GROUP MANAGEMENT REPORT

Goals and Strategies

With the new Group strategy "NEW AUTO" – Mobility for generations to come, we are preparing ourselves for the global changes in mobility and thus driving Volkswagen's transformation into a software-centric company.

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

NEW AUTO thus continues the transformation initiated with the predecessor strategies, TOGETHER 2025 and TOGETHER 2025+, which kicked off one of the biggest processes of change in the Company's history with the aim of making the Group more focused, efficient, innovative, customer-oriented and sustainable, and systematically gearing it toward profitable growth. These strategies have already provided the framework and key pillars with which we aim to achieve our vision of being a world-leading provider of sustainable mobility.

As technology advances, the automotive industry is rapidly forging ahead with the transformation toward e-mobility and digitalization. The market for electric vehicles will thus continue to grow strongly in the next few years, meaning that cost-efficient and sustainable production of battery systems and the expansion of charging infrastructure will be crucial to success.

The shift to connected, intelligent and eventually self-driving vehicles will, however, bring more wide-reaching changes for the automotive industry. Increasing software development capabilities seeking to excite customers with constantly improving digital functionality is the prerequisition for this. The most important milestone in this context is the development of autonomous driving, which will change customers' experience of mobility forever and will additionally pave the way for new business models.

In equal measure to technological trends, the global economic and geopolitical environment is also posing increased challenges for the automotive industry. These include, for example, the economic influence of our largest mobility markets, China, the USA and Europe, and their diverging development. We anticipate that the Chinese economy will continue to gain influence and grow. The sustained growth in economic output (GDP), among other things, underlines the importance of the Asian market.

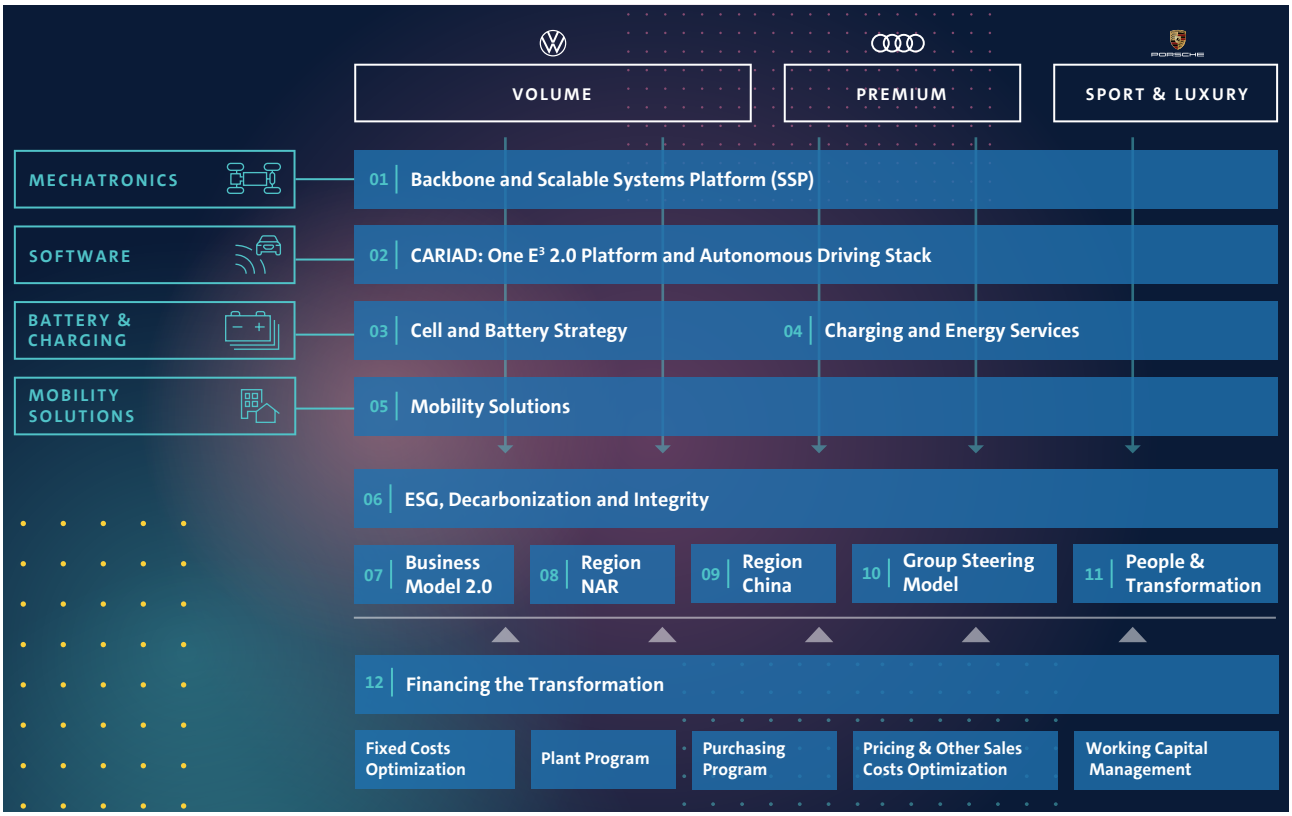
Sustainability will continue to be a recurring theme in the business world, driven by the increasingly noticeable consequences of climate change and customers' greater awareness of sustainable lifestyles. We are committed to the Paris Agreement on climate protection, which aims to keep the increase in global temperature by 2050 to well below 2 degrees Celsius, and have set ourselves the goal of becoming a net carbon-neutral company by 2050.

With NEW AUTO, we are resetting our priorities and developing the necessary expertise as we continue our transition from automotive manufacturer to mobility group. Alongside software development and capabilities in autonomous driving, this also includes areas such as battery technology, battery recycling, charging infrastructure and mobility services.

The new Group strategy consists of a total of twelve Group initiatives across the brand groups. The focus is on the main multidisciplinary topics of mechatronics, software, battery & charging, and mobility solutions, on which the five tech initiatives described below are based. A further seven base initiatives form the foundation for the Volkswagen Group's strategic realignment. These are ESG, Decarbonization & Integrity, Business Model 2.0, North America (NAR) and China Regions, Group Steering Model, People & Transformation and Financing the Transformation.

To make the progress in the relevant Group initiatives of our strategy as transparent as possible for management and employees, the Group Board of Management decided to structure and regularly measure the strategic goals and milestones using the OKR (Objectives and Key Results) method. This means that, for each Group initiative, achievable

THE 12 GROUP INITIATIVES OF THE NEW AUTO STRATEGY



strategic objectives will be defined along with envisaged key results, and their achievement discussed quarterly with the Board of Management.

MECHATRONICS – BACKBONE AND SCALABLE SYSTEMS PLATFORM

Innovation, technology and lasting competitiveness are to be ensured using a future-oriented mechatronics platform. A standard platform known as the SSP – Scalable Systems Platform will enable maximum synergy effects, reduced investment costs and fast, regular technology updates, while also ensuring the necessary product differentiation in the Group's portfolio. The Backbone and SSP tech initiative forms the basis for autonomous driving and supports us in being able to offer electric cars for all.

SOFTWARE – CARIAD: ONE E³ 2.0 PLATFORM AND AUTONOMOUS DRIVING (AD) STACK

Software-based customer functions (such as driver assistance systems) have already improved driving comfort and vehicle safety significantly in the past. As vehicles become fully connected in future and increasingly complex software technologies are developed (for instance with the aid of artificial intelligence), a completely new experience of mobility and additional product differentiation will become possible, due in part to the development of automated driving. To maximize synergies in the development of software platforms and software-based customer functions, the Volkswagen Group combines this development expertise with software subsidiary CARIAD's new software architecture E³ 2.0. The CARIAD: One E³ 2.0 Platform and AD Stack tech initiative thus comprises measures to drive the development of software platforms for connectivity and automated driving and their rollout to all Group's vehicles.

BATTERY – CELL AND BATTERY STRATEGY

We must become a profitable expert along the entire battery life cycle to achieve our objective of transforming into a world-leading provider of sustainable mobility. To this end, the Cell and Battery Strategy tech initiative pools expertise across the Group and drives the transformation process together with our strategic partners. This includes battery management along with cell production and recycling.

CHARGING – CHARGING AND ENERGY SERVICES

We need to ensure coordinated and cohesive cooperation across the whole Group to establish ourselves as a global, comprehensive charging and energy services provider in the future. The Charging and Energy Services tech initiative combines activities across the brands, creates synergies and drives the creation of a dense and extensive charging network.

MOBILITY SOLUTIONS

In keeping with its mission statement, "Mobility for generations to come", the Volkswagen Group is developing mobility solutions of the future, taking into account global trends and changing customer needs. Autonomous driving, combined with new mobility solutions, is expected to mark Volkswagen's transformation into a leading provider of sustainable mobility.

ESG, DECARBONIZATION AND INTEGRITY

ESG (Environmental, Social, Governance) refers to the basic principles of doing business sustainably. The Group's stakeholders (e.g. investors, employees, customers and non-profit organizations) have high expectations of the Company's ESG performance, including issues such as decarbonization and integrity, but also its conduct as an employer and as part of society. The ESG performance therefore directly affects the Group's market capitalization, cost of capital and investing activities.

BUSINESS MODEL 2.0

By connecting vehicles, we will be able in future to remain in contact with customers throughout the entire vehicle lifecycle and thus to offer them services and functions for their individual needs. The Business Model 2.0 base initiative is developing a Group-wide portfolio of services that aims to create a seamless and innovative product experience to connect brands, customers, dealerships, our partners and whole markets.

NORTH AMERICA (NAR) REGION

North America is the region with the greatest growth potential for the Volkswagen Group, especially in e-mobility. In the United States, we are putting a wide range of highly attractive electric vehicles on the roads, tailored to the market. We are positioning ourselves for the future and are ready to leverage the growth of an increasingly electrified market using our strong brands, products and services.

REGION CHINA

China is of major strategic significance to the Volkswagen Group as its largest single market, which we expect will continue growing in the future. This base initiative therefore brings together all key measures to continue the success story of Volkswagen in China. It includes a comprehensive program of measures to expand market share in the electric vehicle segment and safeguard market share in combustion engine vehicles. The core component remains a Group-wide localization strategy, which aims to offer Chinese customers tailored products using globally developed platform technologies (hardware and software).

GROUP STEERING MODEL

To achieve the objectives of the Group strategy and, consequently, long-term success for the Volkswagen Group, we need to establish mechanisms for making swift decisions and exploiting synergies at a consistently high level, and to constantly enhance them. The updated Group steering model hones the definition of responsibilities and roles and provides transparency, thus strengthening collaboration within the Group. The Volkswagen Group is creating a future-oriented governance model to match the changing environment.

PEOPLE & TRANSFORMATION

As it becomes a global tech company, the Volkswagen Group will see the biggest transformation of its workforce in its corporate history. To ensure the Group remains competitive in future, we need to attract and retain top talent in the long term and support employees by providing extensive training. Aligning the structure of the workforce with the fields that will be relevant for the future will also be centrally important.

FINANCING THE TRANSFORMATION

The transformation being driven by digitalization and electrification will require extensive investment. To meet the need for financing, this base initiative aims to leverage even more Group-wide synergies across all functional areas along the value chain, focusing on costs and efficiency. The initiative therefore includes multiple action areas, such as productivity increases at plants and measures to optimize cash flows in the Group.

GOALS AND KEY PERFORMANCE INDICATORS OF THE GROUP'S STRATEGY

The twelve newly defined Group initiatives describe how we intend to achieve our goals of sustainable mobility not only for today's, but also for tomorrow's generations. Our strategy will continue to be guided by four overarching target dimensions: 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.

As the new Group strategy NEW AUTO is currently being concretized and enhanced, the content of the strategic KPIs and the correspondingly adjusted targets for 2030 in the target dimensions are still being determined. As part of this, the relevance of the KPIs will be reviewed at Group level and their focus will be continuously monitored and adjusted as necessary. We report on the originally defined nonfinancial 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 boost their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, and a forward-looking approach to the 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 and 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 for 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%	8 to 9%
Research and development ratio (R&D ratio) in the Automotive Division	7.4%	~6%
Ratio of capex to sales revenue in the Automotive Division	6.9%	~5%
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%	>15%

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 are expressed in both financial and nonfinancial key performance indicators.

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 this
- The product program as the strategic, long-term factor determining corporate policy
- Capacity and utilization planning for the individual site.

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 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 activities. The current forecast serves as a 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
- Ratio of capex to 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 goal of transforming the Volkswagen Group into a world-leading, software-centric mobility provider. 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, connected, resource-efficient and thus largely emission-free vehicles that meet the diverse needs of customers. Demand for our products and mobility services 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, flexible and 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 and digitalization of our product portfolio, the expansion of our battery expertise, the development of software and new platforms and the creation of 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 equity-accounted 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 2021 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 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 Business Area with the Volume, Premium and Sport & Luxury brand groups, as well as the Commercial Vehicles and Power Engineering business areas.

The Passenger Cars Business Area in essence consolidates the Volkswagen Group's passenger car brands and the Volkswagen Commercial Vehicles brand. Activities focus on the development of vehicles, engines and vehicle software, the production and sale of passenger cars and light commercial vehicles, and the genuine parts business. The product portfolio ranges from compact cars to luxury vehicles and also includes motorcycles, and is supplemented by mobility solutions.

The Commercial Vehicles Business Area primarily comprises the development, production and sale of trucks and buses, the corresponding genuine parts business and related services. The commercial vehicles portfolio ranges from light vans to heavy trucks and buses. Navistar has supplemented the brands in this business area since July 1, 2021. The collaboration between the 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 and propulsion components businesses.

The Financial Services Division's activities comprise dealer and customer financing, vehicle leasing, direct banking and insurance activities, fleet management and mobility services.

With its brands, the Volkswagen Group is present in all relevant markets around the world. The key sales markets currently include Western Europe, China, the USA, Brazil, Russia, Mexico, Poland and Turkey.

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 among ten board-level management functions until December 31, 2021. In addition to the Chair of the Board of Management, a function which also includes the Volume brand group, the other Board functions are Purchasing, Technology, Finance, Human Resources and Truck & Bus, Integrity and Legal Affairs, Premium, Sport & Luxury, IT and China. As of December 31, 2021, the Chair of the Board of Management has also been responsible for China and the board member for Finance has also been responsible for IT. With effect from February 1, 2022, a board member is responsible for IT alone and the board-level function for China has once again been assigned to a specific member of the Board of Management as of August 1, 2022.

In December 2021, the Supervisory Board decided to increase the number of members of the Board of Management and reorganize its structure and functions in the process. A new board-level management function for Volkswagen Passenger Cars was created effective January 1, 2022. A new board-level management function was also created for Group Sales effective February 1, 2022.

The Volume brand group comprises the Volkswagen Passenger Cars, ŠKODA, SEAT/CUPRA and Volkswagen Commercial Vehicles brands. Since March 1, 2021, Bentley has been assigned to the Premium brand group, which previously comprised the Audi, Lamborghini and Ducati brands. Following the departure of Bugatti from the Group's brand portfolio in November 2021, the Sport & Luxury brand group now consists of the Porsche brand. In the Truck & Bus brand group, TRATON SE acts as the umbrella for the Scania, MAN, Volkswagen Caminhões and Navistar commercial vehicles brands.

Alongside the brand groups, Volkswagen continued to build its software subsidiary CARIAD SE in the reporting year. This company is pooling and expanding the software expertise within the Volkswagen Group and is working toward providing a standardized operating system for Group brand vehicles.

We are confident 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, while strengthening the brands and giving them more autonomy. In line with the principle of subsidiarity, decisions will be taken at the lowest competent level, close to business operations, thus improving collaboration between the brands and the Group as a whole, leveraging more 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 thereby remain unaffected.

The Volkswagen Group companies are managed solely by their respective managements. The management of each individual company takes into account not only the 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 are continually revising and optimizing 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.

Within the scope of our new Group strategy NEW AUTO, which was adopted in the fiscal year, we are using the Group Steering Model base initiative to enhance our governance model. The objective is to improve the manageability of the Group in unison with the brand groups and to make even better use of overarching areas of synergy. In addition to the further growth of CARIAD, these areas of synergy also include activities in fields such as mechatronics, battery technology and charging infrastructure, and mobility solutions.

MATERIAL CHANGES IN EQUITY INVESTMENTS

In November 2020, TRATON SE (TRATON) and Navistar International Corporation (Navistar), a leading US truck manufacturer, announced the signing of a binding merger agreement. At the end of 2020, TRATON held a 16.7% interest in Navistar. On March 2, 2021, TRATON's takeover of Navistar was approved by the shareholders of Navistar at their Annual General Meeting. In early July 2021, TRATON acquired all outstanding ordinary shares of Navistar for a purchase price of USD 3.7 billion through a TRATON GROUP company after receiving all the regulatory approvals. TRATON now holds 100% of the shares in Navistar.

The merger of MAN SE (MAN) with TRATON was adopted by resolution of the Annual General Meeting of MAN at the end of June 2021. The merger resolution also brought about the share transfer process in which the MAN shares held by noncontrolling interest shareholders were transferred to TRATON against payment of an appropriate cash settlement (merger squeeze-out). The merger of MAN with TRATON was entered in the commercial register for MAN and TRATON on August 31, 2021. The squeeze-out took legal effect upon entry in the commercial register. This was followed in early September 2021 by the disbursement of the cash settlement of €70.68 per ordinary and preferred share to the noncontrolling interest shareholders of MAN SE, thus completing the MAN SE squeeze-out. The appropriateness of the cash settlement is being reviewed by judicial award proceedings initiated by the noncontrolling interest shareholders who had received a settlement as a result of the squeeze-out.

In 2021, the Volkswagen Group and Rimac Automobili d.o.o., Sveta Nedelja/Croatia (Rimac), established Bugatti Rimac d.o.o., which has its headquarters in Sveta Nedelja. Volkswagen contributed its fully consolidated subsidiaries Bugatti Automobiles S.A.S, Molsheim/France and initially 51% of Bugatti International S.A., Strassen/ Luxembourg. Rimac holds 55% of the shares in the company, and Volkswagen holds 45% through Dr. Ing. h.c. F. Porsche AG (Porsche). In addition, Porsche holds a direct interest of 22% in Rimac. Initially, Bugatti Rimac d.o.o. will produce two hypercar models, the Bugatti Chiron and the Rimac Nevera. It is envisaged that further in the future the activities of Bugatti Rimac d.o.o. will focus on a joint product portfolio under the Bugatti brand name with the aim of developing, producing and selling electric-powered, luxury hyper sports cars.

At the end of July 2021, the Volkswagen Supervisory Board approved an agreement with investment firm Attestor Limited and with Pon Holdings B.V. for the submission via a consortium company of a joint public takeover offer for the shares of Europcar Mobility Group S.A., Paris/France. Following a successful review of the offer documents, the French regulator approved the takeover offer at the end of November 2021. The period during which the Europcar shareholders can tender their shares began at the end of November 2021. Together with its two partners, Volkswagen is offering a price of €0.50 per Europcar share through the consortium company. If more than 90% of the shares are tendered, an additional one cent per share will be paid. If the offer is accepted, the consortium – according to current information – will assume joint control of Europcar.

To expand its battery expertise, Volkswagen acquired an interest in Gotion High-Tech Co., Ltd., Hefei (China) through Volkswagen (China) Investment Co. Ltd, making it the largest shareholder of the Chinese battery supplier at 26%. The Group spent a total of €1.2 billion on this transaction. The investment is accounted for using the equity method.

LEGAL FACTORS INFLUENCING BUSINESS

Like other international companies, the business of Volkswagen companies is affected by numerous laws in Germany and abroad. In particular, there are legal requirements relating to services, development, products, production and distribution, as well as supervisory, data protection, financial, company, commercial, capital market, anti-trust and tax regulations and regulations relating to labor, banking, 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 and 315a 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, 2021. 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), which 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. When virtual Annual General Meetings are held to avoid risks during the Covid-19 pandemic, these rights are partially restricted. Shareholders can enforce their pecuniary and administrative 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, capital 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. In line with future legal requirements, the members of the Volkswagen AG Board of Management must include at least one woman and at least one man.

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, which currently runs until December 2026. 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 obtain 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 2021. 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 capital 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 positive growth in fiscal year 2021 as it recovered from the disruption caused by the Covid-19 pandemic. Global demand for vehicles was up on the previous year. Amid continued challenging market conditions, the Volkswagen Group delivered 8.9 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 China. This disease is attributable to a novel virus belonging to the coronavirus family. Infections also appeared outside China from mid-January 2020. The number of people infected rose very rapidly in the course of 2020, albeit with differences in timing and regional spread. Around the world, measures to contain the pandemic were taken and adapted at national level and with varying levels of intensity. However, these ultimately failed to bring the spread of the SARS-CoV-2 virus under control. In addition, aid packages to support the economy were agreed by the European Commission and by numerous governments in Europe and other regions, and economic stimulus measures were introduced to counter the pandemic's impact. 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.

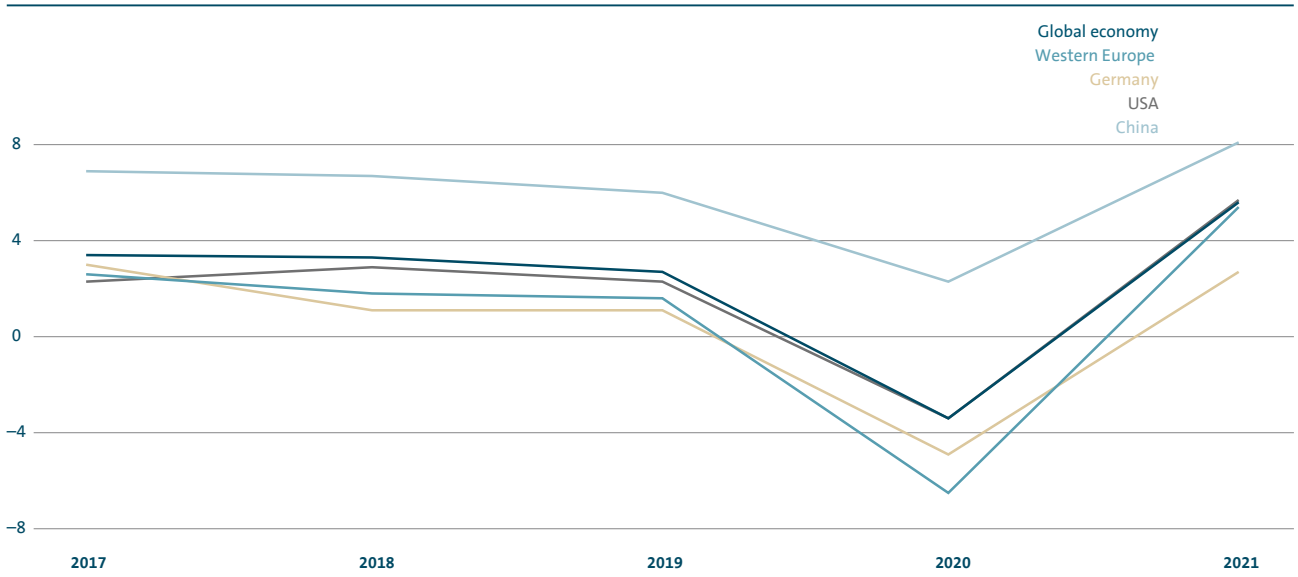
The mostly dynamic increase in the rate of infection continued in many places also throughout the first quarter of 2021. This was accompanied by ongoing disruption – such as contact and mobility restrictions or limitations on business activities – in many parts of the world. With the increased availability of testing capacities and vaccines, some countries have permitted the extensive reopening of everyday life and the economy. In China in particular, the measures taken resulted in a removal of restrictions. In most of the world, the rate of new infections initially declined in the second quarter of 2021, leading to further easing of the measures taken to contain the pandemic. From the middle of the year, however, some countries recorded a renewed increase in infection rates, which was mainly due to new variants of the SARS-CoV-2 virus. Some restrictions returned in response to the situation. Most regions of the world saw a declining rate of new infections in the third quarter of 2021. Against this backdrop, many countries largely lifted their restrictions on everyday life and the economy, depending on the progress of their vaccination campaigns. Temporary increases in case numbers – primarily associated with increased travel – only rarely resulted in the measures being tightened again. Mainly due to new variants of the SARS-CoV-2 virus, numerous countries around the world again recorded some very dynamic increases in infection rates in the course of the fourth quarter, which, depending particularly on the country's vaccination progress, resulted in renewed restrictions.

Overall in 2021, the global spread of the SARS-CoV-2 virus again brought substantial disruption to all areas of everyday life and the economy.

DEVELOPMENTS IN THE GLOBAL ECONOMY

The global economy recovered in 2021 due to the temporary relaxation of many restrictions and recorded growth of 5.6 (–3.4)%. The average rate of expansion of gross domestic product (GDP) was far above the previous year's level in both the advanced economies and the emerging markets. The progress made by many countries in administering vaccines to their populations had a positive effect, while the emergence of new variants of the virus led to renewed national rises in infections. At a national level, performance was dependent among other things on the extent to which the negative impacts of the Covid-19 pandemic were materializing and the intensity with which measures were taken to contain the spread. The governments and central

ECONOMIC GROWTH
Percentage change in GDP



banks of numerous countries continued to maintain their expansionary fiscal and monetary policy measures. Interest rates therefore remained relatively low. Prices for many energy and other commodities rose significantly on average year-on-year, amid growing shortages of intermediates and commodities. On a global average, consumer prices increased at a faster pace than in 2020, and global trade in goods grew in the reporting year.

Europe/Other Markets

The economy in Western Europe recorded significantly positive overall growth of 5.4 (–6.5)% in 2021. This trend was seen in all countries in Northern and Southern Europe. The reasons for this included the increased resilience to high infection rates experienced by the economies in many countries. At the same time, the economic recovery was hit by temporary national restrictions to contain the pandemic and the imbalances between supply and demand that partially resulted from them.

Further, uncertainty was caused in fiscal year 2021 by the United Kingdom's exit from the European Union (EU) and the new Trade and Cooperation Agreement associated with this.

In the economies of Central and Eastern Europe, real absolute GDP increased significantly by 5.6 (–2.4)% in 2021. Economic output increased by 6.4 (–2.1)% in Central Europe and 4.2 (–2.8)% in Eastern Europe. The same trend was also observed in Russia; economic output in Eastern Europe's largest economy grew by 4.3 (–2.9)%.

In Turkey, the GDP growth rate in fiscal year 2021 rose to 10.3 (1.6)% amid high inflation and a fall in the value of the local currency. South Africa saw significant GDP growth of 4.7 (–6.4)% in the reporting period, amid persistent structural deficits and political challenges.

Germany

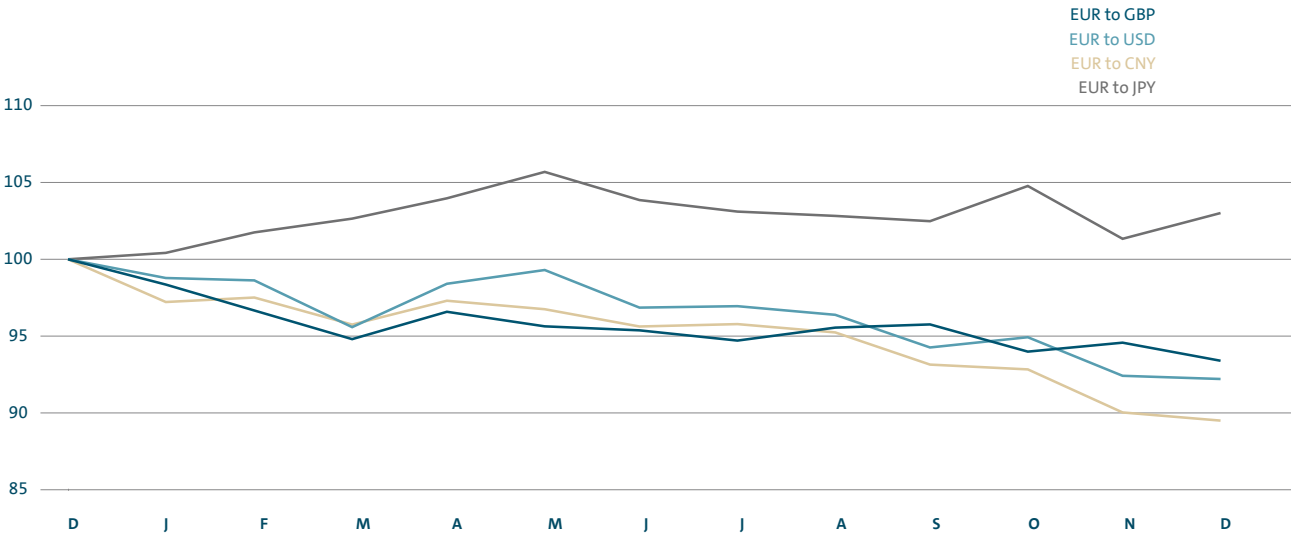
Germany's economic output recorded a positive growth rate of 2.7 (–4.9)% in the reporting year. The labor market recovered over the course of the year with a fall in the unemployment rate and the number of people on *Kurzarbeit* (short-time working). The temporary easing of restrictions on everyday life and economic activity led confidence among consumers and companies to improve. On average, it exceeded the prior-year levels. Confidence rose significantly in the industrial and service sectors.

North America

US economic output increased by 5.7 (–3.4)% in the reporting year despite soaring rates of infection at times. The US government approved a further comprehensive stimulus package in the first quarter of 2021 to strengthen the economy. The US Federal Reserve maintained its low interest rates, alongside other measures to support the economy. The weekly number of people filing new claims for unemployment benefits showed a downward trend. This was reflected accordingly in the unemployment rate, which fell

EXCHANGE RATE MOVEMENTS FROM DECEMBER 2020 TO DECEMBER 2021

Index based on month-end prices: as of December 31, 2020 = 100



significantly year-on-year in the reporting period to 5.4 (8.1)% but was still higher than the pre-crisis level seen in 2019. GDP rose by 4.6 (–5.2)% in neighboring Canada and by 5.5 (–8.4)% in Mexico.

South America

Brazil's economy posted growth of 4.4 (–4.2)% in 2021 despite high infection rates. Argentina registered a positive economic performance with year-on-year growth of 8.4 (–9.9)% amid continued high inflation and a substantial depreciation of the local currency.

Asia-Pacific

The Chinese economy, which had been exposed to the negative effects of the Covid-19 pandemic earlier than other economies and tackled isolated outbreaks in 2021 with a strict zero-Covid strategy, expanded by 8.1 (2.3)% overall. India registered strong growth of 8.1 (–7.5)% amid at times relatively high infection rates. Japan recorded positive growth of 1.9 (–4.5)% versus the prior year.

TRENDS IN THE MARKETS FOR PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES

In fiscal year 2021, the volume of the passenger car market worldwide rose moderately by 4.2% to 70.9 million units from a weak level in the prior year. However, the growth was uneven owing to the effects of the Covid-19 pandemic, which varied strongly from region to region both in 2020 and in the reporting period. The semiconductor shortage and the resulting supply bottlenecks also had a negative impact in the second half of 2021. The overall markets of the Asia-Pacific, South America, Africa and Middle East regions recorded above-average growth. Increases in Central and Eastern Europe as well as in North America were slightly below the global average, while in Western Europe, the market volume declined further, falling short of the poor prior-year figure.

In the reporting period, the global volume of new registrations for light commercial vehicles was slightly (1.5%) higher than in 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 2021. 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 slightly down on the previous year's weak level, declining by 2.0% to 10.7 million vehicles. The continuing restrictions aimed at containing the Covid-19 pandemic led to a year-on-year decline in deliveries in the first two months of 2021. From March to June, demand in each of the individual months exceeded that of the

previous year, which had been affected by the pandemic as of the last third of the first quarter and particularly in the second quarter of 2020. In the second half of 2021, the number of new passenger cars registered declined month-on-month, in some cases substantially. This was due to the market recovery that had been experienced in the previous year, and, in particular, to the semiconductor shortage which reduced vehicle availability. Nevertheless, with the exception of Spain (–0.9%), the performance of the large individual passenger car markets was positive on the whole in fiscal year 2021: France (+0.5%), United Kingdom (+1.0%) and Italy (+5.6%).

The volume of new registrations for light commercial vehicles in Western Europe was moderately higher than in the previous year, increasing by 4.4%.

In the Central and Eastern Europe region, the market volume of passenger cars in fiscal year 2021 stood at 2.9 million vehicles, a modest 2.8% more than in the previous year, which had been strained by the pandemic. Here, the development of demand in the reporting period differed from market to market. In Central Europe, the number of new registrations saw a slower rate of growth on the whole, with a rise of 1.4% to 1.1 million units. By contrast, sales of passenger cars in Eastern Europe rose at a somewhat faster pace (+3.8%) to 1.8 million units. Here, the absolute growth in demand was mainly attributable to a higher level of new registrations in Russia (+2.6%).

The market volume of light commercial vehicles in Central and Eastern Europe was significantly higher year-on-year (+12.1%). In Russia, the number of vehicles sold in the reporting period was distinctly higher than in the previous year with a 7.5% increase.

In the reporting period, the market volume of passenger cars in Turkey was distinctly lower than in the prior year, down 6.9%. In South Africa, the number of passenger cars sold in 2021 was substantially (+21.7%) higher than the very weak prior-year figure.

In the reporting period, the volume of new registrations of light commercial vehicles was moderately down (–3.9%) in Turkey compared with the prior-year figure; in South Africa, by contrast, substantial growth (+22.3%) was recorded.

Germany

New passenger car registrations in Germany in fiscal year 2021 stood at 2.6 million units, falling noticeably (–10.1%) short of the previous year's weak level and thus declining to the lowest level since German reunification. Along with the effects of the Covid-19 pandemic, this was attributable to early purchases made in 2020 due to the expiry of the temporary reduction in value-added tax and to the deterioration in the supply situation as a result of the semiconductor shortage.

Owing to a lack of semiconductor deliveries and related measures such as cutbacks in production and production shutdowns, domestic production and exports in the reporting period also fell short again of the comparable prior-year figures: passenger car production decreased by 11.9% to 3.1 million vehicles and passenger car exports fell by 10.3% to 2.4 million units.

Sales of light commercial vehicles in Germany in the reporting period were down by a slight 1.8% on the 2020 figure.

North America

At 17.7 million vehicles, sales of passenger cars and light commercial vehicles (up to 6.35 tonnes) in the North America region in fiscal year 2021 showed moderate growth of 3.9% on the prior-year figure, which had been impacted by the negative effects of the Covid-19 pandemic. However, this growth weakened during the second half of the year mainly due to supply bottlenecks for semiconductors. In this region, the market volume in the USA also rose moderately year-on-year to 15.1 million units (+3.4%), although the momentum was also weaker. Of the light commercial vehicles, the SUV models in particular benefited from this increase. The Canadian automotive market saw a distinct rise in sales in the reporting period (+6.7%). In Mexico, new registrations for passenger cars and light commercial vehicles were up 6.8%, also distinctly higher than the comparable prior-year figure.

South America

In the South America region, the volume of new registrations for passenger cars and light commercial vehicles in the 2021 reporting period was on the whole significantly higher at 3.5 million units (+12.9%) than the previous year's weak level, which had been very severely affected by the impact of the Covid-19 pandemic. At 2.0 million vehicles, the volume of new registrations in Brazil was up slightly (+1.1%) on the prior-year figure. Total exports of vehicles manufactured in Brazil increased by +16.0% to 376 thousand passenger cars and commercial vehicles. In the Argentinian market, demand for passenger cars and light commercial vehicles in the 2021 reporting period rose noticeably by 9.7% to 356 thousand units.

Asia-Pacific

In the Asia-Pacific region, the volume of the passenger car market in fiscal year 2021 rose to 32.7 million units, moderately (+5.0%) higher than the prior-year figure, which had been considerably impacted by the SARS-CoV-2 virus. Over half of the absolute rise in demand for passenger cars in the region was attributable to the favorable trend in the Chinese passenger car market, where the signs of a recovery that had begun during the second half of 2020 initially

continued, but weakened in the latter months of the reporting period owing to the semiconductor shortage. Overall, the volume of demand totaled 20.8 million units, thus moderately exceeding the prior-year figure by 4.4%. In India, passenger car sales rose substantially by 26.2% to 3.0 million units compared with the comparatively weak prior-year figure. In the Japanese passenger car market, the number of new passenger cars registered in the reporting period was moderately down on the previous year at 3.7 million units (–3.2%).

There was a slight year-on-year decrease in demand for light commercial vehicles in the Asia-Pacific region in 2021, which was down by 1.2%. Registration volumes in China, the region's dominant market and the largest market worldwide, were slightly lower, falling 2.4% short of the prior-year figure. The number of new vehicle registrations in India was significantly (–14.3%) lower than the prior-year level; in Japan this figure was moderately (–3.7%) down year-on-year.

TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

Since July 1, 2021, Navistar has been a TRATON GROUP brand, making it part of the Volkswagen Group's Commercial Vehicles Business Area. This has broadened the relevant markets in the commercial vehicles business, both for trucks and for the school bus segment, which expanded to include North America (consisting of USA, Canada and Mexico).

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 experienced pronounced growth versus the comparison period in fiscal year 2021 (+19.5%). In comparison with the previous year, which had been adversely affected by the Covid-19 pandemic, a recovery of the truck markets could be observed worldwide.

In the 27 EU states excluding Malta, but including the United Kingdom, Norway and Switzerland (EU27+3), the number of new truck registrations was significantly up on the prior-year figure, with growth of 17.1% to a total of 320 thousand vehicles. Growth could be observed in almost all truck markets in the region, albeit to differing degrees. The market recovery already evident since the second half of 2020 continued in the reporting year. Registrations in Germany, the largest market in this region, increased distinctly year-on-year (+6.2%). An increase of almost 60% was registered in Poland, while the UK recorded growth of 12.8%. There was also a distinct increase in demand in France (+6.1%). The Russian market experienced pronounced growth (+19.5%) and new registrations in Turkey increased by around 56% year-on-year, as compared with the low prior-year level. In the South African market, demand rose substantially (+20.8%). The truck market in North America is divided into weight classes 1 to 8. In the segments relevant for Volkswagen – Class 6 to 8 (8.85 tonnes or heavier) – new registrations were markedly higher (+13.0%) than the previous year's figure. In Brazil, the largest market in the South America region, demand for trucks in the reporting year was approximately 44% above the level seen in the previous year.

There was moderate growth in demand overall (+3.0%) in the bus markets that are relevant for the Volkswagen Group compared with the previous year. Demand for buses in the EU27+3 markets in the reporting year was overall in line with the weak level of the previous year (+0.1%), to differing extents in the individual countries. The bus market in North America recorded a moderate decline (–2.6%) year-on-year. Demand for buses in Brazil was slightly up on the previous year's level (+0.9%). As a consequence of the Covid-19 pandemic, demand for coaches in particular was still virtually non-existent in all of the bus markets that are relevant for the Volkswagen Group.

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.

Despite the global impact of the Covid-19 pandemic and continuing uncertainty, for instance surrounding future emissions regulations, the marine market was significantly higher in 2021 than in the previous year. In merchant shipping, performance in the market for container ships in particular remained encouraging thanks to high demand combined with bottlenecks in transport capacity. Overall, the market areas excluding merchant shipping contracted slightly in 2021 compared with the prior year. Demand in the market for cruise ships and passenger ferries remained low due to the continuing difficult liquidity situation of shipping companies as a result of the Covid-19 pandemic. The special market for government vessels, which is supported by state investment, was below the prior-year level. In the offshore sector, the existing overcapacity continued to curb investment in offshore oil production. China, South Korea and Japan remained the dominant shipbuilding countries, accounting for a global market share of around 90% measured in terms of the number of ships.

The market for power generation improved slightly in 2021 compared with the previous year. Overall, there are initial signs of market recovery; however, due to factors such as CO_2 reductions, a great deal of hesitancy remains regarding investment decisions. The trend away from oil-fired power plants toward dual-fuel and gas-fired power plants continued. Demand for new energy solutions remained high with a strong trend toward greater flexibility and decentralized availability and a particular focus on hydrogen technologies.

The strong competitive and price pressures remained unchanged due to the ongoing negative effects of the Covid-19 pandemic.

Compared with a year earlier, the turbomachinery market recovered significantly from the negative impact of the Covid-19 pandemic. Prices for raw materials continued to increase significantly, resulting in rising demand for production facilities with turbo compressors in the raw materials and processing industry. The new business fields for turbomachinery used in the area of decarbonization expanded significantly on the prior year, driven by greater investment and markedly higher prices for carbon dioxide certificates in European trading. However, demand for steam turbines used for power generation and gas turbines used for decentralized, industrial combined-heat-and-power installations declined and deteriorated slightly year-on-year due to the shift in the focus of investments by electricity producers to the field of renewable energy.

The after-sales business for diesel engines continued to be adversely affected by the Covid-19 pandemic and remained at the prior-year level. The Covid-19 pandemic and the associated cash-flow difficulties on the part of customers reduced demand for standard products, and decisions about capital-intensive modifications were delayed.

Compared with 2020, the after-sales business for turbomachinery saw an initial recovery from the negative effects of the Covid-19 pandemic, especially in the second half of the year. However, it did not yet match the pre-crisis level.

TRENDS IN THE MARKETS FOR FINANCIAL SERVICES

Demand for automotive financial services was buoyant in 2021 due, among other things, to the persistently low key interest rates in the main currency areas. Nevertheless, the Covid-19 pandemic and the limited vehicle availability due to the semiconductor shortage put pressure on the demand for financial services in almost all regions. Overall, a continuing shift from financing to leasing is being observed. Demand for mobility services in the retail and business customer segment increased. These services focus on the use rather than ownership of an automobile, for example car subscription models. There was also a moderate increase in demand for service products such as maintenance and servicing agreements or insurance, given that they allow customers to calculate total operating costs.

The European passenger car market was increasingly affected in the reporting period by the impact of the semiconductor shortage; vehicle deliveries were slightly below the prior-year period, which had been weak due to the pandemic. New contracts for financial services products in the new vehicle business reached the prior-year level in this still difficult market environment. A positive trend was recorded in the financing of used vehicles; here particularly sales of after-sales products such as servicing, maintenance and spare parts agreements were up substantially on the previous year's level.

In addition to the impact of the Covid-19 pandemic, the financial services business in Germany increasingly faced the challenges presented by the semiconductor shortage over the course of 2021. Deliveries of new vehicles declined, which in turn also resulted in decreasing vehicle availability in the used vehicle market. Nevertheless, the number of new contracts for new vehicle leases among both retail and fleet customers increased compared with the prior-year period. In contrast, the number of new financing contracts for new and used vehicles and direct business were down on the previous year. New vehicle penetration exceeded the very good prior-year figure. Apart from a few exceptions, the number of new contracts for services and insurance products was down.

Demand for financing and insurance products for new and used vehicles in South Africa persisted at the previous year's level, continuing to be bolstered by campaigns, vehicle price inflation and persistently low interest rates. Financed vehicle purchases, however, remained difficult overall in light of the subdued economy and continuing pressure on disposable income.

In the North America region, the semiconductor shortage increasingly weighed on vehicle deliveries, although they exceeded the prior-year level. In the United States and Mexico, both the proportion of lease and financing contracts in percentage terms and the absolute number of contracts were down on the prior-year figures. In Canada, the proportion of lease and financing contracts in percentage terms was down on the prior-year figures; however, the absolute number of contracts increased. Demand for automotive-related after-sales products was up on the previous year throughout the entire region.

In the South America region, excess demand for new vehicles and a sharp rise in interest rates in Brazil led to a growing number of cash sales. As a result, the number of financing contracts decreased year-on-year. Demand for long-term leases rose, also among private customers. Sales in Argentina increased through car savings plans.

In the Chinese market, both the share of loan-financed vehicle purchases and growth in new contracts tapered off in 2021 owing to the persistent semiconductor shortage and the related drop in passenger car sales. As a result, the comparative prior-year figures were not reached in the reporting period.

The commercial vehicle market, which was heavily affected by the Covid-19 pandemic in the previous year,

recorded a recovery compared to the prior year, particularly due to growth in the heavy commercial vehicles category. This positive trend was also seen in financing and lease contracts for heavy commercial vehicles in Europe and Brazil.

NEW GROUP MODELS IN 2021

The Volkswagen Group offers a broad portfolio of products covering almost all key segments and body types so that its customers can choose the right vehicle for their needs. In fiscal year 2021, we added further attractive vehicles, not only systematically expanding our portfolio of all-electric and hybrid vehicles, but also bringing compelling new products with conventional combustion engines onto the market.

In the compact segment, the Volkswagen Passenger Cars brand upgraded the Polo in 2021. It also launched the Taigo, Volkswagen's new sporty crossover, which is expected to appeal to new target groups with its emotional design and innovative technology. Once the updated version of the best-selling Tiguan was available, the Tiguan Allspace was also upgraded. In the high-end segments, the brand made two sporty statements with its launch of the Arteon R and the Arteon Shooting Brake R. In China, a large number of new models were brought out in 2021, including the all-electric ID.4 X, ID.4 CROZZ, ID.6 X and ID.6 CROZZ. The Passat, Teramont, Teramont X and Tiguan L were among the established vehicles with a conventional powertrain that received an update. The brand new Talagon and the CC Shooting Brake rounded off the portfolio of new models. In the United States, the Taos extended the lower end of the SUV portfolio, and the first all-electric SUV was brought out in the shape of the ID.4. The successful Jetta and Tiguan models received product upgrades. Volkswagen is catering to the desires of sporty drivers with the new Golf GTI and Golf R. In other key regions, too, models that meet regional requirements were introduced to the market, highlights in the reporting period being the Taigun in India and the Taos in Russia.

The Audi brand expanded its portfolio of all-electric cars in 2021 with the addition of the Q4 e-tron and the Q4 Sportback e-tron. At the upper end of the scale, Audi made a clear commitment to athleticism with the e-tron GT and the RS e-tron GT. In the conventional powertrain line-up, the RS3 received an update. The range of vehicles with plug-in hybrid drives was expanded by models including the Q3, the Q5 and the Q8. In China, Audi brought out the Q5L Sportback.

The era of state-of-the-art electric mobility based on the MEB dawned at ŠKODA in 2021 with the rollout of the Enyaq iV. The next generation of the popular Fabia model range was launched, and the top-selling Kodiaq was updated to make it fit for the digital future. In India, ŠKODA kicked off a market drive with the next generation of the Octavia and the new Kushaq.

The SEAT brand expanded the drive portfolio for its product lines in 2021: the successful Leon is now also available with a CNG drive, and the Tarraco will come with the option of a cutting-edge plug-in hybrid drive in future. The successful Ibiza and Arona models received product upgrades. CUPRA provided for further highlights with the launch of the powerful Formentor on the one hand, and on the other the Leon series, which is now available once again as the dynamic top-of-the-range model CUPRA Leon. Production of the sporty, all-electric CUPRA Born started in 2021.

Porsche expanded its Taycan range in 2021, adding the versatile Cross Turismo. The line of classic sports cars was expanded at the upper end of the scale with the addition of the 911 GT3, and the new generation of the 911 is now also available as a GTS version. In the SUV ranges, the Macan received an upgrade, and a new top-of-the-range model is available in the form of the Cayenne Turbo GT.

Bentley expanded the Bentayga range in the reporting period by adding a model with a plug-in hybrid drive plus the sporty derivative Bentayga S. The Continental GT is now available both as a coupé and as a convertible and is rounded off at the upper end of the scale by the top-of-the range model Speed.

Lamborghini brought racetrack technology to the road in 2021 with the Huracan STO.

Last year, Bugatti complemented its Chiron super sports car with two derivatives that further enhance the driving experience: the sporty Pur Sport and the Super Sport designed for top maximum speeds.

In 2021, Volkswagen Commercial Vehicles launched the T7, the new generation of its best-seller from Hanover and included for the first time ever an innovative plug-in hybrid option.

Scania introduced a new powertrain in 2021 that moves the company towards sustainability. It offers fuel savings over the predecessor model and will also be introduced gradually in the other brands of the TRATON GROUP.

MAN unveiled the MAN TGX Individual Lion S, the exclusive top-of-the-range model in the new MAN truck generation, which is available in the highest possible power ratings of 510 to 640 PS.

Navistar introduced new products in the field of electric mobility in 2021, including a mid-sized truck and a school bus.

The motorcycles unveiled by Ducati in 2021 include the new Multistrada V4 and additional variants in the XDiavel family. The Ducati Supersport 950 was launched as a new model in the sports family, while the Ducati Diavel 1260 Lamborghini enhanced the product portfolio.

VOLKSWAGEN GROUP DELIVERIES

The Volkswagen Group delivered 8,881,957 vehicles to customers worldwide in fiscal year 2021. This was 4.5% or

423,034 units less than in the previous year. While sales figures for the Passenger Cars Business Area fell short of the prior-year figure, commercial vehicle deliveries to customers rose year-on-year. The chart in this section shows the trend in deliveries worldwide for the individual months compared with the previous year. In the following, we report separately on deliveries in the Passenger Cars Business Area and the Commercial Vehicles Business Area.

VOLKSWAGEN GROUP DELIVERIES[1]

	2021	2020	%
Passenger Cars	8,610,747	9,114,804	−5.5
Commercial Vehicles	271,210	190,187	+42.6
Total	**8,881,957**	**9,304,991**	**−4.5**

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, Mexico, Turkey and Poland.

Sales of Volkswagen Group passenger cars and light commercial vehicles worldwide declined by 5.5% in fiscal year 2021 to 8,610,747 units. Market conditions that resulted from the uncertainty and the measures taken around the world in connection with the Covid-19 pandemic have had a material impact on the prior-year figure. With regard to the trend in our deliveries to customers, there were some appreciable differences across individual countries and regions in the reporting year, depending on the latest infection rates, the related restrictions and the scale of disruption caused by the pandemic in the prior-year period. Furthermore, supply bottlenecks for semiconductors and the resulting limited availability of Group models meant that demand could not be adequately met in some regions, particularly from the third quarter of 2021 onwards. While the number of vehicles delivered to customers in the individual months of the first half of 2021 only failed to exceed the prior-year figure in January, the number of vehicles delivered to customers in the second half of the year was below the comparative figure for the previous year in every month. Nevertheless, SEAT, Bentley, Lamborghini and Porsche all surpassed their prior-year figures. In the North America, South America, Middle East and Africa regions, we registered higher sales figures than in the previous year.

The Group's sales figures continued to respond positively to its e-mobility campaign. In the fiscal year now ended, we delivered 452,944 all-electric vehicles to customers worldwide, 221,317 units or 95.5% more than in the previous year and accounting for 5.1 (2.5)% of the Group's total deliveries. Our plug-in hybrid models also remained very popular with our customers, with 309,462 units being sold (previous year: 191,970). As a result, electric vehicle deliveries climbed by 80.0%, with their share of total Group deliveries rising to 8.6 (4.6)%. The Group's most successful all-electric vehicles included the ID.4, ID.3 and e-up! from the Volkswagen Passenger Cars brand, the Audi e-tron and Audi Q4 e-tron, the ŠKODA Enyaq iV, the SEAT Mii electric and the Porsche Taycan. The most popular plug-in hybrid models included the Golf, Passat Estate and Tiguan from Volkswagen Passenger Cars, the Audi A3 Sportback and Audi Q5, the ŠKODA Octavia Combi and ŠKODA Superb Combi, the SEAT Leon Sportstourer, the CUPRA Formentor and the Porsche Cayenne.

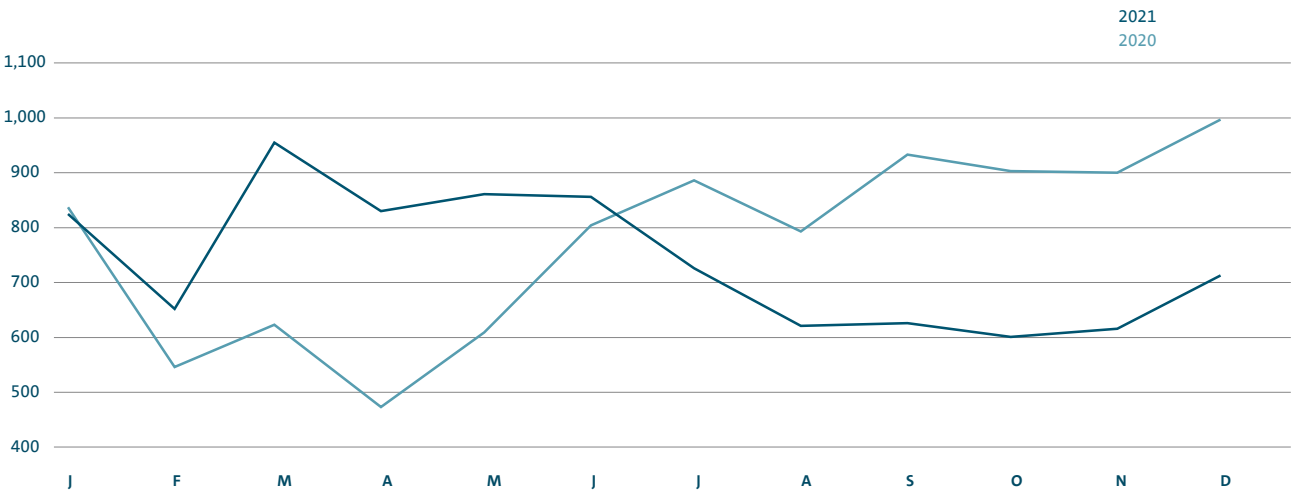
In an overall global market exhibiting moderate growth, we achieved a passenger car market share of 11.7 (12.9)%.

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 sales figures for Group models in these markets and regions are explained in the following sections.

Deliveries in Europe/Other Markets

In Western Europe, the Volkswagen Group delivered 2,761,568 vehicles to customers in 2021 in an overall market experiencing a slight contraction. This was 3.1% fewer than in the previous year, which had been strained by the pandemic. While the course of the Covid-19 pandemic and the restrictions introduced to contain it weighed on demand for Group models in the first quarter of 2021, there was an acceleration in demand, particularly at the beginning of the second quarter, as compared with the same quarter of the previous year, which had been affected most by the pandemic. This meant that the sales volume at the end of the first half of the year was higher than the comparable figure for 2020. From the third quarter of 2021 onwards, supply bottlenecks for semiconductors and the resulting limited availability of Group models increasingly meant that demand could not be adequately met. Consequently, the number of sales to customers fell again by the end of the year to below the prior-year figure. Customer interest in the Volkswagen Group's electric vehicles was strongest in Western Europe, where we delivered around three-quarters of our plug-in hybrids and nearly two-thirds of our all-electric models to customers in 2021.

VOLKSWAGEN GROUP DELIVERIES BY MONTH
Vehicles in thousands



Electric vehicles accounted for approximately 18.6% of the Group's total deliveries in Western Europe. The Group models with the highest sales volume were the T-Roc, Golf, Polo and Tiguan from the Volkswagen Passenger Cars brand. In addition, the following new or successor models introduced to the market in the previous year proved very popular with customers: the T-Roc Cabriolet, Arteon Shooting Brake, ID.3 and ID.4 from the Volkswagen Passenger Cars brand, the A3 saloon, A3 Sportback and e-tron Sportback from Audi, the ŠKODA Octavia saloon and the CUPRA Formentor. In the reporting period, the Polo, Taigo and Tiguan Allspace models from Volkswagen Passenger Cars, the Fabia and Kodiaq from ŠKODA, the Arona and Ibiza from SEAT and the Porsche Macan, as well as the all-electric e-tron GT, Q4 e-tron and Q4 Sportback e-tron from Audi, Enyaq iV from ŠKODA, CUPRA Born and Porsche Taycan Cross Turismo were among the vehicles successfully launched on the market as new or successor models. The new Multivan from Volkswagen Commercial Vehicles also celebrated its market debut. The Volkswagen Group's share of the passenger car market in Western Europe amounted to 23.5 (23.7)%.

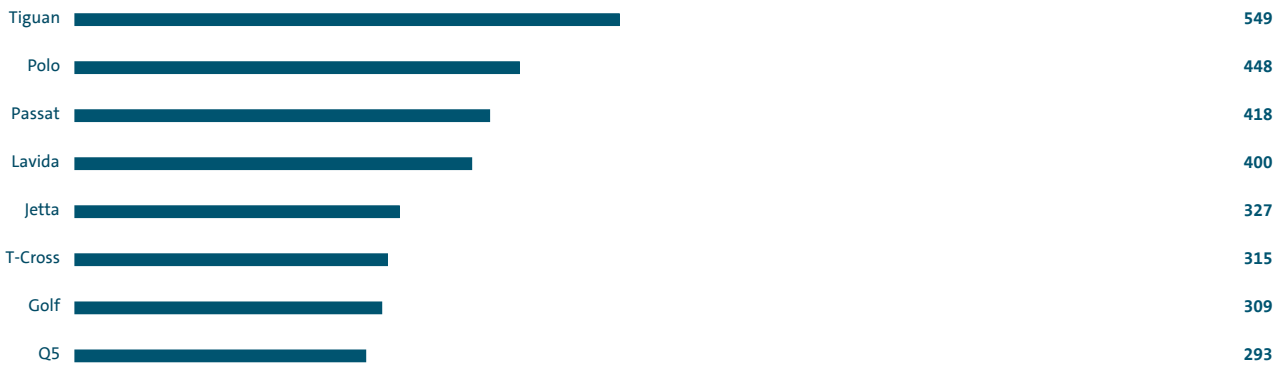
In the Central and Eastern Europe region, the number of vehicles handed over to customers in 2021 was down 4.3% year-on-year. At the same time, the overall market recorded slightly higher volumes. Demand developed encouragingly for the T-Cross and T-Roc models from Volkswagen Passenger Cars, for the ŠKODA Rapid, Kamiq and Karoq and for the SEAT Arona. The Taos was one of the new models successfully launched by Volkswagen Passenger Cars. The Volkswagen Group's share of the passenger car market in the Central and Eastern Europe region amounted to 20.5 (22.0)%.

In Turkey, the Volkswagen Group delivered 0.6% more vehicles to customers than in 2020 despite the distinct overall market downtrend in the previous fiscal year. The Passat saloon was the most sought-after Group model. In the South African market, the number of Group models sold increased by 12.6%, a somewhat slower rise than that registered in the overall market. The Polo from the Volkswagen Passenger Cars brand remained the most sought-after Group model in this region.

Deliveries in Germany

In Germany, the number of Volkswagen Group vehicles handed over to customers in 2021 was down 10.0% on the pandemic-related weak prior year in an overall market that saw a noticeable decline. After the impact of the Covid-19 pandemic and early purchases made in the fourth quarter of 2020 in anticipation of the expiry of the temporary reduction in value-added tax (VAT) weighted on the volume of deliveries in the first quarter, demand recovered during the second quarter. Consequently, the volume of vehicles sold at the end of the first half of the year was higher than the comparative figure for 2020. The limited vehicle availability resulting from bottlenecks in the supply of semiconductors had an increasing impact on the Group's deliveries from the third quarter of 2021, and the number of vehicles handed over to customers therefore fell short of the prior-year figure again by the end of the year. The Group models with the highest

WORLDWIDE DELIVERIES OF THE MOST SUCCESSFUL GROUP MODEL RANGES IN 2021
Vehicles in thousands



sales volume were the Golf and Passat Estate from the Volkswagen Passenger Cars brand. In addition, the T-Roc Cabriolet and Arteon Shooting Brake together with the ID.3 and ID.4 from Volkswagen Passenger Cars, the Audi e-tron Sportback and the CUPRA Formentor, which had all been introduced as new or successor models the previous year, were very popular with customers. Eight Group models led the *Kraftfahrt-Bundesamt* (KBA – German Federal Motor Transport Authority) registration statistics in their respective segments: the up!, Golf, T-Roc, Tiguan, Passat, Audi A6, Porsche 911 and Multivan/Transporter. The Golf was again the most popular passenger car in Germany in terms of registrations in 2021.

Deliveries in North America

In North America, the number of Volkswagen Group vehicles delivered to customers in the reporting period climbed by 11.8% compared with the previous year, which had been weakened by the pandemic, and thus outperformed the overall market. The Group's share of the market in this region amounted to 4.9 (4.6)%. The Tiguan Allspace and Jetta from Volkswagen Passenger Cars were the most sought-after Group models in North America.

In the US market, which is witnessing moderate growth, the Volkswagen Group delivered 12.6% more vehicles to customers in fiscal year 2021 than in the previous year. The volume of all-electric vehicles delivered in the United States tripled year-on-year to 37,179 units. Here, too, bottlenecks in the supply of semiconductors had a negative impact on the Group's sales figures from the third quarter onwards. The Group models to record the greatest increases in absolute terms were the Tiguan Allspace, Atlas and Atlas Cross Sport from Volkswagen Passenger Cars, the Q3, Q5 and e-tron from the Audi brand and the Macan and Taycan from Porsche. The Taos and the Tiguan Allspace from Volkswagen Passenger Cars, the Audi A3 saloon and Audi Q5 Sportback and the Porsche Panamera, as well as the all-electric ID.4 from Volkswagen Passenger Cars, e-tron GT and Q4 e-tron from Audi and the Porsche Taycan Cross Turismo were successfully launched on the market during the reporting period as new or successor models.

In Canada, the number of vehicles delivered to Volkswagen Group customers rose in the reporting period by 18.3% compared with 2020. The overall market recorded a smaller increase during this period. The Tiguan Allspace and Atlas Cross Sport from Volkswagen Passenger Cars, the Audi Q3 and the Porsche Macan were some of the models to register encouraging volume growth.

In Mexico, where the market as a whole is seeing distinct growth, we sold 3.4% more vehicles to customers in the past fiscal year than in the year before. The Group models with the highest volume of demand were the Vento and the new Taos from the Volkswagen Passenger Cars brand, and the SEAT Ibiza.

Deliveries in South America

In the South American market for passenger cars and light commercial vehicles, which is seeing significant growth, the number of Group models handed over to customers in 2021 was down 0.8% on the prior-year figure. The Gol, T-Cross and the Nivus from Volkswagen Passenger Cars were the Group models with the highest demand. The new Taos from Volkswagen Passenger Cars was successfully launched on the market. The Group's share of the market in South America amounted to 12.4 (14.1)%.

In the Brazilian market, which is seeing slight growth, the Volkswagen Group delivered 7.5% fewer vehicles to customers in the reporting period than in the previous year. Together with the Gol and the T-Cross, the Nivus from Volkswagen Passenger Cars was in especially high demand.

In Argentina, the number of Volkswagen Group vehicles handed over to customers in 2021 decreased by 2.4% year-on-year in an overall market exhibiting noticeable growth. The Group models with the highest volume of sales were the Gol, the Nivus and T-Cross from Volkswagen Passenger Cars and the Amarok from Volkswagen Commercial Vehicles.

Deliveries in the Asia-Pacific region

In the past fiscal year, the Volkswagen Group saw deliveries to customers in the Asia-Pacific region drop by 12.5% compared with 2020 in a market that is experiencing moderate growth overall. Bottlenecks in the supply of semiconductors were most prevalent in this region and had an increased impact from the third quarter of 2021 onwards. The Group's share of the passenger car market in this region amounted to 10.9 (13.1)%.

In China, the recovery of the market as a whole continued at a slower pace in 2021. The Volkswagen Group delivered 14.1% fewer vehicles to customers there than in the preceding year. By contrast, the number of all-electric vehicles delivered to customers in China more than quadrupled year-on-year to 92,681 units. Particularly high demand was recorded for the new or successor models introduced in the course of 2020, these being the Tacqua, Tiguan X, Tayron X and Viloran from Volkswagen Passenger Cars, the VS7 from the JETTA brand, the Audi A5 Sportback, Audi Q7 and Audi e-tron, and the Porsche Taycan. Demand also developed encouragingly for models such as the Q3 and Q3 Sportback from Audi and the Porsche Macan. The Tiguan L, Passat, Talagon, CC Shooting Brake, Teramont and Teramont X models from Volkswagen Passenger Cars, the Audi A3L saloon and Audi Q5L Sportback, and the Porsche Panamera, as well as the all-electric ID.3, ID.4 X, ID.4 CROZZ, ID.6 X and ID.6 CROZZ from Volkswagen Passenger Cars were successfully launched on the market during the reporting period as new or successor models.

In the Indian passenger car market, which is recording substantial growth, the Volkswagen Group registered a surge in demand of over 80% in fiscal year 2021 compared with the weak previous year. The Polo and the new Taigun from the Volkswagen Passenger Cars brand together with the new Kushaq and the Rapid from ŠKODA were the most sought-after Group models there.

In Japan, the number of Group vehicles delivered to customers in 2021 was down 2.1% year-on-year in an overall market experiencing a moderate decline. The Group models to recorded the highest demand were the T-Cross and T-Roc from Volkswagen Passenger Cars.

PASSENGER CAR DELIVERIES TO CUSTOMERS BY MARKET[1]

	DELIVERIES (UNITS)		CHANGE
	2021	2020	(%)
Europe/Other Markets	**3,698,882**	**3,779,397**	**−2.1**
Western Europe	**2,761,568**	**2,848,474**	**−3.1**
of which: Germany	959,748	1,065,811	−10.0
France	238,366	222,520	+7.1
United Kingdom	422,594	409,016	+3.3
Italy	248,414	239,167	+3.9
Spain	220,148	213,700	+3.0
Central and Eastern Europe	**624,815**	**652,819**	**−4.3**
of which: Czech Republic	114,250	112,586	+1.5
Russia	204,772	221,811	−7.7
Poland	120,831	126,883	−4.8
Other Markets	**312,499**	**278,104**	**+12.4**
of which: Turkey	121,885	121,129	+0.6
South Africa	72,847	64,693	+12.6
North America	**876,558**	**784,299**	**+11.8**
of which: USA	647,521	574,822	+12.6
Canada	98,829	83,531	+18.3
Mexico	130,208	125,946	+3.4
South America	**436,852**	**440,326**	**−0.8**
of which: Brazil	311,519	336,773	−7.5
Argentina	56,186	57,555	−2.4
Asia-Pacific	**3,598,455**	**4,110,782**	**−12.5**
of which: China	3,301,444	3,844,679	−14.1
India	52,481	28,423	+84.6
Japan	65,549	66,935	−2.1
Worldwide	**8,610,747**	**9,114,804**	**−5.5**
Volkswagen Passenger Cars	4,896,914	5,328,090	−8.1
ŠKODA	878,202	1,004,816	−12.6
SEAT	470,531	426,641	+10.3
Volkswagen Commercial Vehicles	359,546	371,609	−3.2
Audi	1,680,512	1,692,773	−0.7
Lamborghini	8,405	7,430	+13.1
Bentley	14,659	11,206	+30.8
Porsche	301,915	272,162	+10.9
Bugatti[2]	63	77	−18.2

1 Prior-year deliveries have been updated to reflect subsequent statistical trends. The figures include the Chinese joint ventures.
2 Until October 31, 2021.

COMMERCIAL VEHICLE DELIVERIES

In fiscal year 2021, the Volkswagen Group delivered +42.6% more commercial vehicles to customers worldwide than in the same period of the previous year, when demand was affected by a slump in core markets, which had been further intensified by the uncertainty generated by the Covid-19 pandemic. We delivered a total of 271,210 commercial vehicles to customers. Trucks accounted for 230,151 units (+47.2%) and buses for 18,857 units (+16.6%). A total of 22,202 (+25.9%) vehicles from the MAN TGE van series were delivered. From July 1, 2021, the figures also include Navistar's sales (29,876).

In the 27 EU states excluding Malta, but plus the United Kingdom, Norway and Switzerland (EU27+3), sales in the reporting period were up by 13.2% on the previous year to a total of 119,029 units, of which 92,038 were trucks and 5,451 were buses. Here, the MAN brand delivered 21,540 vehicles from the MAN TGE van series.

In Russia, sales rose year-on-year to 11,293 (8,486) units, comprising 11,232 trucks and 61 buses.

In fiscal year 2021, deliveries in Turkey increased to 4,398 (2,681) vehicles. Trucks accounted for 4,204 units and buses for 28 units, while 166 vehicles from the MAN TGE van series were sold. In South Africa, deliveries of Volkswagen Group commercial vehicles increased by 26.7% year-on-year to a total of 3,942 units; of this figure 3,610 were trucks and 332 were buses.

Sales in North America rose in the reporting year to 31,869 vehicles (1,502); this included 25,815 trucks and 6,054 buses. From July 1, 2021, the figures also include Navistar's sales (29,003) whose vehicles were above all handed over to customers in the United States.

Deliveries in South America increased to a total of 77,774 vehicles (+57.5%) in 2021, of which 72,955 were trucks and 4,812 were buses. Sales in Brazil were up by 59.1%. Of the units delivered, 61,571 were trucks and 3,434 were buses. From July 1, 2021, the figures also include Navistar's sales (873).

In the Asia-Pacific region, the Volkswagen Group sold 12,140 vehicles in the reporting year; among these, 11,262 were trucks and 860 were buses. Overall, this was 6.3% more than in the previous year.

COMMERCIAL VEHICLE DELIVERIES TO CUSTOMERS BY MARKET[1]

	DELIVERIES (UNITS)		CHANGE
	2021	2020	(%)
Europe/Other Markets	**149,427**	**127,893**	**+16.8**
of which: EU27+3	119,029	105,131	+13.2
of which: Germany	32,130	31,859	+0.9
Russia	11,293	8,486	+33.1
Turkey	4,398	2,681	+64.0
South Africa	3,942	3,111	+26.7
North America	**31,869**	**1,502**	**x**
of which: USA	24,239	–	x
Mexico	5,375	1,498	x
South America	**77,774**	**49,372**	**+57.5**
of which: Brazil	65,005	40,855	+59.1
Asia-Pacific	**12,140**	**11,420**	**+6.3**
Worldwide	**271,210**	**190,187**	**+42.6**
Scania	90,366	72,085	+25.4
MAN	150,968	118,102	+27.8
Navistar	29,876	–	x

1 Prior-year deliveries have been updated to reflect subsequent statistical trends. From July 1, 2021, the figures include Navistar.

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 period, orders received in Western Europe increased by 17.7% compared with the previous year, which had been weakened by the pandemic. All key markets exceeded the respective prior-year level. The growth rates differed in strength from country to country: while Germany saw single-digit growth, the United Kingdom, France, Italy and Spain were up by more than 20%.

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 rose by 66.5% year-on-year to 359,975 vehicles in 2021. The Navistar brand, included from July 1, 2021, contributed to this increase. The increase was seen in both the truck and bus markets and in the MAN TGE van series segment. The visible recovery in the markets since the second half of 2020 also continued in the first half of 2021. The second half of 2021 saw a decline, mainly resulting from falling truck orders in Europe.

Order intake in the bus business recorded a very sharp increase year-on-year. This was due to the inclusion of Navistar from July 1, 2021. With Navistar's school buses, the Volkswagen Group is now represented in North America.

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 2021 amounted to €3.8 (3.4) 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 60 dual fuel engines were placed in 2021 in a project for ten ice-breaking LNG tankers. In the power plant business, orders were won for 66 engines and component sets for 28 completely knocked down engines of different types with an aggregate output of 840 MW. For turbomachinery, we received several orders for new applications which were driven by the energy transition and decarbonization such as carbon capture and storage in Europe and an energy storage facility in England.

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 and also includes the contracts concluded by our international joint ventures. Since July 1, 2021, it has also included the financial services business of Navistar.

The Financial Services Division's products and services were popular in fiscal year 2021, although demand was impaired by the Covid-19 pandemic and the limited vehicle availability due to the semiconductor shortage. At 8.6 (8.6) million, the number of new financing, leasing, service and insurance contracts worldwide was on the previous year's level. The ratio of leased and financed vehicles to Group deliveries (penetration rate) in the Financial Services Division's markets rose to 36.1 (35.5)%. As of December 31, 2021, the total number of contracts was 24.5 million, up 1.7% from the end of 2020. The number of contracts in the customer financing/leasing area fell by 3.2% to 11.6 million, while it increased by 6.4% to 12.9 million in the service/insurance area.

In the Europe/Other Markets region, the financial services business was still impacted by the Covid-19 pandemic in the reporting year. The semiconductor shortage also had a detrimental effect. At 6.3 (6.3) million, the number of new contracts signed in 2021 reached the previous year's level. The penetration rate decreased to 48.8 (50.1)%. At 18.0 million, the total number of contracts at the end of the reporting year exceeded the 2020 figure of 17.6 million. The customer financing/leasing area accounted for 7.4 million of these contracts (–2.8%), while 10.5 million (+5.2%) related to the service/insurance area.

In North America, the number of new contracts signed increased year-on-year by 5.0% to 983 thousand. The ratio of leased or financed vehicles to Group deliveries in North America fell to 59.9 (67.0)% as deliveries grew at a higher rate than new contracts. The number of contracts in North America on December 31, 2021 was 3.2 (3.1) million. The increase resulted from the number of contracts acquired from Navistar. The customer financing/leasing area

accounted for 1.9 million contracts (–2.4%) and 1.4 million contracts (+12.4%) related to the service/ insurance area.

In the South America region, the number of new contracts signed increased to 332 (318) thousand in the reporting year. The penetration rate rose to 34.5 (32.7)%. At 723 (721) thousand as of December 31, 2021, the total number of contracts was higher than the year before. The contracts mainly related to the customer financing/leasing area.

The number of new contracts signed in the Asia-Pacific region in the past fiscal year fell by 5.7% to 1.0 million units. The ratio of leased or financed vehicles to Group deliveries was unchanged at 17.7 (17.7)%. At 2.6 (2.6) million, the total number of contracts at the end of the reporting year reached the previous year's level. The number of contracts in the customer financing/leasing area fell by 5.5% to 1.8 million, while it increased by 13.5% to 0.8 million in the service/ insurance area.

SALES TO THE DEALER ORGANIZATION

The Volkswagen Group's unit sales to the dealer organization decreased by 6.3% to 8,575,590 units (including the Chinese joint ventures) in the reporting year. Navistar has been included in these figures since July 1, 2021. During the reporting period, demand in markets around the world recovered from the declines in sales in the prior-year period precipitated by the Covid-19 pandemic. However, the limited vehicle availability due to the semiconductor shortage had a detrimental impact. Overall, the unit sales volume fell by 5.5% outside Germany – especially in China – and unit sales decreased by 12.2% in Germany. Growth was recorded in the USA and Canada, India and the United Kingdom, in particular. At 11.3 (12.1)%, the proportion of the Group's total unit sales attributable to Germany was lower than in 2020.

The Tiguan, Polo, Passat, Jetta, T-Cross, Golf and T-Roc from the Volkswagen Passenger Cars brand were our biggest sellers last year. The largest increases in unit sales were recorded for the ID.4, Tharu and Taigo models from the Volkswagen Passenger Cars brand, the Q3 Sportback, Q5 and Q4 e-tron from Audi, the CUPRA Formentor and the ŠKODA Enyaq. The Porsche Taycan and Bentley Bentayga also achieved a strong growth rate.

PRODUCTION

In the reporting period the Volkswagen Group produced 8,282,954 vehicles (including the Chinese joint ventures), 6.9% less than in the same period of the previous year. The prior year had been marked by the impact of national measures to contain the pandemic, which had led to the disruption of supply chains with production subsequently being halted in the Volkswagen Group. In fiscal year 2021 as well, supply shortages, especially for semiconductors, resulted in production cutbacks so that the total annual production volumes dropped even further. Navistar has been included in the Group figures since July 1, 2021. In Germany, production contracted by 9.2% to a total of 1,483,281 vehicles. The percentage of the Group's total production accounted for by Germany fell to 17.9 (18.4)%.

INVENTORIES

Global inventories of new vehicles at Group companies and in the dealer organization were much lower at the end of the reporting period than at year-end 2020.

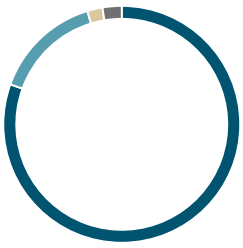
EMPLOYEES

Including the Chinese joint ventures, the Volkswagen Group employed an average of 667,647 people in fiscal year 2021, an increase of 0.3% year-on-year. In Germany, we employed 294,479 people on average; at 44.1 (44.4)%, their share of the total headcount was slightly below the level of the previous year.

The number of active employees in the Volkswagen Group rose by 1.6% to 643,297 as of December 31, 2021. In addition, 12,341 employees were in the passive phase of their partial retirement and 17,151 young people were in vocational traineeships. At the end of the reporting year, the Volkswagen Group's total workforce grew to a total of 672,789 employees worldwide. This represents a year-on-year increase of 1.5%, mainly due to the inclusion of the Navistar workforce. A total of 295,065 people were employed in Germany (+0.2%) and 377,724 outside Germany (+2.6%).

EMPLOYEES BY DIVISION/BUSINESS AREA

as of December 31, 2021



Passenger Cars	541,522
Commercial Vehicles	99,626
Power Engineering	14,062
Financial Services	17,579

Shares and Bonds

During the reporting period trading in Volkswagen AG's ordinary and preferred shares continued to recover from the sharp fall in share prices in 2020. The price of our ordinary shares, in particular, was higher at the end of 2021 than before the pandemic.

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

The recovery on the international stock markets, which began over the course of 2020, after the sharp falls in share prices triggered by the Covid-19 pandemic, continued to be strong for the most part of fiscal year 2021. Optimism was widespread, despite fears of setbacks in tackling the pandemic and of the resulting prolongation of restrictions to public life and the corresponding impact on economic growth.

The DAX recorded an increase of 15.8% compared with the end of 2020. Germany's benchmark index remained largely unperturbed by the continuing spread of the SARS-CoV-2 virus, although the dynamic pace of increase in the second quarter transitioned into sideways movement and then started a year-end rally, which was, however, overshadowed by renewed increases in infection rates. The main drivers of this positive development were the progress made in the vaccination campaigns and the continued economic stimulus by central banks and governments all around the world, as well as an emerging recovery in the global economy. Support also came from gains in automotive stocks. In contrast, the concerns of market participants regarding rising inflation had a negative impact, as did lack of parts availability due to supply bottlenecks.

Volkswagen AG's preferred and ordinary shares recovered from the loss in value caused by the pandemic. Their prices were up by 16% and 52% respectively compared to the end of 2020. As a result, their value was higher than before the Covid-19 pandemic, with the ordinary shares performing especially positively. The encouraging performance of Volkswagen shares was based firstly on the good business performance in the reporting year, especially in the first six months. Secondly, the new Group strategy NEW AUTO, including the Group's plans to accelerate the expansion of e-mobility and the associated battery technology, was well received by investors. The continued strained situation relating to the supply of semiconductors had a negative impact.

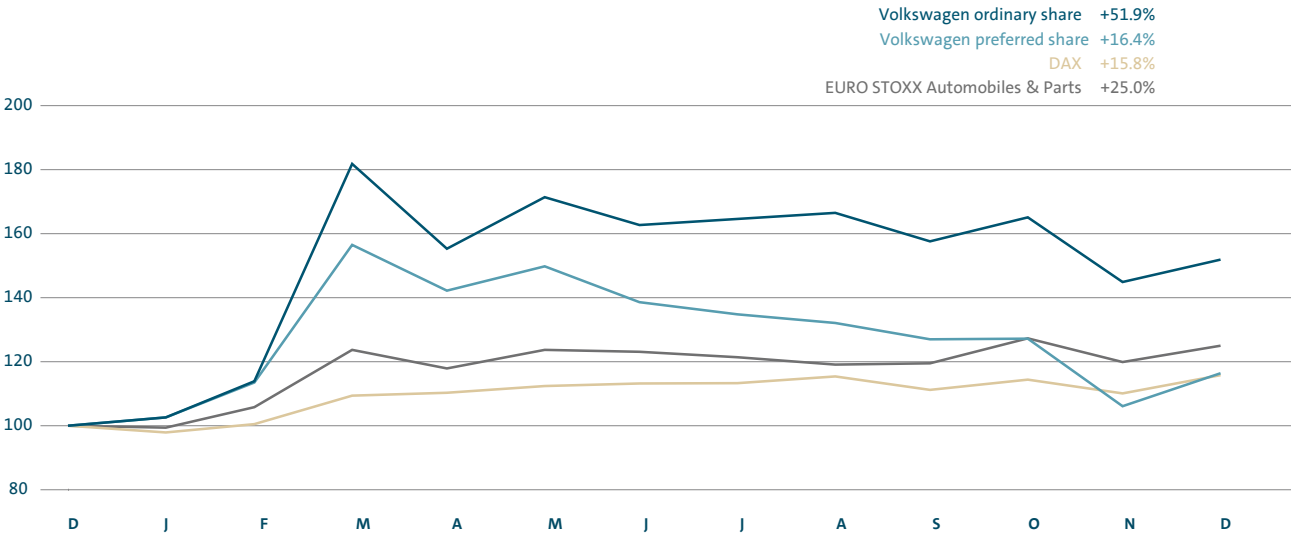
VOLKSWAGEN SHARE KEY FIGURES AND MARKET INDICES FROM JANUARY 1 TO DECEMBER 31, 2021

		High	Low	Closing
Ordinary share	Price (€)	327.20	165.70	258.40
	Date	Mar. 18	Jan. 12	Dec. 30
Preferred share	Price (€)	246.55	144.80	177.48
	Date	Apr. 6	Jan. 13	Dec. 30
DAX[1]	Price	16,251	13,433	15,885
	Date	Nov. 17	Jan. 29	Dec. 30
ESTX Auto & Parts	Price	672	491	630
	Date	Nov. 18	Jan. 11	Dec. 30

1 Effective September 20, 2021, the number of companies that make up the DAX rose from 30 to 40.

PRICE DEVELOPMENT FROM DECEMBER 2020 TO DECEMBER 2021

Index based on month-end prices: December 31, 2020 = 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 €7.50 per ordinary share and €7.56 per preferred share for fiscal year 2021. On this basis, the total dividend amounts to €3.8 (2.4) billion. The payout ratio is based on the Group's earnings after tax attributable to Volkswagen AG shareholders. This amounts to 25.4% for the reporting period and stood at 29.0% in the previous year. A payout ratio of at least 30% is one of our strategic goals.

DIVIDEND YIELD

Based on the dividend proposal for the reporting period, the dividend yield on Volkswagen ordinary shares is 2.9 (2.8)%, measured by the closing price on the last trading day in 2021. The dividend yield on preferred shares is 4.3 (3.2)%.

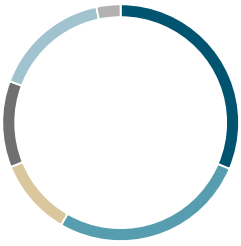
EARNINGS PER SHARE

Basic earnings per ordinary share were €29.59 (16.60) in fiscal year 2021. Basic earnings per preferred share were €29.65 (16.66). 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, 2021

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, 2021

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, 2021 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 in free float.

Notifications of changes in voting rights in accordance with the *Wertpapierhandelsgesetz* (WpHG – German Securities Trading Act) are published on our website at https://www.volkswagenag.com/en/InvestorRelations/news-and-publications/Voting_Rights.html.

VOLKSWAGEN SHARE KEY FIGURES

Dividend development		2021	2020	2019	2018	2017
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	€	7.50	4.80	4.80	4.80	3.90
per preferred share	€	7.56	4.86	4.86	4.86	3.96
Dividend paid[1]	€ million	3,772	2,419	2,419	2,419	1,967
on ordinary shares	€ million	2,213	1,416	1,416	1,416	1,151
on preferred shares	€ million	1,559	1,002	1,002	1,002	817

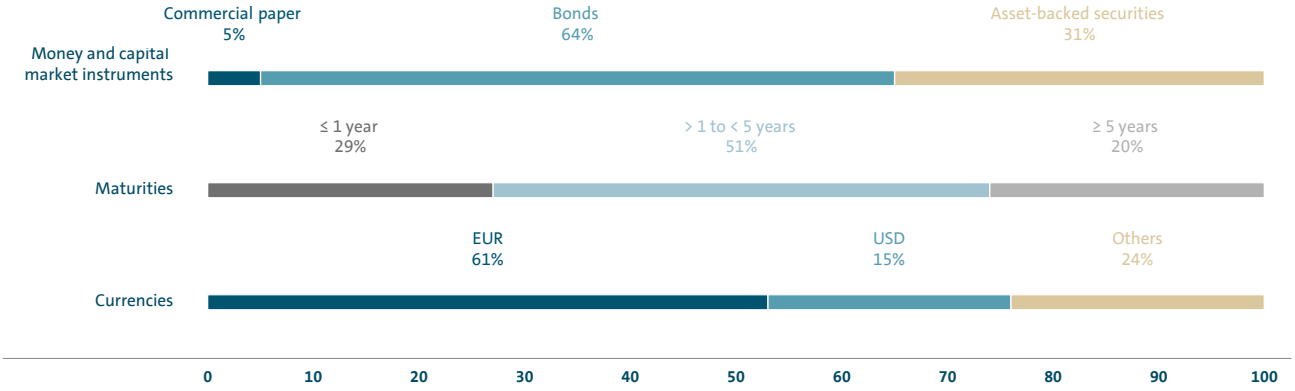
Share price development[2]		2021	2020	2019	2018	2017
Ordinary share						
Closing	€	258.40	170.10	173.25	139.10	168.70
Price performance	%	+51.9	−1.8	+24.6	−17.5	+23.4
Annual high	€	327.20	183.10	182.50	188.00	173.95
Annual low	€	165.70	101.50	135.60	131.10	128.70
Preferred share						
Closing	€	177.48	152.42	176.24	138.92	166.45
Price performance	%	+16.4	−13.5	+26.9	−16.5	+24.8
Annual high	€	246.55	185.52	184.24	188.50	178.10
Annual low	€	144.80	87.20	134.76	133.70	125.35
Beta factor[3]	factor	1.16	1.26	1.17	1.17	1.12
Market capitalization at Dec. 31	€ billion	112.8	81.6	87.5	69.7	84.1
Equity attributable to Volkswagen AG shareholders and hybrid capital investors at Dec. 31	€ billion	144.4	127.0	121.8	117.1	108.8
Ratio of market capitalization to equity	factor	0.78	0.64	0.72	0.60	0.77

Key figures per share		2021	2020	2019	2018	2017
Earnings per ordinary share[4]						
basic	€	29.59	16.60	26.60	23.57	22.28
diluted	€	29.59	16.60	26.60	23.57	22.28
Equity attributable to Volkswagen AG shareholders and hybrid capital investors at Dec. 31	€	288.15	253.44	242.93	233.63	217.13
Price/earnings ratio[5]						
Ordinary share	factor	8.7	10.2	6.5	5.9	7.5
Preferred share	factor	6.0	9.1	6.6	5.9	7.3
Dividend yield[6]						
Ordinary share	%	2.9	2.8	2.8	3.5	2.3
Preferred share	%	4.3	3.2	2.8	3.5	2.4

Stock exchange turnover[7]		2021	2020	2019	2018	2017
Turnover of Volkswagen ordinary shares	€ billion	6.1	3.1	3.3	4.3	3.5
	million shares	23.3	21.6	20.9	28.0	23.6
Turnover of Volkswagen preferred shares	€ billion	58.8	49.8	41.0	54.1	45.1
	million shares	300.4	361.2	266.0	346.6	312.3
Volkswagen share of total DAX turnover	%	6.6	4.7	4.6	5.4	5.4

1 Figures for the years 2017 to 2020 relate to dividends paid in the following year. For 2021, 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, 2021



REFINANCING

High cash inflows from operating activities and the robust net liquidity position significantly reduced the transaction volume in the Automotive Division's capital markets business year-on-year.

On February 11, 2022, the hybrid notes issued in March 2015 with a principal amount of €1.1 billion were canceled with effect from March 20, 2022.

Notes with a volume of CAD 1.0 billion were issued in the Canadian refinancing market. In addition, private placements in euros and Chinese yuan were issued under the automotive issuance program.

In March 2021, TRATON Finance Luxembourg S.A., an indirect subsidiary of TRATON SE, issued senior notes in the bond market with a total volume of €3.0 billion. In the remainder of the year, there were three private placements in euros. TRATON SE also borrowed €700 million through promissory note loans.

Official euro benchmark bonds with an aggregate volume of €8 billion were issued for the Financial Services Division. In addition to this, securities 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. In Europe, public ABS transactions with a total volume of €2.75 billion were placed. Public ABS transactions were also issued in the USA, China, Japan, Australia and Brazil.

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 about three times as high as the proportion of floating-rate instruments.

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

The table below shows how our money and capital market programs were utilized as of December 31, 2021 and illustrates the financial flexibility of the Volkswagen Group:

Programs	Authorized volume € billion	Amount utilized on Dec. 31, 2021 € billion
Commercial paper	44.4	8.1
Bonds	175.0	95.2
of which hybrid issues		14.3
Asset-backed securities	93.5	46.0

RATINGS

	VOLKSWAGEN AG		VOLKSWAGEN FINANCIAL SERVICES AG		VOLKSWAGEN BANK GMBH		TRATON SE	
	2021	2020	2021	2020	2021	2020	2021	2020
Standard & Poor's								
short-term	A–2	A–2	A–2	A–2	A–2	A–2	–	–
long-term	BBB+	BBB+	BBB+	BBB+	BBB+	A–	BBB	BBB
outlook	stable	negative	stable	negative	stable	negative	stable	negative
Moody's Investors Service								
short-term	P–2	P–2	P–2	P–2	P–1	P–1	–	–
long-term	A3	A3	A3	A3	A1	A1	Baa1	Baa1
outlook	stable	negative	stable	negative	stable	negative	negative	negative

Volkswagen AG's syndicated credit line of €10.0 billion agreed in December 2019 was extended by one year to 2026 by making use of the second extension option.

This credit facility was unused as of the end of 2021.

In November 2021, Volkswagen AG concluded for the first time a loan with terms tied to achieving a sustainability target (sustainability linked loan). The interest rate on the three-year €1.8 billion agreement depends on the Volkswagen Group achieving its CO_2 fleet emission target in Europe.

Of the syndicated credit lines with a total of €12.8 billion at other Group companies, €0.8 billion has been drawn down. The Volkswagen Group continued to have bilateral confirmed credit lines with national and international banks in various countries for a total of €5.6 billion, of which €0.7 billion was drawn down.

RATINGS

In April 2021, rating agency Standard & Poor's affirmed its short-term and long-term ratings for Volkswagen AG and Volkswagen Financial Services AG at A–2 and BBB+. The long-term rating of BBB for TRATON SE was also confirmed. The outlooks on Volkswagen AG, TRATON SE and Volkswagen Financial Services AG were revised from "negative" to "stable" on stronger-than-expected free cash flow generation in the automotive business. In June 2021, Standard & Poor's completed a review of different institutions within Germany's banking sector precipitated by pandemic-related structural changes in the banking industry. In this context, Volkswagen Bank GmbH's long-term rating was lowered from A– to BBB+ with a stable outlook.

Moody's Investors Service changed the outlook on the ratings of Volkswagen AG in March 2021 from "negative" to "stable", reflecting the continued recovery in global vehicle sales and the expected improvement in Volkswagen's credit metrics, and affirmed Volkswagen's short-term P–2 rating and long-term A3 rating. In this context, Moody's also left the short-term and long-term ratings for 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 revised from "negative" to "stable". For TRATON SE, the long-term rating and the outlook were left unchanged at Baa1 and "negative" respectively.

ESG RATINGS

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

After the diesel issue became public knowledge, the Volkswagen Group was downgraded significantly in numerous ESG ratings. With the successful completion of the Monitorship and reinstatement of the Group in the UN Global Compact, an improvement in ESG performance was achieved in the reporting period. The MSCI score thus improved from CCC to B and the Sustainalytics ESG risk score from "severe" to "medium". Volkswagen has been reinstated in the Dow Jones Sustainability Index Europe since November 2021. In addition, Volkswagen had a score of A– in the CDP climate rating in fiscal year 2021 and a rating of A in the Water Disclosure Project (WDP). Both these ratings were unchanged.

Results of Operations, Financial Position and Net Assets

Despite the continuing negative impact of the Covid-19 pandemic and, in particular, limited vehicle availability as a result of the semiconductor shortage, the Volkswagen Group generated significantly higher sales revenue and doubled its operating result in the reporting year.

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 financial 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, MAN and, since July 2021, Navistar 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 business areas of the same name. The Financial Services Division corresponds to the Financial Services segment.

ACQUISITION OF NAVISTAR

At the beginning of July 2021, a TRATON GROUP company acquired all of the outstanding shares in Navistar International Corporation (Navistar), a US manufacturer of commercial vehicles. The purchase price of €3.1 billion (USD 3.7 billion) was paid in cash. TRATON SE now indirectly holds 100% of the shares in Navistar, which was previously accounted for using the equity method (interest of 16.7%). The initial recognition of the acquisition has not been finalized due to the size of the transaction, as the internal reviews of the underlying information have not yet been completed. This means that the amounts recognized as of December 31, 2021 are provisional. Total assets increased as a result of the addition of the primary assets and liabilities of Navistar and of their remeasurement, which was required as part of the purchase price allocation. The acquisition resulted in goodwill in the amount of €2.8 billion to reflect the synergies arising from the business with Navistar. These relate particularly to the growth in the share of the market, to purchasing,

KEY FIGURES FOR 2021 BY SEGMENT

€ million	Passenger Cars and Light Commercial Vehicles	Commercial Vehicles[1]	Power Engineering	Financial Services	Total segments	Reconciliation	Volkswagen Group
Sales revenue	192,767	30,092	3,278	43,963	270,099	−19,899	250,200
Segment profit or loss (operating result)	14,614	134	45	6,045	20,838	−1,563	19,275
as a percentage of sales revenue	7.6	0.4	1.4	13.8			7.7
Capex, including capitalized development costs	16,329	1,596	68	159	18,152	346	18,498

1 From July 1, 2021, the figures include Navistar.

production costs, modularization and the use of shared components, and to the area of research and development. The consolidation of Navistar as of July 1, 2021 led to an increase of €3.5 billion in the Volkswagen Group's sales revenue as of December 31, 2021. Moreover, the transition of the treatment of Navistar from equity accounting to consolidation gave rise to a non-cash gain of €182 million during initial consolidation, which was presented in the financial result. Earnings after tax including impairment losses on the realization of hidden reserves decreased by €0.2 billion.

EQUITY INVESTMENTS HELD FOR SALE

In March 2021, Brose Fahrzeugteile SE & Co. Kommanditgesellschaft (Brose) and VW Finance Luxemburg S.A., a subsidiary of Volkswagen AG, entered into an agreement to establish a jointly operated company for the development and manufacture of complete seat units, seat structures and components, and solutions for the vehicle interior. As part of this arrangement, Brose acquired half of the shares of the Volkswagen Group company SITECH Sp. z o.o., Polkowice/Poland. Brose and Volkswagen each hold 50% of the jointly operated company, whereby Brose will take the industrial lead. Consequently, Brose will control the jointly operated company and Volkswagen, given its significant influence following the transaction, will account for the company as an associate using the equity method. Once all closing conditions had been met, the transaction was completed on January 1, 2022. The assets of SITECH were classified as held for sale in accordance with IFRS 5 as of the end of the fiscal year.

ESTABLISHMENT OF BUGATTI RIMAC D.O.O., SVETA NEDELJA/CROATIA

In 2021, the Volkswagen Group and Rimac Automobili d.o.o., Sveta Nedelja/Croatia (Rimac), established Bugatti Rimac d.o.o., which has its headquarters in Sveta Nedelja. Volkswagen contributed its consolidated subsidiaries Bugatti Automobiles S.A.S, Molsheim/France and initially 51% of Bugatti International S.A., Strassen/Luxembourg. After proportional profit elimination, the contribution led to a non-cash gain of €124 million, which was recognized in the other operating result.

SALE OF MAN TRUCK & BUS ÖSTERREICH GESMBH, STEYR/AUSTRIA

The sale of MAN Truck & Bus Österreich GesmbH, Steyr/Austria (MTBÖ) as part of restructuring measures was completed with effect from August 31, 2021. The sale led to the recognition of an expense, of which €160 million was mainly attributable to impairment losses on property, plant and equipment and €144 million to a loss on deconsolidation. The total expense of €304 million related to the disposal is presented in other operating expenses. The sale of the shares in MTBÖ resulted in a net cash outflow of €199 million, which is presented in cash flows from investing activities.

MERGER OF MAN SE WITH TRATON SE

The merger of MAN SE (MAN) with TRATON SE (TRATON) was adopted by resolution of the Annual General Meeting of MAN SE at the end of June 2021. The merger resolution also triggered the process to transfer the shares held by noncontrolling interest shareholders of MAN to TRATON against payment of an appropriate cash settlement (merger squeeze-out). In this context, the present value of the put options granted, amounting to approximately €587 million, was recognized as a current liability directly in equity. The noncontrolling interests in the Volkswagen Group's equity, as well as the retained earnings and other reserves attributable to the shareholders of Volkswagen AG declined accordingly. The merger of MAN with TRATON was entered in the commercial registers for MAN and TRATON on August 31, 2021. The squeeze-out took legal effect upon entry in the commercial register. This was followed at the beginning of September 2021 by the disbursement of the cash settlement of €70.68 per ordinary and preferred share to the noncontrolling interest shareholders of MAN SE, thus completing the MAN SE squeeze-out. The appropriateness of the cash settlement is being reviewed by judicial award proceedings initiated by noncontrolling interest shareholders who had received a settlement as a result of the squeeze-out.

INVESTMENT IN NORTHVOLT AB

In mid-June 2021, Volkswagen and the Swedish battery cell producer Northvolt AB agreed to concentrate production of Volkswagen premium cells in Skellefteå/Sweden. In connection with this, Volkswagen participated in a financing round at Northvolt AB that was proportionate to its shareholding, investing a further USD 650 million in the company. Volkswagen also increased its existing convertible loan by a further €190 million and, at the same time, converted this part of the loan to preferred shares. This increased Volkswagen's ownership interest in Northvolt AB to 23.6%. Due to favorable terms and conditions on conversion, the measurement of the converted loan resulted in non-cash income of €62 million. As a result, the carrying amount of the equity investment in Northvolt AB rose by €796 million. A convertible loan of €240 million remains on issue.

EQUITY INVESTMENT IN GOTION HIGH-TECH CO., LTD.

To expand its battery expertise, Volkswagen acquired an interest in Gotion High-Tech Co., Ltd., Hefei/China through Volkswagen (China) Investment Co. Ltd., making it the largest shareholder of the Chinese battery supplier at 26%. The Group spent a total of €1.2 billion on this transaction. The investment is accounted for using the equity method.

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 2021, the operating result in the Passenger Cars Business Area was affected by negative special items of €–0.8 (–0.9) billion in connection with the diesel issue. The additional expenses, mainly for legal risks, were offset by income from agreements regarding the settlement of damages.

RESULTS OF OPERATIONS

Results of operations of the Group

Against the backdrop of a global economic recovery and despite the continuing impact of the Covid-19 pandemic, and in particular limited vehicle availability as a result of the semiconductor shortage, the Volkswagen Group generated sales revenue of €250.2 billion in fiscal year 2021, 12.3% more than in the previous year, despite the decline in unit sales. Mix effects, better price positioning, and the good business performance of the Financial Services Division and the Commercial Vehicles Business Area particularly had a positive impact. Bottlenecks in the supply of semiconductors and the resulting limited availability of vehicles led to a reduction in vehicle sales. Changes in exchange rates also had a negative effect. At 82.3 (80.8)%, most of the sales revenue was generated abroad. Gross profit increased by €8.3 billion to €47.2 billion. The gross margin went up to 18.9 (17.5)%.

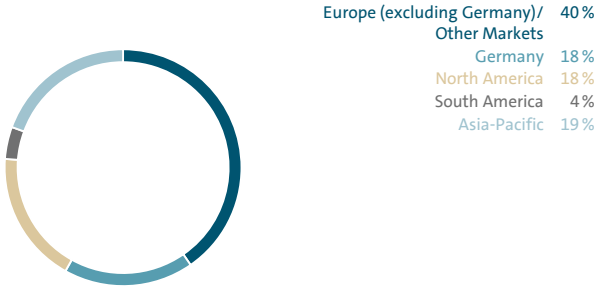
The Volkswagen Group's operating result before special items improved by €9.4 billion to €20.0 billion in the reporting period. The operating return on sales before special items increased to 8.0 (4.8)%. The rise was mainly attributable to positive mix effects, improved price positioning and positive effects of €2.5 (–0.1) billion from the measurement of derivatives to which hedge accounting is not applied (especially commodity hedging derivatives). The good business performance of the Financial Services Division also made a positive contribution. One-off expenses of €0.7 billion for restructuring measures were recognized in the Commercial Vehicles Business Area. These primarily include expenses from the sale of the commercial vehicle plant in Steyr, which became effective on August 31, 2021. In addition, incurred expenses of €0.5 billion in connection with the EU antitrust proceedings against Scania had a negative effect. Special items in connection with the diesel issue weighed on the operating result, reducing this item by €–0.8 (–0.9) billion. The Volkswagen Group's operating profit doubled to €19.3 (9.7) billion, resulting in a rise in the operating return on sales to 7.7 (4.3)%.

INCOME STATEMENT BY DIVISION

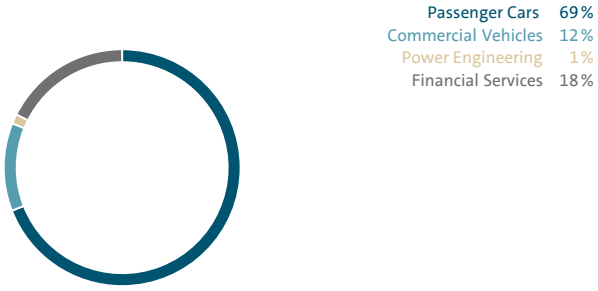
	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
€ million	2021	2020	2021	2020	2021	2020
Sales revenue	**250,200**	**222,884**	**206,237**	**182,106**	**43,963**	**40,778**
Cost of sales	–202,959	–183,937	–167,645	–150,507	–35,314	–33,430
Gross profit	**47,241**	**38,947**	**38,592**	**31,599**	**8,649**	**7,348**
Distribution expenses	–19,228	–18,407	–18,068	–17,267	–1,160	–1,140
Administrative expenses	–10,420	–9,399	–7,964	–7,147	–2,456	–2,252
Net other operating result	1,682	–1,466	670	–522	1,012	–944
Operating result	**19,275**	**9,675**	**13,230**	**6,664**	**6,045**	**3,012**
Operating return on sales (%)	**7.7**	**4.3**	**6.4**	**3.7**	**13.8**	**7.4**
Share of profits and losses of equity-accounted investments	2,321	2,756	2,232	2,697	89	60
Interest result and Other financial result	–1,470	–765	–1,316	–469	–154	–296
Financial result	**851**	**1,991**	**915**	**2,227**	**–64**	**–236**
Earnings before tax	**20,126**	**11,667**	**14,146**	**8,891**	**5,981**	**2,776**
Income tax expense	–4,698	–2,843	–3,179	–2,228	–1,519	–615
Earnings after tax	**15,428**	**8,824**	**10,967**	**6,663**	**4,462**	**2,161**
Noncontrolling interests	46	–43	–42	–98	87	55
Earnings attributable to Volkswagen AG hybrid capital investors	539	533	539	533	–	–
Earnings attributable to Volkswagen AG shareholders	**14,843**	**8,334**	**10,469**	**6,227**	**4,374**	**2,106**

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

SHARE OF SALES REVENUE BY MARKET 2021
in percent



SHARE OF SALES REVENUE BY DIVISION/BUSINESS AREA 2021
in percent



The financial result decreased by €1.1 billion year-on-year to €0.9 billion. The other financial result included negative effects from forward purchase agreements for new shares in QuantumScape (€–0.6 billion). In the previous year, the measurement and realization of these forward agreements had led to a non-cash gain of €1.4 billion. Moreover, the share of the result of equity-accounted investments was down on the prior-year period. This is primarily attributable to the lower profit generated by the Chinese joint ventures, which is again a reflection of the bottlenecks in the supply of semiconductors and the resulting limited availability of vehicles. The interest expenses included in the financial result increased, due mainly to the interest cost on provisions. In the previous year, changes in share prices had weighed on net income from securities and funds as a result of the Covid-19 pandemic.

The Volkswagen Group's profit before tax rose to €20.1 (11.7) billion. The return on sales before tax increased to 8.0 (5.2)%. Income taxes resulted in an expense of €4.7 (2.8) billion in fiscal year 2021, which in turn led to a tax rate of 23.3 (24.4)%. Profit after tax went up by €6.6 billion to €15.4 billion.

Results of operations in the Automotive Division

Despite the decline in unit sales, the Automotive Division's sales revenue of €206.2 billion in fiscal year 2021 was 13.3% higher than in the prior-year period, which had been more severely impacted by the spread of the Covid-19 pandemic and its negative consequences. Improvements in the mix and in price positioning had a positive effect, while limited vehicle availability due to the semiconductor shortage and changes in exchange rates had an adverse impact.

In the Passenger Cars Business Area, sales revenue in the reporting period increased by a noticeable 10.6%, while the Commercial Vehicles Business Area recorded a very strong year-on-year rise of 35.8%. In the Power Engineering Business Area, sales revenue was 9.9% lower than in fiscal year 2020, which had included the business of Renk until October. 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.

Cost of sales increased, driven by factors such as a rise in research and development costs recognized in profit or loss. As a result of the marked growth in sales revenue, the ratio of cost of sales to sales revenue decreased. Total research and development costs as a percentage of the Automotive Division's sales revenue (research and development ratio or R&D ratio) was unchanged from the previous year, at 7.6 (7.6)%. In addition to new models, our activities focused above all on the electrification of our vehicle portfolio, digitalization, new technologies and our modular toolkits and platforms.

There was a year-on-year rise in both distribution and administrative expenses in the reporting period. The ratio of distribution expenses to sales revenue went down, while the ratio of administrative expenses was virtually unchanged. The other operating result amounted to €0.7 (–0.5) billion, benefiting in particular from the effects of the fair value measurement of derivatives to which hedge accounting is not applied (especially commodity hedging derivatives) in the amount of €2.4 (–0.1) billion, and from currency effects. This was set against factors such as negative special items in connection with the diesel issue in the Passenger Cars Busi-

RESULTS OF OPERATIONS IN THE PASSENGER CARS, COMMERCIAL VEHICLES AND POWER ENGINEERING BUSINESS AREAS FROM JANUARY 1 TO DECEMBER 31

€ million	2021	2020
Passenger Cars		
Sales revenue	172,868	156,311
Operating result	13,051	7,224
Operating return on sales (%)	7.5	4.6
Commercial Vehicles[1]		
Sales revenue	30,092	22,156
Operating result	134	−79
Operating return on sales (%)	0.4	−0.4
Power Engineering[2]		
Sales revenue	3,278	3,640
Operating result	45	−482
Operating return on sales (%)	1.4	−13.2

1 From July 1, 2021, the figures include Navistar.
2 Figures up to October 2020 include Renk.

ness Area which had to be recognized here, an increase in provisions in connection with the EU antitrust proceedings against Scania in the reporting period and one-off expenses for restructuring measures in the Commercial Vehicles Business Area. In addition, the contribution of the two Bugatti subsidiaries to the newly established company Bugatti Rimac d.o.o. led to a non-cash gain after proportional profit elimination. The prior-year figure had included a gain of €0.8 billion from the contribution of the consolidated subsidiary Autonomous Intelligent Driving to Argo AI and a gain on the sale of the shares in Renk.

The Automotive Division's operating result doubled to €13.2 (6.7) billion in the reporting period. The operating return on sales of the Automotive Division climbed to 6.4 (3.7) %. Positive factors included favorable price positioning, the fair value measurement of derivatives to which hedge accounting is not applied and changes in the mix. Negative special items attributable to the diesel issue were down on the previous year. These factors were offset by limited vehicle availability as a result of the semiconductor shortage, an increase in provisions in connection with the EU antitrust proceedings against Scania in the reporting period, and one-off expenses for restructuring measures in the Commercial Vehicles Business Area.

The operating result before special items increased by €6.4 billion to €14.0 billion, while the operating return on sales before special items went up to 6.8 (4.2) %.

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

Results of operations in the Financial Services Division

The Financial Services Division's sales revenue amounted to €44.0 billion in fiscal year 2021, 7.8 % more than in the prior-year period. Cost of sales increased slightly more slowly than sales revenue, rising by 5.6% to €35.3 billion.

The Financial Services Division's operating result grew by €3.0 billion to €6.0 billion thanks to improved business performance, which was driven above all by strong demand for used vehicles, and lower risk costs for credit and residual value risks. The operating return on sales increased to 13.8 (7.4) %. The return on equity before tax almost doubled to 17.3 (8.8) %.

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, and 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 and of the Financial Services Division are included in the financial management and, in addition, 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 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

In the period from January to December 2021, the Volkswagen Group generated gross cash flow of €43.7 (35.0) billion. The increase compared with the previous year was largely attributable to the improvement in profit. In comparison with the previous year, which had been impacted by the pandemic, a decrease in inventories and receivables, a rise in lease assets and higher liabilities took the change in working capital to €–5.1 (–10.1) billion. Cash outflows attributable to the diesel issue were lower than in fiscal year 2020 and included the inflows from the agreements regarding the settlement of damages. As a result, cash flows from operating activities grew by €13.7 billion to €38.6 billion.

The Volkswagen Group's investing activities attributable to operating activities increased by €5.8 billion to €24.2 billion in the reporting period, particularly due to the acquisition of Navistar for an amount of €2.6 billion (net of the cash funds acquired), the capital increase and acquisition of shares in Gotion High-Tech in an amount of €1.1 billion and a rise in capitalized development costs.

Financing activities accounted for total cash outflows of €–7.8 billion. Financing activities related primarily to the redemption of the hybrid note called in the first quarter of 2021, the dividend paid to the shareholders of Volkswagen AG and the issuance and redemption of bonds, as well as to changes in other financial liabilities. In the prior-year period, there had been a cash inflow of €7.6 billion to boost gross liquidity by placing hybrid bonds and issuing the green bond.

At the end of the reporting period, the Volkswagen Group reported cash and cash equivalents of €39.1 (33.4) billion in its cash flow statement.

FINANCIAL POSITION IN THE PASSENGER CARS, COMMERCIAL VEHICLES AND POWER ENGINEERING BUSINESS AREAS FROM JANUARY 1 TO DECEMBER 31

€ million	2021	2020
Passenger Cars		
Gross cash flow	26,221	21,823
Change in working capital	3,439	331
Cash flows from operating activities	29,659	22,154
Cash flows from investing activities attributable to operating activities	–19,266	–16,762
Net cash flow	10,393	5,392
Commercial Vehicles[1]		
Gross cash flow	2,491	1,845
Change in working capital	–109	159
Cash flows from operating activities	2,382	2,004
Cash flows from investing activities attributable to operating activities	–4,453	–1,328
Net cash flow	–2,071	676
Power Engineering[2]		
Gross cash flow	333	–25
Change in working capital	29	588
Cash flows from operating activities	362	562
Cash flows from investing activities attributable to operating activities	–74	–274
Net cash flow	287	289

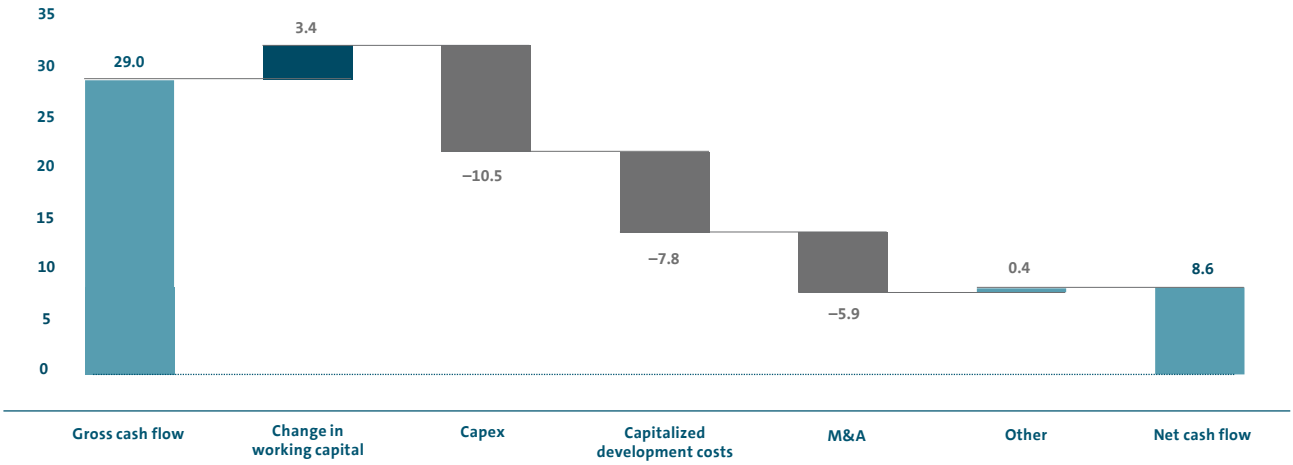
1 From July 1, 2021, the figures include Navistar.
2 Figures up to October 2020 include Renk.

At the end of December 2021, the Volkswagen Group's net liquidity stood at €–136.6 billion, compared with €–137.4 billion at the end of 2020.

Financial position of the Automotive Division

The Automotive Division recorded gross cash flow of €29.0 billion in fiscal year 2021, which exceeded the prior-year figure by €5.4 billion due to earnings-related reasons. The change in working capital amounted to €3.4 (1.1) billion. The rise of €2.3 billion compared with the previous year, which had been impacted more severely by the Covid-19 pandemic, was due to increases in liabilities and in other provisions, offset by a smaller decline in inventories.

AUTOMOTIVE DIVISION NET CASH FLOW 2021
€ billion



In the reporting period, cash outflows attributable to the diesel issue were lower than in the previous year. This applies even if the inflows from the agreements regarding the settlement of damages are not taken into account. Consequently, cash flows from operating activities were up €7.7 billion on the previous year, to €32.4 billion.

Investing activities attributable to operating activities increased by €5.4 billion to €23.8 billion. Within this figure, investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs (capex) decreased by €0.6 billion to €10.5 billion. Thanks to higher sales revenue and a decline in capital expenditure, the ratio of capex to sales revenue was down on the prior-year figure, at 5.1 (6.1)%. A considerable portion of capex was allocated to our production facilities and to models that we launched in 2021 or are planning to launch in 2022, or for which production is set to start. These are primarily vehicles in the ID. family and the new Taigo model, the Multivan T7, the next generation of the ŠKODA Fabia as well as the Enyaq, CUPRA Born, Audi Q4 e-tron, Audi A8, new model variants in the Bentley Bentayga and Flying Spur series, and the Porsche Taycan and the Porsche Macan. Other investment priorities include the electrification and digitalization of our products and our modular toolkits and platforms. Additions to capitalized development costs rose to €7.8 (6.5) billion in the reporting period. The "Acquisition and disposal of equity investments" item (M&A) expanded by €4.7 billion to €5.9 billion as a result of strategic investments in a number of companies, in particular Navistar, the associates Gotion High-Tech and Northvolt, and the joint venture Argo AI. In the prior-year period, this item had included the sale of the shares in Renk.

Despite the investment in Navistar (€−2.6 billion), the Automotive Division's net cash flow of €8.6 billion in the period from January to December 2021 was €2.3 billion higher than the comparative figure for 2020.

In the reporting period, the financing activities of the Automotive Division resulted in a cash outflow of €−7.4 billion; in the prior-year period, there had been a cash inflow of €2.9 billion to boost gross liquidity through measures such as the placement of hybrid notes and the issuance of the green bond. The redemption of the hybrid note called in the first quarter of 2021 led to a cash outflow of around €−1.2 billion. A dividend totaling €2.4 billion was paid to the shareholders of Volkswagen AG in July 2021. Financing activities also include the issuance and redemption of bonds and changes in other financial liabilities. The "Transactions with noncontrolling interests" item includes the present value of the cash settlement for MAN noncontrolling interest shareholders in connection with the merger of MAN and TRATON; the settlement was paid at the beginning of September 2021. In the prior-year period, the transfer of all outstanding Audi shares to Volkswagen AG had been reported in this item.

At the end of the reporting year, the Automotive Division's net liquidity was €26.7 billion, compared with €26.8 billion on December 31, 2020. With net liquidity almost unchanged and a noticeable increase in sales revenue, the Automotive Division's net liquidity as a proportion of consolidated sales revenue declined to 10.7 (12.0)% in the reporting period.

CASH FLOW STATEMENT BY DIVISION

€ million	VOLKSWAGEN GROUP 2021	VOLKSWAGEN GROUP 2020	AUTOMOTIVE[1] 2021	AUTOMOTIVE[1] 2020	FINANCIAL SERVICES 2021	FINANCIAL SERVICES 2020
Cash and cash equivalents at beginning of period	**33,432**	**24,329**	**23,758**	**18,098**	**9,674**	**6,231**
Earnings before tax	20,126	11,667	14,146	8,891	5,981	2,776
Income taxes paid	−4,216	−2,646	−3,329	−2,009	−887	−637
Depreciation and amortization expense[2]	27,473	27,069	18,378	17,798	9,094	9,272
Change in pension provisions	992	806	947	767	45	39
Share of the result of equity-accounted investments	787	536	839	584	−52	−48
Other noncash income/expense and reclassifications[3]	−1,473	−2,461	−1,938	−2,388	465	−73
Gross cash flow	**43,690**	**34,971**	**29,044**	**23,642**	**14,646**	**11,329**
Change in working capital	**−5,056**	**−10,070**	**3,358**	**1,079**	**−8,415**	**−11,148**
Change in inventories	2,110	1,334	624	1,406	1,486	−72
Change in receivables	1,888	712	421	45	1,466	668
Change in liabilities	1,856	540	2,009	−138	−153	678
Change in other provisions	951	−2	938	−214	14	211
Change in lease assets (excluding depreciation)	−16,205	−12,914	−536	52	−15,669	−12,966
Change in financial services receivables	4,345	260	−97	−72	4,442	332
Cash flows from operating activities	**38,633**	**24,901**	**32,402**	**24,721**	**6,231**	**180**
Cash flows from investing activities attributable to operating activities	**−24,181**	**−18,372**	**−23,793**	**−18,364**	**−388**	**−8**
of which: investments in property, plant and equipment, investment property and intangible assets, excluding capitalized development costs	−10,655	−11,273	−10,496	−11,065	−159	−208
capitalized development costs	−7,843	−6,473	−7,843	−6,473	–	–
acquisition and disposal of equity investments	−6,151	−1,037	−5,882	−1,188	−268	151
Net cash flow[4]	***14,453***	***6,529***	***8,610***	***6,357***	***5,843***	***172***
Change in investments in securities, loans and time deposits	−1,948	−4,319	−933	−3,015	−1,015	−1,304
Cash flows from investing activities	**−26,128**	**−22,690**	**−24,726**	**−21,379**	**−1,403**	**−1,312**
Cash flows from financing activities	**−7,754**	**7,637**	**−7,375**	**2,938**	**−380**	**4,699**
of which: capital transactions with noncontrolling interests	−590	−238	−590	−238	–	–
capital contributions/capital redemptions	−1,071	2,984	−1,575	2,952	504	33
MAN noncontrolling interest shareholders: compensation payments and acquisition of shares tendered	–	2	–	2	–	–
Effect of exchange rate changes on cash and cash equivalents	942	−745	839	−619	102	−125
Change of loss allowance within cash & cash equivalents	−1	−0	−1	−0	−0	0
Net change in cash and cash equivalents	**5,691**	**9,103**	**1,141**	**5,660**	**4,550**	**3,443**
Cash and cash equivalents at Dec. 31[5]	**39,123**	**33,432**	**24,899**	**23,758**	**14,224**	**9,674**
Securities, loans and time deposits	34,515	32,645	16,200	15,868	18,314	16,777
Gross liquidity	**73,637**	**66,078**	**41,099**	**39,626**	**32,539**	**26,451**
Total third-party borrowings	−210,213	−203,457	−14,413	−12,830	−195,800	−190,627
Net liquidity[6]	**−136,576**	**−137,380**	**26,685**	**26,796**	**−163,261**	**−164,176**

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).

Financial position in the Financial Services Division

In fiscal year 2021, the Financial Services Division generated gross cash flow of €14.6 (11.3) billion. The increase was mainly attributable to improved earnings. The change in working capital amounted to €–8.4 (–11.1) billion. A reduction of receivables and inventories were set against a rise in lease assets and led to a decrease in funds tied up in working capital compared with the prior-year period. Cash flows from operating activities went up by €6.1 billion to €6.2 billion.

Investing activities attributable to operating activities expanded to €0.4 (0.0) billion. The "Acquisition and disposal of equity investments" item went up in the reporting period as a result of strategic investments in a number of companies.

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 outflow of €–0.4 billion in the reporting period. In the previous year, financing activities had accounted for cash inflows of €4.7 billion.

At the end of 2021, the Financial Services Division's negative net liquidity, which is common in the industry, was €–163.3 billion, compared with €–164.2 billion on December 31, 2020.

NET ASSETS

Consolidated balance sheet structure

At the end of the reporting year, the Volkswagen Group had total assets of €528.6 billion, 6.3% more than one year earlier. The increase was mainly attributable to higher earnings, the initial consolidation of Navistar and changes in exchange rates. 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 rose by €17.4 billion to €146.2 billion. The equity ratio went up to 27.6 (25.9)%.

As of the end of fiscal year 2021, the Group had off-balance-sheet commitments in the form of contingent liabilities in the amount of €9.7 (8.6) billion and in the form of financial guarantees in the amount of €1.4 (0.4) billion. In addition, there were other financial obligations of €34.7 (30.3) 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, irrevocable credit commitments to customers and from development and supply contracts. 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 €0.7 (0.9) billion for this purpose. In the previous year, this item had also reflected the payment of the purchase price for the acquisition of all of Navistar's outstanding shares totaling around USD 3.7 billion. In addition to the other financial obligations, there are purchase commitments for inventories with a short turnover period, which arise primarily from the Master Collaboration Agreement with Ford Motor Company for the joint development of vans and mid-sized pickups for the global market.

BALANCE SHEET STRUCTURE OF THE PASSENGER CARS, COMMERCIAL VEHICLES AND POWER ENGINEERING BUSINESS AREAS

€ million	Dec. 31, 2021	Dec. 31, 2020
Passenger Cars		
Noncurrent assets	133,857	130,237
Current assets	86,362	83,180
Total assets	**220,218**	**213,417**
Equity	93,894	81,423
Noncurrent liabilities	80,621	82,263
Current liabilities	45,704	49,731
Commercial Vehicles[1]		
Noncurrent assets	34,730	24,777
Current assets	12,264	11,256
Total assets	**46,994**	**36,033**
Equity	12,807	13,389
Noncurrent liabilities	17,778	10,592
Current liabilities	16,409	12,052
Power Engineering		
Noncurrent assets	1,804	1,847
Current assets	2,914	2,800
Total assets	**4,718**	**4,647**
Equity	2,322	1,922
Noncurrent liabilities	524	668
Current liabilities	1,872	2,057

1 From July 1, 2021, the figures include Navistar.

Automotive Division balance sheet structure

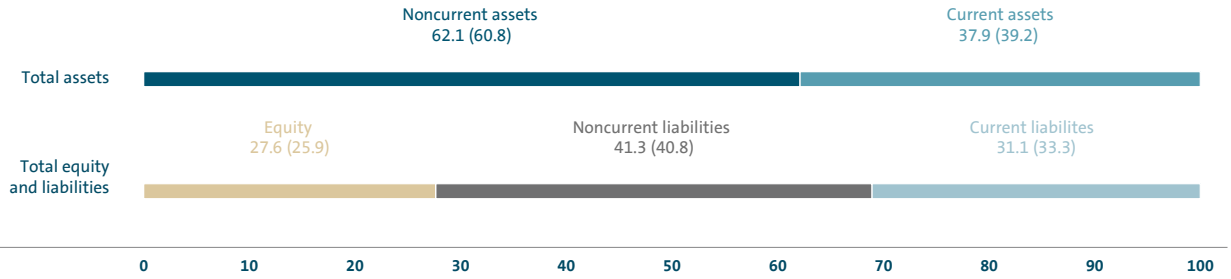
As of December 31, 2021, intangible assets in the Automotive Division increased, driven among other factors by a rise in capitalized development costs. The goodwill recognized as a result of the acquisition of Navistar also had to be taken into account. Property, plant and equipment was on a level with

CONSOLIDATED BALANCE SHEET BY DIVISION AS OF DECEMBER 31

	VOLKSWAGEN GROUP		AUTOMOTIVE[1]		FINANCIAL SERVICES	
€ million	2021	2020	2021	2020	2021	2020
Assets						
Noncurrent assets	**328,261**	**302,170**	**170,391**	**156,861**	**157,871**	**145,309**
Intangible assets	77,689	67,968	77,290	67,781	399	187
Property, plant and equipment	63,695	63,884	62,684	62,807	1,011	1,077
Lease assets	59,699	50,686	2,316	1,512	57,383	49,174
Financial services receivables	84,954	82,565	−781	−377	85,735	82,942
Investments, equity-accounted investments and other equity investments, other receivables and financial assets	42,224	37,067	28,882	25,137	13,342	11,930
Current assets	**200,347**	**194,944**	**101,539**	**97,236**	**98,808**	**97,708**
Inventories	43,725	43,823	40,361	39,055	3,363	4,768
Financial services receivables	56,498	58,006	−936	−557	57,434	58,562
Other receivables and financial assets	37,195	38,044	18,275	17,012	18,921	21,033
Marketable securities	22,532	21,162	17,674	17,503	4,858	3,658
Cash, cash equivalents and time deposits	39,723	33,909	25,491	24,222	14,232	9,687
Assets held for sale	674	–	674	–	–	–
Total assets	**528,609**	**497,114**	**271,930**	**254,097**	**256,679**	**243,017**
Equity and liabilities						
Equity	**146,154**	**128,783**	**109,022**	**96,733**	**37,131**	**32,050**
Equity attributable to Volkswagen AG shareholders	130,009	111,336	93,592	79,913	36,417	31,423
Equity attributable to Volkswagen AG hybrid capital investors	14,439	15,713	14,439	15,713	–	–
Equity attributable to Volkswagen AG shareholders and hybrid capital investors	144,449	127,049	108,031	95,626	36,417	31,423
Noncontrolling interests	1,705	1,734	991	1,107	714	627
Noncurrent liabilities	**218,062**	**202,921**	**98,923**	**93,523**	**119,139**	**109,398**
Financial liabilities	131,618	114,809	24,639	15,637	106,978	99,173
Provisions for pensions	41,550	45,081	40,769	44,207	781	874
Other liabilities	44,894	43,031	33,515	33,680	11,379	9,352
Current liabilities	**164,393**	**165,410**	**63,984**	**63,840**	**100,409**	**101,569**
Financial liabilities	78,584	88,648	−10,237	−2,806	88,821	91,454
Trade payables	23,624	22,677	20,977	19,539	2,647	3,137
Other liabilities	61,948	54,085	53,007	47,107	8,940	6,978
Liabilities associated with assets held for sale	238	–	238	–	–	–
Total equity and liabilities	**528,609**	**497,114**	**271,930**	**254,097**	**256,679**	**243,017**

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

CONSOLIDATED BALANCE SHEET STRUCTURE 2021
in percent



the previous year. Due to the rise attributable to capital increases and the investment in Gotion High-Tech among other factors, equity-accounted investments were up substantially in the fiscal year under review, despite dividend resolutions. In total, noncurrent assets increased to €170.4 (156.9) billion.

Current assets expanded by €4.3 billion compared with the figure at the end of 2020, to €101.5 billion. The inventories included in this item were driven higher, primarily by exchange rate effects. Current other receivables and financial assets increased.

The Automotive Division's cash and cash equivalents grew by €1.3 billion to €25.5 billion.

The "Assets held for sale" item consists mainly of the carrying amounts of the assets of SITECH intended for derecognition. The "Liabilities held for sale" item comprises the carrying amount of the corresponding liabilities intended for derecognition.

Equity in the Automotive Division amounted to €109.0 billion at the end of the reporting period, up 12.7% from December 31, 2020. Good earnings performance, lower actuarial losses from the remeasurement of pension plans and positive currency translation effects pushed equity higher, while the dividend paid to the shareholders of Volkswagen AG, negative effects from the measurement of derivatives recognized directly in equity, and the redemption of the hybrid note called in the first quarter of 2021 weighed on this item. Noncontrolling interests are primarily held by the noncontrolling interest shareholders of the TRATON GROUP. The equity ratio was 40.1 (38.1)%.

Noncurrent liabilities increased by €5.4 billion to €98.9 billion. The noncurrent financial liabilities included here were driven up by exchange rate effects, among other factors. Pension provisions were lower than the comparative 2020 figure, due mainly to the actuarial remeasurement following a change in the discount rate.

At €63.9 (63.8) billion, current liabilities were on a level with the previous year. Current financial liabilities amounted to €−10.2 (−2.8) 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. Trade payables were up distinctly, by 7.4%, compared with the end of 2020.

Current other liabilities exceeded the figure as of December 31, 2020; the other financial liabilities included in this item increased, due among other things to the effects of the measurement of derivatives and to higher liabilities from buyback transactions. Other current provisions rose because, among other reasons, provisions in connection with the EU antitrust proceedings against Scania had to be increased to €0.9 billion in the reporting period.

At the end of 2021, the Automotive Division's total assets stood at €271.9 billion, an increase of 7.0% compared with December 31, 2020.

Financial Services Division balance sheet structure

The Financial Services Division's total assets on December 31, 2021 were €256.7 billion, exceeding the figure on the 2020 reporting date by 5.6%, mainly due to exchange rate effects.

Noncurrent assets were 8.6% higher than at the end of 2020, at €157.9 billion; the property, plant and equipment included in this item was down. Lease assets and noncurrent financial services receivables were up, driven by business growth and changes in exchange rates.

At €98.8 (97.7) billion, current assets were virtually on a level with the previous year's reporting date. Current other receivables and financial assets, inventories and current financial services receivables ended the year lower, while total securities and cash and cash equivalents in the Financial Services Division amounted to €19.1 billion, thus exceeded the figure at the end of 2020 by €5.7 billion.

At the balance sheet date, the Financial Services Division accounted for around 48.6 (48.9) % of the Volkswagen Group's assets.

On December 31, 2021, the Financial Services Division's equity stood at €37.1 billion, 15.9% more than a year earlier, driven by earnings and exchange rate effects. The equity ratio was 14.5 (13.2) %.

Noncurrent liabilities increased by 8.9 % overall, mainly because of a rise in noncurrent financial liabilities to refinance the business volume and higher noncurrent other liabilities. Overall, current liabilities were in a similar range as in the previous year. A reduction in current financial liabilities was offset mainly by higher current other liabilities.

Deposits from the direct banking business amounted to €26.7 (28.9) billion, down from the figure recorded a year earlier.

RETURN ON INVESTMENT (ROI) AND VALUE CONTRIBUTION

The central focus of the Volkswagen Group's financial target system is continuously and sustainably increasing the value of the Company. In order to make 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 earning 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.

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.

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

COST OF CAPITAL AFTER TAX IN THE AUTOMOTIVE DIVISION

%	2021	2020
Risk-free rate	0.1	−0.2
Market risk premium	7.5	7.5
Volkswagen-specific risk premium	1.2	2.0
(Volkswagen beta factor)	(1.16)	(1.26)
Cost of equity after tax	**8.8**	**9.3**
Cost of debt	1.3	1.4
Tax	−0.4	−0.4
Cost of debt after tax	**0.9**	**1.0**
Proportion of equity	66.7	66.7
Proportion of debt	33.3	33.3
Cost of capital after tax	**6.2**	**6.5**

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 1.16 (1.26) was determined for 2021.

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 6.2 (6.5)% for 2021.

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

At €11,740 (7,450) million, the operating result after tax in the Automotive Division, including the proportionate operating result of the equity-accounted Chinese joint ventures, exceeded the previous year's figure, which had been more severely impacted by the Covid-19 pandemic and its negative effects. The increase resulted primarily from favorable price positioning, positive effects from the fair value measurement of derivatives to which hedge accounting is not applied and positive mix effects. Negative special items due to the diesel issue were lower than in the previous year. Contrary effects resulted from factors such as limited vehicle availability due to the semiconductor shortage, increased provisioning in the reporting year in connection with the EU antitrust proceedings against Scania and one-off expenses for restructuring measures in the Commercial Vehicles Business Area. 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.

At €113,386 (114,907) million, invested capital in the reporting year was on a level with the previous year.

The return on investment (ROI) is the return on invested capital for a particular period based on the operating result after tax. The ROI improved due to the higher operating result and, at 10.4 (6.5)%, exceeded our minimum required rate of return of 9%.

At €6,984 (7,504) million, the opportunity cost of capital (invested capital multiplied by cost of capital) was slightly below the prior-year figure. After deduction of the opportunity cost of invested capital, the operating result after tax – which had clearly improved despite still being affected by the Covid-19 pandemic and particularly the shortages in the supply of semiconductors – led to a positive value contribution of €4,756 (–54) 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	2021	2020
Operating result after tax	**11,740**	**7,450**
Invested capital (average)	113,386	114,907
Return on investment (ROI) in %	**10.4**	**6.5**
Cost of capital in %	6.2	6.5
Cost of invested capital	**6,984**	**7,504**
Value contribution	**4,756**	**−54**

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 be satisfactory overall in the context of the current challenges.

The Volkswagen Group's business was impacted by the effects of the Covid-19 pandemic and in particular by the limited vehicle availability as a result of the semiconductor shortage throughout the entire reporting period, and this led to deviations from the original forecast. Moreover, our industry is affected by fierce competition, technological change and growing environmental awareness. In this environment, we delivered 8.9 million vehicles to customers. The Group's sales revenue was up 12.3%, mainly due to mix effects and as a result of the improved financial services business. The operating result before special items went up to €20.0 billion. The operating return on sales before and after special items was 8.0% and 7.7% respectively, putting it above the forecast range. Research and development costs reflect our activities undertaken to safeguard the Company's future viability; the R&D ratio in the Automotive Division was higher than expected, at 7.6%, because of a rise in research and development costs and lower sales revenue.

The reduction in capital expenditure meant that the Automotive Division reached the forecast ratio of capex to sales revenue of 5.1%. Net cash flow amounted to €8.6 billion; mainly for earnings-related reasons, this was, as expected, noticeably up on the previous year despite higher cash outflows for M&A activities. Including the acquisition of Navistar, net liquidity stood at €26.7 billion at the end of fiscal year 2021 and was therefore better than recently estimated.

Return on investment (ROI) in the Automotive Division improved to 10.4% and was therefore, as anticipated, above our minimum required rate of return on invested capital.

FORECAST VERSUS ACTUAL FIGURES

	Actual 2020	Original Forecast for 2021	Adjusted Forecast for 2021	Actual 2021
Deliveries to customers (units)	9.3 million	considerable increase	around the prior-year level	8.9 million
Volkswagen Group				
Sales revenue	€222.9 billion	significant increase	considerable increase	€250.2 billion
Operating return on sales before special items	4.8%	5.0 – 6.5%	6.0 – 7.5%	8.0%
Operating return on sales	4.3%	5.0 – 6.5%	6.0 – 7.5%	7.7%
Operating result before special items	€10.6 billion	in forecast range	in forecast range	€20.0 billion
Operating result	€9.7 billion	in forecast range	in forecast range	€19.3 billion
Passenger Cars Business Area				
Sales revenue	€156.3 billion	significant increase	considerable increase	€172.9 billion
Operating return on sales before special items	5.2%	5.0 – 6.5%	6.0 – 8.0%	8.0%
Operating return on sales	4.6%	5.0 – 6.5%	6.0 – 8.0%	7.5%
Operating result before special items	€8.2 billion	in forecast range	in forecast range	€13.8 billion
Operating result	€7.2 billion	in forecast range	in forecast range	€13.1 billion
Commercial Vehicles Business Area				
Sales revenue	€22.2 billion	considerable increase	very strong increase	€30.1 billion
Operating return on sales	–0.4%	4.0 – 5.5%	~ 1.5%	0.4%
Operating result	€–79 million	in forecast range	in forecast range	€134 million
Power Engineering Business Area				
Sales revenue	€3.6 billion	noticeable decrease	noticeable decrease	€3.3 billion
Operating result	€–482 million	at the break even point	at the break even point	€45 million
Financial Services Division				
Sales revenue	€40.8 billion	noticeable increase	noticeable increase	€44.0 billion
Operating result	€3.0 billion	around the prior-year level	very strong increase	€6.0 billion
R&D ratio in the Automotive Division	7.6%	~ 7.0%	~ 7.0%	7.6%
Capex/sales revenue in the Automotive Division	6.1%	~ 6.0%	~ 5.0%	5.1%
Net cash flow in the Automotive Division	€6.4 billion	around the prior-year level	noticeable increase	€8.6 billion
Net liquidity in the Automotive Division	€26.8 billion	moderate increase	distinct decrease	€26.7 billion
Return on investment (ROI) in the Automotive Division	6.5%	noticeably over 9%	moderately over 9%	10.4%

Volkswagen AG

(Condensed, in accordance with the German Commercial Code)

Effects of the Covid-19 pandemic and the limited vehicle availability due to the semiconductor shortage hit Volkswagen AG's unit sales in 2021.

ANNUAL RESULT

Additional special items in connection with the diesel issue were recognized in 2021 and amounted to €0.7 billion. These particularly related to further provisions for legal risks. Special items had an impact of €–0.7 (–0.8) billion on net other operating result.

Sales revenue increased by 5.0% year-on-year to €70.9 billion in the reporting year. Sales generated abroad accounted for a share of €42.3 billion or 59.6%. Cost of sales increased faster than sales revenue, rising by 6.3% to €67.4 billion, mainly because of higher commodity prices for vehicles.

Gross profit on sales fell accordingly to €3.5 (4.1) billion.

At €7.0 billion, distribution, general and administrative expenses were down €0.3 billion on the prior-year figure.

The other operating result decreased by €0.3 billion to €0.1 billion. The decline was due in particular to increased expenditure for risks from commodity forwards and higher expenditure for legal and litigation risks.

The financial result went down by €1.2 billion to €8.5 billion, mainly because of a decline in income from profit transfers.

Taxes on income rose to €–1.1 (–0.7) billion, particularly due to higher tax expenses for prior years. Net income for fiscal year 2021 thus amounted to €4.0 (6.3) billion.

INCOME STATEMENT OF VOLKSWAGEN AG

€ million	2021	2020
Sales	70,917	67,535
Cost of sales	–67,424	–63,418
Gross profit on sales	**3,494**	**4,117**
Distribution, general and administrative expenses	–6,973	–7,269
Net other operating result	66	398
Financial result[1]	8,545	9,787
Taxes on income	–1,091	–693
Earnings after tax	**4,041**	**6,338**
Net income for the fiscal year	**4,041**	**6,338**
Retained profits brought forward	1,609	855
Release of/appropriation to revenue reserves	13,450	–3,165
Net retained profits	**19,101**	**4,028**

1 Including write-downs of financial assets.

BALANCE SHEET OF VOLKSWAGEN AG AS OF DECEMBER 31

€ million	2021	2020
Fixed assets	136,892	130,377
Inventories	6,921	6,542
Receivables[1]	32,355	38,766
Cash-in-hand and bank balances	10,168	8,803
Total assets	**186,336**	**184,488**
Equity	41,172	39,549
Special tax-allowable reserves	17	18
Long-term debt	40,748	43,086
Medium-term debt	38,087	36,348
Short-term debt	66,312	65,487

1 Including prepaid expenses.

NET ASSETS AND FINANCIAL POSITION

Total assets amounted to €186.3 billion on December 31, 2021, up €1.8 billion on the comparative 2020 figure. Property, plant and equipment was up by €0.4 billion, with capital expenditure exceeding depreciation charges. The rise in financial assets to €127.6 (121.6) billion was primarily attributable to the reinvestment of the dividend distributed for fiscal year 2020 in the capital reserves of VW Finance Luxemburg S.A. in an amount of €3.2 billion as well as a number of capital increases at affiliated companies.

Fixed assets accounted for a share of 73.5 (70.7) % of total assets.

Current assets (including prepaid expenses) amounted to €49.4 (54.1) billion on December 31, 2021. Inventories went up due primarily to the addition of precious metals. Receivables decreased, mainly due to the repayment of loans to subsidiaries. Cash instruments increased, driven particularly by raising restricted short-term time deposits.

Equity at the end of the reporting year was €41.2 billion; the increase was primarily due to earnings-related factors. The equity ratio was 22.1 (21.4) %.

Other provisions decreased by €0.6 billion to €19.2 (19.9) billion, due mainly to the reduction in sales-related provisions. Provisions for pensions rose by €2.2 billion to €21.3 billion, particularly as a result of a change in measurement inputs, while provisions for taxes increased by €0.5 billion to €4.8 billion.

The €1.9 billion decrease in total liabilities (including deferred income) to €99.8 billion was primarily due to reduced liabilities to banks and lower liabilities from commercial paper.

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 €–5.1 billion to €–2.1 billion. The interest-bearing portion of debt amounted to €84.3 (89.8) billion. In our assessment, given the context created by the extensive and persistent negative impact of the spread of the SARS-CoV-2 virus and the limited vehicle availability due to the semiconductor shortage, 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 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.

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 25.4% for the reporting period and stood at 29.0% in the previous year.

DIVIDEND PROPOSAL

In fiscal year 2021, net retained profits amounted to €19.1 billion. The Board of Management and Supervisory Board are proposing to pay a total dividend of €3.8 billion, i.e. €7.50 per ordinary share and €7.56 per preferred share. In addition, a special dividend could be distributed in the event that Dr. Ing. h.c. F. Porsche AG goes public.

PROPOSAL ON THE APPROPRIATION OF NET PROFIT

€	2021
Dividend payout on subscribed capital (€1,283 million)	3,772,086,799.20
of which on: ordinary shares	2,213,173,635.00
preferred shares	1,558,913,164.20
Appropriation to other revenue reserves	–
Balance (carried forward to new account)	15,328,896,181.40
Net retained profits	**19,100,982,980.60**

EMPLOYEE PAY AND BENEFITS AT VOLKSWAGEN AG

€ million	2021	%	2020	%
Direct pay including cash benefits	7,816	67.5	7,477	70.6
Social security contributions	1,340	11.6	1,379	13.0
Compensated absence	1,084	9.4	1,099	10.4
Retirement benefits	1,345	11.6	634	6.0
Total expense	**11,585**	**100.0**	**10,588**	**100.0**

VEHICLE SALES

Volkswagen AG sold a total of 1,775,556 (1,941,821) vehicles in fiscal year 2021. During the reporting period, demand recovered from the declines in sales in the prior-year period precipitated by the Covid-19 pandemic. However, the limited vehicle availability due to the semiconductor shortage had a detrimental impact. Vehicles sold abroad accounted for a share of 66.3 (64.9)%.

PRODUCTION

Volkswagen AG manufactured a total of 631,655 vehicles (–20.3%) in the reporting year at its vehicle production plants in Wolfsburg, Hanover and Emden. In fiscal year 2021, supply shortages, especially for semiconductors, limited production and resulted in a further reduction in total annual production volumes, after the pandemic had had a strong impact in the previous year.

EMPLOYEES

As of December 31, 2021, a total of 117,633 (118,673) people were employed at the sites of Volkswagen AG, excluding staff employed at subsidiaries. Of this figure, 4,635 (4,848) were vocational trainees. 7,235 (6,210) employees were in the passive phase of their partial retirement.

Female employees accounted for 17.9 (17.8)% of the workforce. Volkswagen AG employed 7,227 (7,002) part-time workers. The percentage of foreign employees was 6.5 (6.4)%. In the reporting period, 83.3 (83.1)% of the employees in Volkswagen AG's production area were in possession of vocational or additional training. The proportion of graduates was 21.4 (20.7)% in the same period. The average age of employees in fiscal year 2021 was 44.8 (44.5) years.

RESEARCH AND DEVELOPMENT

Volkswagen AG's research and development costs as defined in the German Commercial Code amounted to €3.5 (3.6) billion in the reporting period. 13,507 (+1.4%) people were employed in this area at the end of the reporting period.

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 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. Even in our new Group strategy NEW AUTO – Mobility for generations to come, we aim to make mobility sustainable for present and future generations.

The main financial 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, purchasing, technology, 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 also anchored our goal to sustainably shape mobility for present and future generations in our new Group strategy NEW AUTO. Especially the Group's ESG, Decarbonization and Integrity base initiative will drive this topic further.

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 compliance with legal provisions and internationally established reporting standards.

We conducted another materiality analysis in the reporting period. In reviewing potentially material issues, we considered both external and internal company perspectives. During the development phase of the Group's NEW AUTO strategy, financial and capital market requirements were also taken into consideration for the selection of focus issues. As a result of this process, the four already defined focus areas – decarbonization, circular economy, responsibility in supply chains and in business, and people & transformation – were confirmed from the 2020 materiality analysis. Two new focus areas – diversity as well as integrity – were added in 2021, and all focus areas were classified as material by the Group Sustainability Steering Committee. The associated United Nations Sustainable Development Goals (SDGs) including the relevant subgoals were assigned to the focus areas in parallel. The six focus areas cover most of the requirements formulated in the ESG ratings for assessment criteria applied. The focus areas are each underpinned by explicit goals and milestones, measurable KPIs – where available – and clear responsibilities allocated to the respective Group functions and appropriate packages of measures. ESG-related KPIs such as the decarbonization index and the diversity index are already today reflected in the remuneration of members of the Board of Management.

For more information on sustainability, please see our Sustainability Report for fiscal year 2021.

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 several internal guidelines on sustainability.

On this basis, we seek to align the Volkswagen Group's actions 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.

Reinstatement in the UN Global Compact

Since 2021, after a five-year hiatus, the Volkswagen Group has officially been reinstated as a participant of the UN Global Compact, the world's largest corporate sustainability initiative. The Volkswagen Group formally requested renewed participation in the reporting period and its request was granted. We had been removed from the list of members in the wake of the diesel issue. An important prerequisite for reinstatement was met on successful completion of the compliance monitorship in 2020.

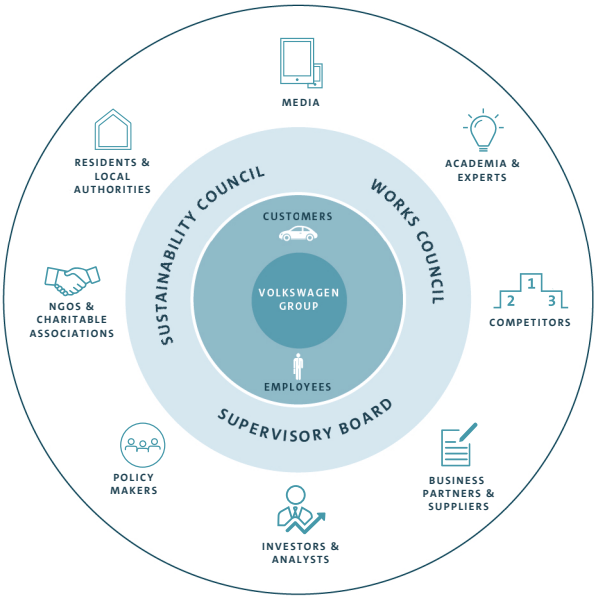
Management and coordination

The Volkswagen Group has established a Group-wide sustainability management. The related structures, processes and responsibilities are codified in a specific Group policy. We view sustainability management as a continuous improvement process. The core elements include assumption of overall responsibility for sustainability by the Chair 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 and from Group Divisin positions as well as 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 analysis, we have identified eight more

THE VOLKSWAGEN GROUP'S STAKEHOLDERS



stakeholder groups of importance around this core. The Group's supervisory and advisory bodies such as the Supervisory Board, the Works Council and the Sustainability Council act as interfaces between internal and external stakeholders.

We understand stakeholder management as systematic, continuous interaction with key interest and stakeholder groups in line with our new Group strategy NEW AUTO. Our stakeholder management aims to actively shape and promote an open, constructive and also critical exchange with nonprofit organizations (NGOs), investors, business partners, associations, policymakers and the scientific community regarding their requirements and expectations, as well as central strategic issues and their implementation.

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 mentioned above and the Stakeholder Panel. The latter once again took a break in 2021 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.

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. This advisory body 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.

Dialogue between Volkswagen and the Sustainability Council in 2021 focused on the new Group strategy NEW AUTO and on the topics of ESG, decarbonization, sustainable supply chains, circular economy, diversity and workforce transformation. Following the discussions, the Sustainability Council submitted two letters of recommendation on these aspects to the Group Board of Management.

Furthermore, the Council launched a project to examine the importance of digitalization for sustainability as well as a study on the potential of future forms of work and training. In the reporting period, the research project with the Mercator Research Institute on Global Commons and Climate Change begun in 2020 focused on dialogue and initial analyses of the inclusivity and effectiveness of climate legislation in the transport sector.

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 2021, the brands and companies launched or continued around 800 projects and initiatives worldwide.

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

TOGETHER4INTEGRITY

HOLISTIC INTEGRITY AND COMPLIANCE MANAGEMENT SYSTEM

Integrity and compliance are major priorities in the Volkswagen Group. We firmly believe that, for long-term commercial success, it is important that each and every individual complies with laws, regulations and commitments. Compliant behavior must be a matter of course for all Group employees. This is why integrity and compliance remain key elements of our new Group strategy NEW AUTO and a focus topic in matters of sustainability.

Our objective is to be a role model and deepen the trust of our employees, customers, shareholders and partners in our Company. Our regulations, processes and corporate culture focus on all employees acting with integrity and complying with the rules at all times.

At the same time, we have embedded integrity in our decision-making processes. For example, every resolution proposal submitted to the Board of Management must explain that the intended decision is in line with integrity and compliance, what risks may be associated with 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.

Integrity and compliance must have an equally important strategic and operational priority as performance indicators in our Company as, for example, sales revenue, profit, product quality or employer attractiveness.

We have been building a holistic integrity and compliance management system (ICMS) since 2018. This system is in line with the five internationally recognized ECI (Ethics and Compliance Initiative) principles: strategy, risk management, a culture of integrity, a speak-up environment and resolute accountability.

We are implementing our Together4Integrity (T4I) program to anchor integrity and compliance throughout the Group. This program brings together the vast majority of the Group's integrity and compliance activities under one roof, applying uniform, robust process and implementation standards.

Thus, we are not only establishing a worldwide ICMS for all Group and brand companies, we are also advancing one of the most extensive change and cultural programs in the history of the Volkswagen Group.

T4I – eleven key initiatives

T4I is to be rolled out in the Volkswagen Group in 2022 and implemented by 2025. The Group's headquarters is overseeing the program planning and rollout of T4I. The managing directors of the individual companies are responsible for implementing the program at a local level. The packages of measures may differ depending on local circumstances. The implementation time will also vary.

The packages of measures are divided into eleven key initiatives:

1. HR (Human Resources) Compliance Policies and Procedures

The aim of this key initiative is the integration of integrity and compliance into the standard HR processes such as recruitment, training, promotion and remuneration (bonus payments). Integrity and compliance are also a compulsory topic in annual employee appraisals and form part of training measures for employees across all levels of the Company.

2. Code of Conduct

The Code of Conduct (CoC) is the key instrument for reinforcing employees' awareness of responsible action and decision making, creating the basis for complying with the rules within the Company. The CoC provides support to employees and managers, helping them to find the right

contact persons in cases of doubt. Included in the employment contracts, the CoC commits all Group employees to comply with it. Our employees undergo regular mandatory training in the key contents of the CoC.

3. Integrity Program

The integrity program is designed to reinforce the culture of integrity. Its objective is to communicate to employees the importance of integrity and motivate employees to behave with integrity in their everyday work. We regard integrity as an attitude; it provides an inner compass for correct action and becomes particularly decisive in gray areas, when explicit rules are missing or conflicting goals exist. We place particular emphasis on making decisions with integrity. Appropriate training modules on this topic provide support to all management levels, from foremen up to executives.

4. Risk Management and Internal Controls

All business activities entail risks. Binding structures and processes are designed to help create transparency and manage risk. These include the quarterly risk process, which is focused on acute risks, the standard internal control system (ICS), which is designed to protect key processes, and root cause analysis.

5. Internal Compliance Risk Assessment

The internal compliance risk assessment (ICRA) identifies and addresses compliance risks in the Group, in particular those risks involving corruption, money laundering, embezzlement and risks relating to business and human rights. Compliance measures are defined for each company based on its risk profile. The ICRA also defines implementation standards for the Code of Conduct, whistleblower system and compliance training.

6. Whistleblower System

The whistleblower system is the central point of contact for reporting cases of rule-breaking by Group employees such as white collar crimes, acts of corruption, tax offenses, environmental offenses, human rights violations, infringements of antitrust and competition legislation, money laundering and terrorism financing, breaches of product safety and licensing regulations, and serious breaches of privacy. Employees and third parties can report misconduct at any time and in many languages. A wide range of channels is available for this purpose, including completely anonymously, if preferred. The aim is to avert damage to the Company and its employees through the use of binding principles and a clearly governed process.

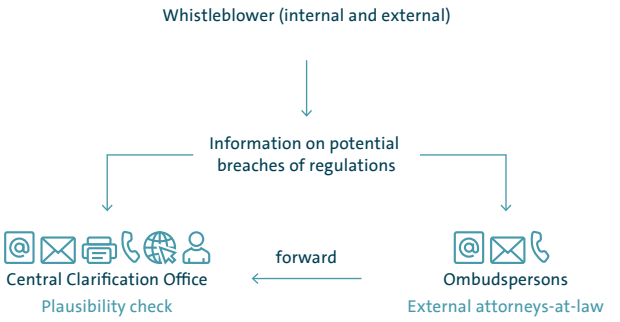
7. M&A and NCS compliance

In the event of planned mergers and acquisitions (M&A transactions), the relevant companies are audited for commercial risks such as corruption, breaches of trust or fraud. The analyses provide recommendations to mitigate the risks identified. This also applies to joint ventures as well as industrialization and cooperation projects with external partners. Furthermore, the Group Compliance organization works to achieve appropriate compliance management at non-controlled shareholdings (NCSs), i.e. companies that are not controlled by a Volkswagen Group company as a majority shareholder.

8. Business Partner Due Diligence

The business partner due diligence (BPDD) process entails reviewing the integrity, and especially corruption risks, of suppliers, service providers and sales partners. The aim is to identify risks of legal infringements, such as corruption or the violation of ethical standards, at an early stage, to avoid risky business partners and to define measures to minimize risks and implement these with the business partner. If this is not possible, options for terminating the business relationship are explored, or the business relationship is not established in the first place. As such, we have already established the fundamental prerequisites for the implementation of parts of the *Lieferkettensorgfaltspflichtengesetz* (German Supply Chain Due Diligence Act).

REPORTING CHANNELS OF THE WHISTLEBLOWER SYSTEM



9. Product Compliance

The product compliance management system (PCMS) is designed to ensure that our products comply with the legal and regulatory requirements of the exporting and importing country, internal and external standards, contractually agreed customer requirements and externally communicated voluntary commitments over 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 relevant requirements and responsibilities for all strategy, planning and decision-making processes in the Group brands and companies. This includes a system of key indicators to determine progress in meeting environmental targets in the fields of renewable energy, CO_2 emissions and resource efficiency. We make allowances for the actual and potential environmental risks and opportunities across our products' entire life cycle.

11. Anti-Corruption

The Volkswagen Group has a zero-tolerance policy on active or passive corruption. This is anchored in both our internal Code of Conduct and our Code of Conduct for Business Partners. Our investigation offices look into and process any reported violations of our principles, and sanctions are imposed on the employees concerned. This initiative also includes the development and implementation of mandatory training for employees in divisions or companies with a high risk exposure.

Hence, T4I aims not only to strengthen uniform corporate governance throughout the Group in relation to integrity and compliance, the program is also designed to advance the culture of integrity by inspiring and motivating employees and strengthening their own drive to act with integrity in all situations. This includes steadfastness in adhering to principles of integrity – regardless of economic or social pressures. Thus, T4I and the ICMS contribute significantly to increasing sustainability in the Volkswagen Group.

Sustainably measuring success

Methods for monitoring effectiveness and measuring progress are an integral part of the compliance management system. The central planning and reporting system of the T4I program provides continuous transparency on the implementation status of the key initiatives. It is used for internal reporting to the Group Board of Management and the Brand Board of Management, makes project advances known and serves to provide assistance when countermeasures are being introduced in response to project delays.

The annual opinion survey also provides information about the development stage of our culture of integrity. The Group-wide employee survey examines whether each individual is able to act with integrity. Where a fixed threshold value is not achieved, the relevant manager must identify and remove the possible obstacles together with the team.

To measure the level of target achievement in relation to Integrity and Legal Affairs, we have 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 that address compliance with regulations and processes, dealing with risks and errors and the opportunity to act with integrity. In the event of negative deviations, the affected departments develop and implement measures. From an already good basis – the level of agreement among employees has always been in the highest category of the underlying five-level range – the indicator has continuously improved up to and including 2021. The index was up by 4.1 points compared with the baseline value and 0.2 points year-on-year.

In addition, Volkswagen uses the integrity index. It measures a company's integrity holistically and functions as a structural early warning system. Determination of the index began in 2019 as a pilot project for the Volkswagen Passenger Cars and Audi brands. Independent business ethicists collect more than 100 measuring points in the categories of compliance & infrastructure, working atmosphere & integrity culture, products & customers, society, and partners & markets. The assessment conducted in the reporting period showed encouraging progress in the index value. Gains in, among other things, the categories of compliance & infrastructure, working atmosphere & integrity culture, products & customers, and society contributed.

The Group also conducted its first-ever integrity and compliance survey in the reporting period, with 47,000 employees taking part anonymously.

Compliance: clear rules in the Group

Compliance with the rules must be a matter of course for all employees of the Volkswagen Group. The Group compliance organization provides support worldwide in the form of programs, guidelines, processes and practical advice. It helps the Group and brand companies to comply with the rules when carrying out their business activities and to comply with the relevant laws and internal regulations. The compliance work focuses on the prevention of corruption and fraudulent breaches of trust, money laundering and the topic of business and human rights.

The Compliance Infopoint has established itself as the central help center for compliance questions at the Volkswagen Group. The team either directly issues a recommendation on the matter in question or forwards the query to a competent body. Case studies derived from these consultations are regularly incorporated into communications about compliance. The accessibility of the Infopoint was expanded further in the reporting period; using the Volkswagen 360° app, employees can now contact the Compliance Infopoint directly. This makes it much easier particularly for employees without a computer workstation of their own.

In addition, the Group Compliance organization offers training and communication formats tailored to specific target groups – management discussions and training courses for multipliers being two of these. Moreover, compliance content is part and parcel of all career development paths from the induction program for trainees to programs for leadership and management development to the senior management program. The measures are supplemented by information and communication activities such as awareness campaigns, film and dialogue formats, newsletters and interactive games for learning about laws and rules.

In the reporting period, the Group Compliance organization dedicated itself to important future areas with a set of actions, including projects for cross-Group collaboration in the markets, further development of IT-based compliance tools and exchange formats with internal and external compliance experts.

Responsibility in supply chains and in business

Requirements and aim

The Volkswagen Group aims to make mobility sustainable for generations to come. It is therefore only natural that we comply with our legal, social and environmental responsibility not just within the Group but also in our supply chains.

This is the reason Volkswagen defined "responsibility in supply chains and in business" as a focus topic and integrated it into the initiatives of the new Group strategy NEW AUTO. We recognize our corporate responsibility for human rights in our business units, at our sites and in our business relationships. We condemn forced and child labor, respect the freedom of assembly, put tolerance and diversity into practice, protect the disadvantaged and do not engage in unlawful activities. This is also anchored in our Code of Conduct.

Our goal is to strengthen the compliance management system for human rights, which is in force throughout the Group. This system has been designed to comply with the UN's Human Rights Due Diligence requirements. We aim to effectively reduce ESG (environmental, social, governance) risks including human rights risks by no later than 2025. All Group companies within the scope of Group Compliance are to have implemented the topic of business and human rights in their compliance management system by 2023. We will support the achievement of targets with suitable measures and manage this by means of corresponding KPIs.

Focal points: business and human rights

We compared the pertinent human rights frameworks with our business-specific activities and defined the aspects that are relevant for us as focal points. These salient business & human rights issues refer to:

- Labor rights
- Safety
- Tolerance

In 2019, the Volkswagen Group Board of Management established a coordination function for the topic of business and human rights within the Volkswagen Group, which also coordinates the collaboration with the brands and regions. We use an appropriate committee structure to manage this topic from the Group Board of Management down to the regional level in the Group brands.

Dialogue and cooperation

We communicate with our workforce on the topic of business and human rights via various channels. We communicate our positioning to the public and external stakeholders in interviews and media reports.

We are the only automobile manufacturer involved in the international, cross-sectoral Global Business Initiative for Business and Human Rights (GBI). In addition, we are active in Econsense, the sustainability association for German industry. Furthermore, we are in dialogue within the German automotive industry as part of the National Action Plan for Business and Human Rights and seek close exchange with other companies as well as institutional investors and investment banks, for example at our annual ESG conference for investors.

Transparency through risk assessments

The topic of business and human rights is closely integrated into our internal compliance risk assessments. Group Compliance has now assessed the human rights risks at 782 controlled Group companies in a total of 83 countries. The results were reviewed and confirmed by the companies, which were then notified of risk-specific measures that they were required to implement by the end of the reporting period. The implementation will be monitored starting in 2022.

Preparations for the Lieferkettensorgfaltspflichtengesetz (LkSG – German Supply Chain Due Diligence Act)

We are currently intensively preparing for the German Supply Chain Due Diligence Act. The Volkswagen Group supports the newly created binding legal framework under which companies and their suppliers commit to respecting human rights. We welcome the fact that the law creates longer-term legal certainty for companies. Yet the LkSG will also impose requirements that can only be fulfilled with great effort on the part of companies.

For more information on integrity and compliance as well as the topic of business and human rights, please see our 2021 Group Sustainability Report.

WHISTLEBLOWER SYSTEM
https://www.volkswagenag.com/en/group/compliance-and-risk-management/whistleblowersystem.html
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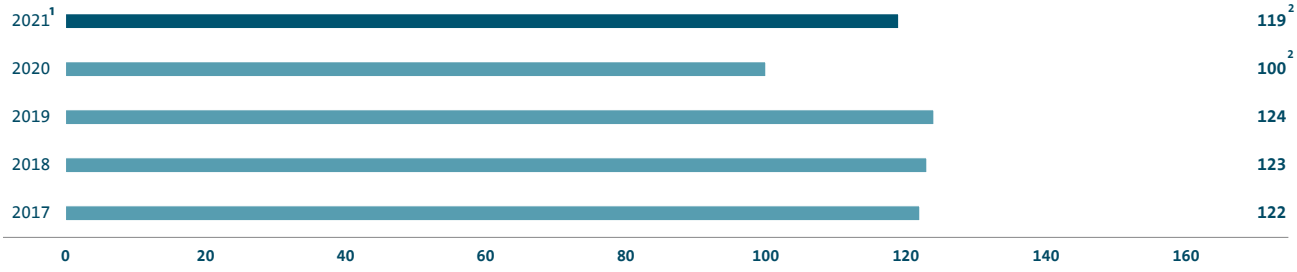
CO_2 EMISSIONS OF THE VOLKSWAGEN GROUP'S EUROPEAN (EU27+2) NEW PASSENGER CAR FLEET
in grams per kilometer (WLTP)



1 The European Commission switched its calculation of CO_2 fleet emissions from NEDC to WLTP in 2021.
2 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 NEW AUTO strategy to link development activities across the Group. At the heart of this new strategy 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 synergies 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.

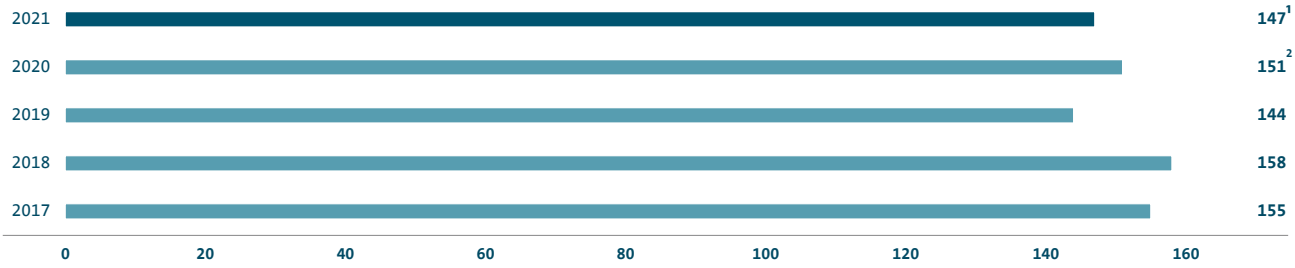
In view of this strategic focus, we concentrated in the reporting period on continuing to develop forward-looking mobility solutions, establishing technological expertise to strengthen our competitiveness, expanding our range of products and services and improving the functionality, quality, safety and environmental compatibility of our products and services.

CO_2 fleet emissions

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) (EU27+2) emitted an average of 119 g CO_2/km (WLTP)[1] in the reporting period in accordance with the statutory measurement bases. The statutory target is 121 g CO_2/km (WLTP)[1]. The Volkswagen Group thus more than met the EU's CO_2 fleet target. Under European CO_2 legislation, the Lamborghini and Bentley brands are considered small volume manufacturers with an independent fleet and are assessed accordingly. Both exceeded their individual targets. Bentley and Lamborghini will be integrated into the Volkswagen Group's new passenger car fleet in the EU from 2022. The European Commission is striving to cut CO_2 emissions by 15 % by the year 2025, which corresponds to a CO_2 target of less than 105 g CO_2/km for our new passenger car fleet in the EU. A reduction of 55 % has been proposed for 2030, equivalent to a CO_2 target of less than 60 g CO_2/km. We assume that our new passenger car fleet in the EU will meet this target for 2025 and exceed the target for 2030. The Volkswagen Group's new light commercial vehicles fleet in the EU emitted an average of 202 g CO_2/km (WLTP)[1] in the 2021 reporting period according to the statutory measurement bases. The statutory target is 198 g CO_2/km (WLTP)[1]. Contrary to the original planning, the Group fell just short of this target owing to the semiconductor shortage, which resulted in limited vehicle availability. The CO_2 pool established together with other manufacturers achieved its target. All figures are subject to confirmation of CO_2 data within the scope of official publication by the European Commission. The European Commission is striving to cut CO_2 emissions by 15 % by the year 2025, which corresponds to a CO_2 target of less than 175 g CO_2/km for our new light commercial vehicles fleet in the EU. A reduction of 50 % has been proposed for 2030, equivalent to a CO_2 target of less than 115 g CO_2/km. We assume that our new light commercial vehicles fleet in the EU will meet this target for 2025 and exceed the target for 2030. In the United Kingdom and Switzerland/Liechtenstein

CO_2 EMISSIONS IN VOLKSWAGEN GROUP PASSENGER CARS AND LIGHT COMMERCIAL VEHICLES UNDER GHG STANDARDS IN THE USA
in grams per kilometer for the model year



1 Subject to submission of the final MY report MY21 and subsequent confirmation by EPA and CARB (internal data as of September 2021).
2 Subject to confirmation by EPA and CARB (final MY report MY20 submitted but not yet confirmed).

markets, the Volkswagen Group fleets fell just short of the statutory requirements for the 2021 reporting period. In the United States, the emission pool – comprising the Group brands Volkswagen Passenger Cars, Audi, Lamborghini, Bentley, Porsche and Bugatti – commits to the Green House Gas (GHG) and Corporate Average Fuel Economy (CAFE) regulations with which all manufacturers are required to comply in connection with passenger cars and light commercial vehicles, taking into account credits for air conditioning and off cycle credits. Due to the delay in the confirmation by the authorities of model years differing from the calendar year, internal calculations are used to determine the figures for the current and preceding model year. The average GHG CO_2 value (internal data as of September 2021) for the passenger car and light commercial vehicle fleets in model year 2021 is 147 g CO_2/km (model year 2020: 151 g CO_2/km). The statutory target is 142 g CO_2/km (model year 2020: 139 g CO_2/km). Application of the statutory flexibility offered by GHG and CAFE together with externally acquired credits enabled the Volkswagen Group to comply with the applicable requirements for model year 2021 subject to confirmation by the authorities. The figure given for model year 2020 is subject to confirmation by EPA and CARB. For 2025, we anticipate a CO_2 target in the USA of approximately 110 g CO_2/km and expect to meet this target. For 2030, we will increase the share of electric vehicles in our new vehicle fleet to significantly more than 40%, putting us within the target range of the current administration.

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. These would entail substantial excess emissions premiums. Around one in five new Volkswagen Group vehicles worldwide is therefore 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 fully battery-electric vehicles by 2030; production of approximately 20 of these 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 have also developed an all-electric platform for our premium and sports brands – the Premium Platform Electric (PPE). Furthermore, we are currently concentrating our energies on designing the Scalable Systems Platform (SSP), the successor platform for our future all-electric vehicles, in the Mechatronics technology initiative within the Group's new strategy NEW AUTO. The strategic goals of this SSP platform are to further reduce variance by consistently leveraging synergies and thus tapping into considerable potential for cost savings. Audi's Artemis vehicle project will use key SSP modules for the first time from 2025. As of

2026, Volkswagen will then launch its first model based on the SSP in the volume segment in the shape of the Trinity vehicle project.

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 will continue to make up a large share of the drive portfolio 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. We are preparing intensively for this as we develop our product portfolio.

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 in the long term as part of our transformation. 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 caused by our products throughout the entire vehicle 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 charging current, 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. One of the recommendations for achieving this goal is avoiding substances on the EU REACH Candidate List of Substances of Very High Concern. 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 the Development division were reorganized in 2020 in order to coordinate module development even more efficiently and leverage synergies in module variance, components, parts and processes.

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 wish 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 an organizational structure based on product lines, thus strengthening their responsibility for the success of vehicle projects, improving project work across the divisions, 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

The mobility of people and goods is a prerequisite for economic growth and social development. But 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 in our Group-wide alliance: when shaping the future of mobility, we are looking not only at the automobile and related services, but at all modes of transport, transport infrastructures and people's mobility habits. Digital connectivity and automated driving allow for completely new approaches to solving problems. They can help us play our part in a comprehensive mobility system for the future and drive forward our industry's transformation.

New software solutions are the basis for this. This is why the Volkswagen Group has declared software development to be one of its targeted core competencies by introducing the software key initiative to its new strategy NEW AUTO. This initiative is the responsibility of our software subsidiary CARIAD. Founded in 2020 as the Car.Software Organisation and renamed CARIAD in 2021, the company is to develop a sustainable, convenient, connected, safe automotive experience for the customers of our Group brands. CARIAD provides answers to the strategic aspects of digitalization and pools the Group's software expertise.

Developers from CARIAD work at plants in Germany and collaborate with development teams in North America and China. The establishment of separate CARIAD branches in North America and China was initiated in 2021. The company employs around 4,500 specialists who are developing the following solutions in the Group:

- VW.OS, a uniform vehicle operating system for all Group vehicles
- A uniform end-to-end electronics architecture
- Connectivity with VW.AC, a shared Volkswagen Automotive Cloud
- An infotainment platform with an app store for third-party providers
- Driver assistance systems, autonomous parking functions and autonomous driving for private mobility
- A data marketplace
- New mobility services and digital business models

It is envisaged that CARIAD will pool these solutions on a specially developed, scalable software platform called E^3 2.0 and make it available to the Group brands from the middle of this decade. The intention is to use it for the first time from 2025 in an Audi brand model as part of the Artemis project. From 2026 the software platform will move into the volume segment within the scope of Volkswagen's Trinity project. Further Group models will follow to generate economies of scale and to lower the cost of growing software requirements in the vehicle for all brands.

CARIAD is already supplying updatable software to the Group brands today. Our goal is to make the software secure and traceable. It can be installed in the vehicles as over-the-air updates – an important prerequisite for fulfilling regulations R.155 and R.156 of the United Nations Economic Commission for Europe (UNECE).

The new software platform E^3 2.0 is set to pave the way for the autonomous driving functions of the future, with CARIAD responsible for developing assisted and highly automated driving functions up to Level 4 for all of the Volkswagen Group's passenger car brands. Volkswagen is developing robotic shuttles and vans as part of its strategic Mobility Solutions technology initiative, which is promoting autonomous driving in conjunction with service models, i.e. shared mobility (Mobility as a Service, Transportation as a Service).

The Group brands presented new concept vehicles in 2021 that showcase their vision of sustainable future mobility. These vehicles aim to enable new forms of mobility in both cities and rural areas, also addressing user groups that have so far been excluded from access to mobility: Volkswagen Commercial Vehicles presented its autonomous shuttle for the first time in conjunction with Argo AI. The Volkswagen ID.Life will offer sustainable electric mobility for urban life, while the Audi Grandsphere defines the future of autonomous business travel.

Pooling strengths with strategic alliances

The aim of our new strategy NEW AUTO is to transform our core business activities and to expand the 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 our 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 motto "Mobility for generations to come". Technologies and activities that are ready for pre-development are regularly transferred from Volkswagen Group Innovation to our Group brands to ensure that the areas of digitalization, sustainability and e-mobility receive continuous support in 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

formed an alliance with Ford Motor Company with the intention of working together on 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. Among other things, 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 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 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. To this end, we completed a transaction to cooperate in the development of autonomous driving with Argo AI and Ford at the start of June 2020. As part of this transaction, the former Volkswagen Group company AID was incorporated into Argo AI. In addition, Ford will use the Modular Electric Drive Toolkit (MEB) developed by Volkswagen for a zero-emissions volume model that is expected to 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.

We are accelerating our transformation into a mobility provider with a fully connected vehicle fleet and our "Volkswagen We" digital ecosystem through our strategic partnership with Microsoft. Together, we will press ahead with software development for the automobile of tomorrow and new services for our customers, including cloud-based driver assistance systems and automated driving and parking functions, thus comprehensively strengthening and expanding our IT expertise and solutions.

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

Key R&D figures

In fiscal year 2021, we filed 5,638 (6,795) 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 €15.6 (13.9) billion and were 12.2% higher than in the previous year; their percentage of the Automotive Division's sales revenue – the R&D ratio – remained unchanged at 7.6 (7.6)%. In addition to new models, our activities focused above all on the electrification of our vehicle portfolio, digitalization, new technologies and our modular toolkits and platforms. The capitalization ratio was 50.3 (46.6)%. Research and development expenditure recognized in profit or loss in accordance with the IFRSs increased to €12.8 (12.1) billion.

As of December 31, 2021, our Research and Development departments – including the equity-accounted Chinese joint ventures – employed 53,046 people (+0.6%) Group-wide, corresponding to 7.9% of the total workforce.

RESEARCH AND DEVELOPMENT COSTS IN THE AUTOMOTIVE DIVISION

€ million	2021	2020
Total research and development costs	15,583	13,885
of which capitalized development costs	7,843	6,473
Capitalization ratio in %	50.3	46.6
Amortization of capitalized development costs	5,050	4,644
Research and development costs recognized in profit or loss	12,790	12,056
Sales revenue	206,237	182,106
Total research and development costs	15,583	13,885
R&D ratio	**7.6**	**7.6**

PURCHASING

In fiscal year 2021, the main task for Purchasing (formerly 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 purchasing processes forward. The first half of 2021 was marked by significantly higher demand for Group vehicles, though it became apparent that the capacity that had been drastically reduced in 2020 due to the pandemic could not be built up quickly enough in many areas. As a result, a large number of raw materials and components saw growing shortages of market capacity in 2021; one example being semiconductors, also due in part to the parallel increase in demand in the consumer, IT and telecommunications sectors, which led to supply bottlenecks and price increases.

Purchasing strategy

The new Group strategy NEW AUTO also stands for more speed, focus and stringency within the Purchasing division, accelerating change even more. In 2021, the Purchasing division launched the functional area strategy NORTH STAR, a cross-organizational, comprehensive strategic program. Alongside short-term cost targets, the program seeks to improve our supply situation, increase product quality and boost innovative power and sustainability. Its goals are based on the NEW AUTO Group strategy and are driving Volkswagen's transformation also from within the Purchasing division. NORTH STAR is also creating optimized structures for our purchasers and setting further focus areas with the digitalization of our processes and increased employee orientation.

E-mobility

A key task for Purchasing 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, while optimizing cost structures.

When awarding contracts to our electric mobility partners, we lay 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 Purchasing division aims 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 Purchasing was laid in 2018 in the form of Group Purchasing's digitalization strategy. This strategy aims not only to eliminate the weaknesses of Purchasing's IT system environment but also to increase the organization's effectiveness, efficiency and future viability. The initial systems, such as a bot project for automating supply chain business processes, were developed and integrated into the existing system environment.

Structure of key purchasing markets

Our purchasing process is organized at a global level, with a presence in the key markets around the world. This allows us to purchase 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' purchasing organizations enables us to leverage synergies across the Group in the various purchasing markets.

In addition to the brands' purchasing units, the Volkswagen Group operates seven 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 purchasing 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, particularly in the face of the persistent challenges posed by the Covid-19 pandemic, and supplies to vehicle and component plants were largely safeguarded throughout the reporting period. However, the supply situation remained precarious in fiscal year 2021, especially for semiconductors, resulting in limited vehicle availability for customers.

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). The Code of Conduct for Business Partners also sets out the expectation that business partners will take steps to ensure compliance in their supply chain. We review compliance with the requirements, which has been an explicit condition for award of contract since 2019, using sustainability ratings for relevant suppliers. The relevance of a business partner for the S-Rating depends, among other things, on the size of the company or the risk exposure arising from the type of service provided.

In our sustainability rating, we determine suppliers' sustainability performance by means of self-disclosures and risk-based on-site audits. Sustainability ratings had been incorporated into the global procurement processes of relevant companies by the end of the reporting period. By then, we had obtained 12,483 ratings for suppliers, covering 85% of the total order volume. Both the validation of the 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 meet our requirements concerning compliance with sustainability standards. 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 defining and implementing measures to correct the violations; this also includes the upstream supply chain. 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 2021, more than 1,700 thousand suppliers took advantage of our training programs such as digital supplier training courses and e-learning.

Our activities in 2021 continued to focus on compliance, decarbonization and human rights.

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 Paris Climate Agreement. We have therefore incorporated the use of renewable energy, among other things, into the specifications for cell manufacturers.

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 introduced a human rights due diligence management system in 2021 to mitigate human rights risks in our supply chain. 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. Transparency requirements for our battery suppliers constitute an important basis for responsible raw material purchasing. These contractual requirements include the disclosure of the entire upstream supply chain by our battery suppliers and are effective for new contracts awarded.

TECHNOLOGY

The newly created Technology Board position will be responsible for the following focus areas: all activities of Volkswagen Group Components, the marketing of the Volkswagen platforms and components to third parties, the development, manufacturing and procurement of battery cells (Cell and Battery Strategy initiative), the areas of charging and energy with the corresponding joint ventures worldwide (Charging and Energy Services initiative).

The aim is further improvement of future viability and competitiveness through cross-brand management of tech-

nology activities and a value creation strategy coordinated throughout the Group. Synergies are to be leveraged across both traditional technologies and future areas to advance the transition to e-mobility.

The Volkswagen Group presented its technology roadmap for battery and charging until 2030 at its first Power Day in March 2021. The objective of the roadmap is to significantly reduce the complexity and cost of the battery so as to make electric vehicles attractive and affordable for as many people as possible. Volkswagen is establishing a European stock corporation (Société Européenne) to consolidate activities along the value chain for batteries – from processing raw materials to developing a unified Volkswagen battery cell to managing the European gigafactories. The company's scope will also include new business models based around reusing discarded car batteries and recycling the valuable raw materials they contain. The Group is thus creating efficient and future-proof structures for the rapidly growing battery business.

Battery

By standardizing properties like format and geometry, the unified battery cell provides the basis for a competitive orientation of electric mobility at Volkswagen. There are plans to introduce unified battery cells in 2024. Six gigafactories will be required in Europe alone to meet our needs until 2030. Two of the six gigafactories planned for Europe have already been decided. In addition to the site of its partner Northvolt AB in Skellefteå, Sweden, Volkswagen is building its own gigafactory in Salzgitter.

One of the most modern laboratories for cell research and development in Europe was opened at the Salzgitter site in the second half of 2021. In the future, some 250 experts will conduct research in the areas of cell development, analytics and testing at a total of four laboratories. For the Volkswagen Group, Salzgitter is also a pioneer in sustainable responsibility throughout the service life of the battery and opened the Group's first facility for recycling high-voltage vehicle batteries here. The objective is industrialized recovery of valuable raw materials such as lithium, nickel, manganese and cobalt in a closed loop, as well as aluminum, copper and plastic. In collaboration with partners, Volkswagen will achieve a recycling rate of more than 90% percent in the future through mechanical and hydrometallurgical processes.

Volkswagen expanded its shareholdings in different companies again in 2021 within the framework of its electric mobility strategy. The primary transactions in the past fiscal year were the capital increase at Swedish battery partner Northvolt AB for continuing the stake of about 20%. Volkswagen also increased its stake in QuantumScape with the goal of driving forward the joint development of solid-state battery technology. In the future, solid-state batteries are expected to significantly increase range and shorten charging times further. The partnership with Gotion High-Tech Co., Ltd. was deepened in the reporting period on the basis of a substantial buy-in in May 2020. The Volkswagen Group entered a strategic cooperation framework with the major Chinese battery manufacturer headquartered at Hefei. The goal of both partners is to industrialize the planned battery cell production at the Salzgitter site.

Vertical integration

Vertical integration, which is a strategic component of the newly created Board position, targets key success criteria of the electrification strategy, such as maximizing customer benefit, ensuring competitive cost structures and achieving transparency in the supply chain to safeguard channels critical for supply and crucial to sustainability.

In the current business model, overall responsibility for all input materials in the battery cell lies with the battery cell manufacturers. Volkswagen's involvement in the supply chain gives it access to costs and capacity for the materials and raw materials needed for battery production, particularly for lithium, nickel, manganese and cobalt (vertical integration). The objective of intervening in the supply chain is to influence costs and capacity so as to maximize the benefit for the Company.

Charging and Energy

Since early 2021, all activities in the Charging and Energy area have been combined and managed by the Technology Board position, which will thus play a key role in the Group's electric mobility strategy in its bid to become the leading provider of a smart charging and energy ecosystem.

As part of the Group's strategic alignment, the Charging and Energy area is focusing on two key areas. Firstly, sales of electric vehicles are being underpinned by the international development of a widespread charging infrastructure. As part of the joint participation of our Group brands Volkswagen Passenger Cars, Audi and Porsche in the pan-European high power charging (HPC) joint venture IONITY, an extensive charging infrastructure is being developed to safeguard long-distance mobility, which already consisted of 1,586 charging points at the end of the reporting period. The number of public fast charging points in Europe is to be increased to 18,000 by 2025. At the same time, the charging network in North America is to be increased to 10,000 fast charging points in collaboration with Electrify America, while the charging network in China will be expanded to 17,000 fast charging points in conjunction with CAMS. Secondly, sustainable business models are being developed by expanding value creation, such as smart and energy market-integrated charging.

Drivetrain and Platform

The independent corporate entity Volkswagen Group Components, under the umbrella of Volkswagen AG, employs around 70 thousand people worldwide. The focus of their expertise is the development and manufacture of vehicle components. As part of the restructuring of Group Components, the former business unit structure was transferred to the Drivetrain and Platform area in a modified form as product lines (conventional powertrain, chassis and electric drivetrain) with effect from April 1, 2021. The product lines assume responsibility for product management and product costs across all locations, covering Volkswagen Group Components' conventional portfolio.

Besides the product lines, the development areas of Group Components are combined in the Drivetrain and Platform area. The development portfolio focuses on the following areas: chassis components, steering systems, drive shafts, transmissions, electric drives and thermal management systems in the electric drivetrain. The new Systems and Innovation Development department, which was created when all components were bundled at organizational level, is working on the holistically optimized electric drivetrain across all business areas. Close integration of product management and development in the Drivetrain and Platform area are expected to optimize product costs, further sharpen the portfolio of Group Components and play a key role in shaping the electric drivetrain of the future.

Platform Business

Since January 1, 2021, Group-wide responsibility for external sales of platforms and components has been combined in the new Technology Board position. This effectively concentrates the existing activities and resources in one place in the Group. The scope of this new Platform Business organizational unit extends to successful initiation and acquisition (including contract design) as well as to support of customer projects including the related order processing (logistics, billing). In the current cooperation project with Ford, the necessary cross-brand structures and processes have been created within the Volkswagen organization so that other external customers can also be efficiently served in the future.

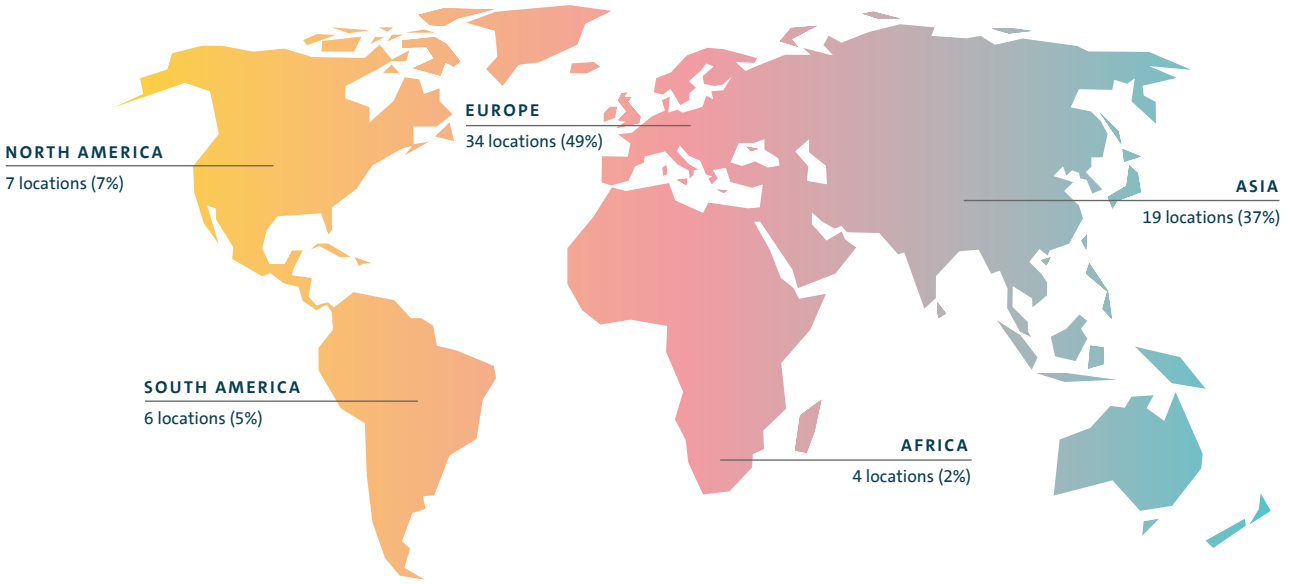
PRODUCTION

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, robust supply streams and structures, and a flexible team. At 8.3 million vehicles, global vehicle production in fiscal year 2021 was 7.0% down on the prior-year figure, which had been affected by national measures to contain the Covid-19 pandemic. Productivity increased by 1.1% year-on-year.

Although most of the restrictions and measures taken in response to the pandemic were lifted during the reporting period and factories were able to operate in compliance with hygiene protocols and other Covid-19-compliant codes of conduct, semiconductor production for key supplier parts had a comparatively slow start. Shortages of market capacity in the semiconductor industry coupled with brisk demand in the consumer goods, IT and telecommunications sectors led to supply bottlenecks and consequently restricted our production. The situation was further exacerbated by extraordinary events such as snowstorms in Texas in early 2021 and pandemic-related closures of semiconductor plants in Southeast Asia starting in June 2021.

To maintain production processes amid the pandemic conditions and protect our employees, we continuously review the behaviors and measures developed as part of our Safe Production Initiative so as to prevent possible chains of infection between the people working in the network and adjust them if necessary.

VEHICLE PRODUCTION LOCATIONS OF THE VOLKSWAGEN GROUP
Share of total production 2021 in percent



"one.PRODUCTION" production strategy

Production is supporting the new Group strategy NEW AUTO with its "one.PRODUCTION" functional area strategy, which was also recently developed. By adopting a common approach for the thematic focus of our activities, we aim to pool the strengths and potential of our global production and logistics across brands and take advantage of the resulting synergy effects. The production strategy is guided by our five strategic goals:

- PRODUCTION.NETWORK
- EFFECTIVITY.EFFICIENCY
- ENVIRONMENT.RESPONSIBILITY
- DIGITALIZATION.INNOVATION
- TEAM.WORK

With these strategic goals we have created content clusters in which expert teams work on the strategic topics relevant for production in the Group. Examples include the design of our global production network, increasing efficiency in production processes, the reduction and offsetting of environmental impact throughout the production process, and the digital transformation of production and working processes and of collaboration formats.

Our scenario-based strategy process provides the thematic framework for the strategic goals. The overarching aim is to increase productivity and profitability. We want to ensure that our sites remain competitive by having our factories work at optimal capacity, enabling us to manufacture high-quality products that give customers maximum benefit at competitive prices.

Global production network

The Group's production network encompasses 120 production sites, including our Chinese joint ventures. Standardizing production with uniform product concepts, plants, operating equipment and production processes within a product family 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 capacities provided by our platforms allow us to respond to market challenges, make requirements-based use of the production network and leverage synergies across brands through multibrand sites. Currently, almost half of the 46 passenger car locations are already multibrand locations. The Bratislava plant continues to serve as a prime example in the Group, producing vehicles for the Volkswagen Passenger Cars, ŠKODA, SEAT, Audi and Porsche brands.

With its new Group strategy NEW AUTO, the Volkswagen Group has set itself the goal of developing sustainable, connected, safe and tailored mobility solutions for future generations and accelerating the Group's realignment from vehicle manufacturer to a leading, global software-centric mobility provider. The foundation for these efforts was 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. The portfolio of the MEB platform in Zwickau was expanded in 2021 through the addition of the CUPRA Born and the Audi Q4 e-tron. Furthermore, we use an all-electric platform for premium and sports brands – the Premium Platform Electric (PPE) – to leverage synergies across brands in production.

Production sites

The acquisition of Navistar increased the Volkswagen Group's global production network to 120 sites in which passenger cars, commercial vehicles and motorcycles, as well as powertrains and various components are manufactured. With 63 factories, Europe remains the center of production activities, and the importance of the Asia-Pacific region is underpinned by 34 sites.

The effects of the Covid-19 pandemic and the additional global supply bottlenecks, especially for semiconductors, caused headwinds for starts of production in the past fiscal year. The Volkswagen Group nevertheless succeeded in starting up 64 vehicle projects, 26 of which were new products and successor products and 38 were product upgrades and derivatives.

New technologies and digitalization

Digital and innovative technologies are systematically validated in the Volkswagen Group and their use for production and logistics is piloted and rolled out. This is to enable the Group to exploit potential for cost savings in the value chain and realize more flexible implementation options as well as quality improvements. The goal of the digital transformation in production is to simplify the entire process chain and make the best possible use of new technologies. Fields of innovation in 2021 were computer vision, augmented reality and process mining.

Based on Volkswagen's proprietary computer vision platform, artificial intelligence is being used for complex label inspections, among other things, and implemented across brands at the Group's sites. Here, for example, the correct positioning and possible damage to the vehicle's name plate are checked. In addition, augmented reality technology (which links the virtual world with the physical world), particularly through the use of the output medium of data glasses, is being tested in initial pilot projects in employee training and in remote support and collaboration. This lays the technical and IT-specific foundations for Group-wide use in production. Work is being done on the use of process mining (visualization and systematic evaluation of IT-based processes in their entirety) so that overarching production and logistics processes can be digitally mapped and better understood. Initial fields of application in process mining are being worked on together with Group Logistics and individual sites. At the Kassel site, for example, the causes of faults in exhaust systems are being identified to increase plant efficiency and reduce resource requirements.

Innovative applications are also being developed locally at the plants and are made available to the Group via the central cloud-based digital production platform (DPP). Despite the Covid-19 pandemic and difficult conditions, the expansion of the DPP was driven forward in collaboration with Amazon Web Services (AWS) and Siemens. Further production sites were linked up to the DPP and equipped with the first applications developed in-house for improving production and logistics. 2021 also saw increased exchange of local solutions between the sites via the DPP. Examples of overarching solutions on the DPP include localization services for vehicles and car bodies on the factory premises, intelligent plant monitoring systems, digital shop floor management, and quality processes and end-to-end quality control loops supported by artificial intelligence. Moreover, collaborative work is being done on predictive maintenance applications (predictive, proactive technology for maintenance and servicing) as well as data analytics functions for analyzing and comparing cross-plant processes.

The Volkswagen Group consciously harnesses the innovative power generated by our continuously growing innovation ecosystem. The Group's open innovation platform provides the central point of contact for start-ups and other innovative companies to work together on new solutions and concepts for production.

With the Industrial Cloud, the Volkswagen Group is going one step further and establishing an open ecosystem based on DPP together with Amazon Web Services (AWS) and integration partner Siemens, in which IoT (Internet of Things) and data analytics solutions will be made available for a more efficient and transparent value chain in the future. The Industrial Cloud community already had over 15 industrial partner companies in 2021.

GoTOzero Impact Factory

We are planning the production of tomorrow with our "one.PRODUCTION" functional area strategy. Emissions levels and the use of resources at Volkswagen Group sites require particular attention. The goTOzero Impact Factory program is developing specific steps toward production that has no

adverse environmental impact with an underlieing vision of creating a factory that has no adverse environmental impact.

We have developed a checklist to help the plants determine the status of their progress on their path to becoming a "Zero-Impact Factory". This currently comprises 143 environmental criteria and provides the basis for the continuous reduction of energy consumption and CO_2 emissions, for example.

To implement such and other programs, a management system will be introduced at all production sites worldwide, linking the main compliance issues with environmental management. This environmental compliance management system (ECMS) provides a solid foundation for compliance with all external and internal rules and regulations relating to the environment within the context of production processes.

We implemented the ECMS in the first Group companies in 2020 and rolled it out to others in 2021. This process is being actively supported, monitored and tracked.

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 managers and employees with specific training on the topic of environmental protection.

We record and catalog measures in another IT system and make these available for a Group-wide exchange of best practices. In the reporting period, around 1,544 implemented measures in the area of environment and energy were tracked and documented in this system via the Maßnahmen@Web system. They serve to improve infrastructure and production processes for passenger cars and light commercial vehicles and are incorporated into the decarbonization index (DKI), 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 can reduce 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.

Specific 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 two roll-on/roll-off (RoRo) charter ships powered by low-pollution liquefied natural gas (LNG) for transporting vehicles across the North Atlantic. Group Logistics plans to replace conventionally operated ships on the North Atlantic route with four more car freighters with the same propulsion system from the end of 2023. In contrast to other LNG-fueled marine engines, Group Logistics' charter ships are climate-friendly because the high-pressure technology of the two-stroke engines from MAN Energy Solutions allows almost no methane to escape. The dual-fuel engines will also enable non-fossil fuels – biogas (bio-LNG), e-gas (synthetic gas) from renewable sources, or biofuel – to be used in the future so that carbon emissions can be reduced even further.

In addition, Group Logistics permanently operates two charter ships on European sea routes using certified renewable fuel. Used cooking oils and fats – waste and residual materials from the catering and food industries, for example, that cannot be used for further processing into food or animal feed – provide the raw material for the biofuel, which produces at least 85 % less CO_2 than conventional fossil fuels.

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 our 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 and legally compliant handling of customer data and the way in which this is processed for digital products and services or in connection with the vehicle purchase. The legal requirements for handling customer data have been tightened in many countries. At the same time, new Group vehicles that are permanently connected to the internet are about to be launched. We are increasingly investing in distribution systems and processes with the goal of further digitalizing and improving the individual customer experience in all distribution channels.

The Volkswagen Group's financial strength and profitability is attributable to an extensive portfolio of strong brands. The objective of our Best Brand Equity instrument is to continuously sharpen the brand profiles and to distinguish as clearly as possible between the customer segments served by the brands, supplementing them as required with tailored solutions. 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.

As part of our new strategy NEW AUTO we have introduced strategic base initiatives for China as the largest single market and North America as the market with the greatest growth potential due to their considerable strategic importance for the Volkswagen Group.

Customer satisfaction, customer loyalty and customer conquest

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, 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 improved for all group brands. 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 a brand-specific selection of competitors. This KPI is stable for the Volkswagen Passenger Cars brand, while Audi and ŠKODA show improved conquest rates.

In the core European markets, the brand image of the Volkswagen Passenger Cars brand stabilized at the level of the market as a whole in 2021, and confidence in the brand improved. Porsche remains in top position in the image ranking.

In the financial services business, we use two strategic indicators of customer satisfaction and customer loyalty. 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.

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 and markets 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 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 in 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 10.1% in the reporting period, business fleet customers accounted for 16.6 (16.2)% of total registrations.

The Volkswagen Group's share of this customer segment remained consistent at 42.1 (42.1)%. Outside Germany, the Group's share of registrations by fleet customers in Europe was 26.5 (26.6)%. This 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, 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 a comprehensive 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 After Sales, we are supporting the changing world of mobility and our consistent orientation on e-mobility by developing new services and innovative concepts. As the Group transforms from vehicle manufacturer to a leading, global software-centric mobility provider, our software company CARIAD is working on the development of the new software architecture for vehicles in future. With the resulting connectivity services, we will be able to leverage synergies in After Sales across all the Volkswagen Group's brands and take advantage of new opportunities to boost customer loyalty.

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. By offering vehicles equipped with an all-electric or hybrid drive system, we take into account both customers' wishes and our responsibility to contribute to emission-free transportation. 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.

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 Auto-

motive 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." The NEW AUTO Group strategy announced in 2021 sets new parameters for transforming the Group into a software-centric mobility provider. Based on this, our quality strategy focuses primarily on achieving maximum levels of customer satisfaction throughout the entire customer experience – from ordering through to the digital ecosystem and up to aftersales and customer service. The work packages that are still being implemented will be integrated. 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.

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, Volkswagen Commercial Vehicles, ŠKODA, SEAT, Audi and Porsche brands are included in this figure. Extraordinary items resulting from initiatives such as recalls to assure product safety or comply with laws are not taken into account. While the figures starting from the 2017 production year remained at a constant low level, they increased in the 2020 production year due to the growing use of new technologies in the vehicle and rising complexity. Action was taken to reduce these figures.

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 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 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 and the official type approval requirements. These standards and requirements 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 these requirements. 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 coordinated and supported in this endeavor by a central office in Group Quality.

Observing regional requirements

We use a variety of feedback instruments, such as specific customer surveys, to collection information on region-specific customer requirements. In addition, we monitor relevant internet forums and social media postings worldwide to obtain direct customer feedback and identify sentiment and trends at an early stage.

In order to be able to make the perceived quality of our vehicles 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 private employers. On December 31, 2021, we employed a total of

672,789 people, which includes the Chinese joint ventures. This figure represents a 1.5 % increase compared with the end of 2020. The ratio of Group employees in Germany to those abroad remained largely stable over the past year; at the end of 2021, 43.9 (44.4) % of the workforce worked in Germany.

EMPLOYEES BY MARKET
in percent, as of December 31, 2021

Human resources strategy and principles of the human resources policy

The 2021 reporting period saw the Volkswagen Group adopt the new "Transform to Tech" human resources strategy that builds on the "Empower to transform" functional area strategy and takes up the objectives of the new Group strategy NEW AUTO and its People & Transformation base initiative.

With its new human resources strategy, the Volkswagen Group is also continuing with key approaches in its human resources policy. These include the pronounced stakeholder focus in corporate governance, comprehensive participation rights for employees, comprehensive training opportunities, the principle of long-term service through systematic employee retention and remuneration that is fair and transparent. Throughout the Group, we offer individual remuneration components for employees not covered by collective agreements that we continuously update to reflect new working realities and business models.

At the same time, the new human resources strategy is setting innovative trends. Employee experience is to be considered systematically, the teams strengthened as the most important units in the company's organization, and modern forms of working, such as agile methods, are to be developed. However, our main aim is to improve the individual experience of employees in order to become more attractive as an employer and take the performance of our organization to the next level.

This is why "Transform to Tech" looks at employees and their needs throughout the entire work experience: "Me" (Me@Volkswagen), "My team" (Teams@Volkswagen), "All of us at Volkswagen" (All of us@Volkswagen) and "Volkswagen in society" (We@Volkswagen and the world around us) are the perspectives from which we address employees' needs and expectations in a holistic manner. Together, these four dimensions make up the work experience, job satisfaction and, ultimately, the success of the work and the Group's integration into society.

- The first dimension, "Me@Volkswagen", follows the principle that every employee should have the best possible conditions in which to do their job. Starting with availability of first-class work equipment and tools, this also entails avoidance of red tape and overly complex process steps and includes state-of-the-art workspaces, opportunities for 360° feedback, individual health coaching, and training opportunities tailored to the individual.
- The "Teams@Volkswagen" dimension is pivotal to the Group's success: high-performance teams in the Volkswagen Group are groups that trust each other, have a common goal and can rely on each other. Yet they also discuss matters critically and speak their minds.
- "All of us@Volkswagen" describes the corporate culture dimension. The Volkswagen Group provides a strong culture, unique products, fair working conditions, safe work, good opportunities for participation and attractive development paths.
- The fourth dimension is "We@Volkswagen and the world around us". Without long-term social legitimacy at our locations and in our markets, we will not be able to carry forward our business model in times of accelerated changes in values – this applies from an economic, environmental and social perspective. Employees are representatives of the Volkswagen Group and communicate our values to society.

By extension, 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.
- 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 focused on employees, strives for operational excellence, and yields strategic value-added contributions.

Although our new human resources strategy "Transform to Tech" already came into effect in fall 2021, the key performance indicators for 2021 are reported in line with the predecessor strategy "Empower to Transform". As part of the strategy, we compile and analyze the following performance indicators:

- Internal employer attractiveness. This indicator is determined by asking respondents, as part of the *Stimmungsbarometer* (opinion survey), whether they perceive the respective company as an attractive employer. The opinion survey is conducted in the majority of our Group companies. The target for 2025 is 89.1 out of a possible total of 100 index points. A score of 86.8 index points was achieved in the reporting period, contrasting with 88.2 points in the previous year.
- 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 in the brand's home country. Rankings in surveys conducted by the Universum Institute, in which we aim to achieve ambitious scores set individually for the Group brands featured, serve as the basis for this. In fiscal year 2021, the Porsche and ŠKODA brands fully met and partially exceeded the targets set for them. While SEAT partially achieved the targets, the Volkswagen Passenger Cars, Volkswagen Commercial Vehicles and Audi brands did not meet their targets.
- 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 a diversity management system across the Group, this strategic indicator is being used to show the trends in the proportion of women in management and the internationalization of top management as a percentage of the active workforce in the Group as a whole, excluding vocational trainees and employees in the passive phase of their partial retirement. In particular, it underpins the objective of the human resources strategy, which is aimed at contributing to an exemplary leadership and corporate culture. The figures for the proportion of women in management (management, senior management, top management including Group Board of Management members) and the internationalization of top management are placed equally weighted in an index and the figures for the year 2016 set to an index value of 100 in each case. The proportion of women in management amounted to 16.3% in 2021 and was 1.2 percentage points 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 20.3 (18.7)%. The diversity index in fiscal year 2021 was 127 compared to 117 in the prior-year.

One strategic indicator has been defined for the financial services business:

- External employer ranking. This involves taking part in the "Great Place to Work" 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. For 2023, we plan to participate in the global ranking of "Great Place to Work". In the European ranking, we achieved our targeted top 20 position in the reporting year. Volkswagen Financial Services AG was represented in other national and international best-employer rankings in 2021.

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. Volkswagen AG's roadmap for digital transformation is one example, as is the Audi brand's Audi.Zukunft agreement.

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 are designed to encourage employees to analyze the Group Essentials and incorporate them into all work processes. In the role model program, managers from all brands strive to 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

AGE STRUCTURE IN YEARS OF EMPLOYEES
as of December 31, 2021; in percent

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. The Volkswagen Group Academy forges 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. In 2021, all 94 graduates of the first phase of the program were placed within Volkswagen AG. In March 2021, 100 students embarked on the training program, which is now in its third year. The program is designed for employees and also external applicants with an affinity for IT and an interest in software development.

Volkswagen AG and CARIAD promoted the establishment of innovative programming schools in Wolfsburg and Berlin in cooperation with the non-profit École 42. The training institute in Wolfsburg commenced operations in May 2021 with initially 170 students from 30 countries. By the end of 2022, it plans to take on 600 students in Wolfsburg and 600 in Berlin, who will learn from and with each other following an innovative training approach.

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 2021, the Volkswagen Group trained 17,151 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.

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 2021, Volkswagen AG hired a total of 82 graduate trainees as part of these programs, 31.7% of whom were women.

Young people can also take part in graduate trainee programs at the other Group companies as well as at the Group's international locations, such as ŠKODA in the Czech Republic, SEAT in Spain or Scania in Sweden.

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 equality. We are working continuously to develop family-friendly working time models and to increase the number of

women in management positions. For Volkswagen AG, we have set targets for the proportion of women in management in accordance with German legislation. Volkswagen AG has achieved the targets set in line with the *Gesetz zur gleichberechtigten Teilhabe von Frauen und Männern an Führungspositionen* (German Act on the Equal Participation of Women and Men in Leadership Positions) and section 76(4) of the *Aktiengesetz* (AktG – German Stock Corporation Act). As of December 31, 2021, the proportion of women in the active workforce at the first level of management (senior management, top management and brand Board of Management) was 13.5% (target: 13.0%). At the second level (management) it was 18.3% (target: 16.9%). The used time credits from deferred compensation (time asset bonds) are not taken into account. For the new period up to the end of 2025, Volkswagen AG has set itself the target of 16.5% women in the first level of management and 23.4% women in the second level of management, each as a proportion of the active workforce. The Group Board of Management and Supervisory Board are regularly informed of the figures achieved and the current target paths.

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.

The Group also has a large number of collective regulations in place to make it easier for employees to balance the demands and needs of work and home life and allow staff to arrange their own individual working model. In addition to flexible working hours and the use of working time accounts and flextime, these include 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. "Meine AusZeit" is one of the latest programs to be offered by Volkswagen AG and allows employees to take a self-financed leave of absence with an upfront payment from the Company.

The Covid-19 pandemic brought fundamental changes to the way we work and collaborate with one another. One of the consequences of the pandemic is that hybrid working – a combination of remote working and working onsite – is increasingly becoming the norm. This has also forced the Volkswagen Group to modify its organization of work and collaboration and prompted it to launch several initiatives during the reporting period. One of these is the Office 2025 project, which led to the development of a holistic concept spanning the dimensions of people, space and technology

PROPORTION OF WOMEN
as of December 31

%	2021	2020
Employees	17.9	17.0
Vocational trainees[1]	20.1	20.5
Graduate recruits[2]	31.7	32.5
Total management	15.9	14.9[3]
Management	17.9	17.1[3]
Senior management	12.5	11.4[3]
Top management	8.3	7.0

[1] Excluding Scania and Navistar
[2] Volkswagen AG
[3] Prior-year figures adjusted

that focuses on the topics of modular working environments, desk sharing and technical infrastructure, including hardware and software. Volkswagen AG, which first entered into its works agreement for remote working back in 2016, made use of this agreement in 2021 – a year dominated by the global pandemic – to give its employees every opportunity to work remotely and thus safeguard against infection as far as possible. Existing regulations were updated in the reporting period at Volkswagen AG and Porsche, for instance, so as to make working arrangements more flexible.

In July 2021, Volkswagen held a "Digital Week" at its Wolfsburg plant on the hybrid working world with numerous interactive events, around 40 speakers and over 20,000 attendees.

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.

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. In the follow-up appointment, they are offered

options for improving their health that are tailored to their needs and draw on the latest medical knowledge. Since fiscal year 2020, our Health department has 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 has been 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 and vaccination 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.

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.

By means of the opinion survey (*Stimmungsbarometer*), the Company regularly gathers information regarding employee satisfaction and also surveys employees on our corporate culture. Based on the results, follow-up processes are implemented in which measures are developed and executed. The 2021 opinion survey covered 165 companies in 40 countries. Of the 596,905 employees in the companies surveyed, 466,021 participated. This was a participation rate of 78%. The sentiment rating calculated from 22 questions is the main parameter of the opinion survey and is used to help determine Board of Management remuneration, among other things. It is calculated from the total of all the related answers in the survey and, in 2021, stood at 82.3 out of a possible total of 100 index points. The score achieved in 2021 was thus just above the previous year's figure, which amounted to 82.2 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 by contributing their ideas for making 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.

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 took extended measures to protect the workforce, such as an increased use of remote working, similar to in the previous year. In this context, safeguarding access to the IT infrastructure in all brands and companies was a major priority again in fiscal year 2021. The use of digital applications to promote more efficient forms of digital collaboration and more effective options for applying these within the Company increased once again compared to the prior year. For example, the Company's internal network, Group Wiki, promotes knowledge transfer and networking among all employees. The platform puts the user in touch with one another across the brands and the world. 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. Building on the rollout of Microsoft 365, the first steps in implementing the Microsoft Power Platform were taken in 2021. The software environment allows employees without programming skills to automate individual work processes in the Office context, such as the filing of e-mail attachments.

Use of IT solutions and digitalization

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 ensures that resources are employed in a coordinated fashion in the development, implementation and use of IT solutions. Particular emphasis is placed on IT projects aimed at digitalizing business processes across departments.

Volkswagen embraces digitalization in the Company; its in-house software innovation centers (SIC, formerly IT Labs) are just one example of this. They act as centers of innovation and expertise that conduct research, pilot new technologies and develop these in areas relevant for the Company and make these available for productive use in applications for the organization. Here, Group IT, research institutes, educational institutions (such as universities), technology partners and policy-makers work closely together on future trends in information technology. At the same time, the SICs 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, the ideas for new areas of business and the speed of young start-ups. Highly specialized experts at the SICs 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, the data-driven management, pricing and optimization of spare parts in the after-sales business, and smart management of energy use to generate sustainable savings using artificial intelligence methods (for example in the compressed air control systems used at the Wolfsburg plant to reduce CO_2 emissions). Initial experimental projects are also investigating opportunities for combining the potential of quantum computers with self-learning systems (quantum machine learning).

In addition, the SICs 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, which 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).

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.

Software development

We develop cross-brand software for digital ecosystems, for new and existing business processes in the Group in our software development centers. 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 refining the digital production platform already in use which aims to enable Volkswagen to reduce its production costs in the future.

IT security

Safeguarding data and information throughout the Volkswagen Group worldwide is one of the main tasks of IT and was continued in fiscal year 2021 with the Group Information Security Program. The objective of the program is to create uniform processes and solutions across the Group to further enhance information security. The main focus is on topics that could one day pose information security risks for the Group and that need to be specially safeguarded as part of the Group's digital transformation strategy, including cloud security and secure software development. The program's content and orientation will be reviewed annually and updated if necessary.

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 devel-

oped by the German Association of the Automotive Industry and is based on the 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.

CAR2X technology offers our customers protection by warning them, for example, of traffic hazards. CAR2X technology enables direct wireless communication from vehicle to vehicle and from the vehicle to the transport infrastructure. This TÜV IT-certified technology, implemented in accordance with European standards, represents a technical milestone in our CAR2X program.

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 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.

The "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. These were confirmed with UNECE CSMS certification in 2021. Safeguarding of the complete life cycle of our vehicles and the digital mobility services was transferred to the responsible line organizations after the program ended in 2021 and continues to be performed there.

Key central information security processes have been audited within the international ISO 27001 framework and were recertified in 2021. 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.

Other key milestones in fiscal year 2021 were the successful completion of the central GDPR (General Data Protection Regulation) project and the associated integration into standard operation. This project gave rise to uniform processes and procedures for GDPR compliance. The introduction of the data protection management system and the data protection management organization has thus established the infrastructure for implementing and complying with data protection requirements at Volkswagen AG. Increasing digitalization and interconnectedness of business processes, new planned legislation with data protection relevance and the sharp rise in the extent of international data protection legislation continue to require a high level of attention if ongoing compliance with data protection requirements is to be ensured. Continuously raising awareness among the workforce and further standardizing and automating processes remain the focus of activities. Going forward, compliance requirements will be already built into the design of IT solutions and infrastructure decisions.

ENVIRONMENTAL STRATEGY

As one of the largest automobile manufacturers, Volkswagen takes responsibility for the environmental impact of its activities. Based on the new Group strategy NEW AUTO, we have put further focus on our ambitious environmental targets. With our 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 Paris Climate Agreement, which aims to keep the increase in global temperature by 2050 to well below two degrees Celsius. 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. In addition, the Company has set a target of a 30% reduction by 2030 compared with 2018, not including emissions offsetting. This decarbonization target has been validated by the Science Based Targets Initiative. 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.
- Environmental compliance. Where integrity is concerned, we aim to become a role model for a modern, transparent and successful enterprise by taking into account the environmental impact of our mobility solutions over all stages of the life cycle. To this end, we use effective management systems, the effectiveness of which is monitored regularly.

We have defined a strategic indicator that aligns with our existing and future strategic direction:

- the decarbonization index (DKI). The DKI measures the emissions of CO_2 and CO_2 equivalents (jointly referred to as CO_2e) by the 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. The DKI gives us an informative measuring tool that makes our progress and interim results public and verifiable. The DKI calculation methodology is regularly 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. In 2021, the methodology was adjusted to the WLTP test cycle for fleet emissions. By 2030, the DKI is to be reduced by 30% compared with the base year 2018 (NEDC), and emissions offsetting will not be included in the figure. In the reporting year, the DKI value averaged 45.9 t CO_2e/vehicle. This represents a reduction of 1.7 t CO_2e/vehicle compared with the WLTP-adjusted figure for 2020.

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 2021 will be available on the website https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2021/Nichtfinanzieller_Bericht_2021_d.pdf in German and at https://www.volkswagenag.com/presence/nachhaltigkeit/documents/sustainability-report/2021/Nonfinancial_Report_2021_e.pdf in English by no later than April 30, 2022.

REPORT ON POST-BALANCE SHEET DATE EVENTS

References to the Russia-Ukraine conflict can be found in the "Report on Expected Developments" and in the "Report on Risks and Opportunities".

We describe the hybrid note we called in the section entitled "Shares and Bonds".

For more information on the analysis of a possible IPO of Dr. Ing. h.c. F. Porsche AG, please refer to the section entitled "Events after the balance sheet date" in the notes to the consolidated financial statements.

EU Taxonomy

Doing business in an environmentally sustainable way is one of the central challenges of our time. The EU has defined criteria for determining the corporate degree of environmental sustainability. With our taxonomy-aligned investments in development activities and in property, plant and equipment, we are today already shaping our future in an environmentally sustainable way as envisaged by the EU taxonomy.

BACKGROUND AND OBJECTIVES

As part of the European Green Deal, the European Union (EU) has placed the topics of climate protection, the environment and sustainability at the heart of its political agenda in order to achieve climate neutrality by the year 2050. To this end, the EU Action Plan on financing sustainable growth was developed that aims to reorient capital flows towards sustainable investment, to mainstream sustainability in risk management and to foster transparency and long-termism in financial and economic activity. The Action Plan comprises ten measures and centres around the EU taxonomy (Regulation (EU) 2020/852 and associated delegated acts).

The EU taxonomy is a classification system for sustainable economic activities. An economic activity is considered taxonomy-eligible if it is listed in the EU taxonomy and can potentially contribute to realizing at least one of the following six environmental objectives:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Transition to a circular economy
- Pollution prevention and control
- Protection and restoration of biodiversity and ecosystems.

An activity is only considered environmentally sustainable, i.e. taxonomy-aligned, if it meets all three of the following conditions:

- The activity makes a substantial contribution to one of the environmental objectives by meeting the screening criteria defined for this economic activity, e.g. level of CO_2 emissions for the climate change mitigation environmental objective.
- The activity meets the Do-No-Significant-Harm (DNSH) criteria defined for this economic activity. These are designed to prevent significant harm to one or more of the other environmental objectives, e.g. from the production process or by the product.
- The activity is carried out in compliance with the minimum safeguards, which apply to all economic activities and relate primarily to human rights and social and labor standards.

FIRST-TIME REPORTING FOR FISCAL YEAR 2021

Under the EU taxonomy, the Volkswagen Group is required to report on the climate change mitigation and climate change adaptation environmental objectives for the first time for fiscal year 2021; the disclosure requirements extend to the share of economic activities that are taxonomy-eligible and that are not taxonomy-eligible in sales revenue, capital expenditure and operating expenditure. The figures reported relate to the consolidated companies included in the Volkswagen Group's financial statements. Volumes and financial

data for our Chinese joint ventures are therefore excluded. As the EU taxonomy is being applied for the first time, prior-year figures are not provided.

The wording and terminology used in the EU taxonomy are currently subject to some uncertainty in interpretation. Our interpretation is set out below.

In addition to the current disclosure obligations, we have voluntarily assessed our business activities for taxonomy alignment. We already report the relevant figures for passenger cars and light commercial vehicles, and for our hydrogen activities in the Power Engineering Business Area.

ECONOMIC ACTIVITIES OF THE VOLKSWAGEN GROUP

In its Group strategy NEW AUTO – Mobility for Generations to come, the Volkswagen Group is driving its transformation towards becoming one of the world's leading providers of sustainable mobility. We pay particular attention here to the use of resources and the emissions of our product portfolio, as well as those of our sites and plants.

The Volkswagen Group's activities in its vehicle-related business with passenger cars, light commercial vehicles, trucks, buses and motorcycles cover the development, production and sale of vehicles and extend to our financial services and other vehicle-related products and services. Activities in these areas are suited under the EU taxonomy to making a substantial contribution to the environmental objective of climate change mitigation by increasing clean or climate-neutral mobility.

The Volkswagen Group's activities in the Power Engineering Business Area comprise the development, design, production, sale and servicing of machinery and equipment. These activities also fall under the environmental objective of climate change mitigation.

The analysis of the economic activities in the context of the EU taxonomy has not revealed any activities that contribute specifically to the environmental objective of climate change adaptation.

The table below sets out the allocation of our activities in the vehicle-related business and in Power Engineering to the economic activities listed in the EU taxonomy under the environmental objective of climate change mitigation. Changes may be made to the economic activities in future as the rules around the EU taxonomy dynamically evolve.

Economic activity in accordance with the EU taxonomy	Description of economic activity	Allocation in the Volkswagen Group
Environmental objective: mitigating climate change		
3. Manufacturing		
3.2 Manufacture of equipment for the production and use of hydrogen	Manufacture of equipment for the production and use of hydrogen.	Power Engineering
3.3 Manufacture of low-carbon technologies for transport	Manufacture, repair, maintenance, retrofitting, repurposing and upgrade of low-carbon vehicles, rolling stock and vessels.	Vehicle-related business
3.6 Manufacture of other low-carbon technologies	Manufacture of technologies aimed at substantial greenhouse gas emission reductions in other sectors of the economy, where those technologies are not covered by other economic activities in the manufacturing sector.	Power Engineering
9. Professional, scientific and technical activities		
9.1 Close to market research, development and innovation	Research, applied research and experimental development of solutions, processes, technologies, business models and other products dedicated to the reduction, avoidance or removal of greenhouse gas emissions for which the ability to reduce, remove or avoid greenhouse gas emissions in the target economic activities has at least been demonstrated in a relevant environment, corresponding to at least Technology Readiness Level 6.	Power Engineering

Economic activities in vehicle-related business

Economic activity 3.3 Manufacture of low-carbon technologies for transport

We allocate all activities in our vehicle-related business associated with the development, production, sale (including financial services), operation and servicing of vehicles to this economic activity. This includes all passenger cars, light commercial vehicles, trucks, buses and motorcycles manufactured by us, irrespective of their powertrain technology, and also includes genuine parts.

In our vehicle-related business, we have detailed the vehicles manufactured by us by model and powertrain technology and analyzed the CO_2 emissions associated with them in accordance with the WLTP. In this way, we have identified those vehicles among all of our taxonomy-eligible vehicles that meet the screening criteria and with which the substantial contribution to climate change mitigation is measured. These include all of the Volkswagen Group's all-electric vehicles. Until December 31, 2025, they also include passenger cars and light commercial vehicles with CO_2 emissions of less than 50 g/km. This encompasses the majority of our plug-in hybrids. Buses meeting the EURO VI standard (Stage E) are also included until December 31, 2022.

At this stage, other activities that are directly associated with the primary vehicle-related business and that in our view should also be allocated to this economic activity have not yet been included or have been interpreted as not yet being taxonomy-eligible. This is because, as the rules of the EU taxonomy currently stand, it is still unclear where to record them in accordance with the EU taxonomy. These activities particularly include the sale of engines and powertrains, as well as parts deliveries, the sale of non-Group products and production under license by third parties. Hedging transactions and individual activities that we present primarily under Other sales revenue in the consolidated financial statements do not conform to the descriptions of economic activities in the EU taxonomy, and we have therefore initially classified them as not being taxonomy-eligible.

Economic activities in Power Engineering

In the Power Engineering Business Area, we have analyzed our activities with respect to their classification under the EU taxonomy and, with the exception of the heavy fuel oil engine new building business and individual components for the extraction and processing of fossil fuels, have identified them as taxonomy-eligible.

Economic activity 3.2 Manufacture of equipment for the production and use of hydrogen

Our activities relating to the manufacture of equipment for the production and use of hydrogen that meet the screening criteria and make a substantial contribution to the climate change objective are taxonomy-eligible. One example is the use of green hydrogen. At Volkswagen, these include the power-to-X technology for the production of low-carbon or carbon-neutral synthetic fuels, as well as components for the storage of hydrogen.

Economic activity 3.6 Manufacture of other low-carbon technologies

The description of this economic activity means that only those technologies manufactured for the purpose of reducing greenhouse gas emissions substantially in other sectors of the economy are taxonomy-eligible. At Volkswagen, this comprises all new-build activities that enable the use of gas and climate-neutral synthetic fuels (e.g. manufacturing of gas and dual-fuel engines), all industrial solutions for energy storage and sector coupling (e.g. heat pumps) and all solutions for carbon capture, storage and usage; it also includes subsea compression (subsea compression close to the wellhead for the extraction of natural gas). These activities are rounded off by the service and after-sales business, comprising the upgrading and modernization of existing equipment. For example, we retrofit existing maritime fleets with technology that makes it possible to reduce CO_2 emissions.

Economic activity 9.1 Close to market research, development and innovation

The description of this economic activity includes applied research in technologies for the reduction or avoidance of greenhouse gas emissions. We allocate our licensing business to this economic activity. This business provides our development services in the form of production documents, based on which our licensees are authorized to manufacture corresponding gas and/or dual-fuel engines.

For economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, we meet the screening criteria that are a requirement for the substantial contribution to the climate change mitigation objective. Given that the new reporting obligations and the requirements specified therein have only very recently been introduced, it was not yet possible to provide corresponding proof of economic activities covered by 3.6 Manufacture of other low-carbon technologies and 9.1 Close to market research, development and innovation.

DO NO SIGNIFICANT HARM (DNSH)

The DNSH criteria were analyzed in the reporting year for economic activities covered by 3.3 Manufacture of low-carbon technologies for transport and 3.2 Manufacture of equipment for the production and use of hydrogen.

In the vehicle-related business, an analysis was performed for each vehicle production site where passenger cars, light commercial vehicles, trucks and buses are or will be produced that meet the screening criteria for the substantial contribution of economic activity 3.3 Manufacture of low-carbon technologies for transport, or that are to meet them in future according to our five-year planning. Of the approximately 30 sites included, the majority are located in the EU, with some in the United Kingdom, Turkey, the USA, Mexico, Brazil and China.

For the Power Engineering Business Area, an analysis was performed for each site that produces relevant components for systems or is responsible for supply chains that meet the screening criteria for the substantial contribution of economic activity 3.2 Manufacture of equipment for the production and use of hydrogen, or that are to meet them in future according to our five-year planning. There are two such sites, located in Germany and Sweden.

Below, we set out our interpretation and describe the main analyses we used to examine whether there was any substantial harm to the other environmental objectives. The assessments confirm that we meet the requirements of the DNSH criteria in the reporting year for the sites producing passenger cars and light commercial vehicles. The outcome of the evaluation of the two Power Engineering sites was also positive.

Climate change adaptation

We performed a climate risk and vulnerability assessment to identify which production sites may be affected by physical climate risks. The physical climate risks we identified were assessed on the basis of the lifetime of the relevant fixed asset.

Volkswagen's climate-based DNSH assessment is based on Representative Concentration Pathway (RCP) scenario 8.5 to the year 2050 and thus assumes the highest concentration of CO_2 according to the Intergovernmental Panel on Climate Change (IPCC). The relevance of the identified threats was assessed for the local environment and, if appropriate, the measures needed to mitigate the risk were developed.

Sustainable use and protection of water and marine resources

We evaluated our economic activities with respect to the sustainable use and protection of water and marine resources looking at the three following criteria: preserving water quality, avoiding water stress, and an environmental impact assessment (EIA) looking at the impact on water, or a similar process. We based the analysis primarily on ISO 14001 certificates, the findings of official approval procedures and other external data sources in relation to regions exposed to increased risks.

Transition to a circular economy

Environmentally compatible waste management in the manufacturing process, reuse and use of secondary raw materials and a long product lifespan are a major part of Volkswagen's environmental management system. Volkswagen defines clear and unambiguous guidelines on the circular economy in its environmental principles, in its overall factory white paper and in its goTOzero strategy.

The product-related requirements for passenger cars and light commercial vehicles are reflected in the implementation of the statutory end-of-life vehicle requirements in conjunction with the type approval of the vehicle models. In addition to this, each brand has targets and measures for the use of recycled materials in new vehicles.

Pollution prevention and control

The DNSH criteria for this environmental objective require that the economic activity in question does not lead to substances listed in a variety of EU chemical regulations and directives being manufactured, placed on the market or used. Approval and monitoring processes are implemented with the aim of ensuring compliance with the legislation specified in the DNSH criteria.

Protection and restoration of biodiversity and ecosystems

In order to verify adherence to the requirements on biodiversity and ecosystems, the relevant areas were identified. Where biodiversity-sensitive areas are located close to a production site, we checked whether a nature conservation assessment had been performed and whether nature conservation measures had been defined in the environmental approvals and subsequently implemented.

MINIMUM SAFEGUARDS

The minimum safeguards consist of the OECD Guidelines for Multinational Enterprises, the United Nations Guiding Principles on Business and Human Rights, the Fundamental Conventions of the International Labour Organisation (ILO) and the International Bill of Human Rights. Below, we describe the main analyses we used to examine whether the minimum safeguards are adhered to.

The Volkswagen Group has 120 production sites in 83 countries, including those of the Chinese joint ventures. We conducted human rights risk assessments for 782 controlled Group companies worldwide; this included all sites that were also examined under the DNSH criteria.

For the risks identified in the analysis, the companies received risk-specific measures to be implemented by the end of 2021.

KEY PERFORMANCE INDICATORS IN ACCORDANCE WITH THE EU TAXONOMY REGULATION

The EU taxonomy defines sales revenue, capital expenditure and operating expenditure as the key performance indicators that must be reported on. Disclosures on taxonomy eligibility are mandatory for fiscal year 2021. We have voluntarily assessed our business activities for taxonomy alignment and already report the relevant figures for passenger cars and light commercial vehicles, and for our hydrogen activities in the Power Engineering Business Area.

The financial figures relevant for the Volkswagen Group are based on the IFRS consolidated financial statements for fiscal year 2021. Where possible, the figures have been directly assigned to an economic activity. In our vehicle-related business, for example, we compiled the financial figures based on the vehicle model and powertrain technology. This applies both to the vehicles themselves and to the corresponding financial services and other services and activities. Only where this was not possible for capital expenditure and operating expenditure, the figures were broken down using allocation formulas. In the vehicle-related business, we based the allocation formulas on the long-term sales plan and the capacity and utilization planning at the individual sites. In the Power Engineering Business Area, we used allocation formulas based on planned sales revenue. This data and planning form part of the medium-term financial planning for the next five years, on which the Board of Management and Supervisory Board have passed a resolution.

Sales revenue

The definition of turnover in the EU taxonomy corresponds to sales revenue as reported in the IFRS consolidated financial statements, which amounted to €250.2 billion in fiscal year 2021 (see also note 1 "Sales revenue" in the notes to the consolidated financial statements).

Of this total, €225.4 billion, or 90.1% of Group sales, was attributable to economic activity 3.3 Manufacture of low-carbon technologies for transport and classified as taxonomy-eligible. This includes sales revenue after sales allowances from new and used vehicles, including motorcycles, from genuine parts, from the rental and lease business, and from interest and similar income, as well as sales revenue directly related to vehicles, such as workshop and other services.

Of the taxonomy-eligible sales revenue, €21.3 billion meet the screening criteria used to measure the substantial contribution to climate change mitigation. This includes all of our all-electric vehicles, the majority of the plug-in hybrids, and the buses meeting the EURO VI standard (Stage E).

Taking into account the DNSH criteria and minimum safeguards, sales revenue of €21.1 billion attributable to our passenger cars and light commercial vehicles, accounting for 8.5% of consolidated sales revenue, was taxonomy-aligned. Of this amount, €14.6 billion, or 5.8% of consolidated sales revenue, was attributable to our all-electric models (BEVs).

In the Power Engineering Business Area, the majority of our taxonomy-eligible sales revenue was attributable to economic activity 3.6 Manufacture of other low-carbon technologies (€2.4 billion). A further €13 million was contributed by economic activity 9.1 Close to market research, development and innovation. Our activities that fall under economic activity 3.2 Manufacture of equipment for the production and use of hydrogen recorded taxonomy-aligned sales revenue of €5 million, taking into account the DNSH criteria and minimum safeguards.

Of the Volkswagen Group's total sales revenue in fiscal year 2021,

- €227.8 billion, or 91.0%, was taxonomy-eligible sales revenue and
- €21.2 billion, or 8.5%, was taxonomy-aligned sales revenue.

SALES REVENUE

	SALES REVENUE		SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION		COMPLIANCE WITH DNSH CRITERIA	COMPLIANCE WITH MINIMUM SAFEGUARDS	TAXONOMY-ALIGNED SALES REVENUE	
Economic activities	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	**227,787**	**91.0**	**21,268**	**8.5**	**Y/N**	**Y**	**21,152**	**8.5**
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	225,380	90.1	21,264	8.5	Y/N	Y	21,147	8.5
of which taxonomy-aligned BEVs (passenger cars and light commercial vehicles)	–	–	–	–	Y	Y	14,579	5.8
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	5	0.0	5	0.0	Y	Y	5	0.0
3.6 Manufacture of other low-carbon technologies	2,390	1.0	–	–	–	–	–	–
9.1 Close to market research, development and innovation	13	0.0	–	–	–	–	–	–
B. Taxonomy-non-eligible activities	**22,413**	**9.0**						
Total (A + B)	**250,200**							

1 All percentages relate to the Group's total sales revenue.

Capital expenditure

Capital expenditure for the purposes of the EU taxonomy refers to the following items in the IFRS consolidated financial statements: additions to intangible assets, additions to property, plant and equipment, and additions to lease assets and investment property. These are reported in the notes to the 2021 consolidated financial statements in note 12 "Intangible assets", note 13 "Property, plant and equipment" and note 14 "Lease assets and investment property". Additions from business combinations, each of which is reported under "Changes in consolidated Group", are also included. By contrast, additions to goodwill are not included in the calculation.

In fiscal year 2021, additions in the Volkswagen Group as defined above amounted to

- €9.1 billion from intangible assets,
- €10.7 billion from property, plant and equipment and
- €29.1 billion from lease assets (mainly vehicle leasing business) and investment property.

Additions from changes in the consolidated Group, which amounted to €5.1 billion in fiscal year 2021, can also be added to this figure. These mostly related to Navistar. Total capital expenditure to be included in accordance with the EU taxonomy therefore came to €54.0 billion.

All capital expenditure attributable to our vehicle-related business is associated with economic activity 3.3 Manufacture of low-carbon technologies for transport. Taxonomy-eligible capital expenditure for the vehicle-related business amounted to €53.5 billion, or 99.1% of the Group's capital expenditure.

To determine the substantial contribution in the vehicle-related business, we compiled the financial figures based on the vehicle model and powertrain technology, in the same way as for sales revenue. Where possible, capital expenditure was directly attributed to vehicles. It was included, if the vehicles in question make a substantial contribution to the climate change mitigation objective. We did not include any capital expenditure directly attributable to vehicles that do not meet the screening criteria. Capital expenditure that was not clearly attributable to a particular vehicle was taken into account on a proportionate basis using allocation formulas. In our vehicle-related business, we used model- and brand-specific allocation formulas based on the long-term sales plan and the capacity and utilization planning for the Group companies. Depending on the primary business activity, allocation formulas from the long-term sales plan were used for sales companies, for example, and allocation formulas based on the capacity and utilization planning were used for production companies. This means that capital expenditure on sites that according to our medium-term planning will only produce vehicles meeting the screening criteria for the substantial contribution in the next five years was counted in full via the allocation formula. In contrast, capital expenditure on sites that only produce vehicles not meeting the screening criteria was not counted under the allocation formula. Calculated in this way, capital expenditure relating to vehicles that meet the screening criteria for the substantial contribution amounted to €14.4 billion.

Taking into account the DNSH criteria and minimum safeguards, capital expenditure of €14.2 billion on our passenger cars and light commercial vehicles was taxonomy-aligned. This represented 26.2% of the Group's total capital expenditure. This figure includes additions to capitalized development costs of €3.5 billion and additions to property, plant and equipment of €3.8 billion for our all-electric passenger cars and light commercial vehicles (BEVs).

Taxonomy-eligible capital expenditure in the Power Engineering Business Area has been allocated to economic activity 3.6 Manufacture of other low-carbon technologies. Capital expenditure was broken down based on planned sales revenue. Taxonomy-eligible capital expenditure amounted to €65 million.

Of the Volkswagen Group's total capital expenditure in fiscal year 2021,

- €53.6 billion, or 99.2%, was taxonomy-eligible capital expenditure and
- €14.2 billion, or 26.2%, was taxonomy-aligned capital expenditure.

CAPITAL EXPENDITURE

	CAPITAL EXPENDITURE		SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION		COMPLIANCE WITH DNSH CRITERIA	COMPLIANCE WITH MINIMUM SAFEGUARDS	TAXONOMY-ALIGNED CAPITAL EXPENDITURES	
Economic activities	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	**53,596**	**99.2**	**14,437**	**26.7**	**Y/N**	**Y**	**14,165**	**26.2**
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	53,531	99.1	14,437	26.7	Y/N	Y	14,165	26.2
of which additions to capitalized development costs for BEVs (passenger cars and light commercial vehicles)	–	–	–	–	Y	Y	3,504	6.5
of which additions to property, plant and equipment for BEVs (passenger cars and light commercial vehicles)	–	–	–	–	Y	Y	3,760	7.0
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	–	–	–	–	–	–	–	–
3.6 Manufacture of other low-carbon technologies	65	0.1	–	–	–	–	–	–
9.1 Close to market research, development and innovation	–	–	–	–	–	–	–	–
B. Taxonomy-non-eligible activities	**443**	**0.8**						
Total (A + B)	**54,039**							

1 All percentages relate to the Group's total capital expenditure.

Operating expenditure

The operating expenditure reported by us for the purposes of the EU taxonomy comprises non-capitalized research and development costs, which can be taken from note 12 "Intangible assets". We also include the expenditure for short-term leases recognised in our consolidated financial statements, which can be found in note 33 "IFRS 16 (Leases)", and expenditure for maintenance and repairs.

The allocation of operating expenditure to the economic activities followed the same logic as that described for capital expenditure.

All operating expenditure attributable to the vehicle-related business is associated with economic activity 3.3 Manufacture of low-carbon technologies for transport and has been classified as taxonomy-eligible.

Where possible, non-capitalized research and development costs were directly attributed to vehicles. It was included, if the vehicles in question make a substantial contribution to the climate change mitigation objective. We did not include any non-capitalized research and development costs directly attributable to vehicles that do not meet the screening criteria. Non-capitalized research and development costs that were not clearly attributable to a particular vehicle were taken into account on a proportionate basis using allocation formulas. For these and other operating expenses, the same allocation formulas were used as for capital expenditure.

Taxonomy-eligible operating expenditure in the Power Engineering Business Area falls under economic activity 3.6 Manufacture of other low-carbon technologies. As with capital expenditure, operating expenditure was broken down on the basis of planned sales revenue.

OPERATING EXPENDITURE

	OPERATING EXPENDITURE		SUBSTANTIAL CONTRIBUTION TO CLIMATE CHANGE MITIGATION		COMPLIANCE WITH DNSH CRITERIA	COMPLIANCE WITH MINIMUM SAFEGUARDS	TAXONOMY-ALIGNED OPERATING EXPENDITURES	
Economic activities	€ million	%[1]	€ million	%[1]	Y/N	Y/N	€ million	%[1]
A. Taxonomy-eligible activities	**9,911**	**99.2**	**3,463**	**34.7**	**Y/N**	**Y**	**3,265**	**32.7**
Vehicle-related business								
3.3 Manufacture of low-carbon technologies for transport	9,702	97.1	3,463	34.7	Y/N	Y	3,265	32.7
Power Engineering								
3.2 Manufacture of equipment for the production and use of hydrogen	–	–	–	–	–	–	–	–
3.6 Manufacture of other low-carbon technologies	209	2.1	–	–	–	–	–	–
9.1 Close to market research, development and innovation	–	–	–	–	–	–	–	–
B. Taxonomy-non-eligible activities	**81**	**0.8**						
Total (A + B)	**9,992**							

1 All percentages relate to the Group's total operating expenditure.

Report on Expected Developments

The global economy is expected to continue growing overall in 2022, albeit at a somewhat lower level. Global demand for passenger cars will probably vary from region to region and increase moderately 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 continue to grow in 2022, albeit at a somewhat lower level overall, after the recovery observed in the past fiscal year – provided that the Covid-19 pandemic does not flare up again and that shortages of intermediates and commodities become less intense. 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, with risks arising especially from the Russia-Ukraine conflict. We assume that both the advanced economies and the emerging markets will experience positive momentum.

Furthermore, we are forecasting that the global economy will also continue to grow in the period from 2023 to 2026.

Europe/Other Markets

In Western Europe, we expect comparatively robust economic growth, exceeding the 2019 pre-crisis level. The widespread impact of the Covid-19 pandemic and the uncertain consequences of the United Kingdom's exit from the EU will fundamentally pose major challenges.

We likewise anticipate relatively robust growth rates in Central Europe in 2022. Economic output in Eastern Europe is also expected to continue growing – subject to the further development of the Russia-Ukraine conflict – though at a somewhat slower pace, similar to the Russian economy.

For Turkey we expect markedly positive, albeit slower growth than in the reporting period given high inflation and a weak local currency. The South African economy will probably be dominated by political uncertainty and social tensions again in 2022 resulting from high unemployment, among other factors. Here we anticipate only moderate growth.

Germany

We expect gross domestic product (GDP) in Germany to grow at a significantly positive pace in 2022, comparatively speaking, exceeding the 2019 pre-crisis level. The labor market situation is likely to improve further in 2022.

North America

We anticipate comparatively high economic growth in the USA in 2022 with a continued recovery of the labor market situation. The US Federal Reserve expects interest rates to rise in the course of the year, albeit at a relatively low level. Further inflationary trends and developments in the labor market will play a key role as decisive factors for possible adjustments to the key interest rate. Economic growth in Canada is also likely to be significantly positive, comparatively speaking, while growth in Mexico is expected to be moderate.

South America

In all probability, the Brazilian economy will record a moderately positive rate of growth in 2022. The economic situation in Argentina is likely to improve slightly amid continued very high inflation and depreciation of the local currency.

Asia-Pacific

The Chinese economy will probably continue growing at a relatively high level in 2022. We also expect a relatively high rate of expansion for the Indian economy in 2022. A robust rise in economic output is anticipated in Japan.

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 2022. Overall, the global volume of new vehicle sales is expected to be moderately up on the prior year without reaching the pre-pandemic level. This prediction assumes that the Covid-19 pandemic does not flare up again and that shortages of intermediates, especially semiconductors, and commodities become less intense. We are forecasting growing demand for passenger cars worldwide in the period from 2023 to 2026.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed; on the whole, we anticipate a slight increase in the sales volume for 2022. This assumes that the Covid-19 pandemic does not flare up again and that shortages of intermediates, especially semiconductors, and commodities become less intense. For the years 2023 to 2026, we expect demand for light commercial vehicles to increase globally.

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. 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.

Europe/Other Markets

For 2022, we anticipate that the volume of new passenger car registrations in Western Europe will be distinctly above that recorded in the reporting period. At the same time, however, the possible impact of the pandemic and the still uncertain consequences of the United Kingdom's exit from the EU may result in ongoing uncertainty among consumers and dampen demand. Limited vehicle availability as a result of the semiconductor shortage may also continue to weigh on the volume of new registrations. Nevertheless, we assume a significant increase for the United Kingdom and Spain in 2022. In France and Italy, there will probably be a slight or moderate increase respectively in the volume of new registrations compared to the reporting period.

For light commercial vehicles, we expect the volume of new registrations in Western Europe in 2022 to be moderately up on the previous year's level despite the possible impact of the pandemic, continuing supply bottlenecks for semiconductors and the still uncertain consequences of the United Kingdom's exit from the EU. We predict a moderate to noticeable increase in the United Kingdom, Spain and France and a slight decline in Italy.

Sales of passenger cars in 2022 are expected to distinctly exceed the prior-year figures in markets in Central and Eastern Europe – subject to the further development of the Russia-Ukraine conflict. In the region's other markets, a slight to significant rise in the number of new registrations is expected.

Registrations of light commercial vehicles in 2022 are expected to slightly exceed the prior-year figures in markets in Central and Eastern Europe – subject to the further development of the Russia-Ukraine conflict.

The volume of new registrations for passenger cars in Turkey in 2022 is projected to be significantly above the previous year's level. In South Africa, the market volume in 2022 is likely to be up moderately year-on-year.

The volume of new registrations for light commercial vehicles in 2022 is expected to be significantly higher in Turkey and moderately higher in South Africa compared with the respective prior–year figure.

Germany

In the German passenger car market, we expect the volume of new registrations in 2022 to distinctly exceed the prior-year figure.

We also anticipate that the number of registrations of light commercial vehicles will be moderately up on the previous year.

North America

The sales volume 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 2022 is likely to be slightly 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 projected to be moderately higher than the previous year's level. For Mexico we also expect a moderate increase in new registrations compared with the reporting period.

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 a distinct increase overall in new registrations in the South American markets in 2022 compared with the previous year. The market volume in Brazil is also expected to grow distinctly compared with 2021. We anticipate that the volume of new registrations in Argentina will also be distinctly higher year-on-year.

Asia-Pacific

The passenger car markets in the Asia-Pacific region are expected to be slightly up on the prior-year level in 2022. We estimate that the market volume in China will also be slightly higher than the comparative figure for 2021. 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 that the Indian market will perform at the previous year's level. Japan should see distinct growth in market volume in 2022.

The volume of new registrations for light commercial vehicles in 2022 will probably be slightly higher than the previous year's figure. We are expecting demand in the Chinese market to be on a level with the prior year. For India, we are forecasting a distinctly higher volume in 2022 than in the reporting period. In the Japanese market, we estimate that volumes will be slightly up year-on-year.

TRENDS IN THE MARKETS FOR COMMERCIAL VEHICLES

Since July 1, 2021, Navistar has been a TRATON GROUP brand, making it part of the Volkswagen Group's Commercial Vehicles Business Area. This has broadened the relevant markets in the commercial vehicles business, both for trucks and for the school bus segment, which expanded to include North America (consisting of USA, Canada and Mexico).

For 2022, 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.

Noticeable market growth is expected for the 27 EU countries excluding Malta, but plus the United Kingdom, Norway and Switzerland (EU27+3) because it has so far not been possible to fully satisfy the high demand for trucks due to existing supply bottlenecks. We anticipate that Turkey will witness a distinct rebound in demand and there will be a moderate increase in demand in South Africa. The truck market in North America is divided into weight classes 1 to 8. We expect a profound increase in new registrations in the segments relevant for Volkswagen – Class 6 to 8 (8.85 tonnes or heavier). We estimate that demand in Brazil will be noticeably higher than in the previous year.

On average, we anticipate slight growth rates in the relevant truck markets for the years 2023 to 2026.

A significant increase in overall demand, with regional variations, is expected for 2022 in the bus markets relevant for the Volkswagen Group. We anticipate slight year-on-year market growth in the EU27+3 countries. Here, we are assuming that the coach segment will start to recover and that we will receive orders in the context of government-funded programs. We expect significant growth in North America. New registrations in Brazil are anticipated to be substantially higher than the prior-year figure.

Overall, we expect a moderate increase in the demand for buses in the relevant markets for the period from 2023 to 2026.

TRENDS IN THE MARKETS FOR POWER ENGINEERING

In the Power Engineering segment, we expect the market environment to remain difficult in 2022. The course of the Covid-19 pandemic thus far and its consequences are resulting in continued uncertainty.

The 2022 market volume for merchant shipping is expected to dip below the level of the reporting year. Despite an expected higher volume of sea trade, combined with calls for high energy efficiency and low pollutant emissions, the market is anticipated to be slightly below the prior-year level due to high order figures in 2021 and the associated shipyard capacity utilization. By contrast, the market areas excluding merchant shipping are expected to reach a slightly higher level than in 2021. Following the recommencement of international travel, demand for cruise ships is forecast to improve slightly from the low level of the reporting year. The passenger ferry market is also expected to grow slightly. We are anticipating stable demand for government vessels. In the offshore sector, new order volumes for special applications such as offshore wind look set to be on the low side due to continued overcapacity. Overall, we expect the marine market to be at a slightly lower level than that seen in the reporting year with competitive pressure continuing.

The global spread of the Covid-19 pandemic and the measures taken to contain it have reduced demand for energy and made it harder to raise capital for investment in power generation plants. Uncertainty surrounding climate-neutral power generation and the route to achieving this goal can also be seen. The ultimate aim is to invest in future-proof power generation plants. Despite this impact and uncertainty on the power generation markets, we expect the trend toward decentralized future-proof power stations and gas-based applications to further intensify. In addition, demand for new and carbon-neutral technologies should continue to increase in future.

With regard to the market development for conventional power generation plants, we are anticipating a slow recovery of what has been a very weak order situation for many years, with increasing investment in power generation using biomass and natural gas as transitional energy sources. Consequently, we are assuming a slight increase in demand for steam and gas turbines. Growth in the power generation market will be driven by renewable energy in particular. The irregularity of power produced in this way will require an increase in storage capacity, which will result in a corresponding expansion of the market for turbocompressors and turboexpanders.

We are expecting good demand for turbomachinery in 2022 due to catch-up capital expenditure and strong demand for raw materials amid rising prices. It is expected that the production plants of market participants will be well utilized. This should result in a relaxation of the competition which had been intensified by the pandemic.

In 2022, we anticipate a slight recovery in the after-sales business for both diesel engines and turbomachinery. There may be a temporary catch-up effect in order intake following the postponement of projects over the past two years.

For the period 2023 to 2026, 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 2022, particularly in the context of the ongoing challenges posed by the Covid-19 pandemic and limited vehicle availability as a result of the semiconductor shortage. 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 probably 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, are likely to become increasingly important for this. Additionally, we expect that demand will increase for new forms of mobility, such as rental and car subscription (*Auto-Abo*) services, and for integrated mobility services, for example parking, refueling and charging, and that the shift initiated in the European financial services business with individual customers from financing to lease contracts will continue. Especially in the Chinese market, we anticipate an increase in the importance of direct business between manufacturers and customers. The seamless integration of financial services into the online vehicle offering will take on increasing importance in efforts to promote this type of business. We estimate that this trend will also persist in the years 2023 to 2026.

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 2022. This trend is also expected to persist in the period 2023 to 2026.

EXCHANGE RATE TRENDS

In 2021, the euro appreciated slightly against the US dollar on an annual average, but fell slightly against sterling. Here, the new EU-UK Trade and Cooperation Agreement continued to cause uncertainty. The euro appreciated against the currencies of some emerging markets, in some cases considerably. In particular, the Argentinian peso, Turkish lira, Brazilian real and Russian ruble lost value against the European single currency. The South African rand, Chinese renminbi and Mexican peso appreciated year-on-year against the euro. The currencies of some Asian emerging markets weakened against the euro on an annual average. For 2022, our planning anticipates that the euro will strengthen somewhat against the US dollar, pounds sterling and the Chinese renminbi. We assume that the Argentinian peso, Brazilian real, Mexican peso, South African rand, Russian ruble and Turkish lira will depreciate further. As a result of the Russia-Ukraine conflict, we expect additional pressure on the Russian currency. For 2023 to 2026, we expect that the euro will be stable against the key currencies, while the com-

parative 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, particularly as a result of the ongoing Covid-19 pandemic, resulted in interest rates around the world remaining very low in relative terms in fiscal year 2021. National central banks in the major Western industrialized nations made hardly any adjustments to their key interest rates, while in contrast they were increased in several emerging markets. The US Federal Reserve and the European Central Bank left their key interest rates at a low level. While the Bank of England already implemented a first increase in rates at the end of 2021, the US Federal Reserve expects rate hikes in 2022. With monetary policy remaining relatively expansionary, we expect a gradual departure from the existing measures in 2022. Changes in key interest rates will depend to a considerable extent on inflationary trends in the individual countries. Whether the higher inflation rates currently being seen in many countries are judged to be temporary or lasting will be crucial here. Base effects resulting from the Covid-19 pandemic and disruption to supply chains could be seen as grounds to assume that they are a temporary phenomenon. We expect interest rates to increase slightly for the years 2023 to 2026.

COMMODITY PRICE TRENDS

The global spread of the SARS-CoV-2 virus has also affected commodity markets. As a result of the imbalance between supply and demand both during the pandemic and during economic recovery the increase in the price of many raw and input materials was very high in relative terms during 2021. Compared with the previous year, there was a rise in the average prices of the commodities coking coal, lithium, crude oil, cobalt, copper, iron ore, natural rubber, aluminum, nickel and lead. The price of the precious metals platinum and palladium, and especially of rhodium, also rose on average over the year. Based on analyses of factors of influence and of trends in the commodity markets, we expect the prices of most commodities to continue to increase in 2022. There is a risk that this will be exacerbated as a result of the Russia-Ukraine conflict. For the years 2023 to 2026, we anticipate continued volatility in the commodity markets with prices trending both upwards and downwards.

NEW MODELS IN 2022

The Volkswagen Passenger Cars brand will add the crossover derivative ID.5 to its ID. family in 2022. A locally produced version of this model tailored to the North American market will be available in this region. The successful T-Roc series will undergo extensive updating. In China, the next generation of the Lamando will be launched. The portfolio of vehicles with conventional powertrains, ranging from the Bora, Lavida and Sagitar saloons to the Tayron, Teramont and Viloran SUVs, will be comprehensively revamped. Product upgrades are also planned in South America in the Polo, Jetta and Virtus series. A local version of the Virtus will additionally be brought out in India for the first time.

Audi's flagship A8 will be updated in 2022 and the R8 series will get a rear-wheel drive derivative. The electrification campaign will be continued; in China, Audi will bring out a new vehicle based on the Modular Electric Drive Toolkit (MEB). The Q4 e-tron and e-tron GT models will also be launched in China. With the A7L, Audi will bring out the first vehicle produced together with new joint venture partner SAIC.

The ŠKODA brand will expand its Enyaq series by adding a sporty top-of-the range model as well as a completely new crossover derivate. The Karoq will be updated. ŠKODA will also live up to its role as an important brand in growth markets and will launch a new notchback saloon called the Slavia in India.

Porsche will supplement its Taycan model range in 2022 with a new body style. The 718 Cayman series will be rounded off with a sporty derivative. New derivatives will also be launched in the 911 family.

Bentley will bring out a plug-in hybrid version of its new Flying Spur starting in 2022 and expand the Bentayga series.

Lamborghini will top off the Aventador range with the Ultimae and also expand the range of the successful Urus.

In 2022, Volkswagen Commercial Vehicles will launch the long-awaited ID. Buzz, a state-of-the-art all-electric vehicle that will be available in both a passenger and a cargo version. In addition, the cooperation with Ford will produce the next generation of the Amarok.

Scania will be the first brand of the TRATON GROUP to introduce the Group-wide 13-liter drive in a large number of models in 2022.

MAN aims to expand its portfolio of battery electric trucks by adding heavy-duty models for long-haul use. It plans to expand deliveries of the battery electric e-Delivery model presented in fiscal year 2021.

Navistar will also work on electrifying its model variants in 2022 and systematically align its models with customer needs.

Motorcycles Ducati will bring onto the market in 2022 include the new Multistrada V2 and the Multistrada V4 Pikes Peak. The Ducati Streetfighter family will be enriched by the new Streetfighter V2 and Streetfighter V4 SP models. The Scrambler 1100 Tribute PRO and the Scrambler Urban Motard will also be launched. Furthermore, the Italian motorcycle manufacturer is bringing out a completely new model – the Ducati Desert X.

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 strengths in innovation and technology and push the Volkswagen Group's transformation into a software-centric mobility provider while leveraging our economies of scale and maximizing synergies.

In our current planning for 2022, 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 electrification of our model portfolio as well as further development of the modular toolkits, such as the all-electric platform for our volume brands – the Modular Electric Drive Toolkit (MEB) – and those for our premium and sports brands – the Premium Platform Electric (PPE) –, which are currently being rolled out throughout the Group. In addition, the Scalable Systems Platform (SSP) marks the development of a successor platform, which will bundle the requirements of the volume, premium and luxury brands and generate high levels of synergy in the future. We will also focus on the growing digitalization of our vehicles and sites and increase our capital expenditure on these. Moreover, we are investing in the gradual conversion of our locations for the production of electric vehicles and in the creation of battery manufacturing capacity with the aim of establishing a battery supply chain under our own control. The Automotive Division's ratio of capex to sales revenue is expected to fluctuate around a level of around 5.5 %.

Besides capex, investing activities will also cover additions to capitalized development costs. Among other things, these reflect upfront expenditures in connection with updating the model range as well as electrification and digitalization. Also included are the services of CARIAD, 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 2022, we anticipate that cash outflows resulting from the diesel issue will rise and mergers and acquisitions will be on a level with the previous year. Including any cash outflows in connection with the EU antitrust proceedings against Scania, we expect the net cash flow to be in the same range as in the previous year.

In 2022, net liquidity in the Automotive Division is anticipated to be up to 15 % higher than the previous year's level.

These plans are based on the Volkswagen Group's current structures.

Our equity-accounted joint ventures in China are not included in the figures above. For 2022, these joint ventures plan to invest in e-mobility, further optimization of the model portfolio, the development of new mobility solutions and digitalization. Their capex will probably exceed the 2021 level and be financed from the companies' own funds.

In the Financial Services Division, we are planning higher investments in 2022 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 %.

In the 2021 reporting period, the Volkswagen Group's business continued to be impacted by the Covid-19 pandemic and, in particular, the semiconductor supply shortages. Compared to the previous year, ROI increased in the reporting period due to earnings-related factors and, at 10.4 (6.5) %, was above both the prior-year figure and our minimum required rate of return of 9 % (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"). We expect

the return on investment (ROI) in the Automotive Division for 2022 to be between 12% and 15%.

SUMMARY OF EXPECTED DEVELOPMENTS

Our planning is based on the assumption that global economic output will continue to grow in 2022, albeit at a somewhat lower level overall, after the recovery observed in the past fiscal year – provided that the Covid-19 pandemic does not flare up again and that shortages of intermediates and commodities become less intense. 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, with risks arising especially from the Russia-Ukraine conflict. 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 2022. Overall, the global volume of new vehicle sales is expected to be moderately up on the prior year without reaching the pre-pandemic level. This prediction assumes that the Covid-19 pandemic does not flare up again and that shortages of intermediates, especially semiconductors, and commodities become less intense. For 2022, we anticipate that the volume of new passenger car registrations in Western Europe will be distinctly above that recorded in the reporting period. In the German passenger car market, we expect the volume of new registrations in 2022 to also distinctly exceed the prior-year figure. Sales of passenger cars in 2022 are expected to moderately exceed the prior-year figures in markets in Central and Eastern Europe – subject to the further development of the Russia-Ukraine conflict. Sales volume in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America in 2022 is forecast to be slightly higher than the previous year's level. We anticipate a moderate increase overall in new registrations in the South American markets in 2022 compared with the previous year. The passenger car markets in the Asia-Pacific region are expected to be slightly up on the prior-year level in 2022.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed; on the whole, we anticipate a slight increase in the sales volume for 2022. This assumes that the Covid-19 pandemic does not flare up again and that shortages of intermediates, especially semiconductors, and commodities become less intense.

For 2022, 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. A pronounced increase in overall demand, with regional variations, is expected for 2022 in the bus markets relevant for the Volkswagen Group.

We anticipate that automotive financial services will continue to prove highly important to global vehicle sales in 2022.

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, given the continuing challenging market conditions, deliveries to customers of the Volkswagen Group in 2022 will be 5% to 10% up on the previous year. This assumes that the Covid-19 pandemic will not flare up again and that shortages of intermediates and commodities will become less intense. The 2022 fiscal year will continue to be affected by shortfalls in supply due to the structural shortage of semiconductors. We anticipate that the supply of semiconductors will improve in the second half of the year, compared with the first half.

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 revenue of the Volkswagen Group and of the Passenger Cars Business Area in 2022 to be 8% to 13% higher than the prior-year figure. In terms of operating result for the Group and the Passenger Cars Business Area, we forecast an operating return on sales in the range of 7.0% to 8.5% in 2022. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of 5.0% to 7.0% amid a strong year-on-year increase in sales revenue, including Navistar. In the Power Engineering Business Area, we expect sales revenue to be moderately above the prior-year figure and the operating result to be in the low triple-digit million euro range. 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 around €4.5 billion.

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 5.5% in 2022. For 2022, we anticipate that cash outflows resulting from the diesel issue will rise and mergers and acquisitions will be on a level with the previous year. Including any cash outflows in connection with the EU antitrust proceedings against Scania, we expect the net cash flow to be in the same range as in the previous year. In 2022, net liquidity in the Automotive Division is anticipated to be up to 15% higher than the prior-year figure. We expect the return on investment (ROI) to be between 12% and 15%. Our declared goal remains unchanged, namely to continue with our robust liquidity policy.

The basis of our success are skilled and dedicated employees. We aim to boost their satisfaction and motivation by means of equal opportunities, an attractive and modern working environment, a forward-looking approach to the organization of work and targeted advanced training programs. We aim for operational excellence in all business processes and plan our actions so that, every day, we exercise responsibility in issues relating to the environment, safety and society. In terms of integrity, Volkswagen aims to become a role model for a modern, transparent and successful enterprise.

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). The purpose of structuring the RMS/ICS in accordance with the COSO framework for enterprise risk management is so 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 in the RMS/ICS processes.

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.

Following completion of the implementation of the Risk Radar risk management IT system in 2020 and of the standardization of the ICS for business processes associated with risk at significant companies, the RMS/ICS will continue to be developed in future.

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, 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.

Second line: Group-wide standardized quarterly risk identification and reporting

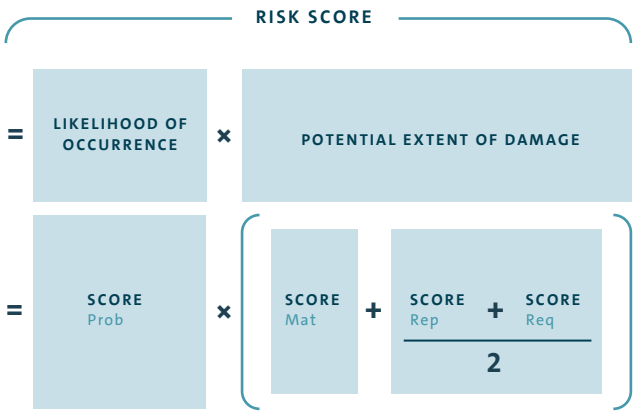
Each quarter, in addition to the ongoing operational risk management, the Group Risk Management department sends standardized surveys regarding the risk situation and the implementation of countermeasures to all Group brands, to significant Group companies and to Volkswagen Financial Services AG and Volkswagen Bank GmbH.

Acute risks for the Volkswagen Group are reported in this survey of the risk situation – the quarterly risk process (QRP). The responses are used to update the picture of the potential risk situation. The assessment of risks from the QRP is conducted in the Risk Radar IT system

The methodology for aggregating risks and assessing the Volkswagen Group's risk-bearing capacity was developed further in 2021. The aggregated risk situation and risk-bearing capacity are compared at half-yearly intervals. There were no indications of insufficient risk-bearing capacity at the Volkswagen Group in the 2021 fiscal year.

A score is calculated for each risk by multiplying the likelihood of occurrence (Prob) by the potential extent of the damage. This enables comparison of the risks. The extent

CALCULATION OF RISK SCORE



of the damage is calculated from the criteria of financial loss (Mat) and reputational damage (Rep) and the potential threat to adherence to external legal requirements (Req). 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 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. The potential threat to adherence to external legal requirements 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 (compliance risks) are also integrated into this process.

Risk reporting to the committees of Volkswagen AG depends on materiality thresholds. 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. In addition, the reporting includes all risks from the QRP with a risk score of 20.

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 the risk may lead to potential financial loss of €1 billion or more and the likelihood of occurrence is estimated at greater than 50%.

In recent years, a standardized ICS has been developed that goes significantly beyond the requirements for the ICS posed by financial reporting. In 22 catalogs of controls, the companies within its scope are presented with requirements in respect of the process risks and control objectives to be covered in order to protect the value chain in a standardized manner. In addition to financial reporting issues, for example, their content addresses process risks in development, production or compliance.

Key controls to cover process risks and control objectives are also tested for their effectiveness; any weaknesses identified are reported to the responsible bodies at Volkswagen AG and resolved in the departments. Like the quarterly risk process, the standardized ICS is fully supported by the Risk Radar IT system.

In terms of its content and organizational aspects, the standardized ICS thus offers broader protection than the regular governance, risk and compliance (GRC) process used in the past. With the introduction of the standardized ICS in further companies in 2021, the regular GRC process is being gradually shut down.

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.

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 compliance management system (CMS) as part of its independent audit procedures. The audit plan adopted by the Board of Management includes the first and second lines, i.e. the risk-mitigating functions in addition to the operational units.

RISK EARLY WARNING SYSTEM

The Company's risk situation is ascertained, assessed and documented in accordance with the legal requirements. 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 Company's continued existence at an early stage 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 regular 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 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 effectiveness of the internal control system in the context of the accounting process is systematically assessed in significant companies as part of the standardized ICS. This begins with a risk analysis and definition of controls with the aim of identifying significant risks for the financial reporting process. Regular tests based on samples are performed to evaluate the effectiveness of the controls. These form the basis for a self-evaluation of whether the controls are appropriately designed and effective.

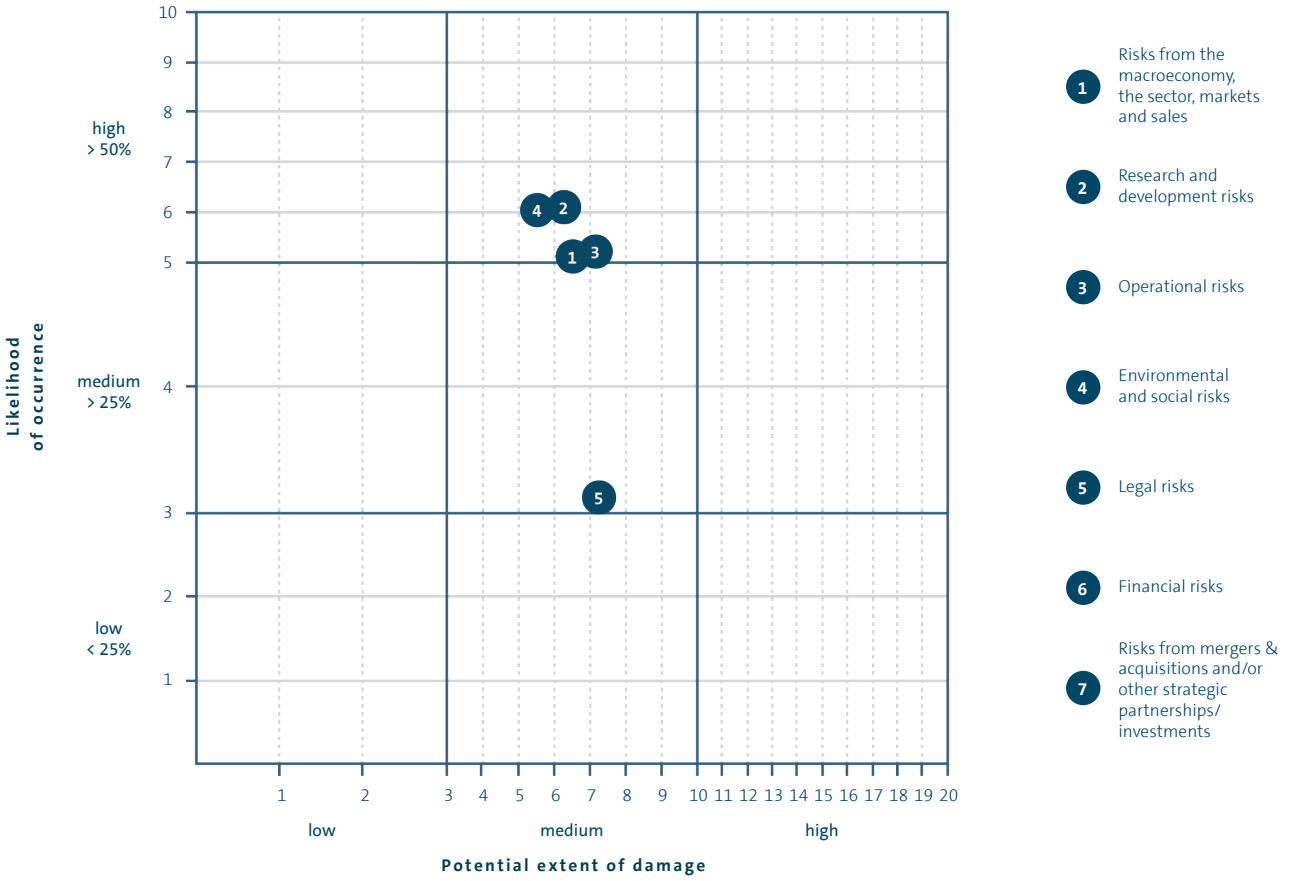
The combined management report of the Volkswagen Group and Volkswagen AG is prepared – in accordance with the applicable requirements and regulations – centrally but with the involvement of and in consultation with the Group units and companies.

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 forward-looking 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 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.

AVERAGE SCORES OF THE RISK CATEGORIES



(weighted score resulting from financial loss, reputational damage and potential risk of non-compliance with external legal requirements)

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 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.

All risks reported to the Group Risk Management department with a risk score of 20 or more for the units included from the QRP are incorporated in the assessment of the Volkswagen Group's risk categories and the reporting to the Board of Management, amongst others. The risk categories are plotted based on the average scores. In the reporting year, no risks with such scores were reported for the "Financial risks" and "Risks from mergers & acquisitions and/or other strategic partnerships/investments" risk categories.

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: high) and the potential extent of damage is classified as medium (previous year: medium).

The most significant risks from 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 arise primarily from a failure to contain the Covid-19 pandemic in a lasting way, turbulence in the financial and commodity markets, supply shortages in connection with imbalances between supply and demand, 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 potential worldwide transition from an expansionary to a more restrictive monetary policy together with continuing inflationary tendencies also presents risks for the macroeconomic environment. High private- and public-sector debt in many countries is clouding the outlook for growth and may likewise cause markets to respond negatively. Demographic change may also inhibit growth. A decline in growth in key countries and regions often has an immediate impact on the state of the global economy and therefore poses a central risk. There are also risks from the still 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 the Middle East or Africa, and especially the current conflict between Russia and Ukraine, 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 suddenly result in unexpected market reactions.

Overall, we expect a positive development of the global economy for 2022. However, due to the risk factors mentioned, as well as cyclical and structural aspects, another slump in the global economy or a period of below-average growth rates is also possible.

The macroeconomic environment may also give rise to opportunities for the Volkswagen Group if actual developments turn out to be more positive than expected.

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.

Supply chain disruption may give rise to the risk of underutilization of capacity in global automobile production, meaning that existing demand can only be partially met.

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 may vary from region to region. 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 maintains a selective distribution system. Within the European Union, dealers and service partners are selected – where permissible – using qualitative and quantitative-qualitative criteria in accordance with the provisions of EU Regulations 330/2010 and 461/2010. Regulation 330/2010 is currently being revised by the European Commission. The new version is due to enter into force on June 1, 2022. The European Commission published a first draft in July 2021. This contains new requirements on the design of a selective distribution system, particularly with respect to dual distribution systems. A final evaluation of whether and to what extent the distribution system of Volkswagen AG will be specifically affected by the legal changes will only be possible once the new regulation has been adopted.

Volkswagen AG may be exposed to increased competition in aftermarkets. This is due to the provisions of the block exemption regulations, which have applied to after-sales services since June 2010, the provisions of EU Regulation 566/2011 dated June 8, 2011 and the room for interpretation concerning the amendments included in 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 vehicle sales, our after-sales business and our dealerships. In particular, more rapidly evolving customer requirements, swift implementation of legislative initiatives, including in connection with the achievement of climate protection targets, 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 and that competitive pressure from local manufacturers will increase. 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 launched a model initiative with new models tailored to customers' needs: the Taigun from the Volkswagen Passenger Cars brand and the ŠKODA Kushaq.

> USA
In the USA, Volkswagen Group of America is steadfast in its pursuit to become a full-fledged volume supplier and expand its market share. The expansion of local production capacity – including production for electric vehicles from 2022 – 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.

> 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.

Despite an improved market level, the marine market continues to see the consequences of the Covid-19 pandemic and the ongoing uncertainty regarding future emissions regulations. There is a risk that investments will be postponed and that there will be a distinct slowdown in project business. 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-CO_2 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 plant surveillance, 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 *Kurzarbeit* (short-time working), 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. 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'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 instrument, 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, for example. 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, fuel and mobility strategies.

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 such as tariffs and sanctions. Furthermore, there are future risks from the sale of electrified vehicles if the minimum requirements for local content under free trade agreements cannot be achieved. 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. The global demand for ships is increasing due to the overall positive development in world trade; however, the volatility in new shipbuilding orders poses the risk of declining license revenues. Due to changes in the competitive environment, especially in China, there is also the risk of losing market share.

Russia-Ukraine conflict

At the time of preparing this report, there is a risk that the latest developments in the Russia-Ukraine conflict will have a negative impact on the Volkswagen Group's business. This may also result from bottlenecks in the supply chain. At the present time, it is not yet possible to conclusively assess the specific effects.

Nor is it possible at this stage to predict with sufficient certainty to what extent further escalation of the Russia-Ukraine conflict will impact the global economy and growth in the industry in fiscal year 2022.

The Volkswagen Group does not have any material subsidiaries and equity investments in Ukraine.

In Russia, the Volkswagen Group has in particular the production company at the Kaluga site, as well as sales units and financing companies. They could above all be adversely affected by the sanctions already resolved, but also by new sanctions and general developments in Russia.

In relation to the net assets, financial position and results of operations of the Volkswagen Group, the business activities of the Volkswagen Group in these two countries are insignificant.

There is a risk that a further escalation of the conflict could have a material adverse effect on the results of operations, financial position and net assets of the Volkswagen Group.

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 – such as the current conflict between Russia and Ukraine – 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. There are risks arising in particular from a fall in demand and an increasing intensity of competition. In production, there are risks especially 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 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 advancements and legislation. One risk posed is the implementation of ever more stringent emission and fuel consumption regulations, such as C6 in China or EU7 in Europe from 2025. New test procedures and test cycles (e.g. the Worldwide Harmonized Light-Duty Vehicles Test Procedure, WLTP) as well as compliance with approval processes (homologation) are becoming increasingly complex and time-consuming. The test specifications and homologation procedures also vary greatly from country to 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 swiftly we are able to tailor 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.

We use the latest findings from the world of physics and other areas of science to plot our course. In addition, we conduct research such as 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, digitalization and software – 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 we are also taking account of the Covid-19 pandemic.

To reduce the risk of patent infringements, we conduct thorough analyses of third-party industrial property rights; increasingly also in relation to communication technologies.

We regularly compare the results of all these analyses with the respective project targets; in the event of any discrepancies, we introduce appropriate countermeasures in good time. Our end-to-end project organization fosters cooperation across all of the 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.

However, with higher volumes there is a higher risk that supply chain disruption – for example due to a shortage of semiconductors – or quality problems may 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 are enabling us to bring e-mobility into mass production worldwide with the introduction of the first MEB- and PPE-based vehicles. In future, we will reinforce these synergy effects by combining the MEB and PPE in the Scalable Systems Platform (SSP).

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 QRP lie particularly in volatile procurement markets, here primarily in relation to the availability of semiconductors, as well as in cyber security and new regulatory requirements regarding IT, and in quality problems.

Risks from particular events in the Volkswagen Group's purchasing 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 violent confrontations – such as the current conflict between Russia and Ukraine – fires, explosions, or the leakage of substances hazardous to health and/or the environment, may result in supply risks in purchasing 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 generally identified in Purchasing 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 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 and a significant shortage of semiconductor capacity throughout the automotive industry, 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 Purchasing and Technology

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. These are being exacerbated by the current commodity price situation and the unavailability of semiconductors. The supplier risk management system in Purchasing at the Volkswagen Group evaluates suppliers before they are commissioned to carry out projects. Purchasing takes into account the recommendations of the risk management system.

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, led to bottlenecks in supply. We intend to safeguard supplies for our production plants by implementing short-term measures along with the use of our relationship management and monitoring across the entire supply chain.

There is also the risk that the latest developments in the Russia-Ukraine conflict will have a negative impact on the supply chain and lead to supply bottlenecks.

A global economic slowdown exacerbated by trade disputes and especially the consequences of the Covid-19 pandemic, including sharply increased commodity prices, is impacting the financial situation of many suppliers. This is also giving rise to risks of bottlenecks and 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. Specialists in Purchasing 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. Additional risks may arise from the long-term relation to cell manufacturers and the direct responsibility of Volkswagen in the supply chain. To counter these risks, the Volkswagen Group maintains multiple strategic supplier relationships while also increasing its own battery production within the value chain (raw material extraction, cell production).

Commodity risks can be partially mitigated through backward integration of the supply chain. For example, partnerships and long-term supply agreements with commodity suppliers can be used to ensure supply of the relevant material while also achieving competitive prices.

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 Purchasing systematically investigate risks resulting from antitrust violations by suppliers and file claims for any losses that may arise.

Risks in the supply chain may also arise in relation to the non-fulfillment of human rights- and environment-related legal due diligence obligations, which may lead to supply shortages. Requirements are compared with existing processes with the help of gap analyses, and processes are developed and implemented to fill in any gaps. In 2021, we introduced a human rights due diligence management system to reduce human rights risks throughout our entire supply chain. An additional management system has been set up to effectively manage the environmental risks in the raw material supply chains.

Production risks

Volatile developments in the global automotive markets, accidents at suppliers and disruptions in the supply chain, such as the semiconductor shortages, 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 related to 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 multi-brand sites, volatility can also be balanced across brands.

Sudden 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 frequent intervals and issuing program scheduling guidelines where necessary.

The diversity of our models, the reduced product life cycles and the use of complex processes and technical systems are associated with a risk that the start of production of a vehicle may be delayed. We address this risk by drawing on

experience of past production starts 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 the start of production of our vehicles throughout the Group.

Legal changes, for instance in the context of the changeover to the WLTP test procedure, may impact production. For one thing, a temporary reduction in the range causes demand to focus on the available variants. Moreover, gaps in production can occur if model variants have not been approved. These fluctuations necessitate measures to stabilize production, such as the temporary storage of vehicles until official approval.

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 design 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 emergence, 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. The current disproportionate increases in commodity prices and limited availability of semiconductor products may have a detrimental impact on production costs and revenue recognition.

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 risks, particularly during the bidding and planning phase of large upcoming projects.

Quality risks

We strive to identify and rectify quality problems at an early stage during the development of our products to avoid, among other things, 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, components or functions 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 emissions 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 the increasing technical complexity of vehicles due to their internal and external connectivity, and the toolkit systems in use across brands, the quality of the parts and software components supplied must be assured. This is lending ever greater 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. Harmonized processes across the Group, such as the car security incident process, enable a fast reaction speed across the

brands in the event of an attack so that any weaknesses in our products can be promptly eliminated. The Automotive Cyber Security Management System is an integral part of our quality management system and helps us to take advantage of synergies with already existing structures. This approach has been taken to meet the legal requirements of the UNECE regulation on cyber security, which will apply from mid-2022.

The *Ausschuss Produktsicherheit* (APS – Product Safety Committee) has been established to comprehensively evaluate and efficiently resolve product safety risks for customers as the product users. 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 and established them within the organization; these are responsible for managing incoming information on APS- and CSB-related topics. In 2021, a universal, transparent management and tracking system was established to follow up on all such information across the Group without employee involvement, right through to the APS decision. In addition, numerous events and training courses were held to improve awareness of safety risks and products' legal conformity among all employees. These activities aim to avoid risks from a lack of timely, complete and correct reporting and preliminary analysis. The entire APS process is, moreover, subject to regular review in the form of internal and external audits, aimed at reducing to a minimum risks arising from delayed, lacking or erroneous decisions and measures on the part of the APS or CSB.

IT risks

At Volkswagen, a global, software-centric mobility provider, the information technology (IT) used in all business units Group-wide is assuming an ever more 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 accuracy and completeness of data, and for the functionality of error-free systems.

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. There is a risk of cyber attacks, particularly on our digital services that make use of our mobility offerings. Legal regulations including the UNECE (United Nations Economic Commission for Europe) cyber security regulation (R155) define the requirements made of 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 disaster.

A newly established committee with members from Information Security, Data Protection, Group Security, Legal Affairs and other stakeholders handles interdisciplinary issues on information security and reports directly to the Group Board of Management. This allows faster and more efficient coordination in challenging situations, thus increasing the overall level of security. A wide range of awareness-raising measures and training courses for employees also helps create and deepen consciousness of information security.

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, sustainability and climate protection 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 high (previous year: medium) and the potential extent of damage is classified as medium (previous year: medium).

The most significant risks from the QRP arise from nonfulfillment of CO_2-related requirements.

Personnel risks

We use a range of instruments to counter economic risks as well as changes in the market and the competitive situation and shortages of supplier components. These 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, flexible shift models and legally regulated instruments such as *Kurzarbeit* (short-time working). 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 and the structural transformation of the automotive industry.

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 integrated degree *Studium im Praxisverbund* and traineeship scheme, Faculty 73 and the Volkswagen-sponsored nonprofit École 42 in Wolfsburg and Berlin, 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, but also system-based improvements so that Volkswagen can ensure compliance with data protection laws when processing personal data. Volkswagen is aware of its responsibility in the processing of this data. To make processing compliant with data protection requirements, we address 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 has had a negative impact on business development since 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 our experience to date, 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 and published by the EU in 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. Up to and including 2020, European fleet legislation was complied with on the basis of the New European Driving Cycle (NEDC). From 2021 onward, the NEDC target value was replaced by a WLTP target value through a process defined by lawmakers; this change has not led to additional tightening of the target value. A similar approach applies to light commercial vehicles, where a target of 147 g CO_2/km applied to the entire fleet in 2021.

The targets will be tightened as from 2025: for new European passenger car fleets, a reduction of 15% in CO_2 emissions 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 WLTP fleet value in 2021. These targets can only be achieved through a high proportion of electric vehicles within the fleet.

If the respective fleet-wide target is not fulfilled, the Commission may impose 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 of new vehicles 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. For 2021, this quota was 14% and had 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, the annual CO_2 and efficiency targets to be fulfilled by the fleet for new passenger cars and light commercial vehicles are defined by the greenhouse gas legislation (since 2012) and Corporate Average Fuel Economy legislation (CAFE). A decision was reached in fiscal year 2020 to relax CO_2 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 CO_2 fleet targets set by the CARB, which are more ambitious than the national standards. In December 2021, the current administration published the new CO_2 fleet targets for the period from 2022 to 2026, thereby reversing the loosening of the targets by the previous administration. The form of the efficiency targets (CAFE) for this period is still under discussion.

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 are becoming increasingly common. The Volkswagen Group closely coordinates technology and product planning with its brands so as to avoid breaches of fleet values, for example. 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.

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 debate on a successor regulation began at European level in 2020. A conclusion to this debate and thus new legislation is not expected before 2023. It is not anticipated that this successor regulation will enter force until the second half of the decade.

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 electricity

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 emissions exceed these targets, vehicle manufacturers will be liable to substantial 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.

The review of the requirements on CO_2 emissions for heavy commercial vehicles planned in the EU for 2022 could additionally toughen these challenges. Meeting these EU targets requires reducing CO_2 emissions through new technologies. We are therefore making substantial investments in climate-friendly alternative drives – especially battery-electric commercial vehicles (trucks and buses).

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. Various of the above-mentioned regulations and directives are currently being revised within this framework to support the achievement of climate targets. This may lead to even more stringent requirements for CO_2 emissions (fleet limits) for the automotive industry.

The debate around driving bans for diesel vehicles in Germany has lost some of its heat given the strong improvements in air quality measurements. There was a significant reduction in the number of municipalities and cities that failed to comply with the air pollutant limits for nitrogen-dioxide (NO_2) immissions in 2021. 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 aforementioned debate could negatively affect sales of diesel vehicles and result in financial liabilities and possible official requirements.

Local bans on the use of diesel vehicles are already also in place in a number of other countries, though these mainly affect older vehicles with lower emissions standards. 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 Environ-

mental 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.

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: medium).

The most significant risks from the 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, brands, 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 for instance 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.

Unless otherwise explicitly stated, the amounts disclosed for the litigation being reported on refer only to the respective principal claim. Ancillary claims, such as for interest and litigation expense, are generally not considered.

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 type EA 189 diesel engines and that this engine type had been installed in roughly eleven million vehicles worldwide. 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. This software function was developed and implemented from 2006 on without knowledge at the level of the Board of Management. Members of the Board of Management did not learn of the development and implementation of this software function until the summer of 2015.

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 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.

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 continues to anticipate 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 updates in the vehicles of a large number of affected customers. The few software updates still being developed are expected to be submitted to the KBA for approval early in the second quarter of 2022.

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 January 2021, the criminal proceedings regarding alleged market manipulation relating to capital market disclosure obligations in connection with the diesel issue were terminated by the Braunschweig Regional Court provisionally as regards the former Chair of the Board of Management and definitively as regards Volkswagen AG.

In September 2020, the Braunschweig Regional Court allowed the indictment of the same former Chair of the Board of Management of Volkswagen AG and others to proceed on charges that include fraud in connection with the diesel issue involving type EA 189 engines. The proceedings against this former Chair of the Board of Management of Volkswagen AG have since been severed from the other cases. The trial of the other defendants began in September 2021.

The Braunschweig Office of the Public Prosecutor is furthermore conducting investigations on suspicion of fraud in connection with type EA 288 engines.

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 a former Chair 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 and 4.2 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.

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%.

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 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, two civil suits filed against Volkswagen AG and other Group companies by the Australian Competition and Consumer Commission (ACCC) were settled for the sum of AUD 75 million in the second half of 2019. On appeal, the amount of the settlement was increased to AUD 125 million by final judicial ruling in the reporting year.

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. 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. The second class action was dismissed as inadmissible in October 2021. The judgment is appealable.
The financialright GmbH filed consolidated actions before various German courts asserting claims assigned to it by customers in Germany, Slovenia, and Switzerland against Volkswagen Group companies. Following the withdrawal of numerous motions for relief, approximately 36 thousand claims are currently still pending. Some cases have in the meantime moved to the first or second appeals level. There is, however, as yet no high court ruling on the permissibility of the business model of financialright GmbH.

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 91 thousand plaintiffs have registered claims under the group litigation, for which the opt-in period has expired. Further plaintiff law firms have registered roughly 105 thousand additional claims with the court. The question of liability on the part of Volkswagen was not among the preliminary issues that the High Court decided in April 2020 and will be dealt with at a later stage of the proceedings. The main trial proceedings are to begin in January 2023. In addition, in late 2021 a new lawsuit was filed in court against Volkswagen AG, Volkswagen Financial Services (UK) Limited, and other Volkswagen Group companies in connection with certain diesel vehicles leased or sold in England, Wales, and Northern Ireland since 2009 and various other diesel engine types.

In France, a class action is pending that was filed by the French consumer organization Confédération de la Consommation, du Logement et du Cadre de Vie (CLCV) against Volkswagen Group Automotive Retail France and Volkswagen AG for up to 1 million French owners and lessees of vehicles with type EA 189 engines. This is an opt-in class action.

In Italy, a trial level judgment in favor of the plaintiffs was rendered by the Venice Regional Court in July 2021 in the class action brought by the consumer association Altroconsumo on behalf of Italian customers; the judgment requires Volkswagen AG and Volkswagen Group Italia to pay damages to some 63 thousand consumers in an aggregate amount of roughly € 185 million. Volkswagen AG and Volkswagen Group Italia have appealed this decision.

In the Netherlands, an opt-out class action is pending that was brought by Stichting Volkswagen Car Claim seeking declaratory rulings for up to 165 thousand customers. A declaratory judgment partially granting the relief sought was issued in July 2021. In the opinion of the court, Volkswagen AG and the other defendant Group companies acted unlawfully with respect to the original engine management software. The court moreover held that consumers are entitled to a purchase price reduction from the defendant dealerships. No specific payment obligations result from the declaratory judgment. Any individual claims would then have to be established afterwards in separate proceedings. Volkswagen AG and the other defendant Group companies have appealed the decision. Furthermore, an opt-out class action lawsuit brought by the Diesel Emissions Justice Foundation seeking monetary damages on behalf of Dutch consumers is also pending. It currently remains 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. The class action potentially affects up to approximately 99 thousand vehicles with type EA 189 engines. 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, roughly 60 thousand individual lawsuits relating to various diesel engine types are currently pending against Volkswagen AG or other Group companies, with the plaintiffs suing for damages or rescission of the contract in most cases.

In 2020, the Bundesgerichtshof (BGH – Federal Court of Justice) issued a series of fundamental judgments deciding legal issues of major importance for the litigation still pending with regard to vehicles with type EA 189 engines. The BGH held that buyers who had purchased vehicles prior to public disclosure of the diesel issue had damage claims against Volkswagen AG. While buyers can require reimbursement of the purchase price paid, they must accept a deduction for the benefit derived from using the vehicle and must return it to Volkswagen AG. Buyers have no tort-based claim for damages if they purchased their vehicles after the ad hoc announcement of September 22, 2015 or if they raise claims based solely on a temperature-dependent emissions control feature (so-called thermal window) in the engine. In February 2022, the BGH issued further fundamental judgments concerning vehicles with EA 189 motors deciding that buyers of new vehicles of the Volkswagen brand were entitled to so-called residual damage claims against Volkswagen AG after the knowledge-based limitation period has expired. As a result, Volkswagen AG has to repay the purchase price of the vehicle or the price paid by the dealer. The BGH decided that the claims for residual damages do not extend beyond claims of ordinary damages. Buyers need to subtract the value of usage and can only demand payment of the residual damages if they in return relinquish the vehicle. Prior to this the BGH had decided that, in contrast, buyers of used vehicles are not entitled to residual damages.

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. Given the early stage of the proceedings, 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 is continuing at subsequent hearings. The latest indication from the court was that it may take evidence on certain points.

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. Oral argument in this case began in July 2021 and is to be continued.

In the Netherlands, an unquantified action filed by a shareholder association seeking a determination that Volkswagen AG had supposedly misled the capital markets was withdrawn in early July 2021 after the European Court of Justice held that the courts of the Netherlands lacked international jurisdiction in a similar case. Volkswagen AG consented to the withdrawal of the action. This terminated the litigation without precluding the filing of subsequent lawsuits.

Excluding the United States and Canada and following the withdrawal of various actions, claims in connection with the diesel issue totaling roughly €9.5 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 Texas attorney general and some municipalities continue to pursue actions in state and federal courts against Volkswagen AG, Volkswagen Group of America, Inc., and certain affiliates, alleging violations of environmental laws. In January 2022, the Texas Supreme Court granted the February 2021 petition of the State of Texas for review of the Texas appellate court decision that had dismissed the environmental claims of Texas against Volkswagen AG and AUDI AG for lack of personal jurisdiction.

In November 2021, the US Supreme Court denied petitions by Volkswagen requesting that it reviews both a decision by the US Court of Appeals for the Ninth Circuit declining to dismiss certain claims brought by Hillsborough County, Florida, and Salt Lake County, Utah, and a decision by the Ohio Supreme Court declining to dismiss certain claims brought by the State of Ohio.

In the reporting year and in early 2022, Volkswagen settled the environmental claims brought by Montana and New Hampshire (in September 2021), Illinois (in December 2021), and Ohio (in January 2022).

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.

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. Subsequently, Volkswagen settled the case. The settlement is subject to court approval, which is currently pending.

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. Damage settlements
At the end of March 2021, the Supervisory Board of Volkswagen AG announced the completion of the investigation initiated in October 2015 into the causes of and those responsible for the diesel issue. The Board resolved to claim damages from Prof. Dr. Martin Winterkorn, former Chair of the Board of Management of Volkswagen AG, and from Rupert Stadler, former member of the Board of Management of Volkswagen AG and former Chair of the Board of Management of AUDI AG, for breach of their duty of care under stock corporation law. The resolution was based on identified negligent breaches of duty. The investigation found no breaches of duty by other members of the Volkswagen AG Board of Management. The investigation covered all members of the Board of Management who were in office during the relevant period. In June 2021, agreements on damage payments were reached in this connection with the goal of achieving speedy, legally certain, and final resolution of the diesel issue as far as the civil liability of members of governing bodies is concerned. To this end, Volkswagen and Audi entered into damage settlements (liability settlements) with Prof. Dr. Winterkorn and Mr. Stadler respectively in connection with the diesel issue. Prof. Dr. Winterkorn's damage payment amounts to €11.2 million and that of Mr. Stadler to €4.1 million. Volkswagen has furthermore reached agreement with the relevant insurers under its directors and officers liability policies (D&O insurance) on payment of an aggregate sum of €270 million (coverage settlement).

In addition, agreement was reached on damage payments by a former member of Audi's Board of Management and by a former member of Porsche's Board of Management. One former member of Audi's Board of Management was unwilling to reach a settlement; legal action is being prepared against him. Claims were already asserted against a former member of the Volkswagen Passenger Cars brand Board of Management.

7. Risk assessment regarding the diesel issue
An amount of around €2.1 (1.9) billion has been included in the provisions for litigation and legal risks as of December 31, 2021 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 €4.3 (4.2) billion, whereby roughly €3.6 (3.5) 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. Further hearings are scheduled for 2022.

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 3.2 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 appealed to the European Court of Justice in Luxembourg and mounted a comprehensive defense. In a judgment rendered in February 2022, the European General Court (Court of First Instance) rejected Scania's appeal in its entirety. Scania is currently analyzing the judgment and will in timely fashion decide whether to appeal it to the European Court of Justice. Scania had already recognized a provision of € 0.4 billion in 2016 and increased this provision to approximately €0.9 billion in the reporting year. 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 an initial 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 stated the European Commission's preliminary evaluation of the matter and afforded the opportunity to comment. Following entry into a formal settlement procedure, in April 2021 the Commission issued a revised statement of objections raising charges that were considerably more narrow. On this basis, a settlement decision was issued on July 8, 2021 concluding the administrative action and assessing a total fine of roughly € 502 million against the three brands. The subject matter scope of the decision is limited to the cooperation of German automobile manufacturers on individual technical questions in connection with the development and introduction of SCR (selective catalytic reduction) systems 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. Volkswagen accepted the decision, which was served on July 12, 2021, and filed no appeal, thus allowing the decision to become final.
The Korean competition authority KFTC is analyzing potential violations based on the facts of the EU case. The final report of the KFTC's appointed case handler was issued in November 2021. Volkswagen, Audi, and Porsche will reply to this report. The Turkish competition authorities, who investigated similar matters, issued a final decision in January 2022 in which they determined anticompetitive behavior to allegedly exist, but found that it had no effect on Turkey, for which reason they refrained from imposing fines on the German automakers. Volkswagen, Audi, and Porsche are currently considering whether to file an appeal. Based on comparable matters, the Chinese competition authority has instituted proceedings against Volkswagen, Audi, and Porsche, among others, and issued requests for information.

In October 2020, the US District Court for the Northern District of California dismissed two antitrust class action

complaints. The plaintiffs in these actions had 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. The plaintiffs appealed this ruling. In August 2021, the plaintiffs in one of the two class actions withdrew their appeal. In October 2021, the Ninth Circuit Court of Appeals affirmed the dismissal of the other class action by the US District Court for the Northern District of California. After receiving an extension until December 27, 2021, the plaintiffs in the latter class action filed a motion for rehearing, which the Ninth Circuit denied on January 25, 2022. On December 28, 2021, those plaintiffs also filed a motion seeking to set aside the District Court's October 2020 judgment and to be allowed to file a new amended complaint. 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.

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. In January 2021, a consolidated complaint was filed with the US District Court for the Northern District of California alleging 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 defendants (Volkswagen AG, Dr. Ing. h.c. F. Porsche AG, and Porsche Cars North America, Inc.) have moved for dismissal of the action.

In December 2021, Navistar entered into a final Profit Sharing Settlement Agreement to terminate with past, present, and future effect certain disputes most recently litigated before an arbitration tribunal concerning the calculation of profit sharing amounts for purposes of Navistar's corporate retiree healthcare commitments. At the same time and in the same context, an agreement to settle the class action lawsuits was also reached with class action members; this agreement is still subject to approval by the supervising court, which will hear the class action members before ruling. The final agreement provides for a payment by Navistar in an amount of €491 million (USD 556 million); in fulfillment of the agreement, Navistar has already made an initial payments totaling €88 million (USD 100 million). Navistar recognized provisions in this regard in prior periods.

In November 2021, three claimants accompanied by Greenpeace filed a lawsuit against Volkswagen AG before the Braunschweig Regional Court. The action seeks to compel Volkswagen to initially reduce in stages and by 2029 completely cease its production and placement into the stream of commerce of vehicles with internal combustion engines as well as to reduce greenhouse gas emissions from development, production, and marketing (including third party vehicle use). The lawsuit further seeks to compel Volkswagen to exercise influence over Group companies, subsidiaries, and joint ventures so as to cause them to fulfill these demands as well. In addition, another action with identical requests for relief and by and large the same rationale has been filed by an organic farmer with the support of Greenpeace before the Detmold Regional Court. Volkswagen is analyzing the lawsuits and will defend itself against them.

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.

The lawsuit filed by GT Gettaxi Ltd. alleging in particular large damage claims, which was served on Volkswagen AG and another defendant in February 2020, was dismissed by

the Cypriot first instance court in August 2021 due to lack of jurisdiction of the Cypriot courts. GT Gettaxi Ltd. has appealed this decision to the Supreme Court (which is the court of final appeal in Cyprus).

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 payments of taxes for former years, while other provisions were recognized for ancillary tax payments arising in this connection.

Financial risks

No risks with a score of 20 or more were reported for this risk category in the reporting year.

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 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 exchange rate risk using hedging instruments. These mainly comprise currency forwards and currency options. We use these transactions to limit the exchange rate 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, Canadian dollars, Chinese renminbi, Czech koruna, Hong Kong dollars, Hungarian forints, Indian rupees, Japanese yen, Mexican pesos, Norwegian kroner, Polish zloty, pounds sterling, 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, coal, copper and lead 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 section 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 work to limit the impact of a default and keep the Volkswagen Group solvent at all times, even in the event of a default by individual counterparties.

The use of financial instruments may result in losses if the hedging exchange rates are less favorable than the rates achievable on the market at the maturity of the financial instrument.

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. There is a potential liquidity risk that we will be 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 primarily safeguarded 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 regard to new business, the residual value recommendation must take into account current market circumstances and factors that might have an influence in future.

Credit risk describes the risk of losses due to defaults in customer transactions, specifically by the borrower or lessee. Default occurs when the borrower or lessee is unable or unwilling to make the payments due. This includes late or partial payment of interest and principal on the part of the contracting party.

Credit checks on borrowers are the primary basis for lending decisions. Rating and scoring systems are used to provide an objective decision-making basis for granting loans and leases and for recognizing risk provisions.

An opportunity may arise if the losses from the lending and leasing business are lower than the previously calculated expected losses and the risk provision recognized on this basis. Particularly in those countries in which we take a conservative approach to risk due to the uncertain economic situation, the realized losses may be lower than the expected losses if the economy stabilizes and borrowers' credit ratings improve as a result.

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 2021 annual reports of Volkswagen Financial Services AG and Volkswagen Bank GmbH.

Opportunities and risks from mergers & acquisitions and/or other strategic partnerships/investments

No risks with a score of 20 or more were reported for this risk category in the reporting year.

Opportunities and risks from partnerships

As part of our new strategy NEW AUTO, 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.

Close interaction with partners in the field of e-mobility in the form of partnerships and joint ventures supports technological change. Examples include the development of a comprehensive charging infrastructure. 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.

The marketing of the Modular Electric Drive Toolkit to third parties, for example as part of the strategic alliance with Ford, could result in damage claims 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. In doing so, we are generating maximum value for the Group and its brands and are able 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. Patent and licensing infringements may also arise in partnerships and thus result in 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 and from equity investments

For the goodwill recognized in the financial statements and for brand names, as well as for equity investments, 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. We also regularly test the equity investments for impairment. The possible consequences of climate change and future regulatory requirements, espe-

cially where associated with the transformation of our business towards e-mobility, and the potential effects of these, are taken into account in our medium-term planning and thus in the calculation of future cash flows, including in impairment tests. If there are objective indications that the recoverable amount of the asset concerned is lower than the carrying amount, Volkswagen recognizes this as a non-cash impairment. An impairment can be caused, for example, by an increase in interest rates or deteriorating business prospects.

Risks from the disposal of equity investments

An unexpected need for funding 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. In 2022, any flare-up of the Covid-19 pandemic, the supply situation, especially for semiconductors, and the Russia-Ukraine conflict may have an adverse effect. 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, any significant shifts in exchange rates or commodities relevant to the Volkswagen Group or in parts supply (especially semiconductors), or any 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 2022

Our planning is based on the assumption that global economic output will continue to grow in 2022, albeit at a somewhat lower level overall, after the recovery observed in the past fiscal year – provided that the Covid-19 pandemic does not flare up again and that shortages of intermediates and commodities become less intense. 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, with risks arising especially from the Russia-Ukraine conflict. 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 2022. Overall, the global volume of new vehicle sales is expected to be moderately up on the prior year without reaching the pre-pandemic level. This prediction assumes that the Covid-19 pandemic does not flare up again and that shortages of intermediates, especially semiconductors, and commodities become less intense. For 2022, we anticipate that the volume of new passenger car registrations in Western Europe will be distinctly above that recorded in the reporting period. In the German passenger car market, we expect the volume of new registrations in 2022 to also distinctly exceed the prior-year figure. Sales of passenger cars in 2022 are expected to moderately exceed the prior-year figures in markets in Central and Eastern Europe – subject to the further development of the Russia-Ukraine conflict. Sales volume in the markets for passenger cars and light commercial vehicles (up to 6.35 tonnes) in North America in 2022 is forecast to be slightly higher than the previous year's level. We anticipate a moderate increase overall in new registrations in the South American markets in 2022 compared with the previous year. The passenger car markets in the Asia-Pacific region are expected to be slightly up on the prior-year level in 2022.

Trends in the markets for light commercial vehicles in the individual regions will also be mixed; on the whole, we anticipate a slight increase in the sales volume for 2022. This assumes that the Covid-19 pandemic does not flare up again and that shortages of intermediates, especially semiconductors, and commodities become less intense.

For 2022, 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. A pronounced increase in overall demand, with regional variations, is expected for 2022 in the bus markets relevant for the Volkswagen Group.

We anticipate that automotive financial services will continue to prove highly important to global vehicle sales in 2022.

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, given the continuing challenging market conditions, deliveries to customers of the Volkswagen Group in 2022 will be 5% to 10% up on the previous year. This assumes that the Covid-19 pandemic will not flare up again and that shortages of intermediates and commodities will become less intense. The 2022 fiscal year will continue to be affected by shortfalls in supply due to the structural shortage of semiconductors. We anticipate that the supply of semiconductors will improve in the second half of the year, compared with the first half.

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 revenue of the Volkswagen Group and of the Passenger Cars Business Area in 2022 to be 8% to 13% higher than the prior-year figure. In terms of operating result for the Group and the Passenger Cars Business Area, we forecast an operating return on sales in the range of 7.0% to 8.5% in 2022. For the Commercial Vehicles Business Area, we anticipate an operating return on sales of 5.0% to 7.0% amid a strong year-on-year increase in sales revenue, including Navistar. In the Power Engineering Business Area, we expect sales revenue to be moderately above the prior-year figure and operating result to be in the low triple-digit million euro range. 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 around €4.5 billion.

Wolfsburg, March 1, 2022
The Board of Management