT SYSTEM

Integrity and compliance are major priorities in the Volkswagen Group. Marking the end of the Monitorship, the Chairman of the Volkswagen AG Board of Management Herbert Diess said: “The end of the Monitorship is not the end of our journey. I am committed to the continuous improvement of our organization and its culture, and so are all my Board of Management colleagues. This mindset is essential to our ambition of making safer and more intelligent zero-emission vehicles for today’s customers and for generations to come.”

We firmly believe that acting with integrity and in compliance with the rules is vitally important for our Company’s future success. It is for this reason that we have embedded integrity and compliance in our Group strategy TOGETHER 2025⁺. Our objective is to act as a role model for integrity and compliance and thus deepen the trust of our employees, customers, shareholders and partners – both existing and future – in our Company.

To achieve this aim, we have been building a comprehensive and holistic integrity and compliance management system (ICMS) since 2018. This is being rolled out as part of the Together4Integrity (T4I) program and 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. In this context we are also implementing the measures that we defined based on the recommendations made by the Independent Compliance Monitor Larry D. Thompson.

T4I aims to establish robust, consistent process standards that are anchored in the Group’s corporate policies or organizational guidelines. The purpose is to give integrity and compliance an equally important strategic and operational priority in our Company as, for example, sales revenue, profit, product quality or employer attractiveness. T4I is thus one of the most extensive change programs in the history of the Group. In 2020, the Group Board of Management resolved to form the Group Board of Management Integrity and Compliance Committee (K-VAC), which, among other things, takes over the tasks of the Group Compliance Committee established during the Monitorship. The main tasks of the K-VAC include continuing to develop the ICMS and the corporate culture as well as managing the uniform implementation of the initiatives combined in T4I across all divisions and brands.

Through T4I we aim to implement the ICMS by 2025 in around 850 Group companies in which we hold a majority stake. By the end of 2020, 639 companies had already begun the implementation. This will strengthen Group-wide corporate governance and reduce the corresponding risks. The ICMS is therefore also a substantial contribution to the sustainability of the Volkswagen Group. We also want to live up to our responsibilities in terms of our influence on companies not controlled by Volkswagen.

Integrity encourages ethical decision-making

An essential role of the ICMS is to introduce integrity as a strategic key to success in all the Group’s brands and companies. This includes integrating integrity into decision-making processes. For example, every resolution proposal submitted to the Board of Management must highlight the extent to which the intended decision is in line with the Group’s integrity and compliance, what risks arise from it and how the risks can be reduced. Similar requirements apply to Group brands and companies and to Group bodies to which the Board of Management has delegated decision-making powers.

Compliance means adherence to rules

We firmly believe that long-term commercial success can only be achieved if each and every individual complies with laws, regulations and commitments. Compliant behavior must be a matter of course for all Group employees. The compliance organization provides worldwide support in the form of programs, guidelines, processes and practical advice. The compliance Infopoint is a core element of this. This is available to all employees.

Our compliance organization focuses on preventing corruption, fraudulent breaches of trust and money laundering. Compliance in mergers & acquisitions, noncontrolled shareholdings and safeguarding business and human rights are other key areas. In addition, we expedited the integration of the topic of business and human rights into the ICMS and accorded the topic vital strategic importance. Here, we follow the UN's requirements and principles on business and human rights due diligence. An investigation of all companies in the Group within the scope of compliance was conducted in 2020 with the aim of identifying risks in respect of human rights. Based on the findings, these companies were given a set of binding measures that they must implement by December 31, 2021.

T4I brings together activities from eleven key initiatives

The ICMS defines standards for integrity and compliance. T4I is rolling out and implementing these standards uniformly throughout the Group in the form of more than 100 packages of measures. The packages of measures are divided into eleven key initiatives:

1. HR Compliance Policies and Procedures

The focus is on standard HR processes such as recruitment, training, promotion and remuneration (bonus payments). For example, integrity and compliance matters have been included as criteria for the recruitment process and staff development measures for managers since 2019. Employment contracts contain integrity and compliance clauses. Integrity and compliance have also been covered by annual employee appraisals since 2020. Performance-related remuneration from senior executive positions is now also partly determined by integrity and compliance standards.

2. Code of Conduct

The Volkswagen Group's Code of Conduct is the key instrument for strengthening employees' awareness of responsible action and decisions, giving employees support and guidance, and finding the right contact persons in cases of doubt. The framework is available online to employees and also to external third parties.

Every employment contract refers to the Code of Conduct and commits the employee to comply with it. Regular training is intended to increase its efficacy. The Code of Conduct is also taken into account when calculating their variable, performance-related remuneration, which is set as part of the employee appraisals. Members of the higher levels of management are annually certified on the Code of Conduct. They confirm that they will comply with the Code of Conduct and undertake to report any serious regulatory violations.

3. Integrity Program

The integrity program is designed to reinforce the culture of integrity. The most important instruments in this program include dialogue-oriented communication measures and event formats. These communicate to employees the importance of integrity and motivate employees to behave with integrity even in the face of external pressure. Associated actions include encouraging a culture of handling mistakes constructively, more transparency in taking decisions and a greater willingness to discuss mistakes and risks openly.

4. Risk Management and Internal Controls

This initiative involves operating an effective risk management system. Uniform, defined structures should ensure transparent handling of risks from our business activities and enable them to be managed. This refers to the annual regular governance, risk and compliance (GRC) process focused on systemic risks, the quarterly risk process (QRP) focused on acute risks, the standard ICS (internal control system) aimed at safeguarding processes, and root cause analysis. The initiative to support the QRP also includes the introduction of the "Riskradar" IT system and training of risk managers.

5. ICRA and Compliance Organization

This key initiative describes the organization and processes of the Compliance department at Group level and in the individual Group companies. It shapes the Company's compliance strategy, sets Group-wide standards for the internal compliance risk assessment (ICRA) and contains measures for managing and mitigating the compliance risks. The ICRA has been carried out since 2018, with the Group companies being assigned to different risk categories on the basis of a comprehensive questionnaire. To reduce potential risks, we rolled out standardized compliance measures in the relevant business units, the scope of which varies depending on the business units' individual risk exposure. The degree to which measures have been implemented is reported on a regular basis, but at least once per year. Business units with a high risk are regularly monitored by the Divisional Compliance Officer or Regional Compliance Officer and starting in 2021, audited by an external auditor.

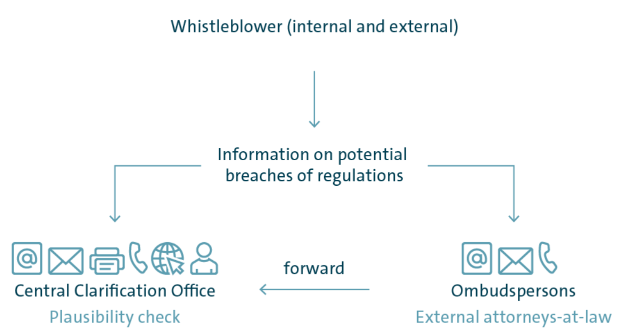
6. Whistleblower system and incident response

This initiative brings together all measures for the establishment and operation of the whistleblower system. The whistleblower system is the central point of contact for reporting cases of serious rule-breaking in the Volkswagen Group. The aim is to avert damage to the Company and its employees through the use of binding principles and a clearly governed process. 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 affected parties are treated fairly: the presumption of innocence applies as long as rule-breaking has not been proven. They are listened to at an early stage and vindicated if wrongly suspected. Strict confidentiality and secrecy apply throughout the investigation. Appropriate sanctions are applied where misconduct is proven. Whistleblowers are protected and their statements are treated confidentially. A wide range of channels is available for reporting information on misconduct, including anonymously if preferred.

7. M & A and NCS Compliance

In the event of planned mergers and acquisitions, the relevant companies are audited according to integrity and compliance standards. This prevents a Group company from being confronted with unidentified integrity or compliance risks when acquiring another company. This key initiative also promotes compliance in non-controlled shareholdings (NCS), i.e. companies that are not controlled by a Volkswagen Group company as a majority shareholder (excluding Chinese joint ventures). During mergers and acquisitions (M&A) and the supervision of NCSs, strategic, economic and ethical considerations are key to the sustainability of investment decisions.

REPORTING CHANNELS OF THE WHISTLEBLOWER SYSTEM



8. Business partner due diligence

Business partner due diligence entails reviewing the integrity and compliance systems of suppliers, service providers and sales partners. This review of existing and potentially new business partners is carried out as part of a risk-based, transparent, documented process that is implemented worldwide using an IT-based tool. This initiative also includes the offer to assist business partners in meeting the required standards. Companies that do not meet the standards defined in the Volkswagen Code of Conduct for Business Partners should not receive new business.

9. Product compliance

The product compliance management system (PCMS) shall ensure that our products comply with the legal and regulatory requirements of the exporting and importing country, external standards and contractually agreed customer requirements, as well as internal standards and externally communicated voluntary commitments throughout their life cycle. We have defined clear roles and responsibilities for our PCMS with regard to design, implementation and monitoring.

10. Environmental compliance

Statutory environmental regulations and voluntary commitments are binding at all locations and in all business fields. The Group's environmental policy and the environmental compliance management system stipulate the corresponding requirements and responsibilities for all strategy, planning and decision-making processes in the Group brands and companies. This also includes a system of metrics to determine progress in meeting environmental targets: in the fields of renewable energy, CO_2 emissions and resource efficiency. We make allowance for the actual and potential environmental risks and opportunities in our products' entire life cycle.

11. Anti-corruption

We advocate fairness in business dealings and have a clear zero-tolerance policy on active or passive corruption. We have therefore produced Group policies on dealing with gifts and invitations, donations and sponsorship. This initiative also includes the development and implementation of trainings for employees in divisions or companies with a high risk exposure.

Emphatically developing a culture of integrity

The holistic integrity and compliance management system being established Group-wide through T4I provides the regulatory framework for acting with integrity and in compliance with the rules and results in uniform corporate governance throughout the Group in relation to integrity and compliance. It is also advancing the culture of integrity. The aim is to inspire and motivate employees and strengthen their own drive to act with integrity in all situations. Both, uniform corporate governance and a mature culture of integrity contribute to the effectiveness of the ICMS as a major factor in the sustainability of the Volkswagen Group.

Volkswagen's corporate culture is founded on the seven Group Essentials. They define how we at Volkswagen want to work together and thus supplement the Code of Conduct. The Group Essentials also form the frame of reference for the Role Model Program, which encourages dialogue-oriented and distance-reducing collaboration.

T4I inspires and motivates employees, especially with launch events and perception workshops. Both events are held in each Group or brand company at the start of the implementation of T4I and involve both employees and managers across hierarchies as players in the change process. The perception workshops are primarily about the actual practice of integrity and compliance – measured by the perception of employees. Here, representatively selected employees and managers give their assessment of this practice and discuss opportunities for improvement. The perception workshops will be repeated annually until the key initiatives have been fully implemented. They measure the progress of the relevant company with regard to integrity and compliance and show where further action is needed.

Monitoring of implementation and effectiveness

Methods of impact monitoring and progress measurement are an integral part of our ICMS. The planning and reporting system of the T4I program provides information on the implementation status of all packages of measures at any time. It is used for reporting to the Board of Management and the boards of the Group and brand companies as well as for monitoring potential delays and initiating countermeasures.

In addition to the recurring perception workshops, our annual employee opinion survey shows the progress in our culture of integrity. This Group-wide survey asks whether it is possible for each individual to act with integrity. If the answer is no, the relevant manager must identify and clear the possible obstacles together with the team. The question was asked in the opinion survey for the first time in 2017 and since then, including in the reporting period, has been one of the three questions with the highest level of agreement, with a significant improvement in the value. The level of agreement among employees each achieved an average value in the highest category of the underlying five-level range.

Contributing to the Group's strategic indicators

To measure the level of target achievement in the area of Integrity & Legal Affairs, 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 the opportunity to act with integrity. In the case of negative deviations, the affected departments develop and implement measures. The indicator continuously improved on the previous good figure until 2020. On average, the level of agreement among employees was in the highest category of the underlying five-level range.

As an additional measuring tool, we use the Integrity Index developed by independent business ethicists from the Technical University of Munich. Based on more than 100 criteria in the categories of: the compliance & infrastructure, working atmosphere & integrity culture, products & customers, society, and partners & markets; it gives a comprehensive picture of an organization's integrity. The integrity index was started in 2019 as a pilot project for Volkswagen Passenger Cars Germany and Audi (German sites). The scientists found that both of the brands examined exhibited a "good" integrity level overall.

The findings were used in the reporting year in a structured follow-up process to derive and implement improvement measures together with the respected departments.

Further information on the topics of integrity and compliance can be found in the Group Sustainability Report 2020.

Independent Compliance Monitorship successfully completed

In September 2020, the Independent Compliance Monitor, Larry D. Thompson, certified that Volkswagen has fulfilled its obligations under its Plea Agreement with the US Department of Justice (DOJ) to maintain a compliance program that will prevent, detect and punish violations of anti-fraud and environmental laws. Certification applies to Volkswagen AG and its subsidiaries and affiliates with the exception of Porsche AG and Porsche Cars North America, which were not part of the Monitorship. Over the course of the Monitorship, which began in 2017 and is now concluded, Volkswagen enhanced and improved its structures, processes and systems in many divisions of the company including technical development, governance, risk management, compliance and legal functions. Volkswagen expanded the whistleblower system, strengthened processes to prevent corruption and antitrust violations, and created a due diligence process for business partners. The Group also flattened hierarchies, decentralized decision-making and gave more responsibility to its brands and regional companies.

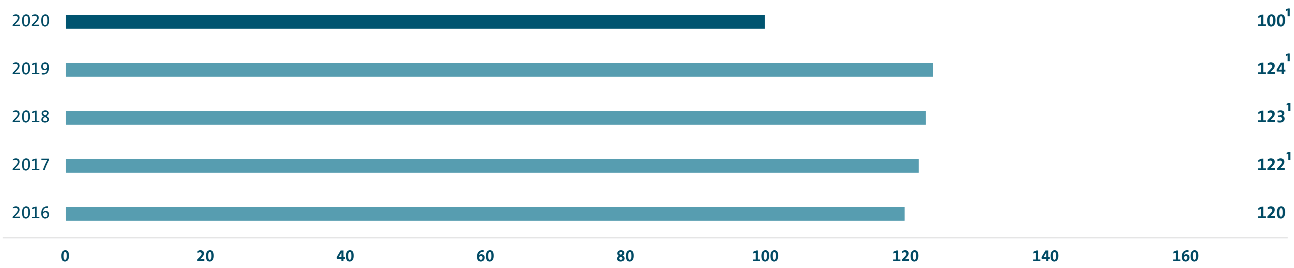
The completion of the Monitorship is not the end of the process; the Group remains committed to continuous further improvement of compliance and its corporate culture.

Thompson also served as Independent Compliance Auditor and issued his third and final audit report in June 2020. That report established that there had been no new violations of the relevant settlements with the Environment and Natural Resources Division of the DOJ, the California Attorney General, the US Environmental Protection Agency (EPA) and the California Air Resources Board.

On September 2, 2019, Volkswagen also announced that the Company had concluded a settlement agreement with the EPA, which had been the reason for commissioning a second auditor for the Volkswagen Group. This agreement was concluded to prevent it from being excluded from public contracts in the United States. This second auditorship is scheduled to last three years and will run until August 2022.

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

CO_2 EMISSIONS OF THE VOLKSWAGEN GROUP'S EUROPEAN (EU27+3) NEW PASSENGER CAR FLEET
in grams per kilometer (NEDC)



1 Subject to confirmation of CO_2 data within the scope of official publication by the European Commission.

RESEARCH AND DEVELOPMENT

Forward-looking mobility solutions with brand-defining products and services would be unthinkable without innovation. 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 plays a major part in driving the Volkswagen Group's transformation and helping to make it 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 evaluate the effectiveness of our measures to reduce CO_2 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 99.9 g CO_2/km[1] (NEDC) in the reporting period in accordance with the statutory measurement bases, thus down 20% on the prior-year figure. The CO_2 pool established together with other manufacturers fell just 0.8 g CO_2/km short of its target. Owing to delays in product launches and contrary to the original planning, it was not possible to achieve the target despite substantial improvements compared with 2019. As small volume manufacturers, the Lamborghini and Bentley brands each have an independent fleet for the purposes of 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 of the vehicles rather than the calendar year, and the period for compensating for any breaches of CO_2 limits, which comprises three model years. In fiscal year 2020, we complied with the regulations that apply to our greenhouse gas account in the United States, subject to any alternative 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 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 substantial excess emissions premiums. Around one in five new Volkswagen Group vehicles worldwide is to have a purely electric drive by the year 2025; depending on market development, this could be over two million electric vehicles a year. As part of our electrification campaign, we aim to offer our customers worldwide around 70 completely battery-electric vehicles by 2030, of which production of approximately 20 models has already started. In addition, a total of around 60 hybrid models are planned by the end of the decade, just over half of which are already in production. 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 or 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 intends to become a net-carbon-neutral company by 2050.

To offer 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 offer more efficient and more sustainable mobility in the volume segment: The Golf's new petrol mild hybrid drivetrain significantly reduces fuel consumption compared to its predecessor.

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 aim to 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

Technological innovation for reducing fuel consumption is not enough on its own to minimize the effect of vehicles on the environment. We consider the environmental impact we cause throughout the entire life cycle and at all stages of the value chain. This includes 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. Against this background, responsibilities in Technical Development were reorganized in 2020 in order to coordinate module development even more efficiently and leverage synergies in module variance, components, parts and processes. We 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 the 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 the model-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 of people and goods is a basic prerequisite for economic growth and social development, especially in times of the Covid-19 pandemic. At the same time, natural resources are dwindling and climate change is advancing. This calls for comprehensive mobility concepts to minimize the environmental impact. Such solutions need to be efficient, sustainable, crisis-proof, customer-oriented and accessible anytime 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, its components and related services, 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.

In its pursuit of autonomous driving, the Volkswagen Group further improved its assistance systems and automated driving functions and introduced these in vehicles in 2020. 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.

As part of the TOGETHER 2025⁺ strategy, we are working with the Software-enabled Car Company module to make software development one of the core competencies of the Volkswagen Group. Starting on January 1, 2020, we have brought together all of our interests and subsidiaries that develop software for vehicles and digital ecosystems in the Car.Software Organisation, an independent entity with Group responsibility. This first step involved more than 3,500 employees. Since mid-2020, experts who used to work in the various Group brands and regions have been working together under the umbrella of the Car.Software Organisation.

The Car.Software Organisation is developing software for five applications within the Group:

- a uniform vehicle operating system "vw.os" for all Group vehicles as well as their 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.

From the middle of this decade onwards, all new vehicle models throughout the Group are to be based on a uniform, cross-brand software platform, including the "vw.os" operating system and Volkswagen Automotive Cloud, as well as a uniform architecture. At the end of 2024, this architecture will be used for the first time in an Audi model as part of the Artemis project. It is then to be deployed in high-volume vehicles to generate economies of scale and thus reduce the cost of in-vehicle software 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 mobility solutions business area at the same time. It is decisive to the success of this plan that we place our innovative strength on even broader foundations.

Within the Volkswagen Group, we combine technological innovation activities in the Volkswagen Group Innovation unit. At seven locations worldwide in the USA, Europe and Asia, employees are working on sustainable solutions for urban and interurban mobility systems in line with our strategic vision "Shaping mobility – for generations to come". Technologies and activities from Volkswagen Group Innovation that are ready for pre-development are regularly transferred to our Group brands. This means that the areas of digitalization, sustainability and e-mobility receive continuous support through innovative projects. In this way, we are creating an agile innovation structure that allows us to initiate new milestone projects with innovative international partners, even at short notice.

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. This helps us to identify the regional needs of customers more precisely, to adjust our product range correspondingly and to establish competitive cost structures. In doing so, we rely to a greater extent than in the past on partnerships, acquisitions and venture-capital investments and 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 Ford Motor Company with the intention of working together on the development of vans and mid-sized pickups. At the beginning of June 2020, Ford Motor Company and Volkswagen AG signed additional contracts within their existing global alliance for light commercial vehicles, electrification and autonomous driving. The contracts serve as the foundation for a total of three vehicle projects. In addition to the existing collaboration on the mid-sized pickup, projects are underway for a city van and a one-tonne cargo van. In total, the three alliance projects amount to a volume of approximately 8 million vehicles over the entire model cycle. In addition, we are investing 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 to make fully automated driving possible, and thus to open up new opportunities, particularly for ride-sharing providers and delivery services in urban areas through the use of fully automated vehicles. At the start of June 2020, a transaction was completed with Argo AI and Ford on cooperation to develop autonomous driving. Subsequently, the Volkswagen Group company AID was incorporated into Argo AI. 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 from 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 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, thus comprehensively strengthening and expanding our IT expertise and solutions.

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. A 16 GWh battery cell factory is to be built in Salzgitter. Looking ahead, we are already preparing for the next generation: we intend to bring solid-state batteries to market readiness in collaboration with our partner QuantumScape.

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: by the end of the reporting year, 325 charging stations were already in operation. By the end of 2021, we plan to have 400 charging stations in place.

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 2020, we filed 6,795 (7,614) 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, automation and connectivity as well as alternative drive systems.

The Automotive Division's total research and development costs in the reporting period amounted to €13.9 (14.3) billion and were 2.9% lower than in the previous year; their percentage of the Automotive Division's sales revenue – the R&D ratio – came to 7.6 (6.7)% due to the fall in sales revenue as a result of the Covid-19 pandemic. 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 46.6 (36.1)%. Research and development expenditure recognized in profit or loss in accordance with IFRSs decreased to €12.1 (13.2) billion.

As of December 31, 2020, our Research and Development departments – including the equity-accounted Chinese joint ventures – employed 53,268 people (–3.1%) Group-wide, corresponding to 8.0% of the total workforce.

RESEARCH AND DEVELOPMENT COSTS IN THE AUTOMOTIVE DIVISION

€ million	2020	2019
Total research and development costs	13,885	14,306
of which capitalized development costs	6,473	5,171
Capitalization ratio in %	46.6	36.1
Amortization of capitalized development costs	4,644	4,064
Research and development costs recognized in profit or loss	12,056	13,199
Sales revenue	182,106	212,473
Total research and development costs	13,885	14,306
R&D ratio	**7.6**	**6.7**

PROCUREMENT

In fiscal year 2020, 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 Group strategy TOGETHER 2025+ stands for more speed, focus and stringency, within the Procurement division as well, accelerating change even more. The focus in 2020 was on implementing the concepts developed in the procurement strategy. Procurement's key performance indicators were defined as part of a combined system of targets for Group Components and Procurement. This system of targets now gives greater weight to sustainability aspects in the supply chain, alongside the targets for material and investment costs and the timely award of contracts.

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 hardware and software that is strategically relevant and/or crucial for ensuring supplies. The Strategic Value Chain Management committee that has been set up takes strategically important “make, buy or partner” decisions on a regular basis.

The growing volume of software and the new partners and suppliers this entails necessitate adjustments to the process chain and Procurement's award criteria. The Corporate Sourcing Committee Digital Car is in charge of awarding contracts for vehicle and vehicle-related software optimally and on a weekly basis.

Volkswagen FAST – Supplier network as the basis for success

The FAST (Future Automotive Supply Tracks) initiative from Group Procurement is instrumental in advancing the Volkswagen Group and its supply network in terms of partnerships and future viability.

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 established criteria, a comprehensive assessment of the previous year is disclosed to the suppliers so that improvements can be made together. Strategic agreements on globalization and innovation continue to be core issues of this exchange, in addition to existing supply relationships.

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. Where possible, digital communication media were used for the annual meeting in the reporting year due to the spread of the SARS-CoV-2 virus. The program is updated and refined on an ongoing basis in order to take full advantage of the potential from the FAST initiative in the future as well.

E-mobility

A key task for Procurement is to safeguard supplies for the continually growing requirements of the e-mobility offensive over the next five to ten years in a sustainable way, and while optimizing cost structures.

Group Procurement puts a particular focus on high-voltage batteries and e-resources. By means of benchmarking and requirements-based training, we are increasing our purchasing expertise in this context.

When awarding contracts to our electric mobility partners, we have laid down requirements as regards sustainable supplier 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 aim of achieving cost leadership for electric mobility solutions. To this end, we consider diversification in conjunction with dual-supplier strategies as well as localization of the supplier portfolio for all core components of the electric vehicle fleet 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 safeguard 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 in an automated way 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 a global level, with a presence in the key markets around the world. This enables us to procure production materials, investments in property, plant and equipment, and services worldwide at the quality required and on the best possible terms. Networking among 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. In this context, we are also focusing on start-ups and software suppliers. In familiar and established markets, the regional offices support access to the latest technologies and innovations.

Management of purchased parts and suppliers

Today's supplier portfolio is characterized by global distribution, segmentation and diversification. We address the challenges this presents by supporting and monitoring the industrialization of suppliers with our procurement supplier management. This starts with auditing and assessing suppliers in preparation for the nomination process and continues with monitoring the maturity of the industrialization of purchased parts, to the complete acceptance and confirmation of the required production capacity at the individual supplier locations. The complexity of the components requires regular monitoring of production processes in order to identify any disruptive factors at an early stage and take action to remedy these. Close cooperation with the quality assurance units at the production sites is crucial for a stable supply of purchased parts for our start-up and series production vehicle projects. The global supplier management network worked reliably, particulary in the face of the challenges posed by the Covid-19 pandemic, and supplies to vehicle and component plants were largely safeguarded throughout the reporting year. Bottlenecks and supply disruption occurred globally due to the restrictions on mobility and border closures, resulting from the pandemic.

Sustainability in supplier relationships

Successful relationships with our business partners are based on respecting 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). These signed documents also contain the expectation that any subsuppliers will be subject to the same standards. We review compliance with the requirements, which has been an explicit condition for award of contract since 2019.

In our sustainability rating – introduced in 2019 and expanded in 2020 – we determine suppliers' sustainability performance by means of self-disclosures and on-site audits. By the end of the reporting year, we had obtained 13,041 ratings for suppliers, covering 76% of the total order volume. Both the validation of the self-assessment questionnaire and the on-site audits are carried out by selected service providers. 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. Despite the adversities caused by the Covid-19 pandemic, we once again stepped up our focus on advanced and continuing training for suppliers; in fiscal year 2020, more than 12 thousand suppliers took advantage of the training programs.

The focus of our activities in 2020 was on decarbonization, respecting human rights and responsible raw material sourcing.

With regard to decarbonization, the Volkswagen Group is striving to continuously reduce greenhouse gas emissions or avoid them altogether over the entire life cycle of a vehicle. The Group's transformation into a provider of sustainable mobility solutions and in particular the trend towards electric mobility are shifting the action required from the service life of the vehicle to supply chains and the manufacture of vehicles and components. We are aware of our social responsibility and are committed to the 2°C target of the Paris Climate Agreement. We have therefore incorporated the use of renewable energy into the specifications for battery suppliers.

In respecting human rights in our supply chains, we are guided by international agreements and frameworks as required by the UN Guiding Principles on Business and Human Rights and the principles and conventions of the OECD. To comply with these requirements, we launched a human rights due diligence management system in 2020 to make human rights risks in our supply chain transparent and to mitigate these risks. An additional management system has been set up to effectively manage the sometimes extensive risks in the raw material supply chains. This sets out in detail the prioritization and processing of the raw material supply chains that we classify as particularly high risk. Our current focus is on 16 raw materials. The inclusion of additional transparency requirements for our battery suppliers in 2020 represented a milestone for responsible raw material procurement. These requirements include the disclosure of the entire upstream supply chain by our battery suppliers and is effective for new contracts awarded from fiscal year 2020 onwards.

COMPONENTS BUSINESS

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

The components business manages around 75 thousand employees 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 corporate entity, Volkswagen Group Components, under the umbrella of Volkswagen AG.

The entity has been organized into business areas: Engine and Foundry, Transmissions and Electric Drive, Chassis and Battery System, Battery Cell and Seats. In each of the business areas, innovative power and competitiveness is to be increased by means of an economical product portfolio that is viable for the future, a continuously optimized product range and economies of scale exploited across all business areas. Group Components in the Volkswagen Group is to 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 to recycle them in a climate-friendly manner.

PRODUCTION

The international, cross-brand production network enables the process 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. To be able to meet the challenges of the future, we rely on holistic optimizations, forward-looking innovations, flexible supply streams and structures, and an agile team. In fiscal year 2020, the global vehicle production volume was 17.8% below the previous year's level, reaching 8.9 million units. This was primarily attributable to the global spread of the SARS-CoV-2 virus and the measures taken to contain the pandemic, such as temporary closures of factories or reduced factory output, particularly in the first half of 2020, due to interruption to supply chains and logistics and closures of dealerships. Despite the continuing difficult conditions in many markets, production in the second half of 2020 stabilized at close to the previous year's level. To maintain production processes amid the pandemic conditions and protect our employees, we developed and agreed behaviors and measures as part of our Safe Production Initiative to prevent possible chains of infection between the people working in the network. These mainly include the obligation to wear face masks, adherence to behavioural rules, particularly regarding social distancing, hygiene requirements and ensuring regular ventilation, and the reorganization of shift models and breaks. We constantly review the measures taken to contain the Covid-19 pandemic and adjust them if necessary.

Productivity increased by 0.8% year-on-year.

VEHICLE PRODUCTION LOCATIONS OF THE VOLKSWAGEN GROUP
Share of total production 2020 in percent

"Intelligently networked" production strategy

Production is supporting the 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 cross-brand 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. A scenario-based strategy process has been developed in the course of the transformation phase in production and is geared to an observation period running until 2040. The overarching aim is to increase productivity and profitability. We want to ensure that our locations remain competitive by having our factories work at optimal capacity, enabling us to manufacture high-quality products that give customers maximum benefits at competitive prices.

Global production network

The Group's production network encompasses twelve brands and 118 production locations, including our Chinese joint ventures. Standardizing production with uniform product concepts, plants, operating equipment and production processes is a key factor in our forward-looking production. We are constantly enhancing our production concepts and aligning them with new technologies to achieve ambitious targets in the individual projects.

The flexible production capacity provided by our platforms allows us to leverage synergies, respond to market challenges, make requirements-based use of the production network and realize multibrand locations. Currently, almost half of the 47 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. One example is the ID.3 from the Volkswagen Passenger Cars brand. In 2020, the portfolio of the MEB platform was expanded in Zwickau to include the ID.4 from Volkswagen Passenger Cars as well as at the Mlada Boleslav location with the addition of the Enyaq iV from ŠKODA.

In order to design multibrand projects and electric mobility to be cost-effective in conjunction with existing concepts, it is necessary to make production 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 Hanover.

Production locations

Following the sale of Renk, the Volkswagen Group's production network, including our Chinese joint ventures, is now comprised of 118 locations in which passenger cars, commercial vehicles and motorcycles, as well as powertrains and components are manufactured.

With 66 locations, Europe remains our most important production region for vehicles and components. There are 24 sites in Germany alone. The Group has 34 locations in the Asia-Pacific region, five in North America, nine in South America and four in Africa.

Despite difficult conditions due to the effects of the Covid-19 pandemic, we carried out 81 production start-ups in the reporting year: 33 for new products and successor products and 48 for product upgrades and derivatives.

The Group's production system

The Group's production system provides methods and tools designed to bring about continuous, sustainable workflow improvements at all Group brand and regional sites in production and production-related environments. When refining the methods, we incorporate new topics and ongoing trends, focusing, for example, on digitalization and the switch to electric mobility. Digitalization in particular is opening up new areas of application, for instance through the use of digital data and models. Furthermore, digitalization also provides the opportunity to transpose existing methods into digital formats and create new, IT-based tools. In this way, we are taking advantage of the opportunities presented by digitalization and are making increased use of digital formats and digital tools in training courses and workshops.

The people in the Group play a pivotal role in anchoring the production system. We promote a culture of appreciative cooperation, in which leadership and individual responsibility are indispensable.

New technologies and digitalization

3D printing is still one of the key technologies for Industry 4.0 and digitalizing the automotive value chain. These technologies, also dubbed additive manufacturing, are being used successfully at nearly all Volkswagen Group sites in the manufacture of components and also operating equipment. They open up wholly new opportunities in the areas of development, design, production and after sales. Due to the digital nature of 3D printing, 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.

Augmented reality links the virtual world with the physical one and, as a mature technology, likewise plays a key part in the digitalization of the value chain – not least in view of ongoing restrictions on contact and travel caused by the Covid-19 pandemic. In this regard, there is potential to increase efficiency and innovative capability in areas such as remote support, employee training, quality assurance and the development process. Along with the implementation of new solutions that use data glasses, tablets or projectors as an output medium, existing augmented reality applications are continuously being rolled out to other Group sites.

The basis for the digitalization of the production system is often the harnessing of production data. One focus is the use of artificial intelligence on image data, the so-called "industrial computer vision". Here, the Volkswagen Group developed its own platform for the implementation of specific projects and is rolling out applications across its brands and locations. Examples include checking that vehicle license plates are correct or detecting cracks in the press shop.

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. For this, the Volkswagen Group is developing, among other things, the Industrial Cloud in collaboration with Amazon Web Services and the integration partner Siemens. 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, related inline measuring systems, continuous quality control loops, predictive maintenance applications or 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 and operate them centrally. The entire project will take several years to be implemented. Moreover, Volkswagen is creating its Industrial Cloud as an open platform with the goal of incorporating companies from the entire value chain in addition to its own locations. In the long term, the Volkswagen Group aims to integrate its global supply chain with over 30,000 sites of suppliers and partner companies into the cloud, creating a constantly growing, worldwide ecosystem.

In order to identify future innovations and new business models along the entire value chain, our open innovation approach enables an influx of innovative ideas and technologies from external start-ups, thus driving forward-looking innovations for our products, services and processes within the Volkswagen Group.

GoTOzero Impact Factory

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 toward creating a factory that has no adverse environmental impact.

We have developed a checklist to help the sites determine their status on the way to becoming a “Zero-Impact Factory”. This currently comprises 140 environmental criteria and thus provides the basis for continuous reduction of energy consumption and CO_2 emissions, for example.

To implement such programs, a new management system will be introduced at all production sites worldwide, linking the main compliance issues with environmental management. This environmental compliance management system provides a solid foundation for compliance with all external and internal rules relating to the environment for instance in the course of production processes.

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 our employees with training on the topic of 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 1,520 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 and are incorporated into the decarbonization index (DCI), for example. These activities are beneficial from an environmental and often also from an economic perspective as well as having a positive effect on the Group’s environmental indicators.

GoTOzero Impact Logistics

In the joint “goTOzero Impact Logistics” initiative, Group and brand logistics departments work together to help achieve the goals of the goTOzero environmental mission statement. Continuous optimization of the transport network and logistics processes reduces emissions – this includes the use of digitalization tools. The use of new low-emission technologies for transporting production materials and vehicles will also be continuously analyzed and accelerated.

The measures the Volkswagen Group is taking to achieve future carbon-neutral logistics include, for example, moving shipments from road to rail and almost complete avoidance of CO_2 through the use of green electricity in rail transport in Germany in collaboration with Deutsche Bahn AG.

Other examples of the use of the railways as a low-emission mode of transport are the delivery of battery modules to Braunschweig from the supplier in Wrocław, Poland, and the transport of battery systems from the component site in Braunschweig to the Zwickau plant in order to produce completely battery-electric vehicles.

In addition, Group Logistics is using the world’s first two roll-on/roll-off (RoRo) charter ships powered by low-pollution liquefied natural gas (LNG) for transporting vehicles across the North Atlantic.

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 state-of-the-art 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 strategic Best Brand Equity module is to continuously sharpen the brand profiles, demarcate the respective vehicle segments that are served by the brands as clearly as possible and add to them in a targeted way as required. Our aim is to achieve high market saturation with great efficiency and a low level of brand cannibalization. Market positioning is an important element for increasing brand values. To this end, we have established automobile-specific customer segmentation to steer the positioning of our brands which we consistently apply throughout 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. Thanks to their faithful customers, the Volkswagen Passenger Cars, Audi, ŠKODA and Porsche brands have remained in the upper loyalty rankings of the core European markets in comparison with their competitors for a number of years. Following a decrease in the loyalty rates between 2016 and 2018, these figures stabilized for the Volkswagen Passenger Cars, Audi and Porsche brands and have since risen for ŠKODA and SEAT. Compared to other manufacturer groups, the Volkswagen Group continues to hold a top spot in the core European markets in terms of loyalty.

> 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 in 2020 above the level for the market as a whole. Porsche remains in top position in the image ranking.

In the financial services business, we use two strategic indicators. The two indicators are currently being revised in light of changes in customer needs and in the product range, the short- and long-term impact of the Covid-19 pandemic and the strategic alignment of financial services in the Volkswagen Group:

> Customer satisfaction. A high level of customer satisfaction is one of the key objectives of our financial services activities. Our goal is to satisfy customers completely. This is the reason why we have measured both external and internal customer satisfaction in our markets in recent years.

> Customer loyalty. Trust in and loyalty to our services rely on customer satisfaction with our product range and service. For this reason we ascertained the re-entering contract rates in our markets in past years based on product sales to customers, for financing and lease agreements for repurchases of new Volkswagen Group vehicles.

E-mobility and digitalization in Group Sales

As part of our electrification campaign, we aim to offer our customers worldwide around 70 completely battery-electric vehicles and approximately 60 hybrid models by 2030. 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. This poses 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 brands – 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. This results to 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 sales of well-equipped, profitable vehicle models 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 an overall passenger car market in Germany that declined by 19.1% in the reporting year, business fleet customers accounted for 16.2 (14.8)% of total registrations. The Volkswagen Group's share of this customer segment slipped to 42.1 (44.1)%. Outside Germany, the Group's share of registrations by fleet customers in Europe was up slightly at 26.5 (25.7)%. This trend shows that fleet customers' confidence in the Group remains at a high level. We were able to consolidate our strong market position in the fleet customer business in Europe.

After Sales and Service

In addition to individual service, the timely provision of genuine parts is essential to assure 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 are creating the prerequisites to supply almost all our authorized service facilities around the world 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, our mission is to 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 aim to guarantee fuel efficiency, reliability and wide vehicle availability. Workshop service and service contracts are intended to 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 to secure the availability of machinery with MAN PrimeServ. The global network of more than 100 PrimeServ locations stands for excellent customer focus and offers, among other things, replacement parts of genuine-part 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 quality.

Digitalization was once again the beating heart of our work in the reporting year: we are sharpening our focus on software-based system development, which is a critical factor for success in respect of customer satisfaction. Consistent application of the "Automotive SPICE" process assessment model that we use to improve our processes is particularly important in our activities. It is a key building block for meeting the requirements of our customers, as well as those of the regulatory and legislative bodies.

Volkswagen has been implementing cybersecurity measures in the Group for some time now. For example, we have an independent cybersecurity network in place across all regions and Group brands and monitor potential cyber risks. This enables us to act fast when potential threats arise. The UNECE (United Nations Economic Commission for Europe) has provided for corresponding certification and homologation in the future to ensure that companies can guarantee that these aspects are dealt with properly so as to protect the users of our vehicles from potential attacks. Our Group pursues the goal of implementing standards in the areas of both accident prevention and security. We are refining the established processes within the framework of an Automotive Cyber Security Management System in keeping with the requirements of the UNECE regulation. In this context, Volkswagen is implementing comprehensive measures across departments in the Group. One of these is a Group-wide communications campaign launched for the Volkswagen Passenger Cars brand to underline the importance of this issue.

Strategy of Group Quality

We review our functional area strategy periodically and coordinate it with the brands. We align our activities with our goal expressed in the motto: "We embody outstanding quality and ensure reliable mobility for our customers worldwide." 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 ex gratia repair costs.

The strategy of Group Quality developed in this context comprises the following four goals:

> We excite our customers with our outstanding quality by understanding what exactly they perceive as quality and implementing this in our products.
> We contribute to competitive products with optimal quality costs by ensuring robust processes, thereby reducing the expense involved in testing each vehicle.
> We make our contribution to sustainability, security and integrity by embodying and designing high standards of quality in products and processes.
> We are becoming an excellent employer by promoting the personal development of every single employee even more intensively.

To achieve our goals, we have defined a variety of work packages. 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 at the top level of consideration for the major passenger car-producing brands.

> Warranty and ex gratia repair payments per vehicle after 12 months in service. This indicator shows all warranty and ex gratia repair payments for the vehicles produced worldwide in each production year, expressed in euros per vehicle. All vehicles from the Volkswagen Passenger Cars, Audi, Porsche, ŠKODA, SEAT and Volkswagen Commercial Vehicles brands are included in this figure. Extraordinary items resulting from initiatives such as recalls or in connection with the diesel issue are not taken into account. While the figures for the 2017 and 2018 production years remained at a constant level, it was possible to reduce the allowances for vehicles manufactured in 2019 which are within the targeted corridor. Particularly noteworthy is the Volkswagen Commercial Vehicles brand, the figures for which improved by more than 10% year-on-year in the 2019 production year.

In 2020, the Board of Management decided to replace the "Tow-in 12 MIS" strategic indicator with this new indicator, as evaluation of global warranty and ex gratia repair payments is a more comprehensive instrument for the economic management of customer perceptions of product quality.

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 business units. Among other things, 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 that the conformity checks on our products are carried out and assessed with the participation of all business units involved. This applies particularly to checks related to emissions and fuel consumption.

We are also dedicating increased attention to our quality management system, reinforcing the interdisciplinary, process-driven approach throughout the Group. The quality management system in the Volkswagen Group is based on the ISO 9001 standard. 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 sites 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.

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.

In order to be able to ensure that the perceived quality of our vehicles is at a level commensurate with that of our competitors, we take the needs of our regional customers into account in our vehicle audits. Every brand works together with the individual regions to decide how its product is to be positioned there. In this way, we strengthen the brands' responsibility. So that the vehicle 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, the 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, 2020, we employed a total of 662,575 people, which includes the Chinese joint ventures. This figure represents a 1.3% decrease compared with the end of 2019. The ratio of Group employees in Germany to those abroad remained largely stable over the past year; at the end of 2020, 44.4 (44.3)% of the workforce worked in Germany.

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 in corporate governance, comprehensive participation rights for employees, outstanding training opportunities, the principle of long-term service through systematic employee retention and remuneration that is fair and transparent. 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 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:

EMPLOYEES BY MARKET
in percent, as of December 31, 2020

> 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 88.2 index points was achieved in the reporting period, contrasting with 85.6 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 once a year to check the positioning of the major passenger car-producing brands on the labor markets for graduates. 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. The Porsche and ŠKODA brands fully met and partly exceeded their targets in fiscal year 2020, while Volkswagen Passenger Cars, Volkswagen Commercial Vehicles, SEAT and Audi missed or only partially achieved them.
> 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, solutions to problems and product ideas. The diversity of our workforce provides potential for innovation in this area, which we aim to make even better use of in future. As we establish diversity management across the Group, this strategic indicator expresses the development of the proportion of women in management and the internationalization of top management as a percentage of the active workforce worldwide. 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 15.3% in 2020 and was one percentage point up on the prior-year level. We aim to raise this figure to 20.2% by 2025. Our goal is 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 18.7 (18.4)%.

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 Group strategy TOGETHER 2025+ has been accompanied by a work package that we defined with the Excellent Leadership module under the slogan “Accelerate the transformation” to drive the change towards an open, cooperative, diverse management culture that places emphasis on acting with integrity. Communication and collaboration will be improved across the brands and regions, open, partnership-based and value-based leadership will be intensified, management development and training will undergo fundamental change, and an even more systematic approach to succession planning will be taken so that the Group has the right people available for the right positions. In 2020, we overhauled our staff development system in line with our business requirements and introduced scouting day management, a new selection procedure that will enable us to identify suitable talent for selected functions in specialist or executive management objectively, accurately and promptly. Individual responsibility, transparency and greater practical relevance already characterize the career paths leading to management; the evaluation of talented candidates addresses employees from different levels of the hierarchy.

To master the challenges of the transformation, 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 refined in fiscal year 2020.

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 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. Since 2019, the Volkswagen Group Academy has forged partnerships with renowned external training portals to expand online learning, for example on IT topics. The Company has set aside additional funds for the transformation of personnel skills made necessary by digitalization. These resources are 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 providing in-house training for the software developers who are needed for the digital transformation. The academic year started in 2020 with 100 participants. The program is designed for employees and also external applicants with IT affinity and an interest in software development.

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 2020, the Volkswagen Group trained 17,939 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. At Volkswagen AG, for example, 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 relevant to Volkswagen's future – such as electrical engineering, chemistry or computer science – 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 also 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 2020, Volkswagen AG hired a total of 151 graduate trainees as part of these programs, 32.5% 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.

Increasing attractiveness as an employer and development programs for specific target groups

A human resources policy that promotes a work-life balance is a major component of Volkswagen's attractiveness as an employer; in particular, it contributes to greater gender

PROPORTION OF WOMEN
as of December 31

%	2020	2019
Employees	17.0	16.8
Vocational trainees[1]	20.5	21.4
Graduate recruits[2]	32.5	31.7
Total management	15.1	14.2
Management	17.3	16.2
Senior management	11.6	10.8
Top management	7.0	6.8

1 Excluding Scania.
2 Volkswagen AG

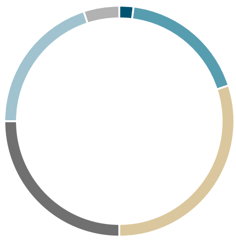
equality. We are working continuously to develop family-friendly working time models and to increase the number of women in management positions. In line with the Gesetz für die gleichberechtigte Teilhabe von Frauen und Männern in Führungspositionen in der Privatwirtschaft und im öffentlichen Dienst (German Act on the Equal Participation of Women and Men in Leadership Positions in 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, 2020, the proportion of women in the active workforce at the first level of management was 10.9 (11.4)% and at the second level of management it was 16.7 (16.4)%.

In order to encourage women with great potential to advance within the Company, we have set targets relating to the development of the proportion of women in management for every Board of Management business area at Volkswagen AG. 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, the possibility to convert salary components into paid leave, childcare services that are associated with the company or are company-owned, and remote working.

At Volkswagen AG, which first entered into its works agreement for remote working back in 2016, around 40 thousand employees were making use of a more flexible working arrangement as of the end of the 2020 fiscal year.

AGE STRUCTURE IN YEARS OF VOLKSWAGEN GROUP EMPLOYEES
as of December 31, 2020; in percent



The Covid-19 pandemic brought fundamental changes to the way we work and collaborate with one another. As in other companies, at Volkswagen the pandemic acted primarily as a catalyst for the breakthrough of digitalization in knowledge work: virtual communication and collaboration, and new formats of knowledge transfer and training, for example through podcasts or online tutorials, were set up and expanded at short notice. In addition, digital tools enabled us to remain operational throughout the measures introduced to contain the pandemic, such as business closures.

Preventive healthcare and occupational safety

Preventive healthcare and occupational safety are key elements of human resources policy in the Volkswagen Group. In fiscal year 2019, we underpinned this by drawing up 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. In fiscal year 2020, our Health department faced unique challenges due to the spread of the Covid-19 pandemic and the measures that needed to be put in place. Our top priority was to safeguard production in the Group without putting the protection and health of our employees in jeopardy. To this end, we developed and implemented a variety of actions such as hygiene measures, setting up dedicated test centers at Volkswagen locations and providing input and guidance from the Health department on the Safe Production Initiative, which supports safe and healthy manufacturing under pandemic conditions.

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 criticism being heard.

We brief our employees extensively on upcoming changes so as to involve them in strategic decision-making as early as possible. When shaping labor relations to embody cooperation and 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 Global Works Councils which set out the principles of labor policy in the Volkswagen Group as well as employee rights.

By means of the opinion survey, an employee poll conducted at 172 companies belonging to the Group, the Company not only regularly gathers information regarding employee satisfaction, but also inquires about the manifestation 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 540 thousand employees in 38 countries were invited to take part in the 2020 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 2020 it stood at 82.2 out of a possible total of 100 index points. The score achieved in 2020 was thus higher than the previous year's figure, which amounted to 80.0 points.

In addition, we also encourage employee 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. The system also provides monetary incentives by offering set rewards.

Employee participation in the Company's success through the issuance of treasury shares in the form of an employee share program is not currently offered.

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.

Due to the global spread of the Covid-19 pandemic, we have taken measures to protect the workforce, such as an increased use of remote working. In this context, safeguarding access to the IT infrastructure in all brands and companies was a major priority in fiscal year 2020. Usage figures for VPN (virtual private network) access and digital collaboration applications soared compared with the previous year. IT system availability improved once again year-on-year.

The Group IT Steering Committee was formed in 2019 to leverage synergies, to manage the Group's IT project portfolio and promote communication with departments on IT projects. Planning and managing the IT project portfolio at Group level make sure that budgets and resources are employed in a coordinated fashion in the development, implementation and use of IT solutions. In fiscal year 2020, the Group IT Steering Committee prioritized the IT project portfolio with all brands so as to take account of the Group's situation during the Covid-19 pandemic.

Volkswagen embraces digitalization in the Company; its in-house IT labs are just one example of this. The labs act as centers of innovation and expertise that conduct research, experiment with new technologies and make these available for productive use in applications for the organization. Here, Group IT, research institutes, technology partners and policymakers work 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 Munich, and increasingly also in Wolfsburg, are working, for example, on exploiting the potential of quantum computers for areas that have a commercial application. The focus here is on the optimization of traffic flows and the 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, the IT labs are used to transfer knowledge throughout the entire Company on topics such as data analytics (process for the systematic analysis of data in electronic form) and decentralized databases, that allow network participants to jointly process and store data (distributed ledger technologies), and to make new technologies usable for the Company. For instance, numerous bot projects are being implemented to automate business processes (robotic process automation), and self-learning systems will be used to intelligently analyze data to assist staff in recurring administrative work by preparing such activities independently and passing them on to staff for decision-making.

The further convergence of different business areas with IT is also opening up potential. 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 factories are linked together in an integrated overall system, enabling efficiency to be increased and digital pilot projects to be integrated into the existing architecture much more easily than before. In conjunction with the different departments, Group IT is also contributing its expertise to the field of research and development. 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 in optimizing the use of parking lots and vehicle collection processes.

The IT department engages in extensive activities to give Volkswagen's employees access to digital media and work tools. The provision of state-of-the-art IT applications for digital collaboration and the expansion of options for conducting business on mobile devices are designed to improve productivity in the long term. 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 the brands and the world.

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.

Cutting-edge technologies for the industrial Internet of Things are being developed at the 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 information throughout the Volkswagen Group worldwide is one of the main tasks of IT and is being continued with the Group Information Security Program launched in fiscal year 2020. The objective of the program is to create uniform processes and solutions across the Group to further enhance information security in the areas of cloud security and secure software development. The main focus is on topics that could one day pose information security risks for the Group. The program's content and orientation will be reviewed annually and updated if necessary.

CAR2X technology offers our customers protection by warning them, for example, about traffic hazards. CAR2X technology enables direct wireless communication among the vehicles themselves and with the transport infrastructure. This TÜV IT-certified technology, implemented in accordance with European standards, represents a technical milestone in our CAR2X program.

We are one of the first vehicle manufacturers to require our suppliers to have passed TISAX (Trusted Information Security Assessment Exchange) certification. This sends out a strong signal about cross-company information and data security. TISAX certification is an assessment method developed by the German Association of the Automotive Industry and is based on the new international industry standard and the requirements of the automotive world. The aim is for sensitive data and information to be dealt with securely by our suppliers.

The tasks of automotive cybersecurity are to avert cyber attacks on our vehicles throughout the entire product life cycle and in the supply chains and to protect our customers' personal data in our vehicles. The first Group policies in the Volkswagen Group based on the legal requirements of the UNECE regulation have been implemented. Cross-brand organizational guidelines are being specified and implemented on this basis, taking the organizational circumstances into account.

Our "Protected Customer" program addresses the requirements of the UNECE regulation. To enable us to protect our customers against cyber attacks, and to implement our solutions in conformity with national and international legislation, we are establishing integrated, cross-brand, cross-regional security management systems for information and cybersecurity. One of the aims of this program, which is set to run until 2021, is to safeguard the complete life cycle of our vehicles and the digital mobility services.

Key central information security processes have been audited within the international ISO 27001 framework and were recertified in 2020. 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.

In fiscal year 2020, we continued the activities of our Group program for systematic implementation of the European General Data Protection Regulation (GDPR) and developed Group-wide standards for GDPR compliance. This gave rise to uniform processes, procedures and systemic solutions, as well as a Group-wide GDPR dialogue. In addition, knowledge relating to data protection was continuously built up through extensive training and qualification measures. Whenever new IT solutions are developed, requirements based on the Privacy by Design principle are taken into account from the outset. The basic requirements of the GDPR, transparency in processing and the minimization of personal data, remain essential goals in all existing and future processes. To facilitate long-term compliance with the GDPR, the development of the data protection management organization that began in 2019 was steadily continued and implemented in regular operations.

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 the environmental mission statement goTOzero, we aspire to minimize environmental impact along the entire life cycle – from raw material extraction until end-of-life – for all our products and mobility solutions in order to keep ecosystems intact and to exert a positive influence 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 net-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 with the intention of improving the local air quality. Our target is a share of battery electric vehicles in our model portfolio of around 20% by 2025.
- Environmental compliance. Where integrity is concerned, we aim to become a role model for a modern, transparent and successful enterprise by covering the environmental impact of our mobility solutions over all life cycle stages. To this end, we use effective management systems, the effectiveness of which is monitored regularly.

With our future program TOGETHER 2025+, we have defined a strategic indicator:

- Decarbonization index (DKI). The DKI measures the emissions of CO_2 and CO_2 equivalents (jointly referred to as CO_2e) by the major passenger car- and light commercial vehicle-producing brands in the regions of Europe (EU27, United Kingdom, Norway and Iceland), China and the USA over the entire life cycle. In this index, the use phase is calculated over 200,000 km and with reference to region-specific fleet values without statutory flexibilities. The CO_2e intensity of the charging current of the electric vehicles is also calculated based on region-specific electricity mixes. Our vehicle life cycle assessments, which are used as the data basis for calculating supply chain and recycling emissions, have been verified externally and independently in accordance with ISO 14040. In the DKI, we have a meaningful measuring instrument that makes our progress and interim results public and verifiable. The DKI calculation methodology is adapted according to internal and external requirements such as new test cycles for fleet emissions. Published DKI values can therefore also be adjusted to the new methodology and thus changed to facilitate the presentation of a time series that is methodologically consistent. By 2025, the DKI is to be reduced by 30% compared with the base year 2015. In the reporting year, the DKI value averaged 43.0 t CO_2e/vehicle. Compared with the value calculated for 2019, this represents an increase of 0.2 t CO_2e/vehicle.

We once again markedly enhanced and expanded our climate protection targets in the reporting year. The Volkswagen Group aims to reduce the CO_2 emissions of its vehicles by 30% in the production and use phase between 2018 and 2030. The independent Science Based Targets Initiative confirmed to the Volkswagen Group that due to its climate targets, the Company fulfills the conditions for limiting global warming to “significantly below 2 degrees Celsius.”

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 body for environmental issues. Both it and the brands’ 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. They 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.

Our declared aim is to comply with legal and regulatory requirements. Furthermore, we are guided by company standards and targets. The intention of our environmental compliance management systems is to ensure that environmental aspects and obligations are taken into account in our business operations. Disregard for the rules is treated as a severe compliance violation, as are fraud and misconduct. 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 NONFINANCIAL GROUP REPORT

The combined separate nonfinancial report of Volkswagen AG and the Volkswagen Group in accordance with sections 289b and 315b Handelsgesetzbuch (HGB – German Commercial Code) for fiscal year 2020 will be available on the website https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2020/Nichtfinanzieller_ Bericht_ 2020_d.pdf in German and at https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2020/Nonfinancial_Report_2020_e.pdf in English by no later than April 30, 2021.

REPORT ON POST-BALANCE SHEET DATE EVENTS

For more information on the agreement covering the key points of a comprehensive realignment of MAN Truck & Bus SE, please refer to the details provided in “Events after the balance sheet date” of the notes to the consolidated financial statements.

Report on Expected Developments

Growth in the global economy is expected to recover overall in 2021. Global demand for passenger cars will probably vary from region to region and increase noticeably year-on-year. With our brand diversity, broad product range, technologies and services, we believe 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 planning is based on the assumption that global economic output will recover overall in 2021, provided lasting containment of the Covid-19 pandemic is achieved. This growth will most likely be sufficient for the economy to recover to approximately its pre-pandemic level. We continue to 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 ongoing geopolitical tensions and conflicts. We anticipate that both the advanced economies and the emerging markets will experience positive momentum.

Furthermore, we anticipate that the global economy will also continue to grow in the period from 2022 to 2025.

Europe/Other Markets

In Western Europe, we expect moderate economic growth in 2021 after the downturn in the last fiscal year. The impact of the Covid-19 pandemic and the uncertain consequences of the United Kingdom's withdrawal from the EU will fundamentally pose major challenges.

We also anticipate moderate growth rates in Central Europe in 2021. The economic situation in Eastern Europe is expected to recover as well, albeit at a somewhat slower pace given that only slight growth is anticipated for the Russian economy.

For Turkey, we expect an increasing economic growth rate combined with high inflation and a weak domestic currency. The South African economy will probably be dominated by political uncertainty and social tensions again in 2021 resulting from high unemployment, among other factors. Despite the sharp slump in the past fiscal year, we therefore expect only moderate growth.

Germany

We expect gross domestic product (GDP) in Germany to grow at a relatively robust pace in 2021 but to remain short of its pre-pandemic level. The labor market situation is likely to deteriorate somewhat depending, among other things, on a delayed increase in corporate insolvencies following the suspension of the obligation to file for insolvency during the pandemic.

North America

We anticipate a distinct improvement in the economic situation in the USA in 2021, despite a declining but still relatively high unemployment rate. The US Federal Reserve will probably leave key interest rates close to zero. Economic growth is also likely to increase distinctly in neighboring Canada and Mexico, although growth in Mexico is not expected to match the pace of the relatively sharp decline in the reporting year.

South America

In all probability, the Brazilian economy will recover in 2021 and record a moderate rate of growth. After three years of negative GDP growth rates, we anticipate only little improvement in the economic situation in Argentina. Inflation is likely to remain very high and the local currency to depreciate.

Asia-Pacific

The Chinese economy will probably continue growing at a relatively high level in 2021 after being one of the few economies not to experience a recession in 2020. After a sharp contraction in the reporting year, we also expect a relatively high rate of expansion for the Indian economy in 2021, outpacing the average growth seen in the years before the Covid-19 pandemic. In Japan, we anticipate a solid rise in GDP growth.

TRENDS IN THE MARKETS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

We predict that trends in the markets for passenger cars in the individual regions will be mixed in 2021. Overall, the volume of demand worldwide for new vehicles is expected to be noticeably up on the reporting year, but will not reach the pre-pandemic level, provided successful containment of the Covid-19 pandemic is achieved. We are forecasting growing demand for passenger cars worldwide in the period from 2022 to 2025.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed in 2021; on the whole, we anticipate a moderate rise in demand for 2021, assuming a successful containment of the Covid-19 pandemic. For the years 2022 to 2025, we expect demand for light commercial vehicles to increase globally.

We believe we are well prepared overall 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. With electric drives, digital connectivity and autonomous driving, we want to make the automobile cleaner, quieter, more intelligent and safer. With an appealing product portfolio of impressive vehicles and forward-looking, tailor-made mobility solutions we have set ourselves the goal of continuing to excite our customers and to meet their diverse needs.

Europe/Other Markets

For 2021, we anticipate that the volume of new passenger car registrations in Western Europe will be significantly above that recorded in the reporting year. At the same time, however, possible consequences of the pandemic and the uncertain impact of the United Kingdom's exit from the EU may result in ongoing uncertainty among consumers and dampen demand. Despite this, we expect a strong increase in the United Kingdom in 2021. In Italy, Spain and France, the markets are likely to significantly exceed the level seen in the reporting year.

For light commercial vehicles, we anticipate demand in Western Europe in 2021 to be noticeably up on the previous year's level despite the possible consequences of the pandemic and the uncertain impact of the United Kingdom's exit from the EU. We predict a moderate to large increase in Italy, France, Spain and the United Kingdom.

Sales of passenger cars in 2021 are expected to distinctly exceed the prior-year figures in markets in Central and Eastern Europe. In Russia, we anticipate a moderate year-on-year increase in market volume. In the region's other markets, a slight to strong rise in the number of new registrations is expected.

Registrations of light commercial vehicles in the Central and Eastern European markets in 2021 will probably be distinctly higher than in the previous year. We predict a moderate increase in market volume for Russia.

The volume of the passenger car market in Turkey in 2021 is expected to remain at the previous year's level. The volume of new registrations in South Africa in 2021 is likely to be substantially higher year-on-year.

Germany

In the German passenger car market, we expect a moderate year-on-year increase in demand in 2021.

We also anticipate that registrations of light commercial vehicles will be noticeably up on the previous year.

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 2021 is likely to be distinctly higher than the previous year's level. 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 significantly higher than the previous year's level. For Mexico, we expect demand to rise slightly 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 anticipate an overall large increase in new registrations in the South American markets in 2021 compared with the previous year. In Brazil, the volume of demand is expected to increase substantially compared with 2020. We anticipate that demand in Argentina will be significantly higher year-on-year.

Asia-Pacific

The passenger car markets in the Asia-Pacific region are expected to be noticeably up on the prior-year level in 2021. We predict demand in China to also be noticeably higher than the comparative figure for 2020. Attractively priced entry-level models in the SUV segment in particular should still see strong demand. As long as there is no resolution in sight, the trade dispute between China and the United States is likely to continue to weigh on business and consumer confidence. We anticipate an appreciable increase in the Indian market compared with the previous year. Japan should see slight growth in market volume in 2021.

The market volume for light commercial vehicles in 2021 will probably be slightly higher than the previous year's figure. We are expecting demand in the Chinese market to be distinctly lower than in the previous year. For India, we are forecasting a substantially higher volume in 2021 than in the reporting year. In the Japanese market, we expect demand to be comparable with the previous year.

TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

For 2021, we expect a significantly positive development in new registrations for mid-sized and heavy trucks with a gross weight of more than six tonnes compared with the previous year, with variations from region to region, in the markets that are relevant for the Volkswagen Group.

Significant market growth is expected for the 27 EU states excluding Malta, but plus the United Kingdom, Norway and Switzerland (EU27+3). Russia will probably witness a noticeable rebound in demand. We are forecasting a slight increase in Turkey and a significant increase in demand in South Africa. We estimate that demand in Brazil will be considerably higher than in the previous year.

On average, we anticipate moderate growth rates in the relevant truck markets for the years 2022 to 2025.

A moderate increase in overall demand with regional variations for 2021 is likely in the bus markets relevant for the Volkswagen Group. We anticipate a slight year-on-year decline in the market in the EU27+3 countries. In Mexico, we expect to see very strong market growth. New registrations in Brazil will probably be distinctly higher than the prior-year figure.

Overall, we expect a noticeable increase in the demand for buses on the relevant markets for the period from 2022 to 2025.

TRENDS IN THE MARKETS FOR POWER ENGINEERING

In the Power Engineering segment, we expect the market environment to remain difficult in 2021. The further course of the Covid-19 pandemic and its consequences bring additional uncertainty.

In 2021, the market volume for two-stroke engines used in merchant shipping is likely to reach a higher level than in the reporting period. An expected higher volume of sea trade, combined with calls for high energy efficiency and low pollutant emissions, will continue to have a significant influence on drive systems in the future. The market for four-stroke engines for cruise ships is likely to remain at a very low level due to the continuing very difficult liquidity situation. Demand in the passenger ferry segment – similarly affected by a loss of revenue – is also expected at a low level. We also expect demand to remain stable for government vessels and dredgers. In the offshore sector, new order volumes of special applications look set to be on the low side due to continued overcapacity. Overall, we expect the marine market to be at a slightly higher level than that seen in the reporting year with competitive pressure continuing unabated.

The Covid-19 pandemic has led to great uncertainty concerning likely energy demand in 2021. Initial signs point to a further slight decline in market volume. The global spread of the SARS-CoV-2 virus and the measures taken to contain it have reduced demand for energy and made it harder to raise capital for investment in energy generation plants. Despite this impact on the markets, we expect the trend towards decentralized power stations and gas-based applications to further intensify. In addition, demand for new and carbon-neutral technologies should continue to increase in future.

Potential projects in turbomachinery suggest that demand will stabilize in 2021 at the previous year's level. However, the course of the Covid-19 pandemic brings substantial uncertainty to the decision-making process for capital expenditure. Favorable conditions in the capital markets and targeted state support facilitate such capital-intensive decisions. Lower capacity utilization of production facilities by market participants is expected. With the pandemic's increasing duration, this may lead to more intense competition. In energy generation, we expect increasing growth in renewable energy sources, bolstered by state support. Fluctuations in the amount of electricity generated by these will necessitate an increase in storage capacity. We are therefore pushing the construction of pilot plants for thermal storage. This could lead to an expansion of the market for turbocompressors and turboexpanders.

We anticipate a slight recovery in 2021 both in the marine and power plant after-sales business for diesel engines and in the after-sales market for turbomachinery. There may be a temporary catch-up effect in order intake following the postponement of projects over the past year.

For the period 2022 to 2025, 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. It remains to be seen for how long the pandemic will continue to affect the market.

TRENDS IN THE MARKETS FOR FINANCIAL SERVICES

We anticipate that automotive financial services will prove highly important to global vehicle sales in 2021, particularly in the context of the ongoing challenges posed by the Covid-19 pandemic. We expect demand to rise in emerging markets where market penetration has so far been low. Regions with already 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 that demand will increase for new forms of mobility, such as rental services, and for integrated mobility services, for example parking, refueling and charging, and that the shift in the European leasing business initiated with individual customers from financing to lease contracts will continue. We estimate that this trend will continue in the years 2022 to 2025.

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 2021. This trend is also expected to persist in the period 2022 to 2025.

EXCHANGE RATE TRENDS

In 2020, the euro appreciated slightly against the US dollar on an annual average. It also rose against sterling. The euro/sterling exchange rate in 2020 was affected by high uncertainty about the outcome of the negotiations on the United Kingdom's exit from the EU and the shape of future relationships. Against the currencies of some emerging markets, the euro appreciated considerably in some cases. In particular, the Argentinian peso, Brazilian real, South African rand, Russian ruble and Mexican peso lost value against the European single currency. The currencies of Asian emerging markets also weakened overall against the euro on an annual average. For 2021, we are forecasting that the euro will strengthen against the US dollar, sterling and the Chinese renminbi. The Argentinian peso, Brazilian real, Mexican peso, South African rand and Russian ruble will most likely continue to depreciate. For 2022 to 2025, we expect that the euro will be stable against the key currencies, but that the comparative weakness of the currencies in the aforementioned 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

The challenging macroeconomic conditions, including as a result of the Covid-19 pandemic, resulted in globally falling interest rates in fiscal year 2020. National central banks both in the major Western industrialized nations and in emerging markets cut key interest rates, in some cases on multiple occasions, and also introduced additional expansionary monetary policy measures to support their economies. In March 2020, the US Federal Reserve cut the key interest rate to almost 0% in the space of just a few days, while the European Central Bank also left its key interest rate at zero. We expect these policies to generally continue in 2021 and therefore consider it currently unlikely that interest rates will rise in the USA or Europe. In the period from 2022 to 2025, we expect no more than a slight increase in interest rates.

COMMODITY PRICE TRENDS

The global spread of the coronavirus (SARS-CoV-2) has also affected commodity markets. The associated restrictions and the resulting downturn in demand and supply, reduced the prices of many raw and input materials in the first half of 2020. However, the prices recovered markedly in some cases over the course of the year. Compared with the previous year, there was a fall in the average prices for raw materials such as crude oil, coking coal, lead, aluminum and natural rubber, while prices for iron ore, rare earths and the precious metals rhodium and palladium rose and copper and platinum prices were more or less unchanged. Prices for the raw materials that are relevant for e-mobility also developed unevenly: average prices over the year for lithium and cobalt fell, while nickel prices were more or less 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 2021. For the years 2022 to 2025, we continue to expect volatility in the commodity markets with prices trending both upwards and downwards.

NEW MODELS IN 2021

The Volkswagen Passenger Cars brand will expand the ID. family in 2021 with the all-electric ID.5, a new crossover derivative based on the MEB. The Tiguan will be electrified as a plug-in hybrid. The brand will also launch a compact SUV coupé and the updated Polo. New entry-level SUVs in the compact category will also be debuted in the respective markets, with the Tarek being launched in Russia and the Taos in North and South America. In China, several all-electric vehicles will be introduced to the market, including the ID.4 Crozz and ID.4 X. In India, the locally produced Taigun compact SUV will be available.

Audi will also continue its electric car offensive in 2021, expanding the e-tron family with the new e-tron GT. The all-electric Q4 e-tron will also be available. In the Q5 series, Audi will offer a dynamic Sportback model and a version with plug-in hybrid drive.

The ŠKODA brand will power ahead with the electrification of its portfolio by introducing the new Enyaq iV. The new generation of the Fabia and the facelifted Kodiaq will also become available in the course of the year. In India, the Kushaq, a new small SUV, tailored to local needs, will arrive on the market.

SEAT will expand its range in 2021 with a plug-in hybrid Tarraco, among other models. The popular, compact Ibiza will receive an update. CUPRA will bring its Formentor e-Hybrid with powerful plug-in hybrid drive to the market. The el-Born will mark the brand's debut in the world of pure electric cars.

Porsche will expand its Taycan model range in 2021 with an all-electric Cross Turismo version. Sporty all-round models will be added to the 911 model range. The Macan will receive a product upgrade.

The Bentley brand will offer a plug-in hybrid version of the new Bentayga in 2021. The introduction of a further model with plug-in hybrid drive is also planned.

Lamborghini will launch its Huracán STO high-performance super sports car.

A new derivative of the Chiron will be available from Bugatti.

Volkswagen Commercial Vehicles will completely revamp the Multivan/Transporter in 2021, and in doing so pen a new chapter in this model's success story.

Scania and MAN will present innovative new models in 2021, including a truck and a bus with all-electric drives and other solutions for urban transport.

Ducati will introduce its new Monster, among other motorcycles, in 2021. The fourth generation of the Multistrada V4 will be available and the XDiavel and Scrambler families will be upgraded. The SuperSport 950, new Panigale V4 SP and updated Panigale 4 sports bikes are also waiting in the wings.

FUTURE ORGANIZATIONAL STRUCTURE OF THE GROUP

In November 2020, TRATON SE and Navistar International Corporation (Navistar), a leading US truck manufacturer, announced the signing of a binding merger agreement. Under this agreement, TRATON will acquire all outstanding shares in Navistar not already owned by TRATON in return for cash payment at a price of USD 44.50 per share (total: approximately USD 3.7 billion). As of December 31, 2020, TRATON already holds a 16.7% stake in Navistar. The aim of the transaction is to enhance the ability to meet challenges from new regulations and fast-developing technologies in connectivity, propulsion and autonomous driving and to benefit from Navistar's presence on the North American market. The completion of the transaction, through which TRATON will become Navistar's sole owner, is intended for mid-2021 and is subject to the approval of Navistar's shareholders, to the usual closing conditions and regulatory approvals. The main shareholders Icahn Capital LP and MHR Fund Management LC have already agreed to vote their stake in favor of the transaction.

Our plans are based on the Volkswagen Group's current structures. They do not include the conclusion of the merger agreement. The effects of this transaction on the financial performance, cash flows and financial position are not taken into account in the forecast of the Volkswagen Group.

INVESTMENT AND FINANCIAL PLANNING

To meet people's needs for individual, sustainable, fully connected mobility and thus increase 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 into a digital mobility group while leveraging our economies of scale and maximizing synergies.

In our current planning for 2021, most of the 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. Forthis, we will invest in the electrification and hybridization of our model portfolio and continue to advance 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 will also focus on the growing digitalization of our vehicles and locations and increase our capital expenditure on these. 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 is expected to fluctuate around a level of 6.0% to 6.5%.

Besides capex, investing activities will also cover additions to capitalized development costs. Among other things, these reflect upfront expenditures in connection with the electrification, digitalization and updating of our model range. Also included are the services of the Car.Software Organisation, which is developing a standardized operating system for Group brand vehicles, along with other projects.

With the investments in our facilities and models, as well as in the development of electric drives and modular toolkits and in digitalization, 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 2021, we estimate cash outflows resulting from the diesel issue to remain more or less the same and effects from mergers & acquisitions to be significantly higher. Consequently, we anticipate that the net cash flow will be in line with the previous year.

Net liquidity in the Automotive Division will probably see a moderate increase in 2021.

These plans are based on the Volkswagen Group's current structures. They do not include the intended acquisition of all outstanding ordinary shares of Navistar International Corporation and the related cash outflows.

Our joint ventures in China are accounted for using the equity method and are therefore not included in the figures above. For 2021, 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 probably exceed the 2020 level and be financed from the companies' own funds.

In the Financial Services Division, we are planning higher investments in 2021 than in the previous year. We expect the development of lease assets and of 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%.

Business at the Volkswagen Group was affected by the consequences of the Covid-19 pandemic throughout the whole of 2020. As a result, ROI decreased in the reporting period due to earnings-related factors and, at 6.5% (11.2%), was below both the prior-year figure and our minimum required rate of return (for further information, please see the headline "Return on investment (ROI) and value contribution in the reporting period" in the chapter entitled "Results of Operations, Financial Position and Net Assets"). In the Automotive Division, we expect the return on investment (ROI) to be noticeably above our minimum required rate of return on the invested capital.

SUMMARY OF EXPECTED DEVELOPMENTS

Our planning is based on the assumption that global economic output will recover overall in 2021, provided lasting containment of the Covid-19 pandemic is achieved. This growth will most likely be sufficient for the economy to recover to approximately its pre-pandemic level. We continue to 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 ongoing geopolitical tensions and conflicts. We anticipate that both the advanced economies and the emerging markets will experience positive momentum.

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 2021. Overall, the volume of demand worldwide for new vehicles is expected to be noticeably up on the reporting year, provided successful containment of the Covid-19 pandemic is achieved; however, it will not recover to its pre-pandemic level. For 2021, we anticipate that the volume of new passenger car registrations in Western Europe will be significantly above that recorded in the reporting year. In the German passenger car market, we expect a moderate year-on-year increase in demand in 2021. Sales of passenger cars in 2021 are expected to distinctly exceed the prior-year figures in markets in Central and Eastern Europe. The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America as a whole in 2021 is also likely to be distinctly higher than the previous year's level. We expect to see a large increase overall in new registrations in the South American markets in 2021 compared with the previous year. The passenger car markets in the Asia-Pacific region are expected to be noticeably up on the prior-year level in 2021.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed in 2021; on the whole, we anticipate a moderate rise in demand for 2021, assuming that containment of the Covid-19 pandemic is successful.

For 2021, we expect a significantly positive development in new registrations for mid-sized and heavy trucks with a gross weight of more than six tonnes compared with the previous year in the markets that are relevant for the Volkswagen Group. A moderate increase in overall demand for 2021 is likely in the bus markets relevant for the Volkswagen Group.

We anticipate that automotive financial services will be of great significance to global vehicle sales in 2021, particularly in the context of the ongoing challenges posed by the Covid-19 pandemic.

We believe we are well prepared overall for the future challenges pertaining to automotive 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 our 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 the future and meeting their diverse needs with an appealing product portfolio of impressive vehicles and forward-looking, tailor-made mobility solutions.

We anticipate that deliveries to Volkswagen Group customers will be significantly up on the previous year in 2021 – assuming successful containment of the Covid-19 pandemic – amid continued challenging market conditions.

Challenges will arise particularly from the economic situation, the increasing intensity of competition, volatile commodity and foreign exchange markets, securing supply chains, and more stringent emissions-related requirements.

We expect the sales revenues of the Volkswagen Group and Passenger Cars Business Area in 2021 to be significantly higher than the prior-year figure. 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 5.0% to 6.5% in 2021. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of 4.0% to 5.5% before restructuring measures amid a significant year-on-year increase in sales revenue. We expect the Power Engineering Business Area to reach the break-even point amid a noticeable decline in sales revenue compared with the previous year. For the Financial Services Division, we forecast that sales revenue will be noticeably higher than the prior-year figure and that the operating result will be in line with the previous year.

In the Automotive Division, we expect the R&D ratio to come in at around 7% and the ratio of capex to sales revenue at around 6% in 2021. For 2021, we expect cash outflows resulting from the diesel issue to remain more or less the same and effects from mergers & acquisitions to be significantly higher. Consequently, we anticipate that the net cash flow will be in line with the previous year. Net liquidity in the Automotive Division will probably see a moderate increase in 2021. We expect the return on investment (ROI) to be noticeably above our minimum required rate of return. 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 approach to organizing 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 aspires to become a role model for a modern, transparent and successful enterprise. We also aim 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.

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.

THE VOLKSWAGEN THREE LINES MODEL

Another key element of the RMS/ICS at Volkswagen is the Three Lines Model, a basic element required by, among other bodies, the European Confederation of Institutes of Internal Auditing (ECIIA). In line with this model, the Volkswagen Group's RMS/ICS has three lines designed to protect the Company from significant risks occurring.

The minimum requirements for the RMS/ICS, including the Three Lines Model, are set out in guidelines for the entire Group.

The RMS/ICS was further developed in the past fiscal year. The IT risk management system called “Riskradar” was introduced at all brands and significant Group companies in 2020. 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 at 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 high-risk business processes at significant companies. We will continue to develop our RMS/ICS in the future.

CALCULATION OF RISK SCORE

First line: Operational risk management

The first line 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 impact is 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 promptly incorporated into the monthly forecasts regarding further business development. This means that the Board of Management also has access to an overall picture of the current risk situation via the documented reporting channels during the year.

The operational risk management and internal control system 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: 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 regarding the risk situation and the effectiveness of the RMS/ICS to the significant Group companies and units worldwide (regular Governance, Risk & Compliance (GRC) process) each year.

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 (Prob) by the potential extent of the damage. The extent of the damage is calculated from the criteria of 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.

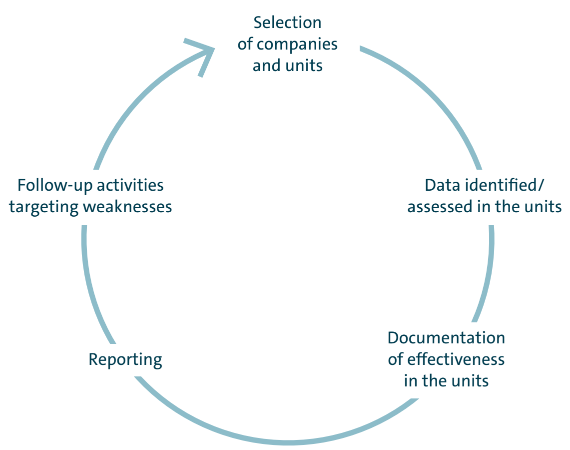
The score for a likelihood of occurrence of more than 50% in the analysis period is classified as high; for a medium classification, the likelihood of occurrence is at least 25%. For the criterion of financial loss, the score rises in line with the loss; the highest score of 10 is reached when the potential loss is 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 2020.

Quarterly risk reports are produced in addition to the annual risk assessment. These depict the Volkswagen Group’s

ANNUAL STANDARD GOVERNANCE, RISK AND COMPLIANCE PROCESS



acute – short to medium-term – risk situation. The assessment of risks from this quarterly risk process (QRP) is conducted in the "Riskradar" IT system similarly to that of the annual regular GRC process. All Group brands as well as 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, are reported to the Board of Management as required. This is necessary if, among other things, the risk may lead to potential financial loss of over €1 billion.

Based on the feedback from the annual regular 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 loss 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: 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 line). 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 via spot checks in detailed interviews with the divisions and companies concerned together with the external auditors. The auditor examines the risk early warning system integrated in the risk management system with respect to its fundamental suitability of being able to identify risks that might jeopardize the continued existence and assesses the functionality of the risk early warning and monitoring systems in accordance with section 317(4) of the HGB.

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. Its aim is to ensure that the locally applicable regulatory requirements are adhered to and at the same time to enable 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. External experts assist in the continuous enhancement of our RMS/ICS on a case-by-case basis. The results culminate in both regular and event-driven reporting to the Board of Management and Supervisory Board of Volkswagen AG.

THE RISK MANAGEMENT AND INTEGRATED INTERNAL CONTROL SYSTEM IN THE CONTEXT OF THE FINANCIAL REPORTING PROCESS

The accounting-related part of the RMS/ICS that is relevant for the financial statements of Volkswagen AG and the Volkswagen Group as well as its subsidiaries comprises measures 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 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, is intended to ensure 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 is based on these.

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 "four eyes" 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.

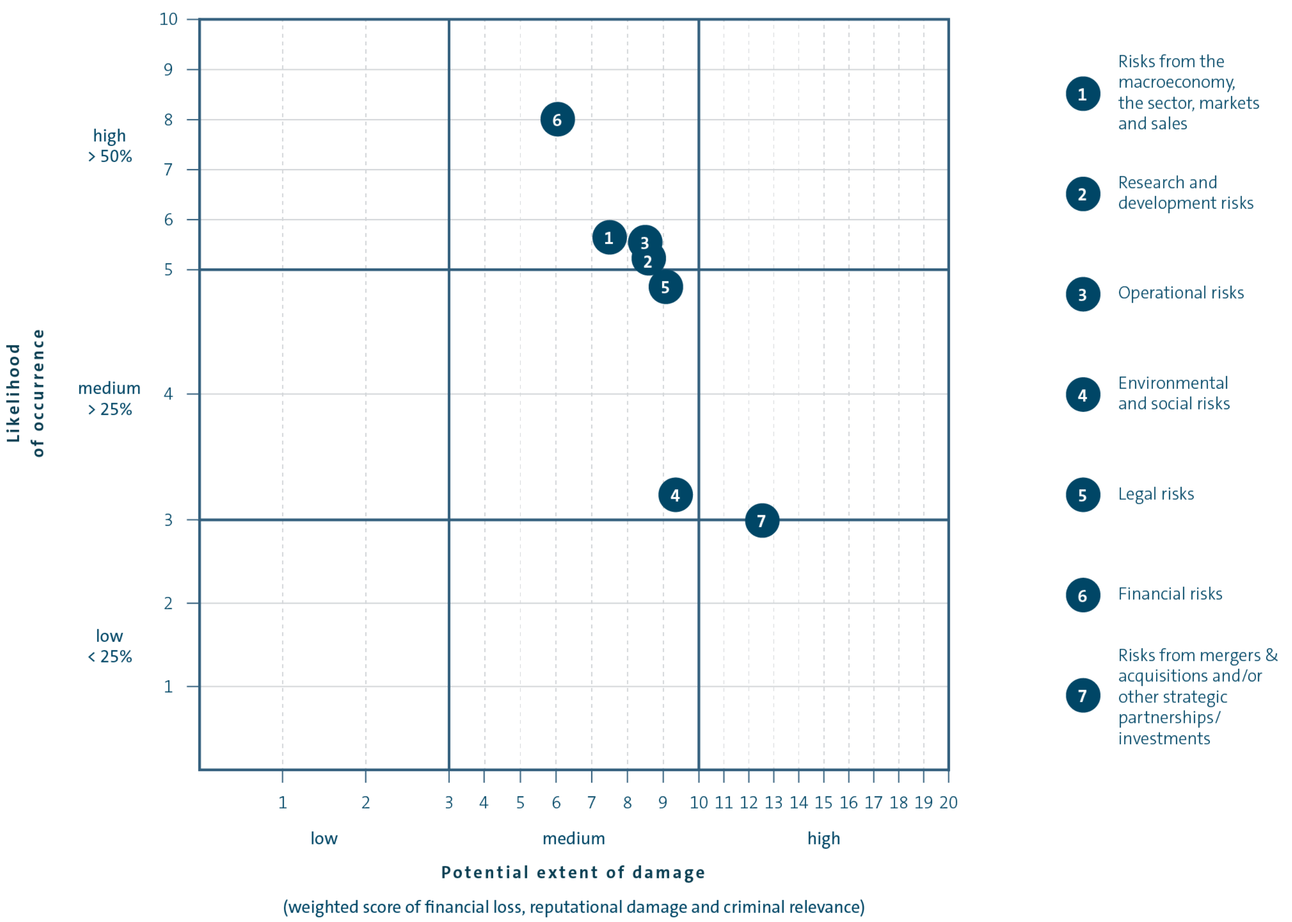
Integrated consolidation and planning system

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 the required 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 changed.

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

For this risk category, the likelihood of occurrence is classified as high (previous year: medium) and the potential extent of damage is classified as medium (previous year: medium).

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 positive growth in global economic output will arise primarily if efforts to contain the Covid-19 pandemic are not successful in the long term, as well as 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. 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. There are also risks from the uncertain consequences of the United Kingdom's exit from the EU.

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 can 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 also 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 also put a strain on the global economy. The same applies to violent conflicts, terrorist activities, cyber attacks and the spread of infectious diseases, which may quickly result in unexpected market reactions.

Overall, we anticipate a recovery in the global economy in 2021. However, due to the risk factors mentioned, as well as cyclical and structural aspects, a further negative trend in the global economy 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 from expected developments in a positive way.

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.

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. Examples of these are customs regulations or minimum local content requirements for production. 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.

Price pressure in established automotive markets for new and used vehicles as a result of high market saturation is a further risk 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.

There is a risk that excess capacity in global automotive production may lead to a rise in inventories and therefore an increase in tied-up capital. 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 demand that built up in individual established markets in times of crisis could result in a marked recovery if the economic environment eases more quickly than expected.

In Europe, there is a risk that further municipalities and cities will impose a driving ban on vehicles with combustion engines in order to comply with emission limits. 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.

Economic performance varied in individual regions in fiscal year 2020. The resulting risks for our trading and sales companies, such as in relation to efficient inventory management and a profitable dealer network, are substantial and are being responded to with 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 dealership end that could hinder smooth business operations.

We continue to approve loans for vehicle financing 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 dated June 8, 2011 and EU Regulation 858/2018 applicable from September 1, 2020, regarding independent market participants' access to technical information.

In Germany, legislation entered into force on December 2, 2020 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 is facing 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 at 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.

There is also a risk of freight deliveries worldwide being shifted from trucks to other means of transport, and of 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
Demand for vehicles is expected to increase in the coming years due to the need for individual mobility. It is also expected that demand will shift from the coastal metropolises to the country's 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.

> India
The Volkswagen Group has consolidated its activities in this strategically important future market and has launched a model initiative with the new ŠKODA Kushaq tailored to the needs of customers.

> USA
In the USA, Volkswagen Group of America is steadfast in its pursuit to become a full-fledged volume supplier. The expansion of local production capacity – including production 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 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 tailored specially for this market that are locally produced, such as the Gol and the Nivus.

> Russia
The heavy reliance on oil and gas income, currency volatility and the resulting volatility of vehicle prices, the political crisis and the related sanctions imposed by the EU and the USA continue to negatively impact the development of demand. The market remains strategically important to the Volkswagen Group, which is why we have a strong focus on market cultivation there.

> Middle East
Political and economic uncertainty in the region weigh on the passenger car markets. In spite of this instability, 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 having our own production facilities there.

Power Engineering

Global economic trends are likely to continue, such as digitalization and the increasing interest in emissions-reducing technologies associated with decarbonization. Growing global energy needs call for innovation in the industry and a growing willingness on the part of governments to invest in line with the global climate policy.

The situation for the marine market has deteriorated due to the global pandemic. There is a risk that investments will be postponed and there will be a distinct slowdown in project business. Some market segments have been disproportionately affected. These include the cruise industry, which has been hit by the collapse in demand for tourist travel, or the offshore market, which is suffering from the sustained reduction in oil prices.

In turbomachinery, there is the risk that planned projects and orders will be scaled back or postponed due to negative developments in sales markets or individual applications.

We address these risks by constantly monitoring the markets, focusing on less strongly affected market segments, working closely with all business partners such as customers and licensees, and introducing new and improved technologies.

We are working systematically to leverage market opportunities at a global level, for example by positioning ourselves as a solution provider for reduced-carbon drive and energy-generation technologies as well as for storage technology. Moreover, significant potential can be leveraged in the medium term by enhancing our after-sales business through the introduction of new digital 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. Digital service solutions, for instance for remote surveillance of plants, offer growth potential despite the pandemic.

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, carry the risk of significant changes in demand or the cancellation of already existing orders.

The measures we use to counter the substantial economic and extraordinary risks include flexible production concepts and cost flexibility by means of temporary external personnel, working time accounts and short-time working (Kurzarbeit), and the necessary structural adjustments.

Sales risks

There is a risk that the Volkswagen Group could experience decreases in demand, possibly exacerbated by media reports or insufficient communication, for example as a result of the diesel issue. 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 substantial 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. As a result, there could be a risk of 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.

The fleet customer business continues to be characterized by increasing concentration and internationalization, accompanied by the risk that the loss of individual fleet customers may result in relatively high volume losses. Viewed over an extended period, the fleet customer business is more stable than the business with retail customers. The Volkswagen Group is well positioned with its broad portfolio of products and drive systems, as well as its target-group-focused customer care, and counteracts a 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. A current example is that of the Covid-19 pandemic. Households' worries about the future economic situation, for example, may lead to unexpected buyer reluctance. 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 existing vehicles for longer. We are countering the risk of buyer reluctance 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, and from 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 resulting risk of production fluctuations calls for a high degree of flexibility from the 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 poses a risk of declining license revenues. Due to changes in the competitive environment, especially in China, there is also the risk of losing market share.

Other factors

In addition to 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, pandemics – such as the current spread of the SARS-CoV-2 virus –, violent conflicts and terrorist attacks.

There is a risk that the Covid-19 pandemic could intensify, due to reasons such as changes in the virus. All areas of the Volkswagen Group are affected by the pandemic, especially sales due to a fall in customer demand, production and supply chains. There are risks arising in particular from a sustained fall in demand and an increasing intensity of competition. These risks could be mitigated by government economic programs. Furthermore, we envisage challenges, especially in production with regard to stable supply chains and protecting the health of our staff. We have put in place increased hygiene and protective measures to ensure plants can operate.

Research and development risks

For this risk category, the likelihood of occurrence is classified as high (previous year: high) and the potential extent of damage is classified as medium (previous year: medium).

The most significant risks from the regular GRC process and QRP result from the inability to develop products in line with demand and requirements, especially with regard to e-mobility and digitalization.

Risks arising from research and development

The automotive industry is undergoing a fundamental transformation process. For multinational corporations like Volkswagen, this means risks in the areas of customer/market, technological advances and legislation. One risk is posed by the implementation of increasingly stringent emission and fuel consumption regulations, taking new test procedures and test cycles (e.g. Worldwide Harmonized Light-Duty Vehicles Test Procedure, 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). There is therefore a risk of non-conformity in the manufacture, procurement and introduction of products such as automobiles or replacement parts.

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 speed of technological development, for example in the fields of digitalization and automated driving, there is a risk of failing to identify relevant trends early enough to respond accordingly.

The latest from the world of physics and other scientific findings are used to plot our course. In addition, we 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 time frame, to the required quality standards, or in line with cost specifications, by continuously and systematically monitoring the progress of all projects; at present also amidst the Covid-19 pandemic.

To reduce the risk of 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 departments 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.

As volumes rise, however, so does the risk that disruption in the supply chain – for example, as a consequence of the pandemic – or quality problems will affect an increasing number of vehicles.

The Modular Transverse Toolkit (MQB) is an extremely flexible vehicle architecture that was created to allow conceptual dimensions – 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. Thanks to the resulting synergy effects, 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 varying 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 have also transferred this principle of standardization with maximum flexibility to the Modular Electric Drive Toolkit (MEB) and Premium Platform Electric (PPE), concepts developed for all-electric drives. The synergy effects and efficiency gains offered by the modular toolkit strategy will give us the opportunity to bring e-mobility into mass production worldwide with the introduction of the first MEB- and PPE-based vehicles.

Operational risks and opportunities

For this risk category, the likelihood of occurrence is classified as high (previous year: high) and the potential extent of damage is classified as medium (previous year: medium).

The most significant risks from the regular GRC process and QRP lie particularly in cyber security and new regulatory requirements for IT, in quality problems, and in volatile procurement markets.

Risks from particular events in the Volkswagen Group's procurement and production network

Particular events beyond our control such as natural disasters, pandemics – currently the spread of the SARS-CoV-2 virus – or other events such as fires, explosions, or the leakage of substances hazardous to health and/or the environment, may result in supply risks in procurement and significantly impair production. As a consequence, bottlenecks or even outages in production may occur, thus preventing the planned volume of production from being achieved.

Supply risks are identified in Procurement through early warning systems and mitigated by applying corresponding measures to safeguard supply and avert future assembly line stoppages caused by suspensions of deliveries. Further methods of counteracting such risks include hygiene concepts, fire protection measures and hazardous goods management, and, where financially viable, ensuring that they are covered by insurance policies.

Due to the uncertainty arising from the further development of the Covid-19 pandemic, there is a risk that looming supply breakdowns may not be recognized early enough and that countermeasures may not be initiated in time to maintain production. Countermeasures to stabilize global production include, for example, observing the spread of infection and the measures taken to contain the pandemic, analyzing the impact on suppliers and supply and transport chains, finding alternatives where suppliers are unavailable and organizing special processes. Vehicle programs and production processes can be adjusted dynamically. As part of the Safe Production Initiative, we have defined hygiene measures to prevent possible chains of infection at essential points of contact between the people working in the network. These measures will be adjusted if necessary and include physical distancing, wearing of protective masks, cleaning and disinfecting, and reorganizing shift models and staggering break times.

Risks and opportunities from Procurement and Components

Concentrating on only a few financially strong suppliers gives rise to the risk of insufficient competition. Current trends in the automotive industry such as e-mobility and automated driving are resulting in an increased need for financing among suppliers, presenting them with considerable challenges. The Volkswagen Group's procurement risk management system assesses suppliers before they are commissioned to carry out projects and takes risk management into account when awarding contracts.

There is a risk of bottlenecks or disruption in supply, as is currently being seen in the case of semiconductor components. Here, the rapid recovery in demand starting in the fourth quarter of 2020, following the pandemic-induced drop in production and sales volumes in the first half of 2020, and the insufficient market capacity of the semiconductor industry combined with high demand from the consumer, IT and telecommunications industries have led to bottlenecks in supply. We intend to safeguard supplies for our production plants by implementing short-term measures and intensifying relationship management and monitoring across the entire supply chain.

A global economic slowdown exacerbated by trade disputes and especially the consequences of the Covid-19 pandemic is impacting the financial situation of many suppliers. This is also giving rise to risks of bottlenecks or disruption in supply.

Government support measures have stabilized the position of suppliers experiencing financial difficulties as a result of the pandemic. In Germany, for example, new rules on short-time working (Kurzarbeit) and loan support schemes, but also the suspension of the obligation to file for insolvency, have prevented companies from becoming insolvent. Despite the government support measures, the number of suppliers around the world experiencing crises and insolvencies rose significantly in 2020. Specialists in Procurement for restructuring and supply reliability monitor the financial situation of our suppliers continuously and globally, taking targeted measures to counter the risk of possible supply disruptions.

Risks in battery cell production arise particularly from the rising demand for battery cells and the resulting reliance on suppliers, from technological change and from the service life of battery cells. To counter these risks, the Group maintains multiple strategic supplier relationships in order to ensure its supply of batteries in every region.

Demand for resources, possible speculations on the market and current trends in the automotive industry, such as the growing share of electrified vehicles, may affect the availability and prices of certain raw materials. Trends in raw materials and demand are continuously analyzed and assessed on an interdisciplinary basis to enable steps to be taken at an early stage in the event of potential bottlenecks.

Quality problems may necessitate technical intervention involving a substantial financial outlay where costs cannot be passed on to the supplier or can only be passed on to a limited extent. 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 preventing quality defects in the supply chain from arising.

It is not possible at present to rule out the possibility of a further increase in recalls of various models produced by a variety of manufacturers in which certain airbags manufactured by Takata were installed. This could also affect Volkswagen Group models.

Specialists in Procurement systematically investigate risks resulting from antitrust violations by suppliers and file claims for any losses that may arise.

Production risks

Volatile developments in the global automotive markets, accidents at suppliers and disruptions in the supply chain may cause fluctuations in production volumes affecting both vehicle models and plants. In specific markets we are seeing a trend away from orders for conventional vehicles with combustion engines and towards increased orders for electric vehicles. We use established tools, such as flexible working time models, to address possible risks in terms of fluctuations in the mix of vehicle types. The international production network enables us to respond flexibly at the sites. “Turntable concepts” adjust capacity utilization between production facilities. At multibrand sites, volatility can also be balanced across brands.

Quick 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 based on long-term sales planning for all vehicle projects. This involves a degree of risk as it is subject to market momentum and changes in demand. 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. In the event of short-notice fluctuations in demand beyond the technical capacity that has been installed, Volkswagen or its suppliers may be unable to meet demand that goes beyond the available technical flexibility. We counter such risks by matching demand and capacity at rapid intervals and issuing program scheduling guidelines where necessary.

The diversity of our models is growing, particularly with the current electrification campaign. The growing model diversity and reduction in product life cycles are leading to an increasing number of new vehicle start-ups at our sites worldwide. These involve the use of complex processes and technical systems, meaning there is a risk that a vehicle start-up 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 generally prevent risks such as disruption to plant operation, downtime, lost output, rejects and reworking, we use the TPM (Total Productive Maintenance) method at our production facilities. TPM is a continuous process that involves the entire workforce. Round-the-clock maintenance of the technical facilities means that they are always operational and guaranteed to function reliably.

Legal changes, for instance in the context of the change-over 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.

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, quality defects and unnoticed product malfunctions in product creation, or poor performance by subcontractors. Most notably, omissions at the start of a project, overshooting of the development budget or timeframe, and legislative changes are usually difficult to correct or compensate for and often entail substantial additional expenses.

We endeavor to identify these risks at an early stage and to take appropriate measures to eliminate or minimize them 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 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 faults. 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. If quality management is ineffective, there is a risk of losing ISO 9001 and KBA certification. This would lead directly to a loss of type approval from one or more authorities. We counter this risk by continuously training the Group's system auditors and subjecting our quality management system and process quality to internal audits.

We also check the conformity of series products (conformity of production – CoP) in vehicle production plants as part of system audits with a CoP component. Further risks are associated with discrepancies identified in conformity of production (CoP) measurements and in-service-conformity (ISC) measurements. We have established an effective system for monitoring the conformity of CoP and ISC measurements for manufactured vehicles. To ensure that the results of the CoP and ISC measurements are analyzed systematically, we have defined an IT system throughout the Group as the basis for reporting and implemented it across the organization. This is used for status reporting and documenting the results of the series of measurements.

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 so that the Volkswagen Group brands and their products fulfill all respective applicable requirements and local authorities receive timely notification of all issues requiring reporting. By doing so, we reduce the risk of customer complaints or other negative consequences.

With increasing technical complexity and the use of the toolkit system in the Group, the demand for high-grade, impeccable-quality supplier components and software is growing. This is lending increasing importance to cyber security. To better monitor and manage the risk of cyber attacks on our vehicles in the future, we are establishing an Automotive Cyber Security Management System in all Group brands and integrating it into the existing quality management system. This will allow us to fulfill the legal requirements of the UNECE regulation that apply from 2021.

The Ausschuss für Produktsicherheit (APS – Product Safety Committee) has been established to mitigate product safety risks. In the event of safety defects, doubts about compliance with legal requirements, or issues relating to the brand or corporate image, the APS examines the matter concerned and decides on how to respond. In this context, the APS is also responsible for managing related inquiries from authorities. The cross-divisional Car Security Board (CSB) provides support in relation to cyber security issues. We also created central units responsible for recording and managing incoming information on APS- and CSB-related topics. These now have an established position within the organization. All incoming reports on APS-related issues are also transferred from the APS mailbox to a central database. Risks may arise in this context from a lack of timely, complete and correct preliminary analysis, reporting and follow-up or from a lack of timely, complete and correct decisions and measures by the APS or CSB.

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 is a key factor for the correctness and soundness of data , and for the functionality of error-free systems.

There is a risk of cyber attacks, particularly on our digital technology used for our mobility services. 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. Legal regulations including the UNECE (United Nations Economic Commission for Europe) cyber security regulation (R155) are creating requirements for our vehicle and software development. These also have a 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 such as 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 allow us to mitigate risks that occur in the event of a systems failure or of a disaster.

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 are 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 communication at times of crisis.

Environmental and social risks

For this risk category, the likelihood of occurrence is classified as medium (previous year: medium) and the potential extent of damage is classified as medium (previous year: medium).

The most significant risks from the regular GRC process and QRP arise from non-fulfillment of CO_2-related requirements.

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 areas that are crucial for the future, such as electrical engineering, chemistry or information technology. 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.

A challenge lies in the conflict between requests for information in the context of various US agreements entered into in connection with the diesel issue 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.

The spread of the SARS-CoV-2 virus had a negative impact on business development in fiscal year 2020. Any infectious diseases occurring in the future may also pose a risk of high infection rates among the workforce, resulting in process disruptions in production and non-production areas, for example production stoppages. In the event of the future spread of such diseases, emergency plans to tackle this risk for the purpose of business continuity management will be developed for critical processes, based on the experience of 2020, and incorporated into the risk management systems.

Environmental protection regulations

The specific emission targets for all new passenger car and light commercial vehicle fleets for brands and groups in the EU for 2020 and subsequent years are set out in Regulation (EU) No 2019/631. This regulation is a material component of the European climate protection policy and therefore forms the key regulatory framework for product design and marketing by all vehicle manufacturers selling in the European market.

Adopted by the EU on April 17, 2019 and published on April 25, 2019, the regulation states that, from 2021 onward, the average emissions of European passenger car fleets must be no higher than 95 g CO_2/km; in 2020, this emissions limit already applied to 95% of the fleet. Up to and including 2020, European fleet legislation was complied with on the basis of the New European Driving Cycle (NEDC). From 2021, the NEDC target value will be replaced by a WLTP target value through a process defined by lawmakers; this change will 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 applied to the entire fleet in 2020.

The targets will be tightened as from 2025: for new European passenger car fleets, a reduction of 15% will therefore 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 within the fleet.

Non-fulfillment of the respective fleet-wide target will result in an excess emissions premium, amounting to €95 per excess gram of CO_2 per newly registered vehicle.

At the same time, regulations governing fleet fuel consumption are also being developed or introduced outside the EU27 (plus Norway, Iceland), for example in Brazil, Canada, China, India, Japan, Mexico, Saudi Arabia, South Korea, Switzerland, Taiwan, the United Kingdom 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 5.0 liters/100 km (NEDC) for the period 2016 to 2020, were continued into the period 2021 to 2025 with a target of 4.6 liters/100 km (WLTP). In addition to this legislation on fleet fuel consumption, a 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 was 12%, to be fulfilled through battery-electric vehicles, plug-in hybrids, or fuel cell vehicles. The minimum quota will increase by two percentage points annually until 2023. Targets for the period after 2023 have not yet been defined. In the USA, greenhouse gas legislation has defined the annual CO_2 fleet targets since 2012. A decision was reached in fiscal year 2020 to relax fleet targets significantly starting in 2022. The Volkswagen Group decided to participate in the framework of the California Air Resources Board (CARB). This involves a voluntary commitment to the alternative fleet targets set by the CARB which are more ambitious than the national standards. The form the fleet targets will take under the new administration is not known.

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 values, since these would entail severe payment obligations. 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. Volkswagen continues to regard diesel technology as an important element in the fulfillment of CO_2 emissions targets.

Alongside technical and portfolio electrification measures, it is also possible to use local statutory mechanisms such as the creation of emission pools in Europe or the trading of emission credits in the United States and China. Legislation provides further flexibility to aid target achievement, depending on the region, for example:

> Relief opportunities may be provided for additional innovative technologies in the vehicle that apply outside the test cycle (eco-innovations and off-cycle credits),
> Particularly efficient vehicles qualify for super-credits,
> Special rules are in place for small-series producers and niche manufacturers.

In the EU, a 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 homologation (achievement of vehicle type approvals).

The Real Driving Emissions (RDE) Regulation for passenger cars and light commercial vehicles is another 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:
> 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.

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 excess emissions premiums, 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 substantial 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.

As part of the European Green Deal, the European Commission has presented its 2030 Climate Target Plan, which sets out to reduce CO_2 emissions in the EU by at least 55% (previously 40%) compared to 1990 levels by 2030. This may lead to even more stringent requirements for CO_2 emissions for the automotive industry.

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 air pollutant limits for nitrogen dioxide (NO_2) immissions. In some cases, these issues have been, and continue to be, the subject of legal proceedings. Individual cities throughout Germany have already imposed zonal traffic bans for older vehicles such as Euro 4/IV diesel. 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 traffic bans are already also in place in a number of other countries, though these mainly affect older vehicles. Regulations in Belgium that successively ban older vehicles from larger cities are one example. In addition to major cities such as Paris and London, countries like the United Kingdom are now discussing future bans on vehicles with internal combustion engines.

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 was implemented globally 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 particularly stringent 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 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 to 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. In certain (sub)sectors of industry, there was 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 was 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 received additional certificates free of charge up to the end of the third trading period. Back in 2013, the European Commission decided to initially withhold a portion of the certificates to be auctioned. The certificates were directed into a market stability reserve that was established in 2018. This reserve will serve to offset any imbalance between the supply of and demand for certificates in emissions trading in the fourth trading period (from 2021). Moreover, there are further modifications in emissions trading as from the beginning of the fourth trading period, which may lead in total 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, eight corresponding pilot projects are underway. These do not yet 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

For this risk category, the likelihood of occurrence is classified as medium (previous year: medium) and the potential extent of damage is classified as medium (previous year: high).

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 connection with products and services or in relation to employees, public authorities, dealers, investors, customers, suppliers, 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.

Various legal proceedings are pending worldwide, particularly in the USA, in which customers are asserting purported product-related 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. Compliance with legal or regulatory requirements (such as the GDPR) is another area in which risks may arise. This is particularly true in gray areas where Volkswagen and the relevant public authorities may interpret the law differently.

In connection with their business activities, Volkswagen Group companies engage in constant dialogue with regulatory agencies including the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority). It is not possible to predict with assurance how government regulators will assess certain issues of fact and law in a particular situation. For this reason, the possibility that certain vehicle characteristics and/or type approval aspects may in particular ultimately be deemed deficient or impermissible cannot be ruled out. This is fundamentally a question of the regulatory agency's specific evaluation in a concrete situation.

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. 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; this may result in delivery and production restrictions or interruptions.

Criminal acts by individuals, which even the best compliance management system can never completely prevent, are another potential source of legal risks.

Appropriate insurance has been taken out to cover these risks where they were sufficiently definite and such coverage was economically sensible. Where necessary based on the information currently available, identified and correspondingly measurable risks have been reflected by recognizing provisions in amounts considered appropriate or disclosing contingent liabilities, as the case may be. 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 or by provisions cannot be ruled out. This is, for instance, the case with regard to the legal risks assessed in connection with 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 2.0 l diesel engines in the USA. In this context, Volkswagen AG announced that noticeable discrepancies between the figures recorded in testing and those measured 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.

The so-called 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. No member of the Board of Management had, at that time and for many years to follow, knowledge of the development and implementation of this software function.

There are furthermore no findings that, following the publication in May 2014 of the study by the International Council on Clean Transportation, an unlawful "defeat device" under US law was disclosed either to the Ausschuss für Produktsicherheit (Product Safety Committee) or to the persons responsible for preparing the 2014 annual and consolidated financial statements as the cause of the high NO_x emissions in certain US vehicles with 2.0 l type EA 189 diesel engines. Rather, at the time the 2014 annual and consolidated financial statements were being prepared, the persons responsible for preparing these financial statements remained under the impression that the issue could be resolved with comparatively little expense.

In the course of the summer of 2015, however, it became progressively 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 that was later identified as an unlawful "defeat device" as defined by US law. This culminated in Volkswagen's disclosure of a "defeat device" to the EPA and the California Air Resources Board, a department of the Environmental Protection Agency of the State of California, on September 3, 2015. According to the assessment at the time by the responsible persons dealing with the matter, the magnitude of the costs expected to result for the Volkswagen Group (recall costs, retrofitting costs, and financial penalties) was not fundamentally dissimilar to that in previous cases involving other vehicle manufacturers. It therefore appeared to be manageable overall considering the business activities of the Volkswagen Group. This assessment by Volkswagen AG was based, among other things, on the advice of a law firm engaged in the USA for regulatory approval issues, according to which similar cases had in the past been amicably resolved 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.

As a consequence of the diesel issue, numerous judicial and regulatory proceedings were initiated in various countries. Volkswagen has in the interim 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. The agreements in question include various partial consent decrees as well as a plea agreement that 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. Although Volkswagen is 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 last remaining vehicle class settlement program for customers in the United States, which pertained to second Generation 3.0 l TDI vehicles, ended in May 2020.

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. For all clusters (groups of vehicles) within its jurisdiction, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) determined that implementation of the technical measures would not result in any adverse changes in fuel consumption, CO_2 emissions, 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 potential, 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. AUDI AG currently anticipates that the total cost, including recall expenses, 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 software updates still being developed are expected to be submitted to the KBA in 2021 for approval.

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 commenced in some countries. Criminal investigations into the core factual issues are being conducted by the Offices of the Public Prosecutor in Braunschweig and Munich.

In May 2020, the criminal proceedings against the current Chairman of the Board of Management of Volkswagen AG and a former member of its Board of Management (currently Chairman of the Supervisory Board) regarding alleged market manipulation relating to capital market disclosure obligations in connection with the diesel issue were definitively terminated by the Braunschweig Regional Court against payment in each case of a court-imposed sum of €4.5 million, thereby also terminating to the same extent the proceedings against Volkswagen AG as collateral participant. After permitting the charges against a former Chairman of the Board of Management of Volkswagen AG and the related action against Volkswagen AG to go forward in September 2020, the Braunschweig Regional Court in January 2021 terminated these proceedings – provisionally as regards the indictment which is for the time being still pending against the former Chairman of the Board of Management, but definitively as regards Volkswagen AG.

In September 2020, the Braunschweig Regional Court accepted the indictment of the same former Chairman of the Board of Management of Volkswagen AG and others on charges that include fraud in connection with the diesel issue involving type EA 189 engines and opened the main trial proceedings.

In June 2020, the Munich II Regional Court accepted the substantially unchanged indictment of the Munich II Office of the Public Prosecutor, which also names the former Chairman of the Board of Management of AUDI AG, and opened the main trial proceedings on charges of, among other things, fraud in connection with the diesel issue involving 3.0 l TDI engines. Trial proceedings commenced in September 2020.

In August 2020, the Munich II Office of the Public Prosecutor issued a further indictment charging three former members of the Board of Management of AUDI AG and others with, among other things, fraud in connection with the diesel issue involving 3.0 l and 4.2 l TDI engines.

In connection with the diesel issue, the Stuttgart Office of the Public Prosecutor is conducting a criminal investigation on suspicion of fraud and illegal advertising; this investigation also involves a member of the Board of Management of Dr. Ing. h.c. F. Porsche AG.

The respective Group companies have 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.

As the type approval authority of proper jurisdiction, the KBA is moreover continuously testing Audi, Volkswagen, 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.

Moreover, additional administrative proceedings relating to the diesel issue are ongoing in other jurisdictions.

The companies of the Volkswagen Group are cooperating with the government authorities.

Risks may furthermore result from possible decisions by the European Court of Justice construing EU type approval provisions.

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 less than 10%. Provisions were recognized to a small extent.

2. Product-related lawsuits worldwide (excluding the USA/Canada)

A general possibility exists 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, England and Wales, France, Germany, Italy, the Netherlands, Portugal, and South Africa. 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 had been pending against Volkswagen AG and other Volkswagen Group companies, including the Australian subsidiaries. In December 2019, Volkswagen AG reached tentative agreements with the Australian class action plaintiffs terminating the litigation; the court approved these agreements in April 2020. Volkswagen AG anticipates that the total cost of settling these actions will be approximately AUD 180 million. 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 continues to anticipate payment of a fine of up to AUD 125 million.

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. Given the opt-out rule, the class action potentially covers all vehicles with type EA 189 engines purchased by consumers on the Belgian market after September 1, 2014, unless the right to opt out is actively exercised. 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 consumer protection class actions are pending. The first of these class actions pertains to some 17 thousand Amarok vehicles and the second to roughly 67 thousand later generation Amaroks. In the first class action, 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 appeals judgment remains non-final since Volkswagen do Brasil has appealed it to a higher court. So far no judgment has been rendered in the second class action proceeding.

In Germany, Volkswagen AG and Verbraucherzentrale Bundesverband e.V. (Federation of Consumer Organizations) entered into an out of court settlement on February 28, 2020 terminating the consumer action for model declaratory judgment. The terms of the settlement require Volkswagen AG to offer individual settlements to consumers who registered claims under the action for model declaratory judgment and meet the settlement criteria. As a result, Volkswagen AG entered into individual settlements in the reporting year with some 245 thousand customers in an aggregate amount of roughly €770 million. The process of settling the consumer action for model declaratory judgment is thus almost complete. Verbraucherzentrale Bundesverband e.V. withdrew the action for model declaratory judgment on April 30, 2020.

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, for which the opt-in period has expired. In these proceedings, the High Court in England and Wales ruled in April 2020 that the switch logic in the EA 189 engine constituted an unlawful defeat device; the court believed that it was also bound by the findings of the KBA (German Federal Motor Transport Authority) in this respect. In August 2020, the Court of Appeal rejected Volkswagen's appeal against the High Court's ruling on these preliminary questions; this decision is final. The question of liability on the part of Volkswagen was not a matter addressed by the High Court's ruling and will be dealt with at a later stage of the proceedings. The main trial proceedings are to begin in January 2023.

In France, the French consumer organization Confédération de la Consommation, du Logement et du Cadre de Vie (CLCV) filed a class action in September 2020 against Volkswagen Group Automotive Retail France and Volkswagen AG for up to 950 thousand French owners and lessees of vehicles with type EA 189 engines. This is an opt-in class action in which the affected consumers are not required to opt into the class action until a legally final judgment is rendered.

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 breaches 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 the majority of the registrations is still unclear.

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. Proceedings in the matter are presently suspended. Furthermore, in April 2020 an opt-out class action lawsuit seeking monetary damages on behalf of Dutch consumers was served on Volkswagen by the Diesel Emissions Justice Foundation. It is currently unclear whether other consumers in addition to those in the Netherlands may join this class action. The class action relates to vehicles with type EA 189 engines, among others.

In Portugal, a Portuguese consumer organization has filed an opt-out class action. Potentially, up to approximately 139 thousand vehicles with type EA 189 engines are 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 these lawsuits are seeking damages or rescission of the purchase contract.

In Germany, over 55 thousand individual lawsuits are currently pending. In May 2020, the Bundesgerichtshof (BGH – Federal Court of Justice) handed down its first decision ever in an individual product-related lawsuit in connection with the diesel issue. The BGH held that the buyer, who had purchased a vehicle with a type EA 189 engine prior to public disclosure of the diesel issue, had a claim for damages against Volkswagen AG. While the buyer can require reimbursement of the vehicle's purchase price, he must accept a deduction for the benefit derived from using the vehicle and must return it to Volkswagen AG. The judgment clarified the BGH's stance on the fundamental issues underlying a large number of the individual diesel lawsuits then still pending in Germany. On this basis, it has since been possible to conclude settlements and thus significantly reduce the number of individual lawsuits pending. In a series of fundamental judgments rendered in July 2020, the BGH decided further legal issues of major importance for the litigation still pending with regard to vehicles with type EA 189 engines. The BGH held that plaintiffs who purchased their vehicle after the ad hoc announcement of September 22, 2015 have no claim for damages. The court furthermore ruled that purchasers of affected vehicles are not entitled to tort interest under section 849 of the German Civil Code. The court also made it clear that a plaintiff's potential damage claim may be completely offset by the benefit derived from using the vehicle.

Volkswagen estimates the likelihood that the plaintiffs will prevail to be 50% or less in the great majority of cases: 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 remote. Since most of these actions are still in an early procedural stage, it is in many cases not yet possible to quantify the realistic risk exposure. Furthermore, 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 and what prospect of success such lawsuits might have.

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 before the Braunschweig Regional Court. In August 2016, the Braunschweig Regional Court issued an order referring common questions of law and fact relevant to the investor lawsuits pending before it to the Higher Regional Court in Braunschweig for binding declaratory rulings pursuant to the Kapitalanleger-Musterverfahrensgesetz (KapMuG – German Capital Investor Model Declaratory Judgment Act). In this proceeding, common questions of law and fact relevant to these actions are to be adjudicated by the Braunschweig Higher Regional Court in a single consolidated proceeding (model case proceedings). The lawsuits filed with the Braunschweig Regional Court are 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 the pending cases that have been stayed as described. The model case plaintiff is Deka Investment GmbH. Oral argument in the model case proceedings before the Braunschweig Higher Regional Court began in September 2018 and will be continued at subsequent hearings.

Further investor lawsuits have been filed with the Stuttgart Regional Court against Volkswagen AG, in some cases along with Porsche SE as joint and several debtor. A further investor action for model declaratory judgment is pending before the Stuttgart Higher Regional Court against Porsche SE; Volkswagen AG is involved in this action as a third party intervening in support of a party to the dispute. The Wolverhampton City Council, Administrating Authority for the West Midlands Metropolitan Authorities Pension Fund, has been appointed model case plaintiff. The first hearing for oral argument in these proceedings has yet to take place.

Additional investor lawsuits have been filed with various courts in Germany and the Netherlands.

Excluding the United States and Canada, claims in connection with the diesel issue totaling roughly €9.7 billion are currently pending worldwide against Volkswagen AG in the form of investor lawsuits, judicial applications for dunning and conciliation procedures, and claims under the KapMuG. 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. Contingent liabilities have been disclosed where the chance of success was estimated to be not less than 10%.

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 against Volkswagen AG and other Volkswagen Group companies, in particular by customers, investors, salespersons, and various government agencies in Canada and the United States, including the attorneys general of several US states.

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. The claims asserted by Illinois have been dismissed in full, but Illinois has appealed the dismissal of a subset of its claims. Certain claims asserted by Montana, Ohio, Texas, two Texas counties, Hillsborough County (Florida), and Salt Lake County (Utah) have also been dismissed, but these suits are currently proceeding as to other claims. Volkswagen has asked the US Supreme Court to review a decision by the US Court of Appeals for the Ninth Circuit that declined to dismiss certain claims brought by Hillsborough and Salt Lake Counties. A Texas appellate court dismissed claims asserted by Texas against Volkswagen AG and AUDI AG for lack of personal jurisdiction. Texas has indicated that it will seek discretionary review by the Texas Supreme Court of that decision.

In March 2019, the US Securities and Exchange Commission (SEC) filed a lawsuit against, among others, Volkswagen AG, Volkswagen Group of America Finance, LLC, and VW Credit, Inc., 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. In August 2020, the US District Court for the Northern District of California granted in part and denied in part Volkswagen's motion to dismiss. The claims dismissed by the court included all claims against VW Credit, Inc. related to asset-backed securities. In September 2020, the SEC filed an amended complaint that, among other things, removed the dismissed claims.

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 charging a quasi-criminal enforcement-related offense with respect to certain Volkswagen and Audi 2.0 l diesel vehicles. As to private civil law matters, in an environmental class action lawsuit seeking punitive damages on behalf of the residents of the Province of Quebec, after authorizing the case to proceed as a class, a Quebec court ruled in October 2020 that issues raised as to the viability of plaintiffs' damages theory should be deferred until trial. On that basis, the court denied a motion to dismiss by Volkswagen. The case remains in the early stages.

In line with IAS 37.92, no statements have been made concerning estimates of financial impact or regarding uncertainty as to the amount or maturity of provisions and contingent liabilities in relation to proceedings in the USA/Canada. This is so as to not compromise the results of the proceedings or the interests of the Company.

5. Special audit

In a November 2017 ruling, 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 the members of the Board of Management and Supervisory Board of Volkswagen AG breached their duties in connection with the diesel issue from June 22, 2006 onwards 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 constitutional rights. 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 April 2020, the Celle Higher Regional Court issued a ruling appointing a different special auditor. Volkswagen AG has filed a constitutional complaint with the Federal Constitutional Court contesting this formally unappealable decision as well on grounds of infringement of its constitutional rights and has suggested joinder of this matter with its initial constitutional complaint against the decision to appoint the special auditor. It is currently unclear when the Federal Constitutional Court will rule on the two constitutional complaints. The constitutional complaints have no suspensory effect.

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 €1.9 (2.9) billion has been included in the provisions for litigation and legal risks as of December 31, 2020 to account for the currently known legal risks related to the diesel issue based on the presently available information and the current assessments. Where adequately measurable at this stage, contingent liabilities relating to the diesel issue have been disclosed in the notes in an aggregate amount of €4.2 (3.7) billion, whereby roughly €3.5 (3.4) billion of this amount results from lawsuits filed by investors in Germany. The provisions recognized, the contingent liabilities disclosed, and the other latent legal risks in the context of the diesel issue are in part subject to substantial estimation risks given the complexity of the individual relevant factors, the ongoing coordination with the authorities, and the fact that the fact-finding efforts have not yet been concluded. Should these legal or estimation risks materialize, this could result in further substantial financial charges. In particular, adjustment of the provisions recognized in light of knowledge acquired or events occurring in the future cannot be ruled out.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or regarding uncertainty as to 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) filed a claim for damages against Volkswagen AG and Porsche SE 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 being sought based on allegedly assigned rights currently amount to approximately €2.26 billion plus interest. In April 2016, the Hanover Regional Court formulated numerous objects of declaratory judgment that the antitrust panel of the Higher Regional Court in Celle will decide on in model case proceedings under the KapMuG. At the first hearing in October 2017, the court already indicated that it currently sees no justification for claims against Volkswagen AG, both because the pleadings are not sufficiently specific and for substantive legal reasons. Volkswagen AG sees the court's statements as confirmation that the claims against the Company are absolutely baseless. The Higher Regional Court has yet to render a decision as many hearings have been canceled, among other things due to motions for recusal filed by the plaintiff side (so far in all cases without success) and, more recently, as a result of the Covid-19 pandemic.

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, an adverse administrative appeal ruling was rendered against MAN Latin America. MAN Latin America challenged this ruling before the regular court in 2018. Estimation of the risk in the event the tax authorities prevail on all points is subject to uncertainty because of differences in the amount of penalties and interest that might then apply under Brazilian law. However, a positive outcome for MAN Latin America remains the expectation. Should this not occur, a risk of about BRL 3.1 billion could result for the contested period from 2009 onwards; this amount has been included in contingent liabilities in the notes.

In 2011, the European Commission conducted searches at European truck manufacturers for suspected unlawful exchange of information during the period from 1997 to 2011; in November 2014, the Commission issued a statement of objections to MAN, Scania, and the other truck manufacturers concerned. In its settlement decision of July 2016, the European Commission assessed fines against 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 seeking damages have been received from customers. As is the case in any antitrust proceedings, this may result in further lawsuits for damages. No provisions have been recognized or contingent liabilities disclosed for these cases as most of them are still in an early stage and currently cannot be assessed for this reason. In other cases, the chance of a decision by a court of last resort that awards damages against MAN or Scania currently appears remote.

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. The Chinese, South Korean, and Turkish competition authorities have also instituted proceedings in this matter.

In October 2020, the US District Court for the Northern District of California dismissed two antitrust class action complaints. The plaintiffs in these actions alleged that several automobile manufacturers including Volkswagen AG and other Group companies had conspired to unlawfully increase vehicle prices 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 that the alleged agreements unreasonably restrained competition in violation of US law. Plaintiffs have appealed this ruling. Plaintiffs in Canada filed claims with similar allegations on behalf of putative classes of purchasers against several automobile manufacturers, including Volkswagen Group Canada Inc., Audi Canada Inc., and other Volkswagen Group companies. Neither provisions nor contingent liabilities are stated because the early stage of the proceedings makes an assessment of the realistic risk exposure 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.

A settlement between Volkswagen and the Plaintiffs' Steering Committee resolving civil claims relating to approximately 98 thousand gasoline-powered Volkswagen, Audi, Porsche, and Bentley vehicles with automatic transmissions received final approval from the US District Court for the Northern District of California in February 2020.

Porsche AG has discovered potential regulatory issues relating to vehicles for various markets worldwide. There are questions as to the permissibility of specific hardware and software components used in type approval measurements. Differences compared with production versions may also have occurred in certain cases. Based on the information presently available, current production is not affected, however. The issues are unrelated to the defeat devices that were at the root of the diesel issue. Porsche AG is cooperating with the relevant authorities including the Stuttgart Office of the Public Prosecutor, which is investigating the matter in Germany. Based on the available information, no formal criminal investigation has been opened against the company, however. Porsche's own internal investigations are still in progress.

Five complaints related to these matters were filed with the US District Court for the Northern District of California. The complaints alleged that the affected vehicles used certain software and/or hardware that resulted in increased emissions and/or overstated fuel economy estimates as compared to the results of certification testing. The suits named Volkswagen AG, Dr. Ing. h.c. F. Porsche AG, AUDI AG, and Porsche Cars North America, Inc. as defendants; however, each defendant was not named in all the complaints. A consolidated complaint merging the five putative class actions into a single lawsuit was filed in January 2021. AUDI AG is no longer named as a defendant in the consolidated complaint.

Provisions were recognized by Volkswagen Bank GmbH and Volkswagen Leasing GmbH for possible claims in connection with financial services provided to consumers. These relate to actions involving certain features of customer loan and leasing agreements that may toll the running of the statutory cancellation time periods.

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 is assessing the alleged claims and defending itself against them.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or regarding uncertainty as to 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 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.

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 constantly monitors the development of tax risks, as well as the impact thereof on the consolidated financial statements.

Tax provisions were recognized for potential future tax payments for former years, while other provisions were recognized for ancillary tax payments arising in this connection.

Financial risks

For this risk category, the likelihood of occurrence is classified as high (previous year: high) and the potential extent of damage is classified as medium (previous year: medium).

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 – but also from unforeseeable events such as the Covid-19 pandemic. Management of these financial risks and of 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.

Interest rate risk refers to potential losses that could arise as a result of changes in market interest rates. It occurs because of interest rate mismatches between asset and liability items in a portfolio or on the balance sheet. 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. The principle of matching amounts and maturities applies to financing arrangements within the Volkswagen Group in the Automotive Division. In the Financial Services Division, the risk of changes in the interest rate is managed on the basis of limits using interest rate derivatives as part of the defined risk strategy.

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 use these to 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 particularly 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. For selected commodities, this may also involve increases in physical inventories. We have also entered into transactions in order to supplement and improve allocations of CO_2 emission certificates as part of the European Union Emissions Trading System (EU ETS).

Special funds in which we invest surplus liquidity may entail equity price risks and fund price risks. We reduce these risks through the diversified investment of funds and through minimum values set out in the respective investment guidelines. In addition, exchange rates are hedged when market conditions are appropriate.

In the notes to the consolidated financial statements we explain our hedging policy, the hedging rules and the default and liquidity risks, and quantify the hedging transactions mentioned. We also disclose information on market risk within the meaning of IFRS 7 in the same section.

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 chapter entitled "Principles and Goals of Financial Management" in the "Results of Operations, Financial Position and Net Assets" chapter. 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.

Liquidity risk

Volkswagen is reliant on its ability to adequately cover its financing needs. A liquidity risk consists of potentially being unable to cover existing capital requirements by raising funds or being unable to finance the Group on reasonable terms, which in turn can have a 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.

One of the ways in which Volkswagen finances its projects is with 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.

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 – including as a result of the Covid-19 pandemic – a worsening credit profile and outlook or a downgrade or withdrawal of the credit rating. In such cases, there is a risk of 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.

Risks and opportunities in the financial services business

While carrying out our financial services activities, we are primarily exposed 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 also a possibility 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, there is an initial counterparty default risk associated with this third party (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.

As part of our risk management efforts, the appropriateness of the risk provision is assessed regularly, as is 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 possible gains on residual market values into account when recognizing risk provisions.

Based on the resulting potential residual value risk, a variety of measures are initiated in order to limit this risk. With respect to new business, current market circumstances and future influencing factors must be considered in the residual value recommendation.

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 and for recognizing risk provisions.

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.

An opportunity may arise if the losses from the lending and leasing business are less than the expected losses previously calculated and the risk provision recognized on this basis. In some countries in particular, where we take a conservative approach to risk due to the uncertain economic situation, a stabilization of the economy, accompanied by an improvement in borrowers' credit rating, provides an opportunity for realized losses to be less than expected losses.

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 2020 annual reports of Volkswagen Financial Services AG and Volkswagen Bank GmbH.

Opportunities and risks from mergers & acquisitions and/or other strategic partnerships/investments

For this risk category, the likelihood of occurrence is classified as medium (previous year: high) and the potential extent of damage is classified as high (previous year: high).

The most significant risks from the regular GRC process and QRP are linked to 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 partnerships, both for the transformation of our core business and for the establishment of the new mobility solutions business.

In the field of battery cells, possible risks could arise from potential disagreement with our partners, possible delays in battery cell development or delayed battery cell production.

Strong interaction with partners in the field of e-mobility, such as the development of a comprehensive charging infrastructure, in the form of partnerships and joint ventures, supports technological change. This cooperation involves risks such as an increased coordination workload, more complex decision-making processes and the loss of expertise. At the same time, opportunities are presented by the pooling of specialist knowledge, by horizontal and vertical integration and by better use of resources. Volkswagen has therefore created various teams in Group Components to closely support all such partnerships.

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. We are concentrating to a greater extent 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. Our innovative presence in the markets supports this process. 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

For the goodwill recognized in the consolidated financial statements and for brand names, there is a risk that the carrying amount of goodwill may be higher than the recoverable amount and that an extraordinary impairment loss must therefore be recognized. Volkswagen tests at least once a year on the basis of underlying cash-generating units, whether the value of the goodwill or the brand names could have 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 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 a situation in which assets have to be sold for a lower 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 arise from a negative trend in markets and unit sales, with regard to quality and cyber security, and from an inability to develop products in line with demand and requirements, especially in view of e-mobility and digitalization. Non-fulfillment of CO_2-related requirements also constitutes a risk. The Volkswagen Group continues to be exposed to risks from the diesel issue. Negative effects, for example resulting from supply bottlenecks, may arise for 2021 if efforts to contain the Covid-19 pandemic are not successful in the long term. Taking into account all the information known to us at present, no risks exist which could pose a threat to the continued existence of significant Group companies or the Volkswagen Group.

This annual report contains forward-looking statements on the business development of the Volkswagen Group. These statements are based on assumptions relating to the development of the economic, political and legal environment in individual countries, economic regions and markets, and in particular for the automotive industry, which we have made on the basis of the information available to us and which we consider to be realistic at the time of going to press. The estimates given entail a degree of risk, and actual developments may differ from those forecast. Any changes in significant parameters relating to our key sales markets, or any significant shifts in exchange rates or commodities relevant to the Volkswagen Group or deviations in the actual effects of the Covid-19 pandemic from the scenario presented in this report will have a corresponding effect on the development of our business. In addition, there may be departures from our expected business development if the assessments of the factors influencing sustainable value enhancement and of risks and opportunities presented in this annual report develop in a way other than we are currently expecting, or if additional risks and opportunities or other factors emerge that affect the development of our business.

Prospects for 2021

Our planning is based on the assumption that global economic output will recover overall in 2021, provided lasting containment of the Covid-19 pandemic is achieved. This growth will most likely be sufficient for the economy to recover to approximately its pre-pandemic level. We continue to 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 ongoing geopolitical tensions and conflicts. We anticipate that both the advanced economies and the emerging markets will experience positive momentum.

We predict that trends in the markets for passenger cars in the individual regions will be mixed in 2021. Overall, the volume of demand worldwide for new vehicles is expected to be noticeably up on the reporting year, provided successful containment of the Covid-19 pandemic is achieved; however, it will not recover to its pre-pandemic level. For 2021, we anticipate that the volume of new passenger car registrations in Western Europe will be significantly above that recorded in the reporting year. In the German passenger car market, we expect a moderate year-on-year increase in demand in 2021. Sales of passenger cars in 2021 are expected to distinctly exceed the prior-year figures in markets in Central and Eastern Europe. The volume of demand in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America as a whole in 2021 is also likely to be distinctly higher than the previous year's level. We expect to see a large increase overall in new registrations in the South American markets in 2021 compared with the previous year. The passenger car markets in the Asia-Pacific region are expected to be noticeably up on the prior-year level in 2021.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed in 2021; on the whole, we anticipate a moderate rise in demand for 2021, assuming that containment of the Covid-19 pandemic is successful .

For 2021, we expect a significantly positive development in new registrations for mid-sized and heavy trucks with a gross weight of more than six tonnes compared with the previous year in the markets that are relevant for the Volkswagen Group. A moderate increase in overall demand for 2021 is likely in the bus markets relevant for the Volkswagen Group.

We anticipate that automotive financial services will be of great significance to global vehicle sales in 2021, particularly in the context of the ongoing challenges posed by the Covid-19 pandemic.

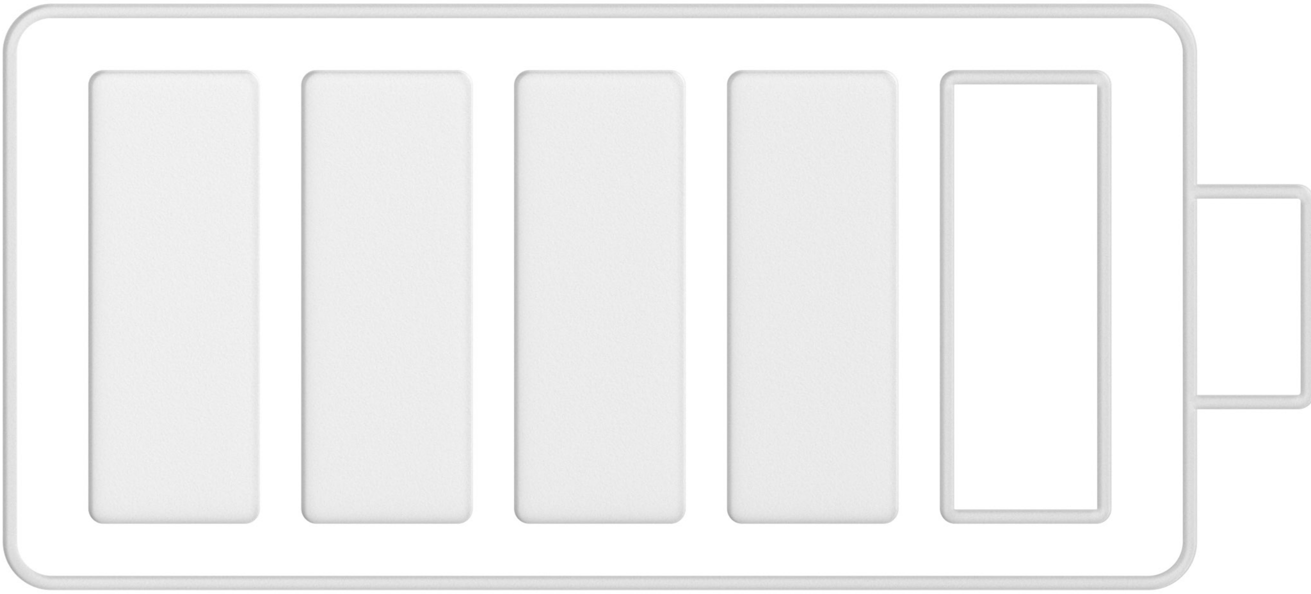
We believe we are well prepared overall for the future challenges pertaining to automotive business activities and for the mixed development of the regional automotive markets. Our brand diversity, our presence in all major world markets, our broad and selectively expanded product range, and our technologies 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 our 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 anticipate that deliveries to Volkswagen Group customers will be significantly up on the previous year in 2021 – assuming successful containment of the Covid-19 pandemic – amid continued challenging market conditions.

Challenges will arise particularly from the economic situation, the increasing intensity of competition, volatile commodity and foreign exchange markets, securing supply chains and more stringent emissions-related requirements.

We expect the sales revenues of the Volkswagen Group and Passenger Cars Business Area in 2021 to be significantly higher than the prior-year figure. 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 5.0% to 6.5% in 2021. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of 4.0% to 5.5% before restructuring measures amid a significant year-on-year increase in sales revenue. We expect the Power Engineering Business Area to reach the break-even point amid a noticeable decline in sales revenue compared with the previous year. For the Financial Services Division, we forecast that sales revenue will be noticeably higher than the prior-year figure and that the operating result will be in line with the previous year.

Wolfsburg, February 16, 2021
The Board of Management



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Consolidated Financial Statements

CONSOLIDATED FINANCIAL STATEMENTS

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Income Statement

of the Volkswagen Group for the period January 1 to December 31, 2020

€ million	Note	2020	2019
Sales revenue	**1**	**222,884**	**252,632**
Cost of sales	2	–183,937	–203,490
Gross result		**38,947**	**49,142**
Distribution expenses	3	–18,407	–20,978
Administrative expenses	4	–9,399	–9,767
Other operating income	5	12,438	11,453
Other operating expenses	6	–13,904	–12,890
Operating result		**9,675**	**16,960**
Share of the result of equity-accounted investments	7	2,756	3,349
Interest income	8	793	910
Interest expenses	8	–2,291	–2,524
Other financial result	9	733	–339
Financial result		**1,991**	**1,396**
Earnings before tax		**11,667**	**18,356**
Income tax income/expense	10	–2,843	–4,326
Current		–3,150	–4,147
Deferred		307	–180
Earnings after tax		**8,824**	**14,029**
of which attributable to			
Noncontrolling interests		–43	143
Volkswagen AG hybrid capital investors		533	540
Volkswagen AG shareholders		8,334	13,346
Basic/diluted earnings per ordinary share in €	**11**	**16.60**	**26.60**
Basic/diluted earnings per preferred share in €	**11**	**16.66**	**26.66**

Statement of Comprehensive Income

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 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 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 debt instruments that may be reclassified to profit or loss, before tax	24	24	–	–
Deferred taxes relating to fair value valuation of debt instruments recognized in other comprehensive income	–7	–7	–	–
Fair value valuation of 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**

Changes in comprehensive income for the period January 1 to December 31, 2020

€ million	Total	Equity attributable to Volkswagen AG shareholders	Equity attributable to Volkswagen AG hybrid capital investors	Equity attributable to noncontrolling interests
Earnings after tax	**8,824**	**8,334**	**533**	**–43**
Pension plan remeasurements recognized in other comprehensive income				
Pension plan remeasurements recognized in other comprehensive income, before tax	–2,871	–2,861	–	–9
Deferred taxes relating to pension plan remeasurements recognized in other comprehensive income	930	928	–	2
Pension plan remeasurements recognized in other comprehensive income, net of tax	–1,940	–1,933	–	–7
Fair Value valuation of equity instruments that will not be reclassified to profit or loss, net of tax	–6	–6	–	1
Share of other comprehensive income of equity-accounted investments that will not be reclassified to profit or loss, net of tax	61	55	–	6
Items that will not be reclassified to profit or loss	**–1,885**	**–1,885**	**–**	**0**
Exchange differences on translating foreign operations				
Gains/losses on currency translation recognized in other comprehensive income	–2,883	–2,846	–	–37
Transferred to profit or loss	16	16	–	0
Exchange differences on translating foreign operations, before tax	–2,868	–2,830	–	–37
Deferred taxes relating to exchange differences on translating foreign operations	–6	–6	–	–
Exchange differences on translating foreign operations, net of tax	–2,874	–2,836	–	–37
Hedging				
Fair value changes recognized in other comprehensive income (OCI I)	2,866	2,872	–	–6
Transferred to profit or loss (OCI I)	–1,122	–1,126	–	4
Cash flow hedges (OCI I), before tax	1,744	1,746	–	–2
Deferred taxes relating to cash flow hedges (OCI I)	–553	–553	–	1
Cash flow hedges (OCI I), net of tax	1,191	1,192	–	–1
Fair value changes recognized in other comprehensive income (OCI II)	–799	–799	–	0
Transferred to profit or loss (OCI II)	1,178	1,178	–	0
Cash flow hedges (OCI II), before tax	378	379	–	0
Deferred taxes relating to cash flow hedges (OCI II)	–110	–110	–	0
Cash flow hedges (OCI II), net of tax	268	269	–	0
Fair value valuation of debt instruments that may be reclassified to profit or loss				
Fair value changes recognized in other comprehensive income	38	38	–	–
Transferred to profit or loss	1	1	–	–
Fair value valuation of debt instruments that may be reclassified to profit or loss, before tax	39	39	–	–
Deferred taxes relating to fair value valuation of debt instruments recognized in other comprehensive income	–12	–12	–	–
Fair value valuation of debt instruments that may be reclassified to profit or loss, net of tax	27	27	–	–
Share of other comprehensive income of equity-accounted investments that may be reclassified to profit or loss, net of tax	–304	–297	–	–6
Items that may be reclassified to profit or loss	**–1,690**	**–1,645**	**–**	**–45**
Other comprehensive income, before tax	–3,825	–3,777	–	–48
Deferred taxes relating to other comprehensive income	250	247	–	3
Other comprehensive income, net of tax	**–3,575**	**–3,530**	**–**	**–45**
Total comprehensive income	**5,249**	**4,804**	**533**	**–88**

Balance Sheet

of the Volkswagen Group as of December 31, 2020

€ million	Note	Dec. 31, 2020	Dec. 31, 2019
Assets			
Noncurrent assets			
Intangible assets	12	67,968	66,214
Property, plant and equipment	13, 33	63,884	66,152
Lease assets	14, 33	50,686	48,938
Investment property	14	558	538
Equity-accounted investments	15	10,080	8,169
Other equity investments	15	1,865	1,902
Financial services receivables	16	82,565	86,973
Other financial assets	17	7,834	5,553
Other receivables	18	2,867	2,722
Tax receivables	19	376	341
Deferred tax assets	19	13,486	13,106
		302,170	**300,608**
Current assets			
Inventories	20	43,823	46,742
Trade receivables	21	16,243	17,941
Financial services receivables	16	58,006	58,615
Other financial assets	17	13,234	12,216
Other receivables	18	7,381	7,272
Tax receivables	19	1,186	1,190
Marketable securities	22	21,162	16,769
Cash, cash equivalents and time deposits	23	33,909	25,923
Assets held for sale		–	795
		194,944	**187,463**
Total assets		**497,114**	**488,071**

€ million	Note	Dec. 31, 2020	Dec. 31, 2019
Equity and liabilities			
Equity	**24**		
Subscribed capital		1,283	1,283
Capital reserve		14,551	14,551
Retained earnings		100,772	96,929
Other reserves		–5,270	–3,646
Equity attributable to Volkswagen AG hybrid capital investors		15,713	12,663
Equity attributable to Volkswagen AG shareholders and hybrid capital investors		127,049	121,781
Noncontrolling interests		1,734	1,870
		128,783	**123,651**
Noncurrent liabilities			
Financial liabilities	25	114,809	113,556
Other financial liabilities	26	4,257	4,499
Other liabilities	27	7,905	7,271
Deferred tax liabilities	28	4,890	5,007
Provisions for pensions	29	45,081	41,389
Provisions for taxes	28	3,292	2,991
Other provisions	30	22,688	21,783
		202,921	**196,497**
Current liabilities			
Financial liabilities	25	88,648	87,912
Trade payables	31	22,677	22,745
Tax payables	28	340	408
Other financial liabilities	26	10,590	10,858
Other liabilities	27	17,979	19,320
Provisions for taxes	28	2,213	1,876
Other provisions	30	22,964	24,434
Liabilities associated with assets held for sale		–	370
		165,410	**167,924**
Total equity and liabilities		**497,114**	**488,071**

Statement of Changes in Equity

of the Volkswagen Group for the period January 1 to December 31, 2020

€ million	Subscribed capital	Capital reserve	Retained earnings	OTHER RESERVES Currency translation reserve
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	–	–	390	173
Other changes	–	–	81	–
Balance at Dec. 31, 2019	**1,283**	**14,551**	**96,929**	**–2,824**
Balance at Jan. 1, 2020	**1,283**	**14,551**	**96,929**	**–2,824**
Earnings after tax	–	–	8,334	–
Other comprehensive income, net of tax	–	–	–1,933	–2,836
Total comprehensive income	**–**	**–**	**6,400**	**–2,836**
Disposal of equity instruments	–	–	5	–
Capital increases/Capital decreases[1]	–	–	–	–
Dividends payment	–	–	–2,419	–
Capital transactions involving a change in ownership interest[2]	–	–	–166	–
Other changes	–	–	22	1
Balance at Dec. 31, 2020	**1,283**	**14,551**	**100,772**	**–5,659**

1 Issuance of new hybrid notes in June 2020.
2 For the change in capital transactions involving a change in ownership interest see the “Key events” section.

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	Equity attributable to Volkswagen AG shareholders and hybrid capital investors	Noncontrolling interests	**Total equity**
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**
95	**–977**	**–235**	**295**	**12,663**	**121,781**	**1,870**	**123,651**
–	–	–	–	533	8,867	–43	8,824
1,192	269	21	–242	–	–3,530	–45	–3,575
1,192	**269**	**21**	**–242**	**533**	**5,337**	**–88**	**5,249**
–	–	–5	–	–	–	–	–
–	–	–	–	2,989	2,989	–	2,989
–	–	–	–	–472	–2,891	–61	–2,952
–	–	–	–	–	–166	–72	–238
–	–	–	–23	–	–1	85	84
1,287	**–708**	**–219**	**30**	**15,713**	**127,049**	**1,734**	**128,783**

Cash flow statement

of the Volkswagen Group for the period January 1 to December 31, 2020

€ million	2020	2019
Cash and cash equivalents at beginning of period	**24,329**	**28,113**
Earnings before tax	11,667	18,356
Income taxes paid	–2,646	–2,914
Depreciation and amortization of, and impairment losses on, intangible assets, property, plant and equipment, and investment property[1]	12,765	12,046
Amortization of and impairment losses on capitalized development costs[1]	4,637	3,665
Impairment losses on equity investments[1]	454	300
Depreciation of and impairment losses on lease assets[1]	9,214	8,428
Gain/loss on disposal of noncurrent assets and equity investments	–889	–4
Share of the result of equity-accounted investments	536	460
Other noncash expense/income	–1,572	–730
Change in inventories	1,334	–674
Change in receivables (excluding financial services)	712	–893
Change in liabilities (excluding financial liabilities)	540	2,297
Change in provisions	803	1,646
Change in lease assets	–12,914	–13,204
Change in financial services receivables	260	–10,796
Cash flows from operating activities	**24,901**	**17,983**
Investments in intangible assets (excluding development costs), property, plant and equipment, and investment property	–11,273	–14,230
Additions to capitalized development costs	–6,473	–5,171
Acquisition of subsidiaries	26	–673
Acquisition of other equity investments	–1,660	–420
Disposal of subsidiaries	402	3
Disposal of other equity investments	195	177
Proceeds from disposal of intangible assets, property, plant and equipment, and investment property	411	237
Change in investments in securities	–4,462	387
Change in loans and time deposits	143	–1,456
Cash flows from investing activities	**–22,690**	**–21,146**
Capital contributions/capital redemptions	2,984	–
Dividends paid	–2,952	–2,899
Capital transactions with noncontrolling interest shareholders	–238	1,368
Proceeds from issuance of bonds	25,181	25,916
Repayments of bonds	–19,815	–19,784
Changes in other financial liabilities	3,577	–4,509
Repayments of lease liabilities	–1,100	–957
Cash flows from financing activities	**7,637**	**–865**
Effect of exchange rate changes on cash and cash equivalents	–745	243
Change of loss allowance within cash and cash equivalents	0	1
Net change in cash and cash equivalents	**9,103**	**–3,784**
Cash and cash equivalents at end of period	**33,432**	**24,329**
Cash and cash equivalents at end of period	33,432	24,329
Securities, loans and time deposits	32,645	29,099
Gross liquidity	**66,078**	**53,428**
Total third-party borrowings	–203,457	–201,468
Net liquidity	**–137,380**	**–148,040**

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, 2020

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 2020 in compliance with the International Financial Reporting Standards (IFRSs), as adopted by the European Union. All the IFRSs adopted by the EU and required to be applied have been complied with.

The accounting policies applied in the previous year were generally retained. The only changes required resulted from new or amended standards.

Moreover, all the provisions of German commercial law that Volkswagen is additionally required to apply, as well as the German Corporate Governance Code, have been complied with in the preparation of the consolidated financial statements. 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 aforementioned 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 16, 2021. 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 2020.

On January 1, 2020, an amended definition of a business in IFRS 3 (Business Combinations) entered into force. According to the new definition, a set of activities and assets is a business only if it includes, as a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs. At the same time, the definition of an output has been narrowed by focusing on goods and services provided to customers and on generating investment income. The reference to an ability to reduce costs as a single criterion has been removed. In addition, an optional concentration test has been introduced that permits an assessment of whether an acquired set of activities and assets is not a business.

Furthermore, amendments to IFRS 16 entered into force on June 1, 2020. These amendments exempt lessees from having to consider whether a rent concession in connection with the Covid-19 pandemic in relation to lease payments that, according to the original agreement, would have been due on or before June 30, 2021 is a lease modification and allows lessees to account for such rent concessions as if they were not lease modifications. The Volkswagen Group is electing not to apply this option.

In addition, as from January 1, 2020, the application of amendments to IFRS 9, IAS 39 and IFRS 7 (Benchmark Interest Rate Reform – Phase 1) became mandatory. In the previous year, the Volkswagen Group had voluntarily opted for early application of these amendments. This affects hedges that existed at the beginning of the reporting period or have subsequently been designated as such. In application of the associated practical expedient, the Volkswagen Group regards the effectiveness of designated hedges as given and not negatively impacted by the IBOR reform so that it will consequently not be necessary to terminate any hedges.

Also as of January 1, 2020, amendments to IAS 1 and IAS 8 entered into force, which clarify and standardize the definition of “material”.

The amendments referred to above do not materially affect the Volkswagen Group’s net assets, financial position and results of operations.

New and amended IFRSs not applied

In its 2020 consolidated financial statements, Volkswagen AG did not apply the following accounting pronouncements that have been adopted by the IASB until December 31, 2020, 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	Updating a Reference to the Conceptual Framework	May 14, 2020	Jan. 1, 2022	No	No material impact
IFRS 4	Extension of the Temporary Exemption from Applying IFRS 9	June 25, 2020	Jan. 1, 2021	Yes	None
IFRS 4; IFRS 7; IFRS 9; IFRS 16 and IAS 39	Interest Rate Benchmark Reform (Phase 2)	Aug. 27, 2020	Jan. 1, 2021	Yes	No material impact
IFRS 17	Insurance Contracts	May 18, 2017	Jan. 1, 2023[2]	No	No material impact
IFRS 17	Insurance Contracts – several amendments	June 25, 2020	Jan. 1, 2023	No	No material impact
IAS 1	Classification of liabilities as current or non-current	Jan. 23, 2020	Jan. 1, 2023	No	No material impact
IAS 16	Property, Plant and Equipment: Proceeds before intended use	May 14, 2020	Jan. 1, 2022	No	No material impact
IAS 37	Onerous contracts – cost of fulfilling a contract	May 14, 2020	Jan. 1, 2022	No	No material impact
	Annual Improvements 2018 – 2020[3]	May 14, 2020	Jan. 1, 2022	No	No material impact

1 Effective date from Volkswagen AG’s perspective.
2 On June 25, 2020, the IASB published amendments to IFRS 17, that led, among other things, to the effective date being deferred to January 1, 2023.
3 Minor amendments to a number of IFRSs (IFRS 1, IFRS 9 and IAS 41).

Key events

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 2.0 l diesel engines in the USA. In this context, Volkswagen AG announced that noticeable discrepancies between the figures recorded in testing and those measured 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.

The so-called 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. No member of the Board of Management had, at that time and for many years to follow, knowledge of the development and implementation of this software function.

There are furthermore no findings that, following the publication in May 2014 of the study by the International Council on Clean Transportation, an unlawful "defeat device" under US law was disclosed either to the Ausschuss für Produktsicherheit (Product Safety Committee) or to the persons responsible for preparing the 2014 annual and consolidated financial statements as the cause of the high NO_x emissions in certain US vehicles with 2.0 l type EA 189 diesel engines. Rather, at the time the 2014 annual and consolidated financial statements were being prepared, the persons responsible for preparing these financial statements remained under the impression that the issue could be resolved with comparatively little expense.

In the course of the summer of 2015, however, it became progressively 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 that was later identified as an unlawful "defeat device" as defined by US law. This culminated in Volkswagen's disclosure of a "defeat device" to the EPA and the California Air Resources Board, a department of the Environmental Protection Agency of the State of California, on September 3, 2015. According to the assessment at the time by the responsible persons dealing with the matter, the magnitude of the costs expected to result for the Volkswagen Group (recall costs, retrofitting costs, and financial penalties) was not fundamentally dissimilar to that in previous cases involving other vehicle manufacturers. It therefore appeared to be manageable overall considering the business activities of the Volkswagen Group. This assessment by Volkswagen AG was based, among other things, on the advice of a law firm engaged in the USA for regulatory approval issues, according to which similar cases had in the past been amicably resolved 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 2020, additional expenses of €0.9 billion had to be recognized in this context, primarily related to legal risks.

Further information on the litigation in connection with the diesel issue can be found in the "Litigation" section.

Effects of the Covid-19 Pandemic

By causing a global decline in demand – driven among other factors by measures taken by governments in the form of restrictions on trade in motor vehicles – as well as temporary production stoppages, the Covid-19 pandemic had a negative impact on the Volkswagen Group's net assets, financial position and results of operations in fiscal year 2020. Since the Covid-19 pandemic still persists at the beginning of 2021, effects on the net assets, financial position and results of operations are again expected for 2021. Please also refer to our comments in the 2020 group management report, specifically in the chapters entitled Business Development, Results of Operations, Financial Position and Net Assets, Report on Expected Developments and Report on Risks and Opportunities.

During the preparation of the consolidated financial statements as of December 31, 2020, the effects of the Covid-19 pandemic had to be analyzed, in particular in the following areas:

- The impairment testing of nonfinancial assets, especially goodwill, acquired brand names, as well as some capitalized development costs and property, plant and equipment, took the planning influenced by the Covid-19 pandemic into consideration. No need to recognize significant impairment losses was identified.
- The impairment tests on lease assets identified no material impact of the Covid-19 pandemic on forecast residual values for the vehicles for the entire Group.
- Impairment tests conducted on financial assets, taking adjusted default expectations into account, did not identify any need for material additional impairment losses.
- The review of the impact of changes in the timings and amounts of hedged items caused by the Covid-19 pandemic on the effectiveness and accounting treatment of hedges did not identify any material factors with an impact on profits.
- The turbulence in the commodity and capital markets had an impact particularly on the treatment of derivatives to which hedge accounting is not applied and the measurement of receivables and liabilities denominated in foreign currencies, sometimes with offsetting consequences.

For more information on these areas, please also refer to our additional comments in the "Accounting policies" section and in the notes to the relevant income statement items.

Material Transactions

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 involves the provision of financial resources totaling USD 1.0 billion, spread over several years, and the contribution by Volkswagen of its consolidated subsidiary Autonomous Intelligent Driving (AID). Furthermore, Volkswagen acquired 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, was executed as of June 1, 2020. After proportional profit elimination, the contribution of AID to Argo AI at fair value resulted in a non-cash gain of €0.8 billion, which was recognized in the other operating result. Argo AI is accounted for as a joint venture and included in the consolidated financial statements using the equity method.

As part of the planned squeeze-out at AUDI AG under the German Stock Corporation Act, Volkswagen AG announced on June 16, 2020 that the cash compensation for the transfer of the shares held by minority shareholders had been set at €1,551.53 per share. On July 31, 2020, the Annual General Meeting of AUDI AG approved the squeeze-out under stock corporation law at AUDI AG and thus the transfer of all outstanding Audi shares to Volkswagen AG. Following the resolution, the present value of the put options granted, amounting to approximately €0.2 billion, had to be recognized as a current liability not affecting net income. The noncontrolling interests in the Volkswagen Group's equity and the retained earnings attributable to the shareholders of Volkswagen AG declined accordingly. This resolution took effect upon its entry in the commercial register on November 16, 2020. In December 2020, a former shareholder of AUDI AG initiated award proceedings against Volkswagen AG at the Munich I Regional Court, asking the court to review the amount of the cash settlement offered by Volkswagen AG.

On October 6, 2020, the Volkswagen Group completed the sale of its 76% interest in Renk AG following the required regulatory approvals. The sale price was €0.5 billion. The transaction generated an operating profit of €0.1 billion, which is reported in other operating result. It also resulted in an increase in net liquidity of €0.4 billion.

In fiscal year 2020, the Volkswagen Group took part in a capital increase at QuantumScape Corporation, a US-based company that develops solid-state batteries, entering into forward purchase agreements for new shares. The capital contribution comprises two tranches of USD 100 million each. The first tranche was already executed in December 2020. Execution of the second tranche is subject to a technical milestone being reached. Since there has meanwhile been a merger with a special purpose acquisition company (SPAC), which resulted in a listing on the New York Stock Exchange, the forward purchases are measured with reference to the share price of QuantumScape Corporation until the contribution has been made and the new shares have been issued. The measurement and realization resulted in a non-cash gain of €1.4 billion in fiscal year 2020, which is reported in the other financial result under gains and losses from changes in the fair value of hedges/derivatives to which hedge accounting is not applied.

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:

	2020	2019
Volkswagen AG and consolidated subsidiaries		
Germany	145	151
Abroad	736	714
Subsidiaries carried at cost		
Germany	78	78
Abroad	284	290
Associates, joint ventures and other equity investments		
Germany	80	76
Abroad	119	107
	1,442	**1,416**

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) and have as far as possible exercised the option not to publish annual financial statements:

- AUDI AG, Ingolstadt
- Audi Berlin GmbH, Berlin
- Audi Frankfurt GmbH, Frankfurt am Main
- Audi Hamburg GmbH, Hamburg
- Audi Hannover GmbH, Hanover
- AUDI Immobilien GmbH & Co. KG, Ingolstadt
- Audi Leipzig GmbH, Leipzig
- Audi München GmbH, Munich
- Audi Sport GmbH, Neckarsulm
- Audi Stuttgart GmbH, Stuttgart
- Auto & Service PIA GmbH, Munich
- 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
- MAHAG Automobilhandel und Service GmbH & Co. oHG, Munich
- MAHAG GmbH, Munich
- MAHAG Sportwagen Zentrum Albrechtstraße GmbH, Munich
- MAN Energy Solutions SE, Augsburg
- MOIA GmbH, Berlin
- MOIA Operations Germany GmbH, Hanover
- Porsche Consulting GmbH, Bietigheim-Bissingen
- Porsche Deutschland GmbH, Bietigheim-Bissingen
- Porsche Dienstleistungs GmbH, Stuttgart
- Porsche Digital 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 Immobilien GmbH & Co. KG, Stuttgart
- Porsche Investments 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
- Schwaba GmbH, Augsburg
- SEAT Deutschland Niederlassung GmbH, Frankfurt am Main
- SKODA AUTO Deutschland GmbH, Weiterstadt

- SZM Sportwagen Zentrum München GmbH, Munich
- VfL Wolfsburg-Fußball GmbH, Wolfsburg
- VGRD GmbH, Wolfsburg
- VGRHH GmbH, Hamburg
- 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 car.SW Org Wolfsburg AG, 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 Sachsen GmbH, Zwickau
- Volkswagen Sechste Leasingobjekt GmbH, Braunschweig
- Volkswagen Siebte Leasingobjekt GmbH, Braunschweig
- Volkswagen Software Asset Management GmbH, Wolfsburg
- Volkswagen Vermögensverwaltungs-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	27
Newly acquired subsidiaries	0	3
Newly formed subsidiaries	0	13
	4	**43**
Deconsolidated		
Mergers	3	3
Liquidations	4	2
Sales/other	3	16
	10	**21**

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, Germany (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, 2020, the quoted market price of the shares in Sinotruk amounted to €1,436 million (previous year: €1,312 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, Germany.

As of December 31, 2020, the quoted market price of the shares in Bertrandt amounted to €116 million (previous year: €165 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. held around 60% of the shares of HERE International B.V., Eindhoven (the Netherlands), as of the end of fiscal year 2020. 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 January 2020, in which Volkswagen participated. As a result, the shares in There Holding B.V., which are accounted for using the equity method, increased by €19 million.

As early as in December 2019, it was announced that additional investors would acquire shares in HERE International B.V. Following the signing in December 2019 and after all antitrust approvals had been obtained, Mitsubishi Corporation (MC), Tokyo (Japan), and Nippon Telegraph and Telephone Corporation of Japan (NTT), Tokyo (Japan), jointly acquired 30% of the shares of HERE International B.V. as of May 29, 2020. As a result, the interest held by There Holding B.V. in HERE International B.V. declined from around 85% to around 60%. In June 2020 and September 2020, capital reductions were implemented at the level of There Holding B.V. in connection with the sale of shares. In this process, an amount of €197 million was attributable to the interest held by Volkswagen.

Volkswagen's ownership interest in There Holding B.V. continues to amount to 29.7%.

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, on the basis of contractual arrangements with Navistar, TRATON SE is entitled to two out of ten seats on the Board of Directors and in view of existing cooperation agreements, the investment in Navistar is reported under equity-accounted investments in the consolidated financial statements.

On November 7, 2020, TRATON SE and Navistar announced that they had entered into a binding merger agreement under which TRATON SE would acquire all outstanding ordinary shares of Navistar not already owned by TRATON SE at a cash price of USD 44.50 per ordinary share. At the time of the agreement, TRATON SE held 16.7% of Navistar's outstanding shares. Expected to be completed in mid-2021, the transaction is subject to approval by Navistar shareholders, customary closing conditions and regulatory approvals.

As of December 31, 2020, the quoted market price of the shares in Navistar amounted to €596 million (previous year: €429 million).

SUMMARIZED FINANCIAL INFORMATION ON MATERIAL ASSOCIATES ON A 100% BASIS

€ million	Sinotruk[1]	Bertrandt[2]	There Holding	Navistar[3]
2020				
Equity interest in %	25	29	30	17
Noncurrent assets	2,578	666	1,190	1,765
Current assets	8,755	481	24	3,921
Noncurrent liabilities	185	408	–	6,072
Current liabilities	7,180	197	0	2,888
Net assets	3,969	541	1,214	–3,274
Sales revenue	9,072	915	–	6,664
Earnings after tax from continuing operations	538	–19	206	–292
Earnings after tax from discontinued operations	–	–	–	–
Other comprehensive income	–1	–1	10	212
Total comprehensive income	537	–20	216	–80
Dividends received[4]	30	5	–	–
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	–	–

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
2020				
Net assets at January 1	3,758	578	1,597	–3,339
Profit or loss	538	–19	206	–292
Other comprehensive income	–1	–1	10	212
Changes in reserves	–124	–	–599	7
Foreign exchange differences	–56	–	–	153
Dividends[1]	–146	–16	–	–15
Net assets at December 31	3,969	541	1,214	–3,274
Proportionate equity	992	157	361	–547
Consolidation/Goodwill/Others	–384	–36	–	923
Carrying amount of equity-accounted investments	608	120	361	376
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

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	2020	2019
Earnings after tax from continuing operations	–25	27
Earnings after tax from discontinued operations	–	–
Other comprehensive income	0	12
Total comprehensive income	–26	39
Carrying amount of equity-accounted investments	1,663	597

There were unrecognized losses of €7 million (previous year: €54 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
2020			
Equity interest in %	40	50	30
Noncurrent assets	11,504	8,871	932
Current assets	9,844	6,509	3,889
of which cash and cash equivalents	3,525	2,711	123
Noncurrent liabilities	1,062	843	130
of which financial liabilities[2]	–	–	–
Current liabilities	12,759	10,601	4,291
of which financial liabilities[2]	–	–	–
Net assets	7,528	3,936	399
Sales revenue	46,282	20,350	23,446
Depreciation and amortization	1,785	1,776	25
Interest income	126	62	5
Interest expenses	6	38	–
Earnings before tax from continuing operations	4,937	2,187	465
Income tax expense	1,272	444	118
Earnings after tax from continuing operations	3,665	1,743	347
Earnings after tax from discontinued operations	–	–	–
Other comprehensive income	24	–9	–
Total comprehensive income	3,689	1,734	347
Dividends received[3]	1,308	1,230	149
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

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
2020			
Net assets at January 1	7,403	4,802	548
Profit or loss	3,665	1,743	347
Other comprehensive income	24	–9	–
Changes in share capital	–	–	–
Changes in reserves	–	–	–
Foreign exchange differences	–149	–33	0
Dividends[1]	–3,416	–2,567	–497
Net assets at December 31	7,528	3,936	399
Proportionate equity	3,011	1,968	120
Consolidation/Goodwill/Others	–792	–803	–
Carrying amount of equity-accounted investments	2,219	1,165	120
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

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	2020	2019
Earnings after tax from continuing operations	166	434
Earnings after tax from discontinued operations	–	–
Other comprehensive income	–186	3
Total comprehensive income	–20	436
Carrying amount of equity-accounted investments	3,447	1,887

There were unrecognized losses of €26 million (previous year: €29 million) relating to investments in joint ventures. Contingent liabilities to joint ventures amounted to €248 million (previous year: €224 million), while financial guarantees stood at €70 million (previous year: €134 million). Cash funds of joint ventures amounting to €197 million (previous year: €276 million) are deposited as collateral for asset-backed securities transactions and are therefore not freely available.

IFRS 5 – NON-CURRENT ASSETS HELD FOR SALE

As of December 31, 2019, the RENK AG subgroup and the consolidated subsidiary Autonomous Intelligent Driving (AID) were classified as disposal groups held for sale in accordance with IFRS 5 and measured at their carrying amounts. Assets of €795 million and liabilities of €370 million attributable to the disposal groups were reported in a separate balance sheet item as of December 31, 2019.

The sale of RENK was completed on October 6, 2020 following the required regulatory approvals. The sale price was €0.5 billion.

The contribution of AID was effected as of June 1, 2020. After proportional profit elimination, the contribution of AID to Argo AI at fair value resulted in a non-cash gain of €0.8 billion, which was recognized in the other operating result.

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 always 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 generally 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 at least 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 is 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; they are 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 =	2020	2019	2020	2019
Argentina	ARS	103.28799	67.23626	100.39080	53.78083
Australia	AUD	1.58605	1.60080	1.61589	1.61071
Brazil	BRL	6.37555	4.51350	6.27218	4.41485
Canada	CAD	1.56275	1.46205	1.55979	1.48595
Czech Republic	CZK	26.23900	25.40650	26.30420	25.66983
India	INR	89.69000	80.15450	89.57211	78.86396
Japan	JPY	126.51000	121.89500	126.26457	122.08649
Mexico	MXN	24.41145	21.24340	24.29728	21.56326
People’s Republic of China	CNY	8.02895	7.81470	7.95821	7.73444
Poland	PLN	4.55615	4.25970	4.47717	4.29784
Republic of Korea	KRW	1,336.21000	1,296.35000	1,332.54652	1,304.89265
Russia	RUB	91.77540	69.84685	90.25599	72.46709
South Africa	ZAR	18.01515	15.76470	18.11555	16.17716
Sweden	SEK	10.02470	10.44505	10.17259	10.58593
United Kingdom	GBP	0.89925	0.84995	0.90553	0.87744
USA	USD	1.22760	1.12275	1.21663	1.11974

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 – if they have finite useful lives – amortized over their useful lives 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 have been capitalized at cost, provided the cash-generating unit to which the respective intangible asset is attributable is not impaired and the other criteria for recognition as assets are met. If at least one of the criteria for recognition as assets is 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, powertrains or software developed – generally between three and nine years.

Amortization charges on intangible assets are 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 indefinite and finite useful lives. Normally, the respective brand is the cash-generating unit that is used as the testing level. Jointly used (corporate) assets are allocated to the cash-generating units using allocation formulas. Measurement of value in use is based on management's current medium-term planning (referred to as budget planning round). The planning period generally covers five years. 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, expected trends in the Volkswagen Group's market shares, the volume and timing of the development of vehicle models and investments in production facilities, as well as changes in price and cost structures, taking particular account of the transformation to e-mobility and an increase in regulatory requirements. The planning for the Financial Services segment is likewise prepared on the basis of these expectations, and also reflects the relevant market penetration rates of expected vehicle sales with finance or lease agreements and other services, as well as 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 is based on the assumption that global economic output and, consequently, trends in the automotive market will recover overall in 2021, provided successful, lasting containment of the Covid-19 pandemic is achieved. However, this growth will most likely be sufficient for the economy to recover to approximately its pre-pandemic level. We continue to 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 ongoing geopolitical tensions and conflicts. We anticipate that both the advanced economies and the emerging markets will experience positive momentum. Furthermore, we anticipate that the global economy will also continue to grow in the period from 2022 to 2025. The Volkswagen Group's automotive market and volume planning reflects the above regional differentiation and takes account of the impact of the Covid-19 pandemic on the initial years of the planning period. The negative impact on earnings expected to arise from 2021 onward from more stringent emission and fuel consumption legislation and the sustained effects of the Covid-19 pandemic is to be offset by corresponding programs to increase efficiency. The change in the operating return on sales assumed for fiscal year 2021 for the purpose of the impairment test is within the range forecast by Volkswagen.

The 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	2020	2019
Passenger Cars segment	6.8%	5.7%
Commercial Vehicles segment	8.7%	7.7%
Power Engineering segment	9.3%	7.9%

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 is taken into account. The composition of the peer groups used to determine beta factors and leverage is continuously reviewed and adjusted if necessary.

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.

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. The 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.

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

The Volkswagen Group accounts 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.

If the Volkswagen Group is the lessee, it generally recognizes in its balance sheet a right-of-use asset and a lease liability for each lease. 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 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.

Practical expedients are allowed 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 being as of low value if the value of the leased asset when 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 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 from within the company, 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 is 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 attributable to the Volkswagen Group of increases or reductions in equity at the associates and joint ventures after their acquisition, 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).

To encourage lending to private households and companies affected by the Covid-19 pandemic, the ECB provided additional liquidity on favorable terms under the TLTRO III program. The Volkswagen Group is of the view that this support constitutes a government grant. The income from these government grants within the meaning of IAS 20 is recognized in the interest result.

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 but 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 period of more than 90 days, 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 other comprehensive income (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

Share-based payment comprises 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. These cash-settled share-based payments are measured at fair value, which is determined using a recognized option pricing model, until maturity. The total compensation cost to be recognized corresponds to the actual payment and 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 with economic benefits 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 –0.23% (previous year: –0.10%) 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 resources with economic benefits 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 resources with economic benefits 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 services have been rendered or the goods have been delivered, i.e. when the customer has obtained control of the goods or services. 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 related 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 ratably as income 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. 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 sections entitled "IFRS 7 (Financial Instruments)" and "Financial risk management and financial instruments" contain 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. Actuarial gains or losses arising from changes in measurement inputs 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 invariably means that unused provisions are reversed or additional amounts have to be recognized for provisions. 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 retrospective tax 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 compared to 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 conditions for awarding the grants and that the grants will in fact 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. 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.

The global spread of the SARS-COV-2 virus, the associated restrictions, and the resulting downturn in demand and supply meant that negative growth of 4.0% was recorded for the world economy in 2020 (previous year: positive growth of 2.6%).

The Volkswagen Group’s planning is based on the assumption that global economic output will recover overall in 2021, provided successful, lasting containment of the Covid-19 pandemic is achieved.

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.

The activities of the Passenger Cars and Light Commercial Vehicles segment cover the development of vehicles, engines and vehicle software, 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. As in the case of the passenger car brands, there is collaboration within the areas procurement, development and sales. The aim is to create closer cooperation within the business areas.

The Power Engineering segment combines the large-bore diesel engines, turbomachinery, special gear units, and propulsion components businesses. Until October 2020, it also included the Renk business; for further information see the “Key events” section.

The activities of the Financial Services segment comprise dealership and customer financing, leasing, banking and insurance activities, fleet management and mobility services. In this segment, activities are combined for reporting purposes taking into particular account the comparability of the type of services and of the regulatory environment.

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 segment reporting, the share of the result of joint ventures is contained in 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 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

REPORTING SEGMENTS 2020

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue from external customers	160,674	21,114	3,638	37,223	222,649	235	222,884
Intersegment sales revenue	15,310	1,042	2	3,555	19,908	–19,908	–
Total sales revenue	175,984	22,156	3,640	40,778	242,557	–19,673	222,884
Depreciation and amortization	15,428	2,309	379	8,647	26,763	–1,014	25,749
Impairment losses	370	179	64	742	1,355	–49	1,306
Reversal of impairment losses	32	1	–	204	237	–8	229
Segment result (operating result)	8,381	–79	–482	3,012	10,832	–1,157	9,675
Share of the result of equity-accounted investments	2,615	85	–3	60	2,756	–	2,756
Interest result and other financial result	–3	–170	–2	–296	–471	–294	–765
Equity-accounted investments	8,129	1,135	29	786	10,080	–	10,080
Investments in intangible assets, property, plant and equipment, and investment property	15,677	1,309	147	208	17,340	405	17,745

RECONCILIATION

€ million	2020	2019
Segment sales revenue	**242,557**	**272,875**
Unallocated activities	997	969
Group financing	27	28
Consolidation/Holding company function	–20,698	–21,239
Group sales revenue	**222,884**	**252,632**
Segment result (operating result)	**10,832**	**20,381**
Unallocated activities	–28	–72
Group financing	–8	–38
Consolidation/Holding company function	–1,121	–3,312
Operating result	**9,675**	**16,960**
Financial result	**1,991**	**1,396**
Consolidated result before tax	**11,667**	**18,356**

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.

BY REGION 2020

€ million	Germany	Europe/Other markets[1]	North America	South America	Asia-Pacific	Hedges sales revenue	Total
Sales revenue from external customers	42,847	90,652	36,810	8,632	44,288	–345	222,884
Intangible assets, property, plant and equipment, lease assets and investment property	105,630	47,680	23,852	2,323	3,611	–	183,096

1 Excluding Germany.

Allocation of sales revenue to the regions follows the destination principle.

The allocation of interregional intragroup transactions regarding the segment assets has been presented uniformly according to the economic ownership.

Income statement disclosures

1. Sales revenue

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**

STRUCTURE OF GROUP SALES REVENUE 2020

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles	Power Engineering	Financial Services	Total Segments	Reconciliation	Volkswagen Group
Vehicles	129,913	13,385	–	–	143,298	–13,703	129,595
Genuine parts	11,755	3,249	–	–	15,004	–118	14,886
Used vehicles and third-party products	11,716	1,455	–	–	13,171	–637	12,535
Engines, powertrains and parts deliveries	12,625	669	–	–	13,294	–41	13,253
Power Engineering	–	–	3,640	–	3,640	–2	3,638
Motorcycles	567	–	–	–	567	–	567
Leasing business	767	1,698	0	31,608	34,073	–4,334	29,739
Interest and similar income	192	8	–	7,707	7,907	–261	7,646
Hedges sales revenue	–357	–18	–	0	–375	30	–345
Other sales revenue	8,806	1,709	–	1,463	11,978	–608	11,370
	175,984	**22,156**	**3,640**	**40,778**	**242,557**	**–19,673**	**222,884**

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 €6,815 million (previous year: €6,333 million) was included in contract liabilities as of January 1, 2020.

€345 million (previous year: €359 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 €3,676 million (previous year: €3,967 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, 2021, the vast majority of the Volkswagen Group's performance obligations that were 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 2021. The calculation of the amounts for the Power Engineering Business Area took account of both contracts with a term of up to one year and service contracts under which the Volkswagen Group realizes sales revenue in exactly the same amount as the customer benefits from the services rendered 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 €2,303 million (previous year: €2,705 million) attributable to the financial services business.

This item also includes impairment losses on intangible assets (primarily development costs), property, plant and equipment (primarily other equipment, operating and office equipment), and lease assets in the amount of €1,180 million (previous year: €830 million). The impairment losses totaling €356 million (previous year: €295 million) recognized during the reporting period on intangible assets and items of property, plant and equipment result primarily from lower values in use of various products in the Passenger Cars segment, due to market and exchange rate risks, and in particular from expected declines in volumes. The impairment losses on lease assets in the amount of €824 million (previous year: €535 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. €60 million (previous year: €25 million) of this figure is reported in current lease assets.

Government grants related to income amounted to €1,001 million in the fiscal year (previous year: €657 million) and were generally allocated to the functional areas.

3. Distribution expenses

Distribution expenses amounting to €18.4 billion (previous year: €21.0 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 €9.4 billion (previous year: €9.8 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	2020	2019
Income from reversal of loss allowances on receivables and other assets	1,334	1,482
Income from reversal of provisions and accruals	1,086	969
Income from foreign currency hedging derivatives within hedge accounting	1,185	686
Income from other hedges	1,709	1,177
Income from foreign exchange gains	2,588	2,346
Income from sale of promotional material	312	498
Income from cost allocations	1,039	985
Income from investment property	10	12
Gains on asset disposals and the reversal of impairment losses on noncurrent assets	299	1,182
Miscellaneous other operating income	2,876	2,116
	12,438	**11,453**

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	2020	2019
Loss allowances on trade receivables including construction contracts	316	317
Loss allowances on other receivables and other assets	2,302	1,783
Losses from foreign currency hedging derivatives within hedge accounting	1,034	997
Expenses from other hedges	1,806	1,332
Foreign exchange losses	3,123	2,013
Expenses from cost allocations	743	563
Expenses for termination agreements	391	54
Losses on disposal of noncurrent assets	212	119
Miscellaneous other operating expenses	3,979	5,712
	13,904	**12,890**

Allowances on other receivables and other assets include allowances on receivables from long-term construction contracts amounting to €1.2 million (previous year: €0.3 million).

Expenses from other hedges include 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.

Miscellaneous other operating expenses consist, among other items, of 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	2020	2019
Share of profits of equity-accounted investments	3,159	3,501
of which from joint ventures	2,916	3,257
of which from associates	243	244
Share of losses of equity-accounted investments	403	152
of which from joint ventures	269	10
of which from associates	134	142
	2,756	**3,349**

8. Interest result

€ million	2020	2019
Interest income	**793**	**910**
Other interest and similar income	788	904
Income from valuation of interest derivatives	5	6
Interest expenses	**–2,291**	**–2,524**
Other interest and similar expenses	–1,499	–1,401
Expenses from valuation of interest derivatives	–23	–6
Interest expenses included in lease payments	–206	–217
Interest result on other liabilities	–104	–238
Net interest on the net defined benefit liability	–459	–662
Interest result	**–1,498**	**–1,614**

9. Other financial result

€ million	2020	2019
Income from profit and loss transfer agreements	23	19
Cost of loss absorption	–103	–72
Other income from equity investments	91	178
Other expenses from equity investments	–433	–374
Income from marketable securities and loans	–230	27
Realized income of loan receivables and payables in foreign currency	1,097	877
Realized expenses of loan receivables and payables in foreign currency	–1,620	–980
Gains and losses from remeasurement and impairment of financial instruments	–61	228
Gains and losses from fair value changes of hedging instruments/derivatives not included in hedge accounting	1,950	–240
Gains and losses from fair value changes of hedging instruments/derivatives included in hedge accounting	20	0
Other financial result	**733**	**–339**

Gains and losses from changes in the fair value of hedges/derivatives to which hedge accounting is not applied relate primarily to gains on the measurement and realization of forward purchase agreements for new shares in QuantumScape Corporation in an amount of €1.4 billion. See the “Key Events” section for more information.

10. Income tax income/expense

COMPONENTS OF TAX INCOME AND EXPENSE

€ million	2020	2019
Current tax expense, Germany	940	1,473
Current tax expense, abroad	2,210	2,673
Current income tax expense	**3,150**	**4,147**
of which prior-period income (–)/expense (+)	299	32
Deferred tax income (–)/expense (+), Germany	–1,026	115
Deferred tax income (–)/expense (+), abroad	719	65
Deferred tax income (–)/expense (+)	**–307**	**180**
Income tax income/expense	**2,843**	**4,326**

The statutory corporation tax rate in Germany for the 2020 assessment period was 15%. Including trade tax and the solidarity surcharge, this resulted in an aggregate tax rate of 30.0% (previous year: 29.8%).

A tax rate of 30.0% (previous year: 29.8%) was used to measure deferred taxes in the German consolidated tax group.

The local income tax rates applied to companies outside Germany vary, as in the previous year, 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 2020 of €392 million (previous year: €692 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, 2020	Dec. 31, 2019
Indefinitely to be carried forward	15,024	14,498
Carried forward within 10 years	3,215	568
Carried forward from 10 to 20 years	4,849	5,579
Total	**23,088**	**20,645**

€ million	EXPIRY OF UNUSABLE TAX LOSS CARRYFORWARDS	
	Dec. 31, 2020	Dec. 31, 2019
Non-expiring tax loss carryforwards	4,584	5,919
Expiry within 10 years	2,180	473
Expiry from 10 to 20 years	2,164	1,743
Expiry over 20 years	11	62
Total	**8,939**	**8,197**

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 €55 million (previous year: €36 million). Deferred tax expense was reduced by €134 million (previous year: €66 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 €470 million (previous year: €58 million). Deferred tax income resulting from the reversal of a write-down of deferred tax assets amounts to €36 million (previous year: €35 million).

Tax credits granted by various countries amounted to €376 million (previous year: €378 million).

No deferred tax assets were recognized for deductible temporary differences of €899 million (previous year: €897 million) and for tax credits of €105 million (previous year: €138 million) that would expire in the next 20 years.

In accordance with IAS 12.39, deferred tax liabilities of €166 million (previous year: €231 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 €54 million at Group level (previous year: €116 million).

Deferred tax assets of €12,591 million (previous year: €1,006 million) were recognized without being offset by deferred tax liabilities in the same amount. In fiscal year 2020, the deferred tax assets of companies within the German tax group recognized due to positive results in the past 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.

€7,997 million (previous year: €7,820 million) of the deferred taxes recognized in the balance sheet was credited to equity and relates to other comprehensive income. €53 million (previous year: €53 million) of this figure is attributable to noncontrolling interests. In fiscal year 2020, deferred tax income of €73 million from the remeasurement of pension plans directly through equity was reclassified within equity. The classification of changes in deferred taxes is presented in the statement of comprehensive income.

In fiscal year 2020, tax effects of €5 million resulting from equity transaction costs were recognized in equity.

DEFERRED TAXES CLASSIFIED BY BALANCE SHEET ITEM

The following recognized deferred tax assets and liabilities were attributable to recognition and measurement differences in the individual balance sheet items and to tax loss carryforwards:

	DEFERRED TAX ASSETS		DEFERRED TAX LIABILITIES	
€ million	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2020	Dec. 31, 2019
Intangible assets	655	267	10,811	10,555
Property, plant and equipment, and lease assets	5,599	5,576	8,150	8,493
Noncurrent financial assets	17	18	97	43
Inventories	2,317	2,348	893	821
Receivables and other assets (including Financial Services Division)	1,858	2,270	10,236	9,670
Other current assets	4,480	3,768	242	7
Pension provisions	10,285	9,013	27	52
Liabilities and other provisions	13,284	13,358	5,156	4,167
Loss allowances on deferred tax assets from temporary differences	–499	–141	–	–
Temporary differences, net of loss allowances	37,997	36,478	35,611	33,809
Tax loss carryforwards, net of loss allowances	3,465	3,068	–	–
Tax credits, net of loss allowances	271	239	–	–
Value before consolidation and offset	**41,733**	**39,786**	**35,611**	**33,809**
of which attributable to noncurrent assets and liabilities	27,924	26,307	28,085	26,736
Offset	31,172	29,627	31,172	29,627
Consolidation	2,925	2,947	451	826
Amount recognized	**13,486**	**13,106**	**4,890**	**5,007**

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 2020 of €2,843 million (previous year: €4,326 million) was €657 million lower (previous year: €1,144 million) than the expected tax expense of €3,500 million that would have resulted from application of a tax rate for the Group of 30.0% (previous year: 29.8%) to the earnings before tax of the Group.

RECONCILIATION OF EXPECTED TO EFFECTIVE INCOME TAX

€ million	2020	2019
Profit before tax	11,667	18,356
Expected income tax income (–)/expense (+) (tax rate 30.0%; previous year: 29.8%)	**3,500**	**5,470**
Reconciliation:		
Effect of different tax rates outside Germany	–364	–843
Proportion of taxation relating to:		
tax-exempt income	–1,501	–1,124
expenses not deductible for tax purposes	540	509
effects of loss carryforwards	520	163
permanent differences	65	51
Tax credits	–117	–54
Prior-period tax expense	–211	–151
Effect of tax rate changes	54	116
Nondeductible withholding tax	419	359
Other taxation changes	–62	–170
Effective income tax expense	**2,843**	**4,326**
Effective tax rate in %	24.4	23.6

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 2020 and 2019 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, preferred shares are entitled to a €0.06 higher dividend than ordinary shares.

		2020	2019
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	8,824	14,029
Earnings attributable to noncontrolling interests	€ million	–43	143
Earnings attributable to Volkswagen AG hybrid capital investors	€ million	533	540
Earnings attributable to Volkswagen AG shareholders	€ million	8,334	13,346
of which basic/diluted earnings attributable to ordinary shares	€ million	4,898	7,849
of which basic/diluted earnings attributable to preferred shares	€ million	3,435	5,497
Earnings per ordinary share – basic/diluted	€	16.60	26.60
Earnings per preferred share – basic/diluted	€	16.66	26.66

Balance sheet disclosures

12. Intangible assets

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**

CHANGES IN INTANGIBLE ASSETS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2020

€ 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, 2020	**16,878**	**23,247**	**6,188**	**36,895**	**9,889**	**93,098**
Foreign exchange differences	33	77	–77	–299	–281	–548
Changes in consolidated Group	–	31	8	15	56	111
Additions	–	–	4,576	1,897	1,038	7,511
Transfers	–	–	–4,150	4,150	–58	–58
Disposals	–	37	107	1,341	310	1,795
Balance at Dec. 31, 2020	**16,911**	**23,318**	**6,438**	**41,316**	**10,334**	**98,317**
Amortization and impairment						
Balance at Jan. 1, 2020	**86**	**–**	**45**	**19,053**	**7,700**	**26,884**
Foreign exchange differences	–5	–	0	–172	–232	–409
Changes in consolidated Group	–	–	–	–	9	9
Additions to cumulative amortization	3	–	–	4,514	733	5,249
Additions to cumulative impairment losses	–	37	55	75	62	229
Transfers	–	–	–6	7	0	1
Disposals	–	37	–	1,344	226	1,606
Reversal of impairment losses	–	–	7	–	0	7
Balance at Dec. 31, 2020	**83**	**–**	**87**	**22,133**	**8,046**	**30,349**
Carrying amount at Dec. 31, 2020	**16,828**	**23,318**	**6,351**	**19,183**	**2,288**	**67,968**

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	2020	2019
Brand names by operating segment		
Porsche	13,823	13,823
Scania Vehicles and Services	971	932
MAN Truck & Bus	1,127	1,127
MAN Energy Solutions	415	415
Ducati	404	404
Other	89	93
	16,828	**16,793**
Goodwill by operating segment		
Porsche	18,825	18,825
Scania Vehicles and Services	2,808	2,699
MAN Truck & Bus	587	587
MAN Energy Solutions	263	265
Ducati	290	290
ŠKODA	155	160
Porsche Holding Salzburg	130	151
Other	260	271
	23,318	**23,247**

The impairment test for recognized goodwill and brand names is based on value in use, which has been determined at the level of the respective brand. In this process, the WACC rates, based on the risk-free rate of interest, a market risk premium and the cost of debt, are applied. For more information on the general approach and key assumptions, please refer to the details provided on intangible assets in the “Accounting policies” section.

Moreover, the following aspects were of significance for the brands with material recognized brand names and goodwill:

The planning of the Porsche cash-generating unit is based on a significant increase in the proportion of electric vehicles over the planning period and the implementation of further optimization measures.

Planning at Scania Vehicles and Services is based on the growing share of electric vehicles in the fleet, against a backdrop of market demand for electric models, which tend to be more expensive.

For MAN Truck & Bus, the planning assumes a continuous improvement in the operating result in the course of the detailed planning period.

For all cash-generating units, 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	2020	2019	%
Total research and development costs	13,885	14,306	–2.9
of which: capitalized development costs	6,473	5,171	25.2
Capitalization ratio in %	46.6	36.1	
Amortization of capitalized development costs	4,644	4,064	14.3
Research and development costs recognized in profit or loss	**12,056**	**13,199**	**–8.7**

13. Property, plant and equipment

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 Due to the initial application of IFRS 16, the values in the opening balance were adjusted.

CHANGES IN PROPERTY, PLANT AND EQUIPMENT IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2020

€ 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, 2020	**43,531**	**50,090**	**81,997**	**7,526**	**183,143**
Foreign exchange differences	–907	–1,343	–1,765	–200	–4,214
Changes in consolidated Group	153	0	47	–32	168
Additions	1,914	1,281	3,935	4,410	11,540
Transfers	852	1,040	2,096	–3,883	105
Disposals	392	1,246	1,920	56	3,613
Balance at Dec. 31, 2020	**45,151**	**49,822**	**84,389**	**7,766**	**187,129**
Depreciation and impairment					
Balance at Jan. 1, 2020	**17,389**	**36,498**	**62,862**	**242**	**116,991**
Foreign exchange differences	–326	–973	–1,393	–9	–2,701
Changes in consolidated Group	34	9	28	–	71
Additions to cumulative depreciation	2,050	3,226	6,561	–	11,838
Additions to cumulative impairment losses	58	46	18	6	127
Transfers	115	–19	98	–193	2
Disposals	177	1,116	1,760	13	3,066
Reversal of impairment losses	0	6	7	3	16
Balance at Dec. 31, 2020	**19,142**	**37,665**	**66,408**	**30**	**123,245**
Carrying amount at Dec. 31, 2020	**26,009**	**12,158**	**17,981**	**7,736**	**63,884**

Government grants of €156 million (previous year: €146 million) were deducted from the cost of property, plant and equipment.

In connection with land and buildings, real property liens of €1,063 million (previous year: €1,221 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, 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 Due to the initial application of IFRS 16, the values in the opening balance were adjusted.

CHANGES IN LEASE ASSETS AND INVESTMENT PROPERTY IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2020

€ million	Lease assets	Investment property	Total
Cost			
Balance at Jan. 1, 2020	**64,384**	**845**	**65,229**
Foreign exchange differences	–2,972	–23	–2,995
Changes in consolidated Group	15	–	15
Additions	24,772	27	24,799
Transfers	67	39	106
Disposals	19,139	19	19,159
Balance at Dec. 31, 2020	**67,127**	**869**	**67,996**
Depreciation and impairment			
Balance at Jan. 1, 2020	**15,446**	**307**	**15,753**
Foreign exchange differences	–975	–4	–979
Changes in consolidated Group	3	–	3
Additions to cumulative depreciation	8,645	17	8,662
Additions to cumulative impairment losses	764	1	765
Transfers	35	1	36
Disposals	7,282	11	7,293
Reversal of impairment losses	195	0	195
Balance at Dec. 31, 2020	**16,441**	**311**	**16,752**
Carrying amount at Dec. 31, 2020	**50,686**	**558**	**51,244**

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 €1,199 million (previous year: €1,206 million). Fair value is estimated using an investment method based on internal calculations (Level 3 of the fair value hierarchy). Operating expenses of €55 million (previous year: €56 million) were incurred for the maintenance of investment property in use. Expenses of €0.4 million (previous year: €0.1 million) were incurred for unused investment property.

Rental income from investment property amounted to €58 million in the fiscal year (previous year: €61 million).

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, 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.

CHANGES IN EQUITY-ACCOUNTED INVESTMENTS AND OTHER EQUITY INVESTMENTS IN THE PERIOD JANUARY 1 TO DECEMBER 31, 2020

€ million	Equity-accounted investments	Other equity investments	Total
Gross carrying amount			
Balance at Jan. 1, 2020	**8,639**	**2,616**	**11,255**
Foreign exchange differences	–49	–24	–73
Changes in consolidated Group	–756	–186	–943
Additions	3,756	488	4,244
Transfers	–	0	0
Disposals	196	50	246
Changes recognized in profit or loss	2,693	–3	2,690
Dividends[1]	–3,195	–	–3,195
Other changes recognized in other comprehensive income	–280	–8	–288
Balance at Dec. 31, 2020	**10,610**	**2,833**	**13,443**
Impairment losses			
Balance at Jan. 1, 2020	**470**	**714**	**1,183**
Foreign exchange differences	–5	–5	–10
Changes in consolidated Group	–108	57	–52
Additions	185	245	429
Transfers	–	–	–
Disposals	–	41	41
Reversal of impairment losses	11	1	12
Balance at Dec. 31, 2020	**531**	**968**	**1,499**
Carrying amount at Dec. 31, 2020	**10,080**	**1,865**	**11,945**

1 Dividends are shown before withholding tax.

Equity-accounted investments include joint ventures in the amount of €6,951 million (previous year: €5,851 million) and associates in the amount of €3,129 million (previous year: €2,318 million).

In the fiscal year, under additions to equity-accounted investments, an amount of €1.7 billion is attributable to the acquisition of shares in Argo AI, a total of €1.0 billion to the acquisition of additional shares in Volkswagen (Anhui) Automotive Company (formerly: JAC Volkswagen Automotive Company) and shares in Anhui Jianghuai Automobile Group Holdings; an amount of €0.5 billion relates to the capital increase at QuantumScape Corporation and the realization of a forward purchase transaction in this context. Further information on Argo AI and QuantumScape Corporation can be found in the "Key Events" section.

The main changes in the consolidated Group affecting equity-accounted investments in an amount of €–0.8 billion relate to the reclassification of shares in Volkswagen (Anhui) Automotive Company following its first-time consolidation.

Of the other changes recognized in other comprehensive income, €–239 million (previous year: €53 million) is attributable to joint ventures and €–41 million (previous year: €22 million) to associates. They are mainly the result of foreign exchange differences in the amount of €–319 million (previous year: €94 million), pension plan remeasurements in the amount of €103 million (previous year: €1 million) and fair value measurement of cash flow hedges in the amount of €16 million (previous year: €–27 million).

16. Noncurrent and current financial services receivables

	Carrying amount			Fair value	Carrying amount			Fair value
€ million	Current	Noncurrent	Dec. 31, 2020	Dec. 31, 2020	Current	Noncurrent	Dec. 31, 2019	Dec. 31, 2019
Receivables from financing business								
Customer financing	26,758	46,157	72,916	75,296	22,873	49,175	72,048	73,248
Dealer financing	12,435	1,994	14,428	14,400	16,781	2,512	19,293	19,270
Direct banking	307	7	314	315	305	5	310	310
	39,500	**48,157**	**87,658**	**90,010**	**39,958**	**51,692**	**91,650**	**92,827**
Receivables from operating leases	379	–	379	379	285	–	285	285
Receivables from finance leases	18,127	34,408	52,534	54,604	18,371	35,281	53,652	54,742
	58,006	**82,565**	**140,571**	**144,994**	**58,615**	**86,973**	**145,588**	**147,855**

The receivables from customer financing and finance leases contained in financial services receivables of €140.6 billion (previous year: €145.6 billion) increased by €21 million (previous year: increased by €2 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, €33 million (previous year: €181 million) was furnished as collateral for financial liabilities and contingent liabilities.

The receivables from dealer financing include €35 million (previous year: €22 million) receivable from unconsolidated affiliated companies.

17. Noncurrent and current other financial assets

€ million	Carrying amount			Carrying amount		
	Current	Noncurrent	Dec. 31, 2020	Current	Noncurrent	Dec. 31, 2019
Positive fair values of derivative financial instruments	2,616	3,435	6,051	1,622	1,628	3,250
Receivables from loans, bonds, profit participation rights (excluding interest)	6,421	3,568	9,988	6,639	3,278	9,917
Miscellaneous financial assets	4,197	832	5,029	3,955	646	4,601
	13,234	**7,834**	**21,068**	**12,216**	**5,553**	**17,769**

Other financial assets include receivables from related parties of €9.7 billion (previous year: €9.7 billion). Other financial assets amounting to €124 million (previous year: €244 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, miscellaneous financial assets include receivables from restricted deposits that serve as collateral (mainly under asset-backed securities transactions).

The positive fair values of derivatives relate to the following items:

€ million	Dec. 31, 2020	Dec. 31, 2019
Transactions for hedging		
foreign currency risk from assets using fair value hedges	44	39
foreign currency risk from liabilities using fair value hedges	14	36
interest rate risk using fair value hedges	819	662
interest rate risk using cash flow hedges	11	13
foreign currency and price risk from future cash flows (cash flow hedges)	2,247	785
Hedging transactions Total	**3,134**	**1,535**
Assets related to derivatives not included in hedging relationships	2,917	1,715
Total	**6,051**	**3,250**

Positive fair values of €0 million (previous year: €6 million) were recognized from transactions for hedging interest rate risk (fair value hedges) used in portfolio hedges.

Further details on derivative financial instruments as a whole are given in the section entitled “Financial risk management and financial instruments".

18. Noncurrent and current other receivables

€ million	Carrying amount Current	Carrying amount Noncurrent	Dec. 31, 2020	Carrying amount Current	Carrying amount Noncurrent	Dec. 31, 2019
Other recoverable income taxes	4,063	1,058	5,121	4,244	806	5,050
Miscellaneous receivables	3,318	1,810	5,128	3,028	1,916	4,945
	7,381	**2,867**	**10,248**	**7,272**	**2,722**	**9,995**

Miscellaneous receivables include assets to fund post-employment benefits in the amount of €41 million (previous year: €65 million). This item also includes the share of the technical provisions attributable to reinsurers amounting to €46 million (previous year: €58 million).

Current other receivables are predominantly non-interest-bearing.

Other receivables include contingent receivables from long-term construction contracts recognized in accordance with project progress. They correspond to the contract assets recognized under contracts with customers and changed as follows:

€ million	2020	2019
Contingent construction contract receivables Balance at Jan. 1	**314**	**352**
Additions and disposals	64	–36
Changes in consolidated Group	–	–
Change in valuation allowances	10	1
Classified as held for sale	–	4
Changes in estimates and assumptions as well as contract modifications	–	–
Foreign exchange differences	0	2
Contingent construction contract receivables at Dec. 31	**389**	**314**

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, 2020, costs to obtain contracts amounting to €63 million (previous year: €65 million) were recognized as assets. In 2020, amortization charges on capitalized costs to obtain contracts amounted to €23 million (previous year: €13 million). No impairment losses were recognized on capitalized costs to obtain contracts in 2020 and 2019.

19. Tax assets

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2020	Current	Noncurrent	Dec. 31, 2019
Deferred tax assets	–	13,486	13,486	–	13,106	13,106
Tax receivables	1,186	376	1,563	1,190	341	1,531
	1,186	**13,862**	**15,049**	**1,190**	**13,447**	**14,637**

Deferred tax assets include an amount of €7,405 million (previous year: €7,490 million) arising from recognition and measurement differences between IFRS carrying amounts and the tax base, which will reverse within one year.

20. Inventories

€ million	Dec. 31, 2020	Dec. 31, 2019
Raw materials, consumables and supplies	6,966	6,099
Work in progress	4,022	4,110
Finished goods and purchased merchandise	27,204	30,617
Current lease assets	5,337	5,699
Prepayments	288	222
Hedges on inventories	6	–6
	43,823	**46,742**

At the same time as the relevant revenue was recognized, inventories in the amount of €170 billion (previous year: €192 billion) were included in cost of sales. Loss allowances (excluding lease assets) recognized as expenses in the reporting period amounted to €697 million (previous year: €672 million). Vehicles with a value amounting to €320 million (previous year: €340 million) were assigned as collateral for partial retirement obligations.

21. Trade receivables

€ million	Dec. 31, 2020	Dec. 31, 2019
Trade receivables from		
third parties	12,706	13,445
unconsolidated subsidiaries	181	180
joint ventures	3,305	4,283
associates	50	32
other investees and investors	2	1
	16,243	**17,941**

The fair values of the trade receivables correspond to the carrying amounts.

22. Marketable securities

The marketable securities serve to safeguard liquidity. They are mainly short-term fixed-income securities and shares. Most securities are measured at fair value. Current securities amounting to €661 million (previous year: €639 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, 2020	Dec. 31, 2019
Bank balances	33,403	25,264
Checks, cash-in-hand, bills and call deposits	507	659
	33,909	**25,923**

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.

CHANGE IN ORDINARY AND PREFERRED SHARES AND SUBSCRIBED CAPITAL

	SHARES		€	
	2020	2019	2020	2019
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 €4,028 million are eligible for distribution following the transfer of €3,165 million to the revenue reserves. The Board of Management and Supervisory Board will propose to the Annual General Meeting that a total dividend of €2,419 million, i.e. €4.80 per ordinary share and €4.86 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 2020.

HYBRID CAPITAL

In June 2020, Volkswagen AG placed two unsecured subordinated hybrid notes with an aggregate principal amount of €3.0 billion via a subsidiary, Volkswagen International Finance N.V., Amsterdam, the Netherlands (VIF). The hybrid notes are perpetual, but may be called unilaterally by VIF. The first possible call date for the first note (€1.5 billion and a coupon of 3.500%) is after five years, and the first possible call date for the second note (€1.5 billion and a coupon of 3.875%) is after nine years. This resulted in an inflow of cash funds amounting to €2,984 million, less transaction costs of €16 million. Additionally, there were noncash effects from the deferral of taxes amounting to €5 million.

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 is called.

NONCONTROLLING INTERESTS

As of December 31, 2020, noncontrolling interests amounted to €1,734 million (previous year: €1,870 million). Most of the noncontrolling interests in equity arose as a result of the IPO of the TRATON GROUP in fiscal year 2019.

On February 28, 2020, Volkswagen AG announced that it was planning to increase its interest in AUDI AG from approximately 99.64% to 100%. On July 31, 2020, the Annual General Meeting of AUDI AG resolved to implement a squeeze-out under stock corporation law (see “Key events” section).

The table below shows summarized financial information of the TRATON GROUP, including amortized goodwill and fair value adjustments, which were determined at the acquisition date:

€ million	2020	2019
Equity interest in %[1]	10.28	10.28
Equity interest	1,495	1,640
Noncurrent assets	29,599	29,623
Current assets	14,401	16,728
Noncurrent liabilities	14,582	14,938
Current liabilities	15,459	16,664
Sales revenue	22,580	26,901
Earnings after tax	–161	1,517
Other comprehensive income, net of tax	–288	–316
Dividend paid to noncontrolling interest shareholders	1	116
Gross cash flow	1,970	3,433
Change in working capital	17	–2,346
Cash flows from operating activities	1,987	1,087
Cash flows from investing activities	–1,293	634
Net cash flow	694	1,721

1 The percentage only includes direct noncontrolling interests.

25. Noncurrent and current financial liabilities

€ million	Carrying amount			Carrying amount		
	Current	Noncurrent	Dec. 31, 2020	Current	Noncurrent	Dec. 31, 2019
Bonds	25,909	66,717	92,626	19,789	68,839	88,629
Commercial paper and notes	16,146	21,380	37,526	18,103	20,147	38,250
Liabilities to banks	18,060	17,273	35,333	17,337	15,337	32,674
Deposits business	26,735	2,411	29,145	30,252	2,395	32,647
Loans and miscellaneous liabilities	794	1,909	2,702	1,429	1,629	3,058
Lease liabilities	1,005	5,119	6,124	1,002	5,208	6,210
	88,648	**114,809**	**203,457**	**87,912**	**113,556**	**201,468**

26. Noncurrent and current other financial liabilities

€ million	Carrying amount			Carrying amount		
	Current	Noncurrent	Dec. 31, 2020	Current	Noncurrent	Dec. 31, 2019
Negative fair values of derivative financial instruments	1,474	1,935	3,409	2,245	1,950	4,195
Interest payable	604	97	702	691	116	807
Miscellaneous financial liabilities	8,512	2,224	10,737	7,922	2,434	10,356
	10,590	**4,257**	**14,847**	**10,858**	**4,499**	**15,358**

The negative fair values of derivatives relate to the following items:

€ million	Dec. 31, 2020	Dec. 31, 2019
Transactions for hedging		
foreign currency risk from assets using fair value hedges	39	107
foreign currency risk from liabilities using fair value hedges	39	5
interest rate risk using fair value hedges	116	97
interest rate risk using cash flow hedges	100	53
foreign currency and price risk from future cash flows (cash flow hedges)	1,284	2,172
Hedging transactions Total	**1,578**	**2,435**
Liabilities related to derivatives not included in hedging relationships	1,831	1,760
Total	**3,409**	**4,195**

Negative fair values of €101 million (previous year: €63 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, 2020	Current	Noncurrent	Dec. 31, 2019
Payments received on account of orders	7,484	5,541	13,024	7,474	5,202	12,676
Liabilities relating to						
other taxes	3,294	110	3,404	2,812	133	2,946
social security	616	112	727	610	162	772
wages and salaries	4,501	960	5,462	5,848	1,008	6,856
Miscellaneous liabilities	2,085	1,183	3,267	2,576	766	3,342
	17,979	**7,905**	**25,884**	**19,320**	**7,271**	**26,591**

The liabilities from payments on account received under contracts with customers correspond to contract liabilities under contracts with customers. They changed as follows:

€ million	2020	2019
Liabilities from advance payments received under contracts with customers at Jan. 1	**10,907**	**9,669**
Additions and disposals	847	1,245
Changes in consolidated Group	13	12
Classified as held for sale	–	167
Changes in estimates and assumptions as well as contract modifications	–	–
Foreign exchange differences	–369	148
Liabilities from advance payments received under contracts with customers at Dec. 31	**11,398**	**10,907**

28. Tax liabilities

	CARRYING AMOUNT			CARRYING AMOUNT		
€ million	Current	Noncurrent	Dec. 31, 2020	Current	Noncurrent	Dec. 31, 2019
Deferred tax liabilities	–	4,890	4,890	–	5,007	5,007
Provisions for taxes	2,213	3,292	5,505	1,876	2,991	4,867
Tax payables	340	–	340	408	–	408
	2,552	**8,181**	**10,734**	**2,283**	**7,998**	**10,282**

Deferred tax liabilities include an amount of €502 million (previous year: €387 million) arising from recognition and measurement differences between IFRS carrying amounts and the tax base, which will reverse 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 2020, they amounted to a total of €2,622 million (previous year: €2,565 million) in the Volkswagen Group. Of this figure, contributions to the compulsory state pension system in Germany amounted to €1,826 million (previous year: €1,796 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, from changes in assumptions, as well as from gains or losses on plan assets, excluding amounts included in net interest income or expenses. They are recognized in other comprehensive income, net of deferred taxes, in the period in which they arise.

Multi-employer pension plans exist in the Volkswagen Group in the United Kingdom, Switzerland, Sweden and the Netherlands. These plans are defined benefit plans. A small proportion of them are accounted for as defined contribution plans, as the Volkswagen Group is not authorized to receive the information required in order to account for them as defined benefit plans. Under the terms of the multi-employer plans, the Volkswagen Group is not liable for the obligations of the other employers. In the event of its withdrawal from the plans or their winding-up, the proportionate share of the surplus of assets attributable to the Volkswagen Group will be credited or the proportionate share of the deficit attributable to the Volkswagen Group will have to be funded. In the case of the defined benefit plans accounted for as defined contribution plans, the Volkswagen Group's share of the obligations represents a small proportion of the total obligations. No probable significant risks arising from multi-employer defined benefit pension plans that are accounted for as defined contribution plans have been identified. The expected contributions to those plans will amount to €25 million for fiscal year 2021.

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 2020, €15 million (previous year: €18 million) was recognized as an expense for healthcare costs. The related carrying amount as of December 31, 2020 was €228 million (previous year: €266 million).

The following amounts were recognized in the balance sheet for defined benefit plans:

€ million	Dec. 31, 2020	Dec. 31, 2019
Present value of funded obligations	24,101	21,090
Fair value of plan assets	13,264	12,478
Funded status (net)	10,838	8,613
Present value of unfunded obligations	34,200	32,710
Amount not recognized as an asset because of the ceiling in IAS 19	2	2
Net liability recognized in the balance sheet	**45,040**	**41,324**
of which provisions for pensions	45,081	41,389
of which other assets	41	65

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 aforementioned 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	
%	2020	2019	2020	2019
Discount rate at December 31	0.70	1.09	1.70	2.30
Payroll trend	3.31	3.59	2.74	2.88[1]
Pension trend	1.49	1.50	2.50	2.68
Employee turnover rate	1.16	1.24	4.36	3.75
Annual increase in healthcare costs	–	–	5.30	5.56

1 Prior-year figures adjusted.

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 Corporate Bond index was taken as the basis for the obligations of German Group companies. Similar indices were used for foreign pension obligations.

Some steps in the calculation of the EUR discount rate were adjusted in the course of the fiscal year in order to better reflect the persistently low interest rates in the valuation technique. The adjustment resulted in an increase in the discount rate by 0.1 percentage points and, consequently, a €1.4 billion decrease in actuarial losses.

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	2020	2019
Net liability recognized in the balance sheet at January 1	**41,324**	**33,022**
Current service cost	2,215	1,555
Net interest expense	459	660
Actuarial gains (–)/losses (+) arising from changes in demographic assumptions	–420	–67
Actuarial gains (–)/losses (+) arising from changes in financial assumptions	4,393	8,689
Actuarial gains (–)/losses (+) arising from experience adjustments	–394	27
Income/expenses from plan assets not included in interest income	677	654
Change in amount not recognized as an asset because of the ceiling in IAS 19	0	21
Employer contributions to plan assets	929	969
Employee contributions to plan assets	–8	–9
Pension payments from company assets	885	873
Past service cost (including plan curtailments)	–99	–25
Gains (–) or losses (+) arising from plan settlements	7	2
Changes in consolidated Group	11	–3
Classified as held for sale	–	14
Other changes	25	–8
Foreign exchange differences from foreign plans	–1	–4
Net liability recognized in the balance sheet at December 31	**45,040**	**41,324**

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	2020	2019
Present value of obligations at January 1	**53,800**	**43,918**
Current service cost	2,215	1,555
Interest cost	631	921
Actuarial gains(–)/losses (+) arising from changes in demographic assumptions	–420	–67
Actuarial gains(–)/losses (+) arising from changes in financial assumptions	4,393	8,689
Actuarial gains(–)/losses (+) arising from experience adjustments	–394	27
Employee contributions to plan assets	17	19
Pension payments from company assets	885	873
Pension payments from plan assets	292	300
Past service cost (including plan curtailments)	–99	–25
Gains (–) or losses (+) arising from plan settlements	7	–8
Changes in consolidated Group	16	–7
Classified as held for sale	–	182
Other changes	–471	–2
Foreign exchange differences from foreign plans	–219	135
Present value of obligations at December 31	**58,301**	**53,800**

In fiscal year 2020, a pension plan in the USA funded by external plan assets was settled. The resulting decrease in the present value of the defined benefit obligation in the amount of €520 million is shown under other changes. The plan settlement led to a loss of €7 million.

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, 2020 € million	DEC. 31, 2020 Change in percent	DEC. 31, 2019 € million	DEC. 31, 2019 Change in percent
Discount rate	is 0.5 percentage points higher	52,604	–9.77	48,598	–9.67
	is 0.5 percentage points lower	64,981	11.46	59,888	11.32
Pension trend	is 0.5 percentage points higher	61,360	5.25	56,633	5.27
	is 0.5 percentage points lower	55,552	–4.71	51,258	–4.73
Payroll trend	is 0.5 percentage points higher	58,808	0.87	54,331	0.99
	is 0.5 percentage points lower	57,843	–0.79	53,319	–0.89
Longevity	increases by one year	60,385	3.57	55,719	3.57

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 21 years (previous year: 22 years).

The present value of the defined benefit obligation is attributable as follows to the members of the plan:

€ million	2020	2019
Active members with pension entitlements	36,124	33,027
Members with vested entitlements who have left the Company	3,642	3,136
Pensioners	18,535	17,637
	58,301	**53,800**

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	2020	2019
Payments due within the next fiscal year	1,162	1,161
Payments due between two and five years	5,334	5,121
Payments due in more than five years	51,806	47,518
	58,301	**53,800**

Changes in plan assets are shown in the following table:

€ million	2020	2019
Fair value of plan assets at January 1	**12,478**	**10,920**
Interest income on plan assets determined using the discount rate	172	261
Income/expenses from plan assets not included in interest income	677	654
Employer contributions to plan assets	929	969
Employee contributions to plan assets	9	9
Pension payments from plan assets	291	299
Gains (+) or losses (–) arising from plan settlements	–	10
Changes in consolidated Group	5	–5
Classified as held for sale	–	167
Other changes	–496	7
Foreign exchange differences from foreign plans	–219	139
Fair value of plan assets at December 31	**13,264**	**12,478**

Other changes in fiscal year 2020 resulted primarily from the derecognition of plan assets in the context of the settlement of a pension plan in the USA funded by external plan assets.

The investment of the plan assets to cover future pension obligations resulted in income of €849 million (previous year: income of €915 million).

Employer contributions to plan assets are expected to amount to €851 million (previous year: €927 million) in the next fiscal year.

Plan assets are invested in the following asset classes:

€ million	DEC. 31, 2020			DEC. 31, 2019		
	Quoted prices in active markets	No quoted prices in active markets	Total	Quoted prices in active markets	No quoted prices in active markets	Total
Cash and cash equivalents	628	–	628	501	–	501
Equity instruments	264	–	264	401	–	401
Debt instruments	496	–	496	850	5	855
Direct investments in real estate	–	121	121	–	110	110
Derivatives	20	–6	14	15	–28	–13
Equity funds	3,640	15	3,655	2,653	20	2,673
Bond funds	6,011	133	6,144	5,729	128	5,857
Real estate funds	190	–	190	170	–	170
Other funds	1,315	28	1,344	1,225	22	1,247
Other instruments	48	360	408	83	594	676

Plan assets include €12 million (previous year: €14 million) invested in Volkswagen Group assets and €5 million (previous year: €14 million) in Volkswagen Group debt instruments.

The following amounts were recognized in the income statement:

€ million	2020	2019
Current service cost	2,215	1,555
Net interest on the net defined benefit liability	459	662
Past service cost (including plan curtailments)	–99	–25
Gains (–) or losses (+) arising from plan settlements	7	2
Net income (–) and expenses (+) recognized in profit or loss	**2,583**	**2,194**

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, 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
Balance at Jan. 1, 2020	**26,988**	**5,993**	**5,260**	**7,976**	**46,217**
Foreign exchange differences	–653	–56	–170	–222	–1,101
Changes in consolidated Group	18	16	0	522	556
Utilization	9,625	2,275	2,347	2,086	16,333
Additions/New provisions	10,890	2,707	1,781	4,393	19,771
Unwinding of discount/effect of change in discount rate	17	108	–20	0	105
Reversals	1,637	223	586	1,117	3,564
Balance at Dec. 31, 2020	**25,998**	**6,270**	**3,918**	**9,465**	**45,652**
of which current	12,394	2,174	2,037	6,359	22,964
of which noncurrent	13,604	4,096	1,881	3,107	22,688

1 Due to the initial application of IFRS 16, the values in the opening balance were adjusted.

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. Depending the jurisdiction concerned, they also include risk provisions for any non-compliance with legal emissions limits. Their measurement takes into account, among other things, the respective sales volume and the legally defined fee or the cost of acquiring emission rights from other manufacturers. Advantage has been taken of synergies between individual brands of the Volkswagen Group by establishing emission pools where possible.

Miscellaneous provisions additionally include provisions amounting to €1,265 million (previous year: €568 million) relating to the insurance business. The increase is mainly due to the expansion of the consolidated Group following an initial consolidation.

31. Trade payables

€ million	Dec. 31, 2020	Dec. 31, 2019
Trade payables to		
third parties	22,163	21,948
unconsolidated subsidiaries	186	222
joint ventures	156	375
associates	167	195
other investees and investors	3	5
	22,677	**22,745**

Other disclosures

32. IAS 23 (Borrowing Costs)

Capitalized borrowing costs amounted to €65 million (previous year: €68 million) and related mainly to capitalized development costs. An average cost of debt of 1.5% (previous year: 1.6%) was used as a basis for capitalization in the Volkswagen Group.

33. 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**

PRESENTATION OF AND CHANGES IN RIGHT-OF-USE ASSETS FROM LEASES FOR THE PERIOD FROM JANUARY 1 TO DECEMBER 31, 2020

€ 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, 2020	**6,253**	**44**	**738**	**7,034**
Foreign exchange differences	–210	–3	–8	–221
Changes in consolidated group	47	–	7	54
Additions	1,240	16	102	1,358
Transfers	–24	–1	2	–23
Disposals	297	1	97	394
Balance at Dec. 31, 2020	**7,009**	**56**	**744**	**7,809**
Depreciation and impairment				
Balance at Jan. 1, 2020	**848**	**23**	**126**	**998**
Foreign exchange differences	–37	–2	–3	–43
Changes in consolidated group	5	–	1	6
Additions to cumulative depreciation	896	8	158	1,062
Additions to cumulative impairment losses	27	–	1	27
Transfers	0	0	–1	–1
Disposals	130	0	78	209
Reversal of impairment losses	0	0	0	0
Balance at Dec. 31, 2020	**1,608**	**28**	**204**	**1,840**
Carrying amount at Dec. 31, 2020	**5,401**	**27**	**540**	**5,969**

Subleases of right-of-use assets generated income of €16 million (previous year: €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, 2020	Dec. 31, 2019
Financial liabilities – Noncurrent	5,119	5,208
Financial liabilities – Current	1,005	1,002
Lease liabilities – Total	**6,124**	**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, 2020	1,005	2,591	2,528	6,124
Lease liabilities at Dec. 31, 2019	1,002	2,613	2,595	6,210

Interest expenses of €216 million (previous year: €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 €285 million (previous year: €270 million) in the fiscal year. This figure does not include any expenses for short-term leases, which totaled €268 million (previous year: €333 million) in the fiscal year. Variable lease expenses not included in the measurement of lease liabilities accounted for €1 million (previous year: €1 million) in the fiscal year.

Leases gave rise to cash outflows totaling €1,865 million (previous year: €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	2020	2019
Future cash outflows to which the lessee is potentially exposed		
Variable lease payments	0	1
Residual value guarantees	0	0
Extension options	3,350	3,575
Termination options	8	3
Obligations under leases not yet commenced	270	359
	3,628	**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 €51,244 million at the end of the fiscal year (previous year: €49,476 million). While €558 million (previous year: €538 million) is attributable to investment property, assets separately reported as lease assets in the balance sheet amount to €50,686 million (previous year: €48,938 million). They relate primarily to vehicles in an amount of €50,605 million (previous year: €48,853 million) as well as land, land rights and buildings, including buildings on third-party land, in an amount of €79 million (previous year: €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:

DISCLOSURE AS OF DECEMBER 31, 2019

€ million	2020	2021	2022	2023	2024	From 2025	Total
Lease payments[1]	8,138	5,526	3,139	829	338	344	**18,315**

1 Prior-year figures adjusted.

DISCLOSURE AS OF DECEMBER 31, 2020

€ million	2021	2022	2023	2024	2025	From 2026	Total
Lease payments	7,893	5,636	3,178	1,220	452	362	**18,741**

BREAKDOWN OF INCOME FROM OPERATING LEASES

€ million	2020	2019
Lease income	12,429	12,014
Income from variable lease payments	7	13
Total	**12,436**	**12,027**

2.2 FINANCE LEASES

Interest income from the net investment in the leases amounted to €2.4 billion (previous year: €2.4 billion) in the fiscal year. Furthermore, a selling profit from the finance leases in the amount of €0.8 billion (previous year: €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, 2020	Dec. 31, 2019
Non-discounted lease payments	**53,162**	**54,302**
Non-guaranteed residual value	4,255	4,112
Unearned interest income	–3,468	–3,789
Loss allowance on lease receivables	–1,414	–971
Net investment	**52,534**	**53,652**

The following cash inflows from expected outstanding, non-discounted finance lease payments are expected over the coming years:

DISCLOSURE AS OF DECEMBER 31, 2019

€ million	2020	2021	2022	2023	2024	From 2025	Total
Lease payments	19,428	14,590	12,179	6,883	847	373	**54,302**

DISCLOSURE AS OF DECEMBER 31, 2020

€ million	2021	2022	2023	2024	2025	From 2026	Total
Lease payments	19,059	15,299	12,051	5,684	612	456	**53,162**

34. 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, 2020	Dec. 31, 2019
Financial assets at fair value through profit or loss	21,898	16,331
Financial assets at fair value through other comprehensive income (debt instruments)	3,545	3,139
Financial assets at fair value through other comprehensive income (equity instruments)	152	68
of which classified as held for sale	–	3
Financial assets measured at amortized cost	151,497	149,203
of which classified as held for sale	–	158
Financial liabilities at fair value through profit or loss	2,403	1,760
Financial liabilities measured at amortized cost	230,904	229,229
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, 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

RECONCILIATION OF BALANCE SHEET ITEMS TO CLASSES OF FINANCIAL INSTRUMENTS AS OF DECEMBER 31, 2020

€ 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, 2020
	Carrying amount	Carrying amount	Fair value	Carrying amount	Carrying amount	
Noncurrent assets						
Equity-accounted investments	–	–	–	–	10,080	10,080
Other equity investments	177	–	–	–	1,688	1,865
Financial services receivables	279	47,879	50,231	–	34,408	82,565
Other financial assets	1,512	4,105	4,220	2,217	–	7,834
Tax receivables	–	–	–	–	376	376
Current assets						
Trade receivables	52	16,191	16,191	–	–	16,243
Financial services receivables	26	39,474	39,474	–	18,506	58,006
Other financial assets	2,402	9,915	9,915	917	–	13,234
Tax receivables	–	9	9	–	1,177	1,186
Marketable securities	21,146	15	15	–	–	21,162
Cash, cash equivalents and time deposits	–	33,909	33,909	–	–	33,909
Noncurrent liabilities						
Noncurrent financial liabilities	–	109,690	115,282	–	5,119	114,809
Other noncurrent financial liabilities	1,188	2,322	2,317	748	–	4,257
Current liabilities						
Current financial liabilities	–	87,643	87,643	–	1,005	88,648
Trade payables	–	22,677	22,677	–	–	22,677
Other current financial liabilities	1,215	8,545	8,545	831	–	10,590
Tax payables	–	38	38	–	301	340

The carrying amount of lease receivables was €52.9 billion (previous year: €53.9 billion) and their fair value (fair value hierarchy level 3) was €55.0 billion (previous year: €55.0 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, 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				
Trade receivables	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

€ million	Dec. 31, 2020	Level 1	Level 2	Level 3
Noncurrent assets				
Other equity investments	177	40	0	137
Financial services receivables	279	–	–	279
Other financial assets	1,512	–	784	729
Current assets				
Trade receivables	52	–	–	52
Financial services receivables	26	–	–	26
Other financial assets	2,402	–	2,242	160
Marketable securities	21,146	21,060	86	–
Noncurrent liabilities				
Other noncurrent financial liabilities	1,188	–	644	543
Current liabilities				
Other current financial liabilities	1,215	–	851	364

FAIR VALUE OF FINANCIAL ASSETS AND LIABILITIES MEASURED AT AMORTIZED COST BY LEVEL

€ 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**

€ million	Dec. 31, 2020	Level 1	Level 2	Level 3
Fair value of financial assets measured at amortized cost				
Financial services receivables	89,705	–	–	89,705
Trade receivables	16,191	–	16,191	–
Other financial assets	14,135	466	4,834	8,834
Tax receivables	9	–	9	–
Cash, cash equivalents and time deposits	33,909	33,721	188	–
Fair value of financial assets measured at amortized cost	**153,950**	**34,187**	**21,223**	**98,540**
Fair value of financial liabilities measured at amortized cost				
Trade payables	22,677	–	22,677	–
Financial liabilities	202,925	41,909	161,016	–
Other financial liabilities	10,862	691	9,851	320
Tax payables	38	–	38	–
Fair value of financial liabilities measured at amortized cost	**236,502**	**42,600**	**193,582**	**320**

DERIVATIVE FINANCIAL INSTRUMENTS WITHIN HEDGE ACCOUNTING BY LEVEL

€ 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	–

€ million	Dec. 31, 2020	Level 1	Level 2	Level 3
Noncurrent assets				
Other financial assets	2,217	–	2,217	–
Current assets				
Other financial assets	917	–	917	–
Noncurrent liabilities				
Other noncurrent financial liabilities	748	–	748	–
Current liabilities				
Other current financial liabilities	831	–	728	102

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. Equity instruments are measured primarily using the relevant business plans and entity-specific discount rates. The significant inputs used to measure fair value for the residual value protection models include forecasts and estimates of used vehicle residual values for the appropriate models. 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	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	–	–

€ million	Financial assets measured at fair value	Financial liabilities measured at fair value
Balance at Jan. 1, 2020	**913**	**765**
Foreign exchange differences	–39	–9
Changes in consolidated Group	66	–
Total comprehensive income	433	551
recognized in profit or loss	425	452
recognized in other comprehensive income	8	99
Additions (purchases)	312	–
Sales and settlements	–203	–323
Transfers into Level 2	–100	–77
Balance at Dec. 31, 2020	**1,383**	**908**
Total gains or losses recognized in profit or loss	**425**	**–452**
Net other operating expense/income	407	–452
of which attributable to assets/liabilities held at the reporting date	313	–370
Financial result	18	0
of which attributable to assets/liabilities held at the reporting date	7	0

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, 2020, earnings after tax would have been €263 million (previous year: €168 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 as of December 31, 2020 had been 10% higher, earnings after tax would have been €4 million (previous year: €3 million) higher. If the assumed enterprise values as of December 31, 2020 had been 10% lower, earnings after tax would have been €4 million (previous year: €3 million) lower.

Residual value risks result from hedging agreements with dealerships under which earnings effects caused by market-related fluctuations in residual values that arise from buy-back obligations under leases are borne in part by the Volkswagen Group.

The key risk variable influencing the fair value of the options relating to residual value risks is used car prices. Sensitivity analyses are used to quantify the effects of changes in used car prices on earnings after tax.

If the prices of the used cars covered by the residual value protection model had been 10% higher as of December 31, 2020, earnings after tax would have been €382 million (previous year: €354 million) higher. If the prices of the used cars covered by the residual value protection model had been 10% lower as of December 31, 2020, earnings after tax would have been €419 million (previous year: €374 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, 2020, earnings after tax would have been €2 million (previous year: €3 million) lower. If the risk-adjusted interest rates as of December 31, 2020 had been 100 basis points lower, earnings after tax would have been €2 million (previous year: €3 million) higher.

If the corresponding vehicle prices used in the vehicle financing programs had been 10% higher as of December 31, 2020, earnings after tax would have been €2 million (previous year: €5 million) higher. If the corresponding vehicle prices used in the vehicle financing programs had been 10% lower as of December 31, 2020, earnings after tax would have been €2 million (previous year: €5 million) lower.

If the result of operations of equity investments measured at fair value had been 10% better as of December 31, 2020, equity would have been €5.8 million (previous year: €0.2 million) higher, and earnings after tax would have been €2.1 million (previous year: €– million) higher. If the result of operations of equity investments measured at fair value had been 10% worse, equity would have been €5.8 million (previous year: €0.2 million) lower, and earnings after tax would have been €2.1 million (previous year: €– 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, 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

				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, 2020
Derivatives	6,216	–165	6,051	–1,770	–35	4,246
Financial services receivables	141,185	–614	140,571	–	–98	140,473
Trade receivables	16,253	–10	16,243	0	–	16,243
Marketable securities	21,162	–	21,162	–	–	21,162
Cash, cash equivalents and time deposits	33,909	–	33,909	–	–	33,909
Other financial assets	15,203	–	15,203	0	–	15,203

Other financial assets include receivables from tax allocations of €9 million (previous year: €9 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, 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

€ 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, 2020
Derivatives	3,417	–8	3,409	–1,769	–2	1,638
Financial liabilities	203,457	–	203,457	–	–1,955	201,502
Trade payables	22,687	–10	22,677	0	–	22,677
Other financial liabilities	12,247	–771	11,476	–	–	11,476

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 €38 million (previous year: €19 million).

ASSET-BACKED SECURITIES TRANSACTIONS

Asset-backed securities transactions with financial assets amounting to €30.6 billion (previous year adjusted: €30.8 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 €34.5 billion (previous year: €34.1 billion). Collateral of €48.9 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.

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 10% 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, 2020, the fair value of the assigned receivables still recognized in the balance sheet was €35.4 billion (previous year: €34.8 billion). The fair value of the related liabilities was €30.6 billion (previous year adjusted: €30.7 billion) at that reporting date.

The Volkswagen Bank GmbH Group is 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	2020	2019
Financial instruments at fair value through profit or loss	2,309	–242
Financial assets measured at amortized cost	2,899	6,282
Financial assets at fair value through other comprehensive income (debt instruments)	4	7
Financial liabilities measured at amortized cost	–3,242	–4,420
	1,970	**1,628**

Net gains and losses in the category "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	2020	2019
Financial assets and liabilities measured at amortized cost		
Interest income	6,982	7,563
Interest expenses	3,707	4,120
Financial assets (debt instruments) and liabilities measured at fair value through other comprehensive income		
Interest income	4	8
Interest expenses	–	–

GAINS AND LOSSES ON THE DISPOSAL OF FINANCIAL ASSETS MEASURED AT AMORTIZED COST

€ million	2020	2019
Gains arising from the derecognition of financial assets measured at amortized cost	810	845
Losses arising from the derecognition of financial assets measured at amortized cost	–1,527	–978
	–717	**–133**

In the fiscal year, €2 million (previous year: €2 million) was recognized as an expense and €29 million (previous year: €44 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.

35. 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 the redemption of bonds, inflows from capital increases and the 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 non-cash transactions and are therefore eliminated.

In the fiscal year, cash flows from operating activities include interest received amounting to €7,192 million (previous year: €7,640 million) and interest paid amounting to €2,677 million (previous year: €2,604 million). Cash flows from operating activities also include dividend payments (net of withholding tax) received from joint ventures and associates of €3,098 million (previous year: €3,679 million).

Dividends amounting to €2,419 million (previous year: €2,419 million) were paid to Volkswagen AG shareholders.

€ million	Dec. 31, 2020	Dec. 31, 2019
Cash, cash equivalents and time deposits as reported in the balance sheet	33,909	25,923
Time deposits	–477	–1,593
Cash and cash equivalents as reported in the cash flow statement	**33,432**	**24,329**

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, 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 Due to the initial application of IFRS 16, the values in the opening balance were adjusted.
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.

€ million	Jan. 1, 2020	Cash-effective changes	NON-CASH CHANGES Foreign exchange differences	Changes in consolidated Group	Other changes	Dec. 31, 2020
Bonds	88,629	5,366	–979	–	–389	92,626
Other total third-party borrowings	106,630	3,404	–5,638	267	44	104,707
Finance lease liabilities[1]	6,210	–1,100	–195	39	1,170	6,124
Total third-party borrowings	**201,468**	**7,670**	**–6,812**	**306**	**825**	**203,457**
Other financial assets and liabilities	–81	172	132	–	–202	21
Financial assets and liabilities in financing activities	**201,387**	**7,843**	**–6,680**	**306**	**622**	**203,478**

1 Other changes in lease liabilities largely contain noncash additions of lease liabilities.

36. 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 the control of risks from financial instruments. The Group Board of Management Committee for Risk Management 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 MAN Energy Solutions, Porsche Holding Salzburg and TRATON GROUP 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, see the section on financial risks in the Report on Risks and Opportunities of the group management report.

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 €1.2 billion (previous year: €1.3 billion). Collateral of €237 million (previous year: €285 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 default risk is determined by the guarantee amount. 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 6.0% at the end of 2020 compared with 5.2 % at the end of 2019. 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 26.1% at the end of 2020, as against 34.2 % at the end of 2019. 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, 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 ASSETS MEASURED AT AMORTIZED COST

€ million	Stage 1	Stage 2	Stage 3	Simplified approach	Stage 4	Total
Carrying amount at Jan. 1, 2020	**913**	**677**	**893**	**760**	**94**	**3,336**
Foreign exchange differences	–33	–32	–89	–29	–5	–189
Changes in consolidated group	13	–2	24	2	–	37
Newly extended/purchased financial assets (additions)	415	–	–	252	18	685
Other changes within a stage	79	69	–35	16	5	134
Transfers to						
Stage 1	22	–61	–14	–	–	–53
Stage 2	–126	320	–42	–	–	152
Stage 3	–167	–88	513	–	–	258
Financial instruments derecognized during the period (disposals)	–197	–121	–170	–154	–6	–647
Utilization	–	–	–257	–33	–21	–311
Changes to models or risk parameters	9	23	1	1	2	36
Carrying amount at Dec. 31, 2020	**929**	**786**	**825**	**814**	**87**	**3,440**

The gross carrying amount of assets measured at amortized cost is €136.0 billion (previous year: €137.7 billion), of which €16.7 billion (previous year: €18.5 billion) is attributable to the simplified approach.

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 FINANCIAL GUARANTEES AND CREDIT COMMITMENTS

€ million	Stage 1	Stage 2	Stage 3	Stage 4	Total
Carrying amount at Jan. 1, 2020	**17**	**2**	**0**	**0**	**18**
Foreign exchange differences	–1	0	0	0	–1
Changes in consolidated group	0	–	–	–	0
Newly extended/purchased financial assets (additions)	8	0	0	0	8
Other changes within a stage	1	1	0	0	2
Transfers to					
Stage 1	0	0	–	–	0
Stage 2	0	1	–	–	1
Stage 3	0	0	0	–	0
Financial instruments derecognized during the period (disposals)	–4	–1	–	0	–5
Utilization	–	–	–1	–	–1
Changes to models or risk parameters	0	0	–	–	0
Carrying amount at Dec. 31, 2020	**19**	**3**	**0**	**0**	**22**

CHANGES IN LOSS ALLOWANCE FOR LEASE RECEIVABLES AND CONTRACT ASSETS

	SIMPLIFIED APPROACH	
€ million	2020	2019
Carrying amount at Jan. 1	**1,312**	**1,193**
Foreign exchange differences	–29	14
Changes in consolidated group	0	6
Newly extended/purchased financial assets (additions)	377	249
Other changes	225	261
Financial instruments derecognized during the period (disposals)	–314	–282
Utilization	–107	–88
Changes to models or risk parameters	51	–42
Classified as held for sale	–	0
Carrying amount at Dec. 31	**1,516**	**1,312**

The gross carrying amounts of lease receivables and contract assets declined from €55.6 billion to €54.8 billion in the fiscal year under review.

The loss allowance on assets measured at fair value in Stage 1 rose by €0 million (previous year: €2 million) in fiscal year 2020, resulting in a closing balance of €3 million (previous year: €3 million). Of this amount, €2 million is attributable to Stage 1 (previous year: €2 million) and €1 million to Stage 2 (previous year €1 million).

The amount contractually outstanding for financial assets that have been derecognized in the current year and are still subject to enforcement proceedings is €221 million (previous year: €331 million).

MODIFICATIONS

There were contract modifications to financial assets in the reporting period that did not lead to the derecognition of the asset. These were primarily attributable to credit ratings and relate to financial assets for which loss allowances were measured in the amount of the expected 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 €493 million (previous year: €120 million). In the reporting period, contract modifications resulted in net income/net expenses of €6.4 million (previous year: €–0.2 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 €81 million (previous year: €28 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, 2020	Dec. 31, 2019
Financial instruments measured at fair value	3,545	3,139
Financial instruments measured at amortized cost	151,497	149,045
Financial guarantees and credit commitments	3,788	5,988
Not allocated to a measurement category	52,914	53,938
Total	**211,744**	**212,109**

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, 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**

GROSS CARRYING AMOUNTS OF FINANCIAL ASSETS BY RATING CATEGORY AS OF DECEMBER 31, 2020

€ million	Stage 1	Stage 2	Stage 3	Simplified approach	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	112,446	10,109	–	65,040	106
Credit risk rating grade 2 (receivables with credit risk – intensified loan management)	5,278	12,926	–	2,877	64
Credit risk rating grade 3 (cancelled receivables – non-performing loans)	–	–	2,709	1,157	288
Total	**117,725**	**23,035**	**2,709**	**69,074**	**458**

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, 2019

€ million	Stage 1	Stage 2	Stage 3	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	3,373[1]	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	**3,474**	**203**	**7**	**4**

1 Prior-year figures adjusted.

DEFAULT RISK FOR FINANCIAL GUARANTEES AND CREDIT COMMITMENTS AS OF DECEMBER 31, 2020

€ million	Stage 1	Stage 2	Stage 3	Stage 4
Credit risk rating grade 1 (receivables with no credit risk – standard loans)	3,368	201	–	0
Credit risk rating grade 2 (receivables with credit risk – intensified loan management)	66	82	–	1
Credit risk rating grade 3 (cancelled receivables – non-performing loans)	–	–	10	2
Total	**3,434**	**283**	**10**	**3**

Collateral that was accepted for financial assets in the current fiscal year was recognized in the balance sheet in the amount of €159 million (previous year: €149 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 €27.9 billion as of December 31, 2020 (previous year: €27.0 billion), of which €2.3 billion (previous year: €3.8 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	2020	up to one year	within one to five years	more than five years	2019
Financial liabilities	89,371	98,159	25,106	212,636	90,137	96,135	25,542	211,814
Trade payables	22,675	1	–	22,677	22,745	0	–	22,745
Other financial liabilities	9,151	2,156	152	11,460	8,633	2,355	176	11,164
Derivatives	73,927	56,294	6,736	136,958	70,932	57,182	5,912	134,027
	195,125	**156,611**	**31,995**	**383,731**	**192,447**	**155,672**	**31,630**	**379,750**

The cash outflows on other financial liabilities include outflows on liabilities for tax allocations amounting to €38 million (previous year: €19 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 also particularly applies if hedges have been closed with offsetting transactions.

The cash outflows from irrevocable credit commitments are presented in the section entitled "Other financial obligations", classified by contractual maturities.

As of December 31, 2020, the maximum potential liability under financial guarantees amounted to €447 million (previous year: €425 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 are executed or coordinated centrally by Group Treasury; exceptions include the MAN Energy Solutions, Porsche Holding GmbH, Salzburg and TRATON GROUP subgroups, as well as some regions such as South America.

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, 2020	Dec. 31, 2019
Hedging interest rate risk		
Other financial result	–	–
Other operating result	–43	–5
Hedging currency risk		
Other financial result	–	–
Other operating result	–12	–39
Combined interest rate and currency risk hedging		
Other financial result	–	–
Other operating result	0	2

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	2020	2019
Hedging interest rate risk		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	–46	–41
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	–1
Hedging currency risk		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	1,434	–2,136
Recognized in profit or loss	–5	–1
Reclassification from the cash flow hedge reserve to profit or loss		
Due to early discontinuation of the hedging relationships	–15	4
Due to realization of the hedged item	69	137
Combined interest rate and currency risk hedging		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	38	–4
Recognized in profit or loss	–6	2
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	–19	2
Hedging commodities price risk		
Gains or losses from changes in fair value of hedging instruments within hedge accounting		
Recognized in equity	0	–
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	–1	–4

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 differences in the parameters for 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 is 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 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

DISCLOSURES ON HEDGING TRANSACTIONS IN FAIR VALUE HEDGES IN 2020

€ million	Notional amount	Other assets	Other liabilities	Fair value changes to determine hedge ineffectiveness
Hedging interest rate risk				
Interest rate swaps	48,371	819	116	626
Hedging currency risk				
Currency forwards, currency options, cross-currency swaps	6,433	56	79	1
Combined interest rate and currency risk hedging				
Cross-currency interest rate swaps	48	2	–	2

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 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

DISCLOSURES ON HEDGING TRANSACTIONS IN CASH FLOW HEDGES IN 2020

€ million	Notional amount	Other assets	Other liabilities	Fair value changes to determine hedge ineffectiveness
Hedging interest rate risk				
Interest rate swaps	13,461	1	96	–93
Hedging currency risk				
Currency forwards and cross-currency swaps	84,862	1,866	1,174	1,824
Currency options	19,021	347	74	132
Combined interest rate and currency risk hedging				
Cross-currency interest rate swaps	1,607	43	40	2

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 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 FAIR VALUE HEDGES IN 2020

€ 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	19,059	18	14	0
Other financial assets	150	7	–17	–
Financial liabilities	35,924	873	423	–
Hedging currency risk				
Financial services receivables	–	–	–	–
Other financial assets	602	18	8	–
Financial liabilities	951	30	–2	–
Combined interest rate and currency risk hedging				
Financial services receivables	–	–	–	–
Other financial assets	–	–	–	–
Financial liabilities	50	5	5	–

DISCLOSURES ON HEDGED ITEMS IN CASH FLOW HEDGES IN 2019

		RESERVE FOR	
€ million	Changes in fair value to determine hedge ineffectiveness	Active cash flow hedges	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

DISCLOSURES ON HEDGED ITEMS IN CASH FLOW HEDGES IN 2020

€ 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	–90	–90	1
Non-designated components	–	–	–
Deferred taxes	–	19	0
Total hedging interest rate risk	–90	–71	1
Hedging currency risk			
Designated components	1,956	1,952	4
Non-designated components	–	–1,008	0
Deferred taxes	–	–299	–1
Total hedging currency risk	1,956	644	3
Combined interest rate and currency risk hedging			
Designated components	0	–1	–
Non-designated components	–	–	–
Deferred taxes	–	0	–
Total hedging combined interest rate and currency risk	0	–1	–
Hedging commodity price risk			
Designated components	–	–	0
Non-designated components	–	–	–
Deferred taxes	–	–	0
Total hedging commodity price risk	–	–	0

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, 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**

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, 2020	**–23**	**135**	**–20**	**1**	**93**
Gains or losses from effective hedging relationships	–46	1,984	38	0	1,976
Reclassifications due to changes in whether the hedged item is expected to occur	–	–41	–	–	–41
Reclassifications due to realization of the hedged item	–1	–724	–19	–1	–744
Balance at Dec. 31, 2020	**–70**	**1,355**	**–1**	**0**	**1,284**

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 generally 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	2020	2019
Balance at Jan. 1	**–35**	**–1**
Gains and losses from non-designated time value of options		
Hedged item is recognized at a point in time	50	–71
Reclassifications due to changes in whether the hedged item is expected to occur		
Hedged item is recognized at a point in time	0	0
Reclassification due to realization of the hedged item		
Hedged item is recognized at a point in time	43	38
Balance at Dec. 31	**59**	**–35**

CHANGES IN THE RESERVE FOR HEDGING COSTS – NON-DESIGNATED FORWARD COMPONENT AND CROSS CURRENCY BASIS SPREAD (CCBS)

	CURRENCY RISK	
€ million	2020	2019
Balance at Jan. 1	**–942**	**–628**
Gains and losses from non-designated forward elements and CCBS		
Hedged item is recognized at a point in time	–600	–973
Reclassification due to realization of the hedged item		
Hedged item is recognized at a point in time	749	656
Reclassification due to changes in whether the hedged item is expected to occur		
Hedged item is recognized at a point in time	26	3
Balance at Dec. 31	**–766**	**–942**

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 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 2020 as part of foreign currency risk management were amongst others in Australian dollars, Brazilian real, British pound 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, 2020:

€ million	DEC. 31, 2020 +10%	DEC. 31, 2020 –10%	DEC. 31, 2019 +10%	DEC. 31, 2019 –10%
Exchange rate				
EUR / GBP				
Hedging reserve	951	–947	1,472	–1,472
Earnings after tax	–59	59	–172	172
EUR / USD				
Hedging reserve	168	–75	964	–979
Earnings after tax	–527	527	–473	473
EUR / CNY				
Hedging reserve	520	–477	739	–761
Earnings after tax	–114	114	–155	155
EUR / CHF				
Hedging reserve	454	–442	414	–396
Earnings after tax	–4	4	–1	1
EUR / SEK				
Hedging reserve	287	–287	87	–85
Earnings after tax	–78	78	–122	122
EUR / JPY				
Hedging reserve	280	–274	342	–344
Earnings after tax	–32	32	–13	13
EUR / AUD				
Hedging reserve	172	–172	87	–87
Earnings after tax	–22	22	–25	25
EUR / KRW				
Hedging reserve	114	–114	79	–78
Earnings after tax	–55	55	–19	19
EUR / CAD				
Hedging reserve	123	–117	190	–190
Earnings after tax	–11	11	–14	14
CZK / GBP				
Hedging reserve	109	–109	136	–136
Earnings after tax	–1	1	0	0
CZK / PLN				
Hedging reserve	85	–85	105	–105
Earnings after tax	–3	3	1	–1
EUR / TWD				
Hedging reserve	75	–75	88	–88
Earnings after tax	–10	10	–6	6
EUR / CZK				
Hedging reserve	50	–50	98	–98
Earnings after tax	–31	31	–62	62
BRL / USD				
Hedging reserve	–1	0	–1	1
Earnings after tax	71	–71	74	–74
EUR / BRL				
Hedging reserve	3	–3	6	–6
Earnings after tax	–64	64	–111	111

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, 2020, equity would have been €218 million (previous year: €98 million) lower. If market interest rates had been 100 bps lower as of December 31, 2020, equity would have been €241 million (previous year: €90 million) higher.

If market interest rates had been 100 bps higher as of December 31, 2020, earnings after tax would have been €16 million lower (previous year: €55 million higher). If market interest rates had been 100 bps lower as of December 31, 2020, earnings after tax would have been €23 million higher (previous year: €47 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. Likewise, selected commodities were purchased on the spot market, which led to a corresponding increase in inventories. 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, 2020, earnings after tax would have been €559 million (previous year: €415 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, the Investment Guidelines define fixed minimum values, which are to be met by taking suitable risk management measures. 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, 2020, earnings after tax would have been €160 million (previous year: €118 million) higher and equity would have been €2 million (previous year: €3 million) higher. If share prices had been 10% lower as of December 31, 2020, earnings after tax would have been €179 million (previous year: €175 million) lower and equity would have been €2 million (previous year: €3 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, 2020, the value at risk was €213 million (previous year: €147 million) for interest rate risk and €148 million (previous year: €172 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: €170 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 aforementioned uncertainty arising from the IBOR reform.

The uncertainty relates mainly to the following interest rate benchmarks: USD LIBOR, GBP 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. Any measures required have already been initiated for certain interest rate benchmarks; for other interest rate benchmarks, they will be initiated in good time in the future. By adapting systems and processes, these 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.

NOTIONAL AMOUNT OF DERIVATIVES

The notional amounts of hedging instruments exposed to the uncertainty from the IBOR reform described above are €25,466 million (previous year: €35,389 million) in total. In the fiscal year, €12,617 million of this total was attributable to the USD LIBOR (previous year: €12,847 million), €9,147 million to the GBP LIBOR (previous year: €13,112 million), €3,620 million to the CAD CDOR (previous year: €3,990 million) and €82 million to the JPY LIBOR (previous year: €0 million). Compared with the previous year, we believe that the notional amounts of AUD BBSW and NOK OIBOR hedging instruments are no longer exposed to any uncertainty from the IBOR reform.

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

	REMAINING TERM			TOTAL NOTIONAL AMOUNT	TOTAL NOTIONAL AMOUNT
€ million	up to one year	within one to five years	more than five years	Dec. 31, 2020	Dec. 31, 2019
Notional amount of hedging instruments within hedge accounting					
Hedging interest rate risk					
Interest rate swap	18,225	38,981	4,626	61,832	69,460
Hedging currency risk					
Currency forwards/Cross-currency swaps					
Currency forwards/Cross-currency swaps in CNY	5,217	1,051	–	6,268	10,869
Currency forwards/Cross-currency swaps in GBP	10,526	6,656	–	17,182	25,153
Currency forwards/Cross-currency swaps in USD	12,411	16,404	3,501	32,316	23,965
Currency forwards/Cross-currency swaps in other currencies	18,607	16,922	–	35,529	34,091
Currency options					
Currency options in USD	2,297	6,452	–	8,749	8,755
Currency options in CNY	3,986	–	–	3,986	2,047
Currency options in other currencies	2,123	4,164	–	6,287	4,395
Combined interest rate and currency risk hedging					
Cross-currency interest rate swaps	1,138	517	–	1,655	2,228
Notional amount of other derivatives					
Hedging Interest rate risk					
Interest rate swap	20,308	36,174	17,996	74,478	70,852
Hedging Currency risk					
Currency forwards/Cross-currency swaps					
Currency forwards/Cross-currency swaps in USD	6,636	4,479	608	11,722	11,498
Currency forwards/Cross-currency swaps in other currencies	13,654	1,291	32	14,977	21,105
Currency options					
Currency options in USD	82	–	–	82	188
Currency options in other currencies	41	–	–	41	487
Combined interest rate and currency risk hedging					
Cross-currency interest rate swaps	3,870	8,088	2,542	14,501	13,499
Hedging Commodity price risk					
Forward commodity contracts (aluminum)	1,001	2,099	–	3,099	3,041
Forward commodity contracts (copper)	333	604	–	938	956
Forward commodity contracts (nickel)	267	1,451	608	2,326	2,075
Forward commodity contracts (other)	96	47	–	143	188

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.

The notional volume with a remaining maturity of less than one year was €10.4 billion (previous year: €18.2 billion), and the notional volume with a remaining maturity of more than one year amounted to €0.2 billion (previous year: €– billion).

Also in connection with fund investments, the Group held credit default swaps with a notional amount of €36.6 billion (previous year: €30.6 billion).

Existing cash flow hedges in the notional amount of €2.1 billion (previous year: €0.2 billion) 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 0.72% 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 1.19; EUR/GBP at 0.89; EUR/CNY at 8.02.

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	–0.4707	0.4178	–0.7357	2.8501	0.4538	0.0147	–0.1458	0.0495	0.1818
Interest rate for one year	–0.5150	0.4386	–0.7293	2.9022	0.5548	–0.0131	–0.0958	0.0034	0.1821
Interest rate for five years	–0.4645	0.8320	–0.5610	3.3500	1.1150	0.1926	–0.0375	0.1325	0.4300
Interest rate for ten years	–0.2650	1.2375	–0.2875	4.0700	1.2850	0.3966	0.0513	0.3880	0.9240

37. 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 ensure that resources are used as efficiently as possible 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. In the reporting year, the Automotive Division's operating result was weighed down primarily by the continued negative impact of the spread of the SARS-CoV-2 virus. This resulted in a negative value contribution of €54 million.

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. The 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 6.5% in the reporting period, which is below the minimum rate of return on invested capital of 9% and on a level with the current cost of capital of 6.5%.

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	2020	2019
Automotive Division[1]		
Operating result after tax	7,450	13,019
Invested capital (average)	114,907	116,016
Return on investment (ROI) in %	**6.5**	**11.2**
Cost of capital in %	6.5	6.3
Opportunity cost of invested capital	7,504	7,328
Value contribution[2]	**–54**	**5,691**
Financial Services Division		
Earnings before tax	2,776	3,219
Average equity	31,463	29,684
Return on equity before tax in %	**8.8**	**10.8**
Equity ratio in %	**13.2**	**12.8**

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.

38. Contingent liabilities

€ million	Dec. 31, 2020	Dec. 31, 2019
Liabilities under guarantees	525	574
Liabilities under warranty contracts	165	192
Assets pledged as security for third-party liabilities	19	19
Other contingent liabilities	7,912	7,708
	8,621	**8,494**

It was considered improbable in the fiscal year under review that there would be an outflow of economic resources relating to the contingent liabilities based on trust assets and liabilities of the savings and trust entities belonging to the South American subsidiaries not included in the consolidated balance sheet.

In the case of liabilities from guarantees, the Group is required to make specific payments if the debtors fail to meet their obligations.

The other contingent liabilities primarily comprise potential liabilities arising from matters relating to taxes and customs duties, as well as litigation and proceedings relating to suppliers, dealers, customers, employees and investors. The contingent liabilities recognized in connection with the diesel issue totaled €4.2 billion (previous year: €3.7 billion), of which €3.5 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 €0.5 billion for potential liabilities resulting from the risk of tax proceedings instituted by the Brazilian tax authorities against MAN Latin America.

Since 2016, the U.S. National Highway Traffic Safety Administration (NHTSA) has announced further extensions of the recalls for various models from different manufacturers containing certain airbags produced by the Takata company. Recalls were also demanded 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.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or regarding uncertainty as to 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. Further information can be found under the section entitled "Litigation".

39. 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 connection with products and services or in relation to employees, public authorities, dealers, investors, customers, suppliers, 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.

Various legal proceedings are pending worldwide, particularly in the USA, in which customers are asserting purported product-related 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. Compliance with legal or regulatory requirements (such as the GDPR) is another area in which risks may arise. This is particularly true in gray areas where Volkswagen and the relevant public authorities may interpret the law differently.

In connection with their business activities, Volkswagen Group companies engage in constant dialogue with regulatory agencies including the German Kraftfahrt-Bundesamt (Federal Motor Transport Authority). It is not possible to predict with assurance how government regulators will assess certain issues of fact and law in a particular situation. For this reason, the possibility that certain vehicle characteristics and/or type approval aspects may in particular ultimately be deemed deficient or impermissible cannot be ruled out. This is fundamentally a question of the regulatory agency's specific evaluation in a concrete situation.

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. 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; this may result in delivery and production restrictions or interruptions.

Criminal acts by individuals, which even the best compliance management system can never completely prevent, are another potential source of legal risks.

Appropriate insurance has been taken out to cover these risks where they were sufficiently definite and such coverage was economically sensible. Where necessary based on the information currently available, identified and correspondingly measurable risks have been reflected by recognizing provisions in amounts considered appropriate or disclosing contingent liabilities, as the case may be. 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 or by provisions cannot be ruled out. This is, for instance, the case with regard to the legal risks assessed in connection with 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 2.0 l diesel engines in the USA. In this context, Volkswagen AG announced that noticeable discrepancies between the figures recorded in testing and those measured 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.

The so-called 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. No member of the Board of Management had, at that time and for many years to follow, knowledge of the development and implementation of this software function.

There are furthermore no findings that, following the publication in May 2014 of the study by the International Council on Clean Transportation, an unlawful “defeat device” under US law was disclosed either to the Ausschuss für Produktsicherheit (Product Safety Committee) or to the persons responsible for preparing the 2014 annual and consolidated financial statements as the cause of the high NO_x emissions in certain US vehicles with 2.0 l type EA 189 diesel engines. Rather, at the time the 2014 annual and consolidated financial statements were being prepared, the persons responsible for preparing these financial statements remained under the impression that the issue could be resolved with comparatively little expense.

In the course of the summer of 2015, however, it became progressively 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 that was later identified as an unlawful “defeat device” as defined by US law. This culminated in Volkswagen's disclosure of a “defeat device” to the EPA and the California Air Resources Board, a department of the Environmental Protection Agency of the State of California, on September 3, 2015. According to the assessment at the time by the responsible persons dealing with the matter, the magnitude of the costs expected to result for the Volkswagen Group (recall costs, retrofitting costs, and financial penalties) was not fundamentally dissimilar to that in previous cases involving other vehicle manufacturers. It therefore appeared to be manageable overall considering the business activities of the Volkswagen Group. This assessment by Volkswagen AG was based, among other things, on the advice of a law firm engaged in the USA for regulatory approval issues, according to which similar cases had in the past been amicably resolved 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.

As a consequence of the diesel issue, numerous judicial and regulatory proceedings were initiated in various countries. Volkswagen has in the interim 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. The agreements in question include various partial consent decrees as well as a plea agreement that 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. Although Volkswagen is 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 last remaining vehicle class settlement program for customers in the United States, which pertained to second Generation 3.0 l TDI vehicles, ended in May 2020.

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. For all clusters (groups of vehicles) within its jurisdiction, the Kraftfahrt-Bundesamt (KBA – German Federal Motor Transport Authority) determined that implementation of the technical measures would not result in any adverse changes in fuel consumption, CO_2 emissions, 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 potential, 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. AUDI AG currently anticipates that the total cost, including recall expenses, 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 software updates still being developed are expected to be submitted to the KBA in 2021 for approval.

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 commenced in some countries. Criminal investigations into the core factual issues are being conducted by the Offices of the Public Prosecutor in Braunschweig and Munich.

In May 2020, the criminal proceedings against the current Chairman of the Board of Management of Volkswagen AG and a former member of its Board of Management (currently Chairman of the Supervisory Board) regarding alleged market manipulation relating to capital market disclosure obligations in connection with the diesel issue were definitively terminated by the Braunschweig Regional Court against payment in each case of a court-imposed sum of €4.5 million, thereby also terminating to the same extent the proceedings against Volkswagen AG as collateral participant. After permitting the charges against a former Chairman of the Board of Management of Volkswagen AG and the related action against Volkswagen AG to go forward in September 2020, the Braunschweig Regional Court in January 2021 terminated these proceedings – provisionally as regards the indictment which is for the time being still pending against the former Chairman of the Board of Management, but definitively as regards Volkswagen AG.

In September 2020, the Braunschweig Regional Court accepted the indictment of the same former Chairman of the Board of Management of Volkswagen AG and others on charges that include fraud in connection with the diesel issue involving type EA 189 engines and opened the main trial proceedings.

In June 2020, the Munich II Regional Court accepted the substantially unchanged indictment of the Munich II Office of the Public Prosecutor, which also names the former Chairman of the Board of Management of AUDI AG, and opened the main trial proceedings on charges of, among other things, fraud in connection with the diesel issue involving 3.0 l TDI engines. Trial proceedings commenced in September 2020.

In August 2020, the Munich II Office of the Public Prosecutor issued a further indictment charging three former members of the Board of Management of AUDI AG and others with, among other things, fraud in connection with the diesel issue involving 3.0 l and 4.2 l TDI engines.

In connection with the diesel issue, the Stuttgart Office of the Public Prosecutor is conducting a criminal investigation on suspicion of fraud and illegal advertising; this investigation also involves a member of the Board of Management of Dr. Ing. h.c. F. Porsche AG.

The respective Group companies have 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.

As the type approval authority of proper jurisdiction, the KBA is moreover continuously testing Audi, Volkswagen, 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.

Moreover, additional administrative proceedings relating to the diesel issue are ongoing in other jurisdictions.

The companies of the Volkswagen Group are cooperating with the government authorities.

Risks may furthermore result from possible decisions by the European Court of Justice construing EU type approval provisions.

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 less than 10%. Provisions were recognized to a small extent.

2. Product-related lawsuits worldwide (excluding the USA/Canada)

A general possibility exists 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, England and Wales, France, Germany, Italy, the Netherlands, Portugal, and South Africa. 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 had been pending against Volkswagen AG and other Volkswagen Group companies, including the Australian subsidiaries. In December 2019, Volkswagen AG reached tentative agreements with the Australian class action plaintiffs terminating the litigation; the court approved these agreements in April 2020. Volkswagen AG anticipates that the total cost of settling these actions will be approximately AUD 180 million. 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 continues to anticipate payment of a fine of up to AUD 125 million.

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. Given the opt-out rule, the class action potentially covers all vehicles with type EA 189 engines purchased by consumers on the Belgian market after September 1, 2014, unless the right to opt out is actively exercised. 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 consumer protection class actions are pending. The first of these class actions pertains to some 17 thousand Amarok vehicles and the second to roughly 67 thousand later generation Amaroks. In the first class action, 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 appeals judgment remains non-final since Volkswagen do Brasil has appealed it to a higher court. So far no judgment has been rendered in the second class action proceeding.

In Germany, Volkswagen AG and Verbraucherzentrale Bundesverband e.V. (Federation of Consumer Organizations) entered into an out of court settlement on February 28, 2020 terminating the consumer action for model declaratory judgment. The terms of the settlement require Volkswagen AG to offer individual settlements to consumers who registered claims under the action for model declaratory judgment and meet the settlement criteria. As a result, Volkswagen AG entered into individual settlements in the reporting year with some 245 thousand customers in an aggregate amount of roughly €770 million. The process of settling the consumer action for model declaratory judgment is thus almost complete. Verbraucherzentrale Bundesverband e.V. withdrew the action for model declaratory judgment on April 30, 2020.

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, for which the opt-in period has expired. In these proceedings, the High Court in England and Wales ruled in April 2020 that the switch logic in the EA 189 engine constituted an unlawful defeat device; the court believed that it was also bound by the findings of the KBA (German Federal Motor Transport Authority) in this respect. In August 2020, the Court of Appeal rejected Volkswagen's appeal against the High Court's ruling on these preliminary questions; this decision is final. The question of liability on the part of Volkswagen was not a matter addressed by the High Court's ruling and will be dealt with at a later stage of the proceedings. The main trial proceedings are to begin in January 2023.

In France, the French consumer organization Confédération de la Consommation, du Logement et du Cadre de Vie (CLCV) filed a class action in September 2020 against Volkswagen Group Automotive Retail France and Volkswagen AG for up to 950 thousand French owners and lessees of vehicles with type EA 189 engines. This is an opt-in class action in which the affected consumers are not required to opt into the class action until a legally final judgment is rendered.

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 breaches 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 the majority of the registrations is still unclear.

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. Proceedings in the matter are presently suspended. Furthermore, in April 2020 an opt-out class action lawsuit seeking monetary damages on behalf of Dutch consumers was served on Volkswagen by the Diesel Emissions Justice Foundation. It is currently unclear whether other consumers in addition to those in the Netherlands may join this class action. The class action relates to vehicles with type EA 189 engines, among others.

In Portugal, a Portuguese consumer organization has filed an opt-out class action. Potentially, up to approximately 139 thousand vehicles with type EA 189 engines are 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 these lawsuits are seeking damages or rescission of the purchase contract. In Germany, over 55 thousand individual lawsuits are currently pending. In May 2020, the Bundesgerichtshof (BGH – Federal Court of Justice) handed down its first decision ever in an individual product-related lawsuit in connection with the diesel issue. The BGH held that the buyer, who had purchased a vehicle with a type EA 189 engine prior to public disclosure of the diesel issue, had a claim for damages against Volkswagen AG. While the buyer can require reimbursement of the vehicle's purchase price, he must accept a deduction for the benefit derived from using the vehicle and must return it to Volkswagen AG. The judgment clarified the BGH's stance on the fundamental issues underlying a large number of the individual diesel lawsuits then still pending in Germany. On this basis, it has since been possible to conclude settlements and thus significantly reduce the number of individual lawsuits pending. In a series of fundamental judgments rendered in July 2020, the BGH decided further legal issues of major importance for the litigation still pending with regard to vehicles with type EA 189 engines. The BGH held that plaintiffs who purchased their vehicle after the ad hoc announcement of September 22, 2015 have no claim for damages. The court furthermore ruled that purchasers of affected vehicles are not entitled to tort interest under section 849 of the German Civil Code. The court also made it clear that a plaintiff's potential damage claim may be completely offset by the benefit derived from using the vehicle.

Volkswagen estimates the likelihood that the plaintiffs will prevail to be 50% or less in the great majority of cases: 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 remote. Since most of these actions are still in an early procedural stage, it is in many cases not yet possible to quantify the realistic risk exposure. Furthermore, 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 and what prospect of success such lawsuits might have.

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 before the Braunschweig Regional Court. In August 2016, the Braunschweig Regional Court issued an order referring common questions of law and fact relevant to the investor lawsuits pending before it to the Higher Regional Court in Braunschweig for binding declaratory rulings pursuant to the Kapitalanleger-Musterverfahrensgesetz (KapMuG – German Capital Investor Model Declaratory Judgment Act). In this proceeding, common questions of law and fact relevant to these actions are to be adjudicated by the Braunschweig Higher Regional Court in a single consolidated proceeding (model case proceedings). The lawsuits filed with the Braunschweig Regional Court are 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 the pending cases that have been stayed as described. The model case plaintiff is Deka Investment GmbH. Oral argument in the model case proceedings before the Braunschweig Higher Regional Court began in September 2018 and will be continued at subsequent hearings.

Further investor lawsuits have been filed with the Stuttgart Regional Court against Volkswagen AG, in some cases along with Porsche SE as joint and several debtor. A further investor action for model declaratory judgment is pending before the Stuttgart Higher Regional Court against Porsche SE; Volkswagen AG is involved in this action as a third party intervening in support of a party to the dispute. The Wolverhampton City Council, Administrating Authority for the West Midlands Metropolitan Authorities Pension Fund, has been appointed model case plaintiff. The first hearing for oral argument in these proceedings has yet to take place.

Additional investor lawsuits have been filed with various courts in Germany and the Netherlands.

Excluding the United States and Canada, claims in connection with the diesel issue totaling roughly €9.7 billion are currently pending worldwide against Volkswagen AG in the form of investor lawsuits, judicial applications for dunning and conciliation procedures, and claims under the KapMuG. 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. Contingent liabilities have been disclosed where the chance of success was estimated to be not less than 10%.

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 against Volkswagen AG and other Volkswagen Group companies, in particular by customers, investors, salespersons, and various government agencies in Canada and the United States, including the attorneys general of several US states.

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. The claims asserted by Illinois have been dismissed in full, but Illinois has appealed the dismissal of a subset of its claims. Certain claims asserted by Montana, Ohio, Texas, two Texas counties, Hillsborough County (Florida), and Salt Lake County (Utah) have also been dismissed, but these suits are currently proceeding as to other claims. Volkswagen has asked the US Supreme Court to review a decision by the US Court of Appeals for the Ninth Circuit that declined to dismiss certain claims brought by Hillsborough and Salt Lake Counties. A Texas appellate court dismissed claims asserted by Texas against Volkswagen AG and AUDI AG for lack of personal jurisdiction. Texas has indicated that it will seek discretionary review by the Texas Supreme Court of that decision.

In March 2019, the US Securities and Exchange Commission (SEC) filed a lawsuit against, among others, Volkswagen AG, Volkswagen Group of America Finance, LLC, and VW Credit, Inc., 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. In August 2020, the US District Court for the Northern District of California granted in part and denied in part Volkswagen's motion to dismiss. The claims dismissed by the court included all claims against VW Credit, Inc. related to asset-backed securities. In September 2020, the SEC filed an amended complaint that, among other things, removed the dismissed claims.

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 charging a quasi-criminal enforcement-related offense with respect to certain Volkswagen and Audi 2.0 l diesel vehicles. As to private civil law matters, in an environmental class action lawsuit seeking punitive damages on behalf of the residents of the Province of Quebec, after authorizing the case to proceed as a class, a Quebec court ruled in October 2020 that issues raised as to the viability of plaintiffs' damages theory should be deferred until trial. On that basis, the court denied a motion to dismiss by Volkswagen. The case remains in the early stages.

In line with IAS 37.92, no statements have been made concerning estimates of financial impact or regarding uncertainty as to the amount or maturity of provisions and contingent liabilities in relation to proceedings in the USA/Canada. This is so as to not compromise the results of the proceedings or the interests of the Company.

5. Special audit
In a November 2017 ruling, 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 the members of the Board of Management and Supervisory Board of Volkswagen AG breached their duties in connection with the diesel issue from June 22, 2006 onwards 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 constitutional rights. 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 April 2020, the Celle Higher Regional Court issued a ruling appointing a different special auditor. Volkswagen AG has filed a constitutional complaint with the Federal Constitutional Court contesting this formally unappealable decision as well on grounds of infringement of its constitutional rights and has suggested joinder of this matter with its initial constitutional complaint against the decision to appoint the special auditor. It is currently unclear when the Federal Constitutional Court will rule on the two constitutional complaints. The constitutional complaints have no suspensory effect.

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 €1.9 billion (previous year: €2.9 billion) has been included in the provisions for litigation and legal risks as of December 31, 2020 to account for the currently known legal risks related to the diesel issue based on the presently available information and the current assessments. Where adequately measurable at this stage, contingent liabilities relating to the diesel issue have been disclosed in the notes in an aggregate amount of €4.2 billion (previous year: €3.7 billion), whereby roughly €3.5 billion (previous year: €3.4 billion) of this amount results from lawsuits filed by investors in Germany. The provisions recognized, the contingent liabilities disclosed, and the other latent legal risks in the context of the diesel issue are in part subject to substantial estimation risks given the complexity of the individual relevant factors, the ongoing coordination with the authorities, and the fact that the fact-finding efforts have not yet been concluded. Should these legal or estimation risks materialize, this could result in further substantial financial charges. In particular, adjustment of the provisions recognized in light of knowledge acquired or events occurring in the future cannot be ruled out.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or regarding uncertainty as to 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) filed a claim for damages against Volkswagen AG and Porsche SE 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 being sought based on allegedly assigned rights currently amount to approximately €2.26 billion plus interest. In April 2016, the Hanover Regional Court formulated numerous objects of declaratory judgment that the antitrust panel of the Higher Regional Court in Celle will decide on in model case proceedings under the KapMuG. At the first hearing in October 2017, the court already indicated that it currently sees no justification for claims against Volkswagen AG, both because the pleadings are not sufficiently specific and for substantive legal reasons. Volkswagen AG sees the court's statements as confirmation that the claims against the Company are absolutely baseless. The Higher Regional Court has yet to render a decision as many hearings have been canceled, among other things due to motions for recusal filed by the plaintiff side (so far in all cases without success) and, more recently, as a result of the Covid-19 pandemic.

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, an adverse administrative appeal ruling was rendered against MAN Latin America. MAN Latin America challenged this ruling before the regular court in 2018. Estimation of the risk in the event the tax authorities prevail on all points is subject to uncertainty because of differences in the amount of penalties and interest that might then apply under Brazilian law. However, a positive outcome for MAN Latin America remains the expectation. Should this not occur, a risk of about BRL 3.1 billion could result for the contested period from 2009 onwards; this amount has been included in contingent liabilities in the notes.

In 2011, the European Commission conducted searches at European truck manufacturers for suspected unlawful exchange of information during the period from 1997 to 2011; in November 2014, the Commission issued a statement of objections to MAN, Scania, and the other truck manufacturers concerned. In its settlement decision of July 2016, the European Commission assessed fines against 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 seeking damages have been received from customers. As is the case in any antitrust proceedings, this may result in further lawsuits for damages. No provisions have been recognized or contingent liabilities disclosed for these cases as most of them are still in an early stage and currently cannot be assessed for this reason. In other cases, the chance of a decision by a court of last resort that awards damages against MAN or Scania currently appears remote.

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. The Chinese, South Korean, and Turkish competition authorities have also instituted proceedings in this matter.

In October 2020, the US District Court for the Northern District of California dismissed two antitrust class action complaints. The plaintiffs in these actions alleged that several automobile manufacturers including Volkswagen AG and other Group companies had conspired to unlawfully increase vehicle prices 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 that the alleged agreements unreasonably restrained competition in violation of US law. Plaintiffs have appealed this ruling. Plaintiffs in Canada filed claims with similar allegations on behalf of putative classes of purchasers against several automobile manufacturers, including Volkswagen Group Canada Inc., Audi Canada Inc., and other Volkswagen Group companies. Neither provisions nor contingent liabilities are stated because the early stage of the proceedings makes an assessment of the realistic risk exposure 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.

A settlement between Volkswagen and the Plaintiffs' Steering Committee resolving civil claims relating to approximately 98 thousand gasoline-powered Volkswagen, Audi, Porsche, and Bentley vehicles with automatic transmissions received final approval from the US District Court for the Northern District of California in February 2020.

Porsche AG has discovered potential regulatory issues relating to vehicles for various markets worldwide. There are questions as to the permissibility of specific hardware and software components used in type approval measurements. Differences compared with production versions may also have occurred in certain cases. Based on the information presently available, current production is not affected, however. The issues are unrelated to the defeat devices that were at the root of the diesel issue. Porsche AG is cooperating with the relevant authorities including the Stuttgart Office of the Public Prosecutor, which is investigating the matter in Germany. Based on the available information, no formal criminal investigation has been opened against the company, however. Porsche's own internal investigations are still in progress.

Five complaints related to these matters were filed with the US District Court for the Northern District of California. The complaints alleged that the affected vehicles used certain software and/or hardware that resulted in increased emissions and/or overstated fuel economy estimates as compared to the results of certification testing. The suits named Volkswagen AG, Dr. Ing. h.c. F. Porsche AG, AUDI AG, and Porsche Cars North America, Inc. as defendants; however, each defendant was not named in all the complaints. A consolidated complaint merging the five putative class actions into a single lawsuit was filed in January 2021. AUDI AG is no longer named as a defendant in the consolidated complaint.

Provisions were recognized by Volkswagen Bank GmbH and Volkswagen Leasing GmbH for possible claims in connection with financial services provided to consumers. These relate to actions involving certain features of customer loan and leasing agreements that may toll the running of the statutory cancellation time periods.

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 is assessing the alleged claims and defending itself against them.

In line with IAS 37.92, no further statements have been made concerning estimates of financial impact or regarding uncertainty as to 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.

40. Other financial obligations

€ million	PAYABLE 2020	PAYABLE 2021 – 2024	PAYABLE from 2025	TOTAL Dec. 31, 2019
Purchase commitments in respect of				
property, plant and equipment[1]	7,423	1,412	1	8,836
intangible assets	913	275	1	1,189
investment property	24	–	–	24
Obligations from loan commitments and irrevocable credit commitments[1]	3,242	54	3	3,300
Obligations from leasing and rental contracts	329	172	151	652
Miscellaneous other financial obligations	3,257	1,712	997	5,966
	15,189	**3,626**	**1,153**	**19,968**

1 Prior-year figures adjusted.

€ million	PAYABLE 2021	PAYABLE 2022 – 2025	PAYABLE from 2026	TOTAL Dec. 31, 2020
Purchase commitments in respect of				
property, plant and equipment	6,402	1,037	–	7,438
intangible assets	1,225	107	–	1,332
investment property	6	–	–	6
Obligations from loan commitments and irrevocable credit commitments	3,352	72	6	3,431
Obligations from leasing and rental contracts	313	265	167	746
Miscellaneous other financial obligations	6,291	2,160	575	9,026
	17,589	**3,641**	**748**	**21,978**

Other financial obligations include an amount of €0.9 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. In addition, this item includes payment of the purchase price for the acquisition of all Navistar's outstanding shares totaling around USD 3.7 billion, because the merger agreement between TRATON SE and Navistar contains conditions precedent and the purchase price payment cannot be capitalized at present.

41. Total fee of the Group auditor

Under the provisions of the Handelsgesetzbuch (HGB – German Commercial Code), Volkswagen AG is obliged to disclose the total fee charged for the fiscal year by the Group auditor, Ernst & Young GmbH Wirtschaftsprüfungsgesellschaft (previous year: PricewaterhouseCoopers GmbH Wirtschaftsprüfungsgesellschaft).

€ million	2020	2019
Financial statement audit services	19	19
Other assurance services	5	4
Tax advisory services	21	1
Other services	7	32
	53	**56**

The financial statement audit services related to the audit of the consolidated financial statements of Volkswagen AG and to the annual financial statements of German Group companies, as well as to reviews of the interim consolidated financial statements of Volkswagen AG and of the interim financial statements of German Group companies. Other assurance services mainly related to statutory and non-statutory audits as well as non-statutory assurance services for capital market transactions. Other services provided by the auditors in the reporting period focused on advice on how to implement new legal standards and advice on corporate governance matters. The tax advisory services provided by the auditors in the reporting period related primarily to assistance in the preparation of tax returns for employees on delegations abroad.

42. Personnel expenses

€ million	2020	2019
Wages and salaries	32,103	34,683
Social security, post-employment and other employee benefit costs	8,413	8,231
	40,516	**42,913**

43. Average number of employees during the year

	2020	2019
Performance-related wage-earners	261,165	265,092
Salaried staff	307,342	304,174
	568,508	**569,266**
of which in the passive phase of partial retirement	10,762	9,554
Vocational trainees	17,678	18,180
	586,185	**587,446**
Employees of Chinese joint ventures	79,260	80,302
	665,445	**667,748**

44. Events after the balance sheet date

In January 2021, Volkswagen AG called a hybrid note with a principal amount of €1.25 billion, which had been placed in 2014 via Volkswagen International Finance N.V., Amsterdam, the Netherlands (issuer). The note, including all unpaid interest accrued up to that point, will be repaid in March 2021. Once called, the note has to be classified as debt in accordance with IAS 32, thus reducing equity and the liquidity of the Volkswagen Group.

On January 26, 2021, the Executive Boards of MAN SE and MAN Truck & Bus SE and the employee representatives signed an agreement covering the key points of a comprehensive realignment of MAN Truck & Bus SE. The agreement reached provides for restructuring of all areas of the MAN Truck & Bus business. The planned measures include reconfiguring the development and production network, with a strong focus on future technologies, as well as cutting around 3,500 jobs across all divisions in Germany by the end of 2022.

The cost of all restructuring measures (including as yet unspecified measures in connection with the production network) over the entire restructuring period is currently expected to be in the upper three-digit million range. Most of the cost will be attributable to HR measures.

45. Remuneration based on performance shares and phantom shares (share-based payment)

At the beginning of 2017, the Supervisory Board of Volkswagen Aktiengesellschaft 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 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 were allocated benefits on the basis of 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. For members of the Board of Management and of top management, the annual target amount under the LTI is converted at the time of granting into performance shares on the basis of the initial reference price of Volkswagen's preferred shares. This annual target amount is allocated to the respective beneficiaries as a pure calculation position. Based on the degree of target achievement for the annual earnings per Volkswagen preferred share, the number of performance shares is definitively determined on the basis of a three-year, forward-looking performance period. 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.

For all other beneficiaries, the payment amount is determined by multiplying the target amount by the degree of target achievement for the annual earnings per Volkswagen preferred share and the ratio of the closing reference price at the end of the period, plus a dividend equivalent, to the initial reference price. Target achievement is determined on the basis of a three-year performance period with a forward-looking horizon of one year. As a departure from this, target achievement in 2020 will initially 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. For all beneficiaries, 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 is smaller than 5% during the performance period.

BOARD OF MANAGEMENT

		Dec. 31, 2020	Dec. 31, 2019
Total expense of the reporting period	€ million	2	22
Carrying amount of the obligation	€ million	39	57
Intrinsic value of the obligation	€ million	30	31
Fair value on granting date	€ million	16	20
Granted performance shares	Shares	389,524	431,800
of which granted during the reporting period	Shares	99,150	155,418

The disclosure relates to current and former members of the Board of Management.

MEMBERS OF TOP MANAGEMENT

		Dec. 31, 2020	Dec. 31, 2019
Total expense of the reporting period	€ million	133	115
Carrying amount of the obligation	€ million	132	115
Intrinsic value of the obligation	€ million	130	104
Fair value at grant date	€ million	84	71
Granted performance shares	Shares	1,040,271	531,090
of which granted during the reporting period	Shares	509,181	531,090

MEMBERS OF MANAGEMENT AND SELECTED PARTICIPANTS BELOW MANAGEMENT LEVEL

In the fiscal year, beneficiary members of management and selected participants below management level were allocated a target amount of €629 million (previous year: €– million) on which target achievement of 100% is based. As of December 31, 2020, the total carrying amount of the obligation, which corresponded to the intrinsic value of the liabilities, was €609 million (previous year: €– million). A total expense of €613 million (previous year: €– million) was recognized for this commitment in the reporting period.

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 previous year, changes in the value of the phantom shares led to the recognition of expenses of €0.3 million.

46. 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. This means that Porsche SE cannot elect all shareholder representatives to Supervisory Board of Volkswagen AG 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 estimated in the low triple-digit million euro range will arise for Volkswagen AG. New information emerging in the future 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 in the contribution agreement.

According to a notification dated January 4, 2021, the State of Lower Saxony and Hannoversche Beteiligungsgesellschaft Niedersachsen mbH, Hanover, held 20.00 % of the voting rights of Volkswagen AG on December 31, 2020. 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	
	2020	2019	2020	2019
Porsche SE and its majority interests	5	5	0	1
Supervisory Board members	4	5	1	1
Board of Management members	0	0	0	0
Unconsolidated subsidiaries	872	1,243	1,160	1,597
Joint ventures and their majority interests	17,660	16,627	632	646
Associates and their majority interests	230	181	1,332	1,312
Pension plans	1	1	1	3
Other related parties	0	0	1	1
State of Lower Saxony, its majority interests and joint ventures	11	10	4	4

€ million	RECEIVABLES FROM		LIABILITIES (INCLUDING OBLIGATIONS) TO	
	Dec. 31, 2020	Dec. 31, 2019	Dec. 31, 2020	Dec. 31, 2019
Porsche SE and its majority interests	4	4	0	0
Supervisory Board members	0	0	167	170
Board of Management members	0	0	31	60[1]
Unconsolidated subsidiaries	1,164	1,497	1,477	1,667
Joint ventures and their majority interests	12,207	12,953	2,250	2,683
Associates and their majority interests	397	326	951	1,063
Pension plans	1	1	–	–
Other related parties	0	0	198	264
State of Lower Saxony, its majority interests and joint ventures	25	1	2	0

1 Prior-year figures adjusted.

The tables above do not contain the dividend payments (net of withholding tax) of €3,098 million (previous year: €3,679 million) received from joint ventures and associates and dividends of €756 million (previous year: €753 million) paid to Porsche SE.

Receivables from joint ventures are primarily attributable to loans granted in an amount of €8,534 million (previous year: €8,290 million) as well as trade receivables in an amount of €3,349 million (previous year: €4,375 million). Receivables from non-consolidated subsidiaries also result primarily from loans granted in an amount of €642 million (previous year: €938 million) as well as trade receivables in an amount of €190 million (previous year: €188 million).

Impairment losses of €24 million (previous year: €56 million) were recognized on the outstanding related party receivables. In the fiscal year, expenses of €14 million (previous year: €37 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 €354 million (previous year: €322 million).

In the reporting period, the Volkswagen Group made capital contributions of €505 million (previous year: €668 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 and other related parties relate primarily to interest-bearing bank balances of Supervisory Board members and other related parties 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 €24.2 million (previous year: €50.1 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:

€	2020	2019
Short-term benefits	30,682,893	36,307,352
Benefits based on performance shares and virtual shares	6,570,097	19,606,328
Post-employment benefits (service cost only)	7,248,486	12,901,219
Termination benefits	11,577,039	10,100,271
	56,078,514	**78,915,169**

Benefits paid on the basis of performance shares include the cost of €6.6 million (previous year: €19.5 million) attributable to the performance shares granted to Board of Management members under the remuneration system applicable as from 2017.

In fiscal year 2020, the share price performance up to the settlement date led to the recognition of expense of €– million (previous year: expense of €0.1 million) for the phantom shares.

The post-employment benefits relate to additions to pension provisions for current members of the Board of Management. The termination benefits relate to the payments made to Mr. Sommer in connection with his early departure from the Board of Management on June 30, 2020 and to Mr. Renschler in connection with his early departure from the Board of Management on July 15, 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.

47. German Corporate Governance Code

On November 13, 2020, 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.

In December 2020, 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 2020, 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.

48. Remuneration of the Board of Management and the Supervisory Board

€	2020	2019
Board of Management remuneration		
Non-performance-related remuneration	18,578,569	13,332,515
Performance-related remuneration	6,903,129	17,647,682
Long-term incentive component	12,746,420	14,414,075
	38,228,118	**45,394,271**
Supervisory Board remuneration		
Non-performance-related remuneration	4,770,194	4,547,188
Performance-related remuneration	571,002	779,967
	5,341,196	**5,327,155**

NON-PERFORMANCE-RELATED REMUNERATION OF THE BOARD OF MANAGEMENT

The non-performance-related remuneration of the Board of Management comprises fixed remuneration and fringe benefits. In addition, Mr. Duesmann was granted compensation of lost entitlements in the amount of €7.3 million due to the change of employer. The fringe benefits result from 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 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)”.

Advances granted to members of the Board of Management under the performance share plan amounted to €6.5 million as of December 31, 2020 (previous year: €12.3 million). In the fiscal year, a total of €4.3 million (previous year: €– million) of the advances paid to members of the Board of Management were deducted from the payment amount under the performance share plan.

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, 2020, the pension provisions for members of the Board of Management amounted to €36.6 million (previous year: €60.5 million). Current pensions are index-linked in line 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 €35.9 million (previous year adjusted: €14.5 million) were granted. Pension provisions in accordance with IFRSs for this group of individuals amounted to €396.3 million (previous year: €373.7 million).

In connection with his departure from the Board of Management effective March 31, 2020, Mr. Schot was granted 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 €3.0 million (previous year: €– million).

In connection with his departure from the Board of Management effective June 30, 2020, Mr. Sommer was granted a non-performance-related component of €1.5 million (previous year: €– million).

In connection with his departure from the Board of Management effective July 15, 2020, Mr. Renschler was granted a non-performance-related component of €10.1 million (previous year: €– million).

The individual remuneration of the members of the Board of Management and the Supervisory Board is explained in the remuneration report, which is part of the group management report. A comprehensive assessment of the individual remuneration components, including the LTI in the form of the performance share plan, can also be found there.

Wolfsburg, February 16, 2021

Volkswagen Aktiengesellschaft
The Board of Management

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 16, 2021

Volkswagen Aktiengesellschaft
The Board of Management

Herbert Diess | Murat Aksel | Oliver Blume

Markus Duesmann | Gunnar Kilian | Thomas Schmall-von Westerholt

Hiltrud Dorothea Werner | Frank Witter

Independent auditor’s report

To VOLKSWAGEN AKTIENGESELLSCHAFT, Wolfsburg

REPORT ON THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS AND OF THE GROUP MANAGEMENT REPORT

OPINIONS

We have audited the consolidated financial statements of VOLKSWAGEN AKTIENGESELLSCHAFT, Wolfsburg, and its subsidiaries (the Group), which comprise the consolidated income statement and consolidated statement of comprehensive income for the fiscal year from 1 January to 31 December 2020, and the consolidated balance sheet as at 31 December 2020, consolidated statement of changes in equity and consolidated cash flow statement for the fiscal year from 1 January to 31 December 2020, 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 fiscal year from 1 January to 31 December 2020. In accordance with German legal requirements, we have not audited the content of the parts of the group management report specified in the appendix to the auditor’s report and the company information stated therein that is provided outside of the annual report and is referenced in the group management 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 Sec. 315e (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 31 December 2020 and of its financial performance for the fiscal year from 1 January to 31 December 2020, 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 opinion on the group management report does not cover the content of the parts of the group management report listed in the appendix to the auditor’s report.

Pursuant to Sec. 322 (3) 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 OPINIONS

We conducted our audit of the consolidated financial statements and of the group management report in accordance with Sec. 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 Art. 10 (2) f) of the EU Audit Regulation, we declare that we have not provided non-audit services prohibited under Art. 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 opinions on the consolidated financial statements and on the group management report.

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 fiscal year from 1 January to 31 December 2020. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon; we do not provide a separate opinion on these matters.

Below, we describe what we consider to be the key audit matters:

1. Accounting treatment of the risk provisions for the diesel issue

Reasons why the matter was determined to be a key audit matter

Due to indications of irregularities in connection with exhaust gas emissions from diesel engines in certain vehicles of the Volkswagen Group, regulatory authorities in numerous countries (particularly in Europe, the USA and Canada) commenced investigations in the past few years, some of which are still ongoing.

On the basis of its own findings and those of the authorities, the Volkswagen Group implemented various measures, which differed according to the country in some cases and included hardware and software measures, vehicle buybacks and early termination of leases as well as compensation payments to vehicle owners in some instances. The hardware and software measures had largely been completed as of the reporting date. The risk provisions for the diesel issue mainly include provisions for criminal, administrative and civil proceedings. Furthermore, there are legal risks from other criminal and administrative proceedings as well as civil actions, particularly by customers and holders of securities.

The provisions recognized as of 31 December 2020 and the contingent liabilities disclosed in the notes to the consolidated financial statements are subject to a significant estimation risk in view of the extensive ongoing criminal and administrative investigations and proceedings, the complexity of the different issues, developments in court rulings and market conditions for used diesel vehicles. Whether provisions need to be recognized or contingent liabilities disclosed for the legal risks from the diesel issue, and in what amount, depends to a large extent on the assessments and assumptions made by the executive directors. As described in the “Key events” section of the notes to the consolidated financial statements and in the “Report on Expected Developments, Risks and Opportunities” section of the group management report, the executive directors considered in their assessments in particular the fact that, based on the various measures taken to resolve the diesel issue to date, there is still no confirmation that members of the Board of Management were aware of any deliberate manipulation of the engine control unit software prior to the summer of 2015.

In light of the significance of the risk provisions and the extent of the assumptions and scope for judgment by the executive directors, this matter was a key audit matter.

Auditor's response

To assess the recognition and measurement of the provisions for legal risks and the disclosure of contingent liabilities from legal risks arising from the diesel issue, we considered, in particular, work and opinions by experts engaged by the executive directors of the Volkswagen Group in addition to available official notices and court judgments as part of a risk-based selection of significant transactions. Moreover, with the involvement of our own legal and forensic specialists, we held regular meetings with the internal Legal department and the external lawyers engaged by the executive directors of the Volkswagen Group to obtain oral explanations about the current developments and reasons leading to the assessments of the ongoing proceedings. We compared confirmations received from external lawyers with the risk assessment by the executive directors. We also regularly reviewed publicly available information, such as media reports, to assess the completeness of the provisions.

In addition, we reviewed on a sample basis the input factors (quantity and value) of the provisions and contingent liabilities for individual matters using statements of claims received, settlement agreements and court judgments. With regard to the valuation, we also compared the current assessments by the executive directors with past experience, where observable. For significant additions to provisions, we examined whether they were due to new matters or to changes in the estimation inputs and obtained corresponding evidence. To analyze significant utilizations of the provisions, we examined a sample to determine whether they were based on settlement agreements or court judgments and whether corresponding payments were made.

Furthermore, inquiries were made of the executive directors and the external law firms engaged to carry out the investigations, with the assistance of our own forensic specialists, in order to understand and assess the investigations undertaken in terms of when former and current members of the Board of Management became aware of the diesel issue.

Our audit procedures did not lead to any objections relating to the accounting treatment of the risk provisions for the diesel issue.

Reference to related disclosures

The information presented and the statements made in connection with the diesel issue, including the comments on the underlying causes, on when the members of the Board of Management became aware of the issue and on the effects on the accompanying financial statements are contained in the “Key events” and “Litigation” sections of the notes to the consolidated financial statements and in the “Report on Risks and Opportunities” section of the group management report, subsection “Legal risks.”

2. Recoverability of goodwill and the acquired brand names

Reasons why the matter was determined to be a key audit matter

The result of the impairment testing of goodwill and the acquired brand names is highly dependent on the executive directors’ estimate of future cash flows and which discount rates they use. The recoverable amount of the cash-generating units is calculated on the basis of their value in use, applying discounted cash flow models.

The COVID-19 pandemic has negatively affected the cash inflows of the Volkswagen Group and its brands as a result of the global drop in demand and the temporary production stops. The executive directors of the Volkswagen Group expect cash inflows to continue to be affected in subsequent years.

In addition, the executive directors have scope for judgment in determining the cash-generating units for impairment testing, in determining the discount rates used and the long-term growth rates assumed.

In view of the foregoing, the materiality of goodwill and the acquired brand names in relation to total assets, the complexity of the valuation and the judgment exercised during valuation, the impairment testing of goodwill and the acquired brands was a key audit matter.

Auditor's response

During our audit, we involved valuation specialists to assess among other things the methodology used to perform the impairment tests in light of the provisions of IAS 36. We also checked the arithmetical accuracy of the valuation models used.

On the basis of the Volkswagen Group's internal reporting, we assessed for the acquired brands whether the brands represent the lowest level within the Group at which independent cash inflows are generated and whether goodwill is monitored at brand level for internal management purposes.

We analyzed the planning process established in the Volkswagen Group and tested the operating effectiveness of the controls implemented in the planning process. As a starting point, we compared the Volkswagen Group's five-year operational plan prepared by the executive directors and acknowledged by the Supervisory Board with the forecast figures in the underlying impairment tests. We discussed the key planning assumptions for selected brands to which significant goodwill and acquired brand names are allocated with the executive directors and compared them with past earnings and cash inflows to assess the planning accuracy. Our plausibility testing of the inputs for the impairment tests was based among other things on a comparison with general and industry-specific market expectations underlying the expected cash inflows. We discussed with the executive directors the effects of the COVID-19 pandemic on the development of cash inflows in the individual cash-generating units and compared them with current market expectations. With respect to the rollforward from the medium-term plan to the long-term forecast, we assessed the plausibility of the assumed growth rates by comparing them with observable data.

To assess the discount rates and growth rates applied, we analyzed the inputs used to determine them on the basis of publicly available information and obtained an understanding of the methods used with regard to the relevant requirements of IAS 36.

We also assessed the sensitivity analyses performed by the executive directors in order to estimate any potential impairment risk associated with a reasonably possible change in one of the significant assumptions used in the valuation.

Our procedures did not lead to any reservations relating to the recoverability of goodwill and the acquired brand names.

Reference to related disclosures

With regard to the recognition and measurement policies applied for goodwill and the acquired brand names, refer to the disclosure on intangible assets in the "Accounting policies" section of the notes to the consolidated financial statements. For the related disclosures on judgments by the executive directors and sources of estimation uncertainty as well as the disclosures on goodwill and the acquired brand names, refer to the disclosure in the "Accounting policies" and "Estimates and assumptions by management" sections and in note 12 "Intangible assets" in the "Balance Sheet disclosures" section of the notes to the consolidated financial statements.

3. Capitalization and recoverability of development costs

Reasons why the matter was determined to be a key audit matter

Key criteria for capitalizing development costs are the ability to implement the development projects (including their technical feasibility, the intention to complete them and the ability to use them) as well as the realization of an expected future economic benefit. The complexity of research and development projects is mounting in view of the technological transformation of the Volkswagen Group and the resulting new development areas (including high investments in electromobility, software and autonomous driving). Assessments of project feasibility are playing an ever greater role in this connection and entail the use of considerable judgment.

Where capitalized development costs are not yet subject to amortization, they must be tested for impairment as part of the related cash-generating unit at least annually at the level of the brands defined as cash-generating units. The assumption of realizing future economic benefits and the result of testing the recoverability of capitalized development costs during the analyses and impairment tests performed are highly dependent on the executive directors' estimate of future cash flows and which discount rates they use. The recoverable amount of the cash-generating units is calculated on the basis of their value in use, applying discounted cash flow models. The COVID-19 pandemic has negatively affected the cash inflows of the Volkswagen Group and its brands as a result of the global drop in demand and the temporary production stops. The executive directors of the Volkswagen Group expect cash inflows to continue to be affected in subsequent years.

In light of the foregoing, the materiality of the capitalized development costs in relation to total assets, the total amount of research and development costs and the judgment exercised during valuation, the capitalization of development costs and the impairment test were a key audit matter.

Auditor's response

During our audit, we examined the process for identifying the research and development costs, particularly with reference to the criteria for capitalization. In this connection, we tested process-related controls, carried out analytical audit procedures such as comparisons of project budgets and capitalization rates and inspected documentation on project feasibility. We also assessed the future economic benefit criterion for capitalization based on the assumptions regarding the cash inflows of the cash-generating unit to which the capitalized development work is allocated.

Moreover, we involved valuation specialists to assess among other things the methodology used to determine the relevant cash-generating units and perform the impairment tests in light of the provisions of IAS 36. We also checked the arithmetical accuracy of the valuation models used, analyzed the planning process established in the Volkswagen Group and tested the operating effectiveness of the controls implemented in the planning process.

We discussed with the executive directors the key planning assumptions for a sample we selected of brands with significant capitalized development costs and compared them with past earnings and cash inflows to assess the planning accuracy. Our plausibility testing of the inputs for the impairment tests was based among other things on a comparison with general and industry-specific market expectations underlying the expected cash inflows. We discussed with the executive directors the effects of the COVID-19 pandemic on the development of cash inflows in the individual cash-generating units and compared them with current market expectations. Furthermore, we analyzed the inputs used to determine the discount rates on the basis of publicly available information and obtained an understanding of the calculation with regard to the relevant requirements of IAS 36.

We also assessed the sensitivity analyses performed by the executive directors in order to estimate any potential impairment risk associated with a reasonably possible change in one of the significant assumptions used in the valuation.

Our procedures did not lead to any reservations relating to the recognition and recoverability of the capitalized development costs.

Reference to related disclosures

With regard to the recognition and measurement policies applied for capitalized development costs, refer to the disclosure on intangible assets in the "Accounting policies" section of the notes to the consolidated financial statements. For the related disclosures on judgments by the executive directors and sources of estimation uncertainty as well as the disclosures on capitalized development costs, refer to the disclosures in the "Accounting policies" and "Estimates and assumptions by management" sections and in note 12 "Intangible assets" in the "Balance Sheet disclosures" section of the notes to the consolidated financial statements.

4. Completeness and measurement of provisions for warranty obligations

Reasons why the matter was determined to be a key audit matter

Obligations for warranty claims are calculated on the basis of estimated warranty costs at the level of individual models and model years by reference to claims to date, including their nature, frequency and remediation cost, and by reference to historical and expected policy on ex gratia arrangements. Where unusual individual technical risks are anticipated, an individual assessment is made whether and, if so, to what extent measures are required to remediate them and provisions need to be recognized.

The amount of provisions for warranty claims is significant overall. Besides the general use of judgment in selecting the valuation methods and assessing the obligations, increasing estimation uncertainty stems from the rise in hybrid and battery electric vehicles entering the market and a lack of experience of their susceptibility to faults. In light of the amount of the provisions and the judgment exercised during valuation, the completeness and measurement of provisions for warranty obligations was a key audit matter.

Auditor's response

With regard to the accounting for the provisions for warranty obligations, we examined the underlying processes for recording previous claims, calculating and valuing the estimated future warranty costs and recognizing the provisions, and tested controls.

In light of the uncertainty in relation to the estimated future losses, we assessed the underlying valuation assumptions, especially the expected claim rate per vehicle and the cost thereof, using analyses of historical data. Where there was a lack of past experience, we obtained an understanding of the assumptions made by the executive directors and tested their plausibility using historical data for comparable items. Using the calculation bases derived from these historical data, we checked the estimated costs for expected claims per vehicle. To assess the completeness of the provisions, we also reconciled the number of sold vehicles used to recognize the provision with the sales volumes. We obtained an understanding of the method used for calculating the provisions, including the discounting, and reperformed the calculations.

For significant individual technical risks, we assessed the expected incidence of technical faults and the calculation of expected costs per claim/vehicle using documentation on previous claims, inspecting resolutions passed by technical committees and holding discussions with the departments responsible.

Our audit procedures did not lead to any reservations relating to the completeness and valuation of provisions for warranty obligations.

Reference to related disclosures

With regard to the recognition and measurement policies applied in accounting for provisions for warranty obligations, refer to the disclosures in the "Accounting policies" and "Noncurrent and current other provisions" sections of the notes to the consolidated financial statements.

5. Calculation of the expected residual values of lease assets during impairment testing

Reasons why the matter was determined to be a key audit matter

Lease assets comprise vehicles under leases that are due to expire. There is an impairment risk for these vehicles which is primarily dependent on the residual value expected at the end of the lease. The expected residual value of these vehicles is a significant area which is subject to estimation uncertainty and in which the executive directors of Volkswagen Financial Services AG exercise judgment.

The expected residual value is reviewed quarterly using internal and external marketing results and on the basis of estimates of future market price development.

In light of the existing estimation uncertainty, the judgment exercised in calculating the residual values and the significance of the amount for impairment testing, the calculation of expected residual values was a key audit matter. As it is not possible to make a conclusive assessment of the impact of the global COVID-19 pandemic, the estimation uncertainty in relation to the calculation of the expected residual values is significantly heightened.

Auditor's response

During our audit, we analyzed the process implemented by the executive directors of Volkswagen Financial Services AG for monitoring and calculating the residual values to identify any risks of material misstatement and obtained an understanding of the process steps and controls. On this basis, we tested the operating effectiveness of the implemented controls over the calculation of the expected residual values. To assess the forecasting model used to calculate the residual values, we assessed the validation plan on the basis of the model design and analyzed the validation procedures performed and the backtesting results as to whether any need for an impairment allowance was identified and whether there had been an unusual number of outliers. Furthermore, we assessed whether the assumptions underlying the forecasting model and the inputs used for calculating the expected residual values were clearly documented. We obtained evidence for the main inputs and assumptions used for age, mileage and lifecycle phase of the vehicles to calculate the residual values and examined them for currentness and transparency. We assessed whether the marketing assumptions used reflect current marketing results and industry-specific and general market expectations.

Our audit procedures did not lead to any reservations relating to the calculation of the expected residual values of the lease assets during impairment testing.

Reference to related disclosures

With regard to the recognition and measurement policies applied for lease assets, refer to the disclosure on intangible assets in the "Accounting policies" section of the notes to the consolidated financial statements. For the related disclosures on judgments by the executive directors and sources of estimation uncertainty, refer to the disclosures in the "Accounting policies" and "Estimates and assumptions by management" sections and in note 14 "Lease assets and investment property" in the "Balance Sheet disclosures" section of the notes to the consolidated financial statements.

OTHER INFORMATION

The Supervisory Board is responsible for the Report of the Supervisory Board. The executive directors and the Supervisory Board are responsible for the declaration pursuant to Sec. 161 AktG ["Aktiengesetz": German Stock Corporation Act] on the German Corporate Governance Code, which is part of the group corporate governance declaration. In all other respects, the executive directors are responsible for the other information. The other information comprises the parts of the annual report listed in the appendix.

Our 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 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 Sec. 315e (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 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 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 Sec. 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 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 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 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 Sec. 315e (1) HGB.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express 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 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

Report on the assurance in accordance with Sec. 317 (3b) HGB on the electronic reproduction of the consolidated financial statements and the group management report prepared for publication purposes

Opinion

We have performed assurance work in accordance with Sec. 317 (3b) HGB to obtain reasonable assurance about whether the reproduction of the consolidated financial statements and the group management report (hereinafter the "ESEF documents") contained in the attached electronic file VWAG_JFB_Konzern_2020-12-31 and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format ("ESEF format"). In accordance with German legal requirements, this assurance only extends to the conversion of the information contained in the consolidated financial statements and the group management report into the ESEF format and therefore relates neither to the information contained in this reproduction nor to any other information contained in the abovementioned electronic file.

In our opinion, the reproduction of the consolidated financial statements and the group management report contained in the abovementioned attached electronic file and prepared for publication purposes complies in all material respects with the requirements of Sec. 328 (1) HGB for the electronic reporting format. We do not express any opinion on the information contained in this reproduction nor on any other information contained in the abovementioned file beyond this reasonable assurance opinion and our audit opinion on the accompanying consolidated financial statements and the accompanying group management report for the fiscal year from 1 January 2020 to 31 December 2020 contained in the "Report on the audit of the consolidated financial statements and of the group management report" above.

Basis for the opinion

We conducted our assurance work on the reproduction of the consolidated financial statements and the group management report contained in the abovementioned attached electronic file in accordance with Sec. 317 (3b) HGB and Exposure Draft of IDW Assurance Standard: Assurance in Accordance with Sec. 317 (3b) HGB on the Electronic Reproduction of Financial Statements and Management Reports Prepared for Publication Purposes (ED IDW AsS 410). Our responsibilities under that standard are further described in the "Group auditor's responsibilities for the assurance work on the ESEF documents" section. Our audit firm applied the requirements for quality control systems set forth in IDW Standard on Quality Control: "Requirements for Quality Control in Audit Firms" (IDW QS 1).

Responsibilities of the executive directors and the Supervisory Board for the ESEF documents

The executive directors of the Company are responsible for the preparation of the ESEF documents including the electronic reproduction of the consolidated financial statements and the group management report in accordance with Sec. 328 (1) Sentence 4 No. 1 HGB and for the tagging of the consolidated financial statements in accordance with Sec. 328 (1) Sentence 4 No. 2 HGB.

In addition, the executive directors of the Company are responsible for such internal control as they have considered necessary to enable the preparation of ESEF documents that are free from material non-compliance with the requirements of Sec. 328 Abs. 1 HGB for the electronic reporting format, whether due to fraud or error.

The executive directors of the Company are also responsible for the submission of the ESEF documents together with the auditor's report and the attached audited consolidated financial statements and the audited group management report as well as other documents to be published to the operator of the *Bundesanzeiger* [German Federal Gazette].

The Supervisory Board is responsible for overseeing the preparation of the ESEF documents as part of the financial reporting process.

Group auditor's responsibilities for the assurance work on the ESEF documents

Our objective is to obtain reasonable assurance about whether the ESEF documents are free from material non-compliance with the requirements of Sec. 328 (1) HGB, whether due to fraud or error. We exercise professional judgment and maintain professional skepticism throughout the engagement. We also:

- Identify and assess the risks of material non-compliance with the requirements of Sec. 328 (1) HGB, whether due to fraud or error, design and perform assurance procedures responsive to those risks, and obtain assurance evidence that is sufficient and appropriate to provide a basis for our assurance opinion.
- Obtain an understanding of internal control relevant to the assurance on the ESEF documents in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing an assurance opinion on the effectiveness of these controls.
- Evaluate the technical validity of the ESEF documents, i.e., whether the electronic file containing the ESEF documents meets the requirements of Delegated Regulation (EU) 2019/815, in the version valid as of the reporting date, on the technical specification for this electronic file.
- Evaluate whether the ESEF documents enable an XHTML reproduction with content equivalent to the audited consolidated financial statements and to the audited group management report.
- Evaluate whether the tagging of the ESEF documents with Inline XBRL technology (iXBRL) enables an appropriate and complete machine-readable XBRL copy of the XHTML reproduction.

Further information pursuant to Art. 10 of the EU Audit Regulation

We were elected as group auditor by the Annual General Meeting on 30 September 2020. We were engaged by the Supervisory Board on 23 November 2020. We have been the group auditor of VOLKSWAGEN AKTIENGESELLSCHAFT since fiscal year 2020.

We declare that the opinions expressed in this auditor's report are consistent with the additional report to the Audit Committee pursuant to Art. 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 Martin Matischiok.

APPENDIX TO THE AUDITOR'S REPORT:

1. Parts of the group management report whose content is unaudited

We have not audited the content of the following part of the group management report:

- The group corporate governance declaration which is published on the website stated in the group management report and is part of the group management report.

2. Further other information

The other information comprises the following parts of the annual report, of which we obtained a copy prior to issuing this auditor's report:

- To our shareholders
- Divisions
- Further information
- Responsibility statement
- Non-financial report

but not the consolidated financial statements, not the group management report disclosures whose content is audited and not our auditor's report thereon.

3. Company information outside of the annual report referenced in the group management report

The group management report contains other cross-references to webpages of the Group. We have not audited the content of the information to which these cross-references refer.

Hanover, 26 February 2021

Ernst & Young GmbH
Wirtschaftsprüfungsgesellschaft

Meyer	Matischiok
Wirtschaftsprüfer	Wirtschaftsprüfer
[German Public Auditor]	[German Public Auditor]

Five-Year Review

1 Adjusted.

	2020	2019	2018	2017[1]	2016
Volume Data (thousands)					
Vehicle sales (units)	**9,157**	**10,956**	**10,900**	**10,777**	**10,391**
Germany	1,108	1,347	1,236	1,264	1,257
Abroad	8,049	9,609	9,664	9,513	9,135
Production (units)	**8,900**	**10,823**	**11,018**	**10,875**	**10,405**
Germany	1,633	2,112	2,303	2,579	2,685
Abroad	7,267	8,712	8,715	8,296	7,720
Employees (yearly average)	**665**	**668**	**656**	**634**	**619**
Germany	295	295	291	285	280
Abroad	370	373	365	350	339
Financial Data (in € million)					
Income Statement					
Sales revenue	**222,884**	**252,632**	**235,849**	**229,550**	**217,267**
Cost of sales	–183,937	–203,490	–189,500	–186,001	–176,270
Gross profit	**38,947**	**49,142**	**46,350**	**43,549**	**40,997**
Distribution expenses	–18,407	–20,978	–20,510	–20,859	–22,700
Administrative expenses	–9,399	–9,767	–8,819	–8,126	–7,336
Net other operating result	–1,466	–1,437	–3,100	–745	–3,858
Operating result	**9,675**	**16,960**	**13,920**	**13,818**	**7,103**
Financial result	1,991	1,396	1,723	–146	189
Earnings before tax	**11,667**	**18,356**	**15,643**	**13,673**	**7,292**
Income tax expense	–2,843	–4,326	–3,489	–2,210	–1,912
Earnings after tax	**8,824**	**14,029**	**12,153**	**11,463**	**5,379**
Personnel expenses	**40,516**	**42,913**	**41,158**	**38,950**	**37,017**
Balance Sheet (at December 31)					
Noncurrent assets	302,170	300,608	274,620	262,081	254,010
Current assets	194,944	187,463	183,536	160,112	155,722
Total assets	**497,114**	**488,071**	**458,156**	**422,193**	**409,732**
Equity	128,783	123,651	117,342	109,077	92,910
of which: noncontrolling interests	1,734	1,870	225	229	221
Noncurrent liabilities	202,921	196,497	172,846	152,726	139,306
Current liabilities	165,410	167,924	167,968	160,389	177,515
Total equity and liabilities	**497,114**	**488,071**	**458,156**	**422,193**	**409,732**
Cash flows from operating activities	**24,901**	**17,983**	**7,272**	**–1,185**	**9,430**
Cash flows from investing activities attributable to operating activities	**18,372**	**20,076**	**19,386**	**18,218**	**16,797**
Cash flows from financing activities	**7,637**	**–865**	**24,566**	**17,625**	**9,712**

1 Adjusted.

Financial Key Performance Indicators

%	2020	2019	2018	2017[1]	2016
Volkswagen Group					
Gross margin	17.5	19.5	19.7	19.0	18.9
Personnel expense ratio	18.2	17.0	17.5	17.0	17.0
Operating return on sales	4.3	6.7	5.9	6.0	3.3
Return on sales before tax	5.2	7.3	6.6	6.0	3.4
Return on sales after tax	4.0	5.6	5.2	5.0	2.5
Equity ratio	25.9	25.3	25.6	25.8	22.7
Automotive Division[2]					
Change in unit sales year-on-year[3]	- 16.4	+ 0.5	+ 1.1	+ 3.7	+ 3.8
Change in sales revenue year-on-year	- 14.3	+ 5.7	+ 2.7	+ 5.3	+ 1.1
Research and development costs as a percentage of sales revenue	7.6	6.7	6.8	6.7	7.3
Operating return on sales	3.7	6.5	5.5	5.7	2.5
EBITDA (in € million)[4]	24,462	29,706	26,707	26,094	18,999
Return on investment (ROI)[5]	6.5	11.2	11.0	12.1	8.2
Cash flows from operating activities as a percentage of sales revenue	13.6	14.5	9.2	6.0	10.9
Cash flows from investing activities attributable to operating activities as a percentage of sales revenue	10.1	9.4	9.4	9.0	8.6
Capex as a percentage of sales revenue	6.1	6.6	6.6	6.5	6.9
Net liquidity as a percentage of sales revenue	12.0	8.4	8.2	9.7	12.5
Ratio of noncurrent assets to total assets[6]	24.7	26.4	23.3	23.7	23.4
Ratio of current assets to total assets[7]	15.4	17.0	17.6	16.3	15.9
Inventory turnover[8]	4.4	4.8	5.0	5.1	5.5
Equity ratio	38.1	37.6	37.9	36.9	31.4
Financial Services Division					
Increase in total assets	0.7	7.9	11.2	6.0	8.3
Return on equity before tax[9]	8.8	10.8	9.9	9.8	10.8
Equity ratio	13.2	12.8	12.7	13.7	12.5

1 Adjusted.
2 Including allocation of consolidation adjustments between the Automotive and Financial Services divisions.
3 Including the Chinese joint ventures. These companies are accounted for using the equity method.
4 Operating result plus net depreciation/amortization and impairment losses/reversals of impairment losses on property, plant and equipment, capitalized development costs, lease assets, goodwill and financial assets as reported in the cash flow statement.
5 For details, see the section entitled "Return on investment (ROI) and value contribution in the reporting period" in the chapter entitled "Results of Operations, Financial Position and Net Assets".
6 Ratio of property, plant and equipment to total assets.
7 Ratio of inventories to total assets at the balance sheet date.
8 Ratio of sales revenue to average monthly inventories.
9 Earnings before tax as a percentage of average equity.

Glossary

Selected terms at a glance

Big Data
Big data is a term used to describe new ways of analyzing and evaluating data volumes that are too vast and too complex to be processed using manual or conventional methods.

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 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 production of the first vehicles based on the MEB started 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.

Premium Platform Electric (PPE)
A new vehicle platform for all-electric premium, sport and luxury class vehicles. The components and functions of this platform are especially tailored to meet the high demands of this segment. This platform enables high synergies to be achieved particularly between the Audi, Porsche and Bentley brands.

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 for 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.

Scheduled Dates 2021

FINANCIAL CALENDER

March 16
Volkswagen AG Annual Media Conference
and Investor Conference

May 6
Interim Report January – March

July 29
Half-Yearly Financial Report

October 28
Interim Report January – September

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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

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