Sustainable Value Enhancement

Our goal is to run our business responsibly along the entire value chain. Everyone should benefit from this – our customers, our employees, the environment and society. Our future program TOGETHER – Strategy 2025 is ushering in the biggest change process in the Company's history. The starting point is our vision of becoming one of the world's leading providers of sustainable mobility.

The main financial key performance indicators for the Volks-wagen Group are described in the "Results of Operations, Financial Position and Net Assets" chapter. Nonfinancial key performance indicators also attest to the efficiency of our Company's value drivers. These include the processes in the areas of research and development, procurement, production, marketing and sales, information technology and quality assurance. In all of these processes, we are aware of our responsibility towards our customers, our employees, the environment and society. In this chapter we provide examples of how we are increasing the value of our Company in a sustainable way.

SUSTAINABILITY

The Volkswagen Group is committed to sustainable, transparent and responsible corporate governance. The biggest challenge we face in implementing this at all levels and at every step in the value chain is the complexity of our Company, with its twelve brands, more than 626 thousand employees and 120 production locations. In order to tackle this challenge in the best way possible, we follow the recommendations of the German Corporate Governance Code and coordinate our sustainability activities across the entire Group. We have also put in place a forward-looking system of risk management and a clear framework for dealing with environmental issues in a future-oriented manner, employee responsibility and social commitment across our brands and in the regions in which we operate. The remuneration paid to the Group Board of Management also takes the Company's long-term success into account.

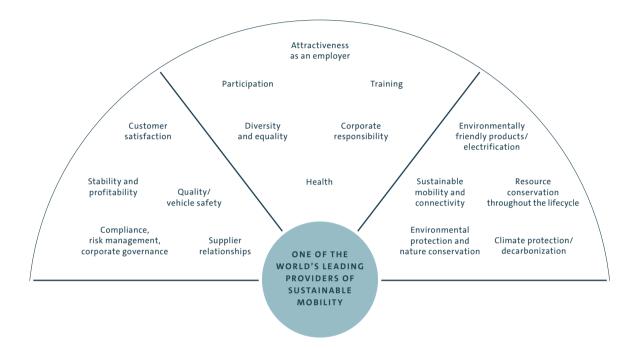
For us, sustainability means simultaneously striving for economic, social and environmental goals in a way that gives them equal priority. We want to create enduring value, provide good working conditions and handle the environment and resources with care. In connection with the

diesel issue, we failed to meet our own standards in several respects. The irregularities in our handling of emissions figures are contrary to everything we stand for. We are doing everything within our power both to prevent it happening again and to regain lost trust from our stakeholders. Our sustainability concept is under extensive revision to ensure that we recognize risks and opportunities in the areas of environment, society and governance at an early stage at every step along the value chain. In this way, our corporate social responsibility (CSR) activities will contribute toward enhancing our Company's reputation and value in the long term.

Management und coordination

The Volkswagen Group has created a clear management structure to coordinate the Group's activities as regards sustainability and CSR. Its highest committee is the Group Board of Management (Sustainability Board), which is regularly informed by the Group Sustainability steering group on issues related to sustainability and corporate responsibility. The members of the Group Sustainability steering group include executives from central Board of Management business areas and representatives of the Group Works Council and the brands. The steering group's tasks include identifying the key action areas, making decisions on the strategic sustainability goals, monitoring the extent to which these goals are being met by means of indicators and approving the sustainability report.

The sustainability office supports the steering group. Its duties include coordinating all sustainability activities within the Group and the brands. It is also responsible for stakeholder dialog at Group level, for example with sustainability-driven analysts and investors. In addition, CSR project teams work across business areas on topics such as reporting, stakeholder management and sustainability in supplier



relationships. In parallel, this coordination and working structure is also largely established across the brands and is constantly expanding. Since 2009, the Sustainability & CSR coordinators for all brands and regions have come together once a year to promote communication across the Group, create uniform structures and learn from one another. This Group CSR meeting has proven its worth as an integral part of the Group-wide coordination structure.

Sustainability Council

As part of its efforts to continuously improve and expand its sustainability management, the Volkswagen Group appointed an international Sustainability Council in 2016 made up of renowned experts from the academic world, politics and society. The members of the council establish their own working methods and areas of focus independently and consult with the Board of Management, senior managers and the employee representatives regularly. The council's role is to keep a watchful, critical eye on developments within the Company and in society.

The proven expertise of the council members guarantees a comprehensive approach. The topics addressed are social responsibility and integrity, sustainable mobility and climate protection, and the future of work and digitalization. The Sustainability Council is vested with rights of information, consultation and initiative. This involves receiving timely, comprehensive information so that the council can fulfill its consulting mandate. Dialog between the Company and the council is ensured through the active offering of consultations. In addition, the council is authorized to proactively propose topics and it or its members can implement projects with the Company subject to prior agreement.

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The first key issues in 2017 will be not only the challenges created by global CO_2 emissions and the corresponding regulations to be met post-2025, but also the Company's transformation process. The Volkswagen Group is initially providing \in 20 million in funding for projects proposed and promoted by the Sustainability Council in its first two years.

Materiality analysis

Two developments in 2016 influenced the detailed analysis as to which issues are material to the Volkswagen Group: the realignment of the Group via the future program TOGETHER – Strategy 2025, and dealing with the consequences of the diesel issue.

After analyzing and identifying topics that are material to the Company, we derived 16 key action areas that we will use to achieve our goal of becoming one of the world's leading providers of sustainable mobility. The analysis was based on external studies, industry analyses and stakeholder surveys carried out by our brands, internal guidelines such as our corporate strategy and Group environmental strategy as well as key factors identified by the Volkswagen Group's strategy committee.

As the details of the new Group strategy have not yet been finalized, we are still in the process of specifying the content of the key action areas and defining corresponding values, targets and indicators. As an enterprise with global operations, we will also take account of the options available to us for influencing and implementing the Sustainable Development Goals (SDGs) formulated by the United Nations.

Code of Conduct and guidelines

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Voluntary commitments and principles that apply throughout the Group form the backbone of our strategic sustainability goals. Such principles include the seven Volkswagen Group values, namely customer focus, top performance, value creation, the ability to realign, respect, responsibility and sustainability. In addition, our sustainability model provides the framework for sustainable and responsible action. The Code of Conduct introduced by the Volkswagen Group in 2010 also applies to the entire Group and helps managers and employees alike to deal with legal and ethical challenges in their day-to-day work.

We expressly support the United Nations Global Compact, an agreement between the UN and the business world aimed at enhancing the social and ecological aspects of globalization. As long ago as 2002, the Volkswagen Group made a commitment to promoting human rights, labor standards and environmental protection and combating corruption. In 2013, this commitment was extended to include the CEO Water Mandate, the aim of which is to ensure the careful management of water resources. Until such time as the diesel issue has been finally resolved, we have agreed to put our membership on hold. We ensure that our actions are in line with the declarations of the International Labor Organization (ILO), the principles and conventions of the Organisation for Economic Co-operation and Development (OECD) and the international covenants of the United Nations on basic rights and freedom.

We have also established our own internal guidelines in the shape of the Volkswagen Social Charter, the Charter on Labor Relations, the Charter on Vocational Education and Training, and the Charter on Temporary Work, all of which apply to the Group as a whole. Environmental protection activities are shaped by the environmental policy and principles for products and production, which both apply throughout the Group.

Strategic stakeholder management

Every day, we are confronted by the multifarious demands, expectations and attitudes of our many different stakeholders. These stakeholders may be individuals, groups or organizations with a legitimate interest in how the Volkswagen Group reaches its corporate decisions and in the implications of those decisions. Our customers and our employees are our key stakeholders. They form the core around which twelve other stakeholder groups are positioned – from the business and academic worlds, society and politics, and the media. The relationships our companies entertain with their stakeholders enrich the work we do together. At the same time, the diverse interests of these groups can lead to conflicts of interests.

That is why, day in and day out, we have to strike a balance between acting efficiently and satisfying a wide array of social expectations. Our customers expect a high-quality range of mobility products and first-class service. Performance-related remuneration, secure jobs and co-determination are key issues for our employees. Investors and analysts, on the other hand, want to see constantly rising unit sales and solid earnings growth, whereas civil society stakeholders are focused on social commitment and supporting social and environmental projects.

It is important to us that our stakeholders interact with us as equal partners. We know that we can achieve long-term success only if we take a proactive approach and are fully acquainted with the interests, needs and expectations of our stakeholders. That includes:

- systematically capturing, analyzing and understanding the stakeholders' expectations of Volkswagen;
- > solving problems jointly and sharing and utilizing the knowledge of both sides;
- openly addressing conflicts and recognizing potential conflicts and the risks arising from them; and
- > improving the quality of our decisions through transparency, openness and participation.

In addition to actively sharing information, we are also promoting a more in-depth and trust-based form of collaboration with selected stakeholders, the goal being to provide support to society, solve problems jointly and to draw on their expertise in the decision-making process. Examples include our cooperation with the German Red Cross (DRK) and our efforts to help refugees.

Humanity, public spirit and a sense of responsibility are the values on which the work of the DRK is based, and they are values we share. As part of the strategic partnership, the Volkswagen Group helps the DRK to find more people who are willing to volunteer their time. This goal is central to the partnership, in conjunction with strengthening the Red Cross's rescue service.

STAKEHOLDERS OF THE VOLKSWAGEN GROUP



The slogan "Helping Together" sums up how we are joining in the collective task of receiving and integrating the refugees who come to Europe and Germany. This is accomplished through a wide variety of projects, such as immediate aid in the initial accommodation facilities, local integration and education projects as well as providing vehicles and nonmonetary resources.

However, our long-standing cooperation and consultancy agreement with the German Nature and Biodiversity Conservation Union (NABU) expired on December 31, 2015. Extension of the contract and further collaboration are suspended for the time being as a result of the diesel issue. Nevertheless, we would like to continue our strategic partnership with NABU and are working hard to create the conditions needed to resume our successful project work of the past.

Not only do we provide support for projects that address future trends or that aid education or society as a whole, but we also want to drive the economy by helping to promote structural development and equal opportunities. In the reporting period we were involved in around 200 projects worldwide. In these, we pay special attention to the continuity and sustainability of our activities. We want not only our employees, but also our shareholders, neighbors and customers to benefit from what we do. Furthermore, we provide rapid assistance to victims of natural disasters and support the volunteer work of our own employees.

RESEARCH AND DEVELOPMENT

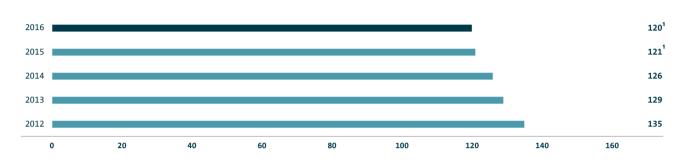
An important basis for innovation and thus the success of our business hinges on the early detection of future-oriented developments and trends in the ever-more complex areas of society, politics, technology, the environment and the economy. The Volkswagen Group's research institutes in the world's key automotive markets directly monitor pioneering developments in the local environment, thus gaining important insights that will safeguard the Group's future.

In the reporting period, our research activities were focused on designing forward-looking mobility solutions that will safeguard the Company's future and on establishing innovative technological expertise to strengthen our competitiveness. Our development activities focused on expanding our product range and enhancing the functionality, quality, safety and environmental compatibility of our products.

The future program TOGETHER – Strategy 2025 provides the framework for the realignment of our Group-wide research and development work: together with the brands, we have formulated an R&D strategy for the Group and already launched our first projects. This enables the brands to focus on developing future trends and systematically strengthening the development network – for example, so as to tap synergies and make efficiency gains even in the early phase of product development.

The Volkswagen Group's technology management team is supporting the Group's transformation into a provider of sustainable mobility solutions by ensuring that early development activities are aligned with future trends in the automotive sector and by creating links between innovation areas such as service design and more traditional product-related topics. All our mobility concepts are systematically tailored to our customers' needs.

CO₂ EMISSIONS OF THE VOLKSWAGEN GROUP'S EUROPEAN (EU28) NEW PASSENGER CAR FLEET in grams per kilometer



1 Subject to official publication by the European Commission in the annual CO₂ fleet monitoring report.

Fuel and drivetrain strategy

The Volkswagen Group's new passenger car fleet in the EU (excluding Lamborghini and Bentley) emitted an average of $120\,\mathrm{g\,CO_2/km^1}$ in the reporting period and was thus well below the 2016 European limit of $130\,\mathrm{g\,CO_2/km}$. As small-volume manufacturers, the Lamborghini and Bentley brands each have an independent fleet for the purposes of the European $\mathrm{CO_2}$ legislation and complied with their individual targets.

Starting in autumn 2017, the test procedure for emissions and fuel consumption used in the EU will gradually be replaced by the Worldwide Harmonized Light-Duty Vehicles Test Procedure (WLTP). The purpose of the new test cycle is to state more practice-oriented levels for CO₂ emissions and fuel consumption and also to take account of higher speeds and driving dynamics as well as the optional equipment chosen by customers.

The Volkswagen Group's fuel and drivetrain strategy is paving the way for sustainable, carbon-neutral mobility. The goal is to increase drive system efficiency with each new model generation – irrespective of whether the means of propulsion are combustion engines, hybrids, plug-in hybrids, pure electric drives, or fuel cell drive systems.

The drivetrain portfolio will expand and coexist between traditional drivetrains and e-mobility will increase in the future. The current modular toolkits are designed so that the full range of drive systems can be deployed and flexibly fitted on product lines across our global locations.

From today's perspective, the combustion engine looks set to serve as the broad basis for drive technology in the coming years. In the interest of using resources responsibly, it is therefore essential for combustion engines to be further optimized.

As far as conventional combustion engines are concerned, we are continually working on technologies for the efficient purification of exhaust gases and clean combustion in order to reduce harmful emissions even further. From mid-2017 onwards, we will progressively fit all Group direct-injection TSI and TFSI engines with petrol particulate filters.

When it comes to vehicles with conventional drive systems, we have taken several efficiency-increasing measures to significantly reduce average fuel consumption. In 2016, the new V6 and V8 petrol engines were deployed for the first time in series production in the premium and sports car segment, for example in the new Porsche Panamera. These engines are not only highly responsive, but have high levels of comfort and efficiency.

Volkswagen continued to refine the TSI engine family in the reporting period. In spring 2017, the new generation made its debut with the 1.5 TSI evo engine in the new Golf. It will be followed by a BlueMotion variant with an output of 96 kW (130 PS), among others. The TSI evo underscores the Company's strategy of using modular technology toolkits in series-production to make cutting-edge technologies available to customers.

We are expanding our traditional range of engines through drivetrain electrification. The percentage of drivers traveling predominantly short distances is growing all the time, and includes not only commuters and residents of big cities, but also drivers of delivery vehicles in urban areas. Zero-emissions, purely electric vehicles like the e-up! and e-Golf are highly suited for short-distance travel and are thus an interesting proposition, especially for this target group. In the medium-to-long term, opportunities to recharge privately – e.g. using a charging station installed on the customer's premises – must be supplemented by good public recharging infrastructure.

However, most customers also want to be able to drive longer distances. Hybrid vehicles, particularly plug-in hybrids, combine highly efficient combustion engines with zeroemission electric motors. We consider this combination of drive concepts to be one way of offering electrified models for

all mobility needs to customers of a wide range of vehicle classes, building trust in the new technologies and thus helping e-mobility gain acceptance.

All Group brands are driving the development of electric traction forwards. We have expanded our expertise in this area with the help of additional technical specialists and experts. On the basis of the experience gained with existing vehicle architectures, we designed the Modular Electric Toolkit (MEB) for the compact segment. This can be deployed across our brands in passenger cars and light commercial vehicles alike. The MEB enables us to develop very exciting vehicles and allows ranges of 300 to 600 km in purely electrical mode. It also makes it possible to factor in vehicle-specific requirements and achieve savings by combining purchasing volumes. Thanks to the Volkswagen Group's modular toolkit strategy, modules can be deployed across different model series and brands, thus achieving substantial synergies. This applies in particular to models that share the same platform. We have integrated the production of electrified vehicles into the manufacturing processes at our existing plants, e.g. in Wolfsburg, Emden, Bratislava, Ingolstadt and Leipzig. The electric motors are manufactured at our plant in Kassel.

The battery is the heart of an electric vehicle and its energy content is the deciding factor in determining the vehicle's range and performance. In light of the gains in market volume and unit sales of electric vehicles over the coming years, the Volkswagen Group will establish battery technology as a new competency. At the moment, we use lithium-ion cells in our all-electric and plug-in hybrid vehicles. We assemble these cells into battery systems in our Braunschweig factory. Battery types based on solid electrolytes, which have a higher energy density and offer higher intrinsic safety, are currently being researched. The next generation of electric and plug-in hybrid vehicles will be fitted with enhanced lithium-ion technology.

In 2016, we presented the visionary I.D. concept car, a zero-emissions vehicle that we intend to launch in 2020. It will have a range of up to 600 km and will be the first representative of an entirely new fleet of highly innovative electric vehicles based on the MEB. In 2016, Audi extended its range of e-tron models with the Audi Q7 3.01 TDI e-tron quattro. In addition to this, Volkswagen Commercial Vehicles presented its e-Crafter study in the reporting period. With a driving range of more than 200 km, the first electrically powered Crafter is a near production-ready solution for zero-emis-

sions urban delivery situations. MAN presented an all-electric MAN Lion's City articulated bus as a modular concept vehicle, a TGS semitrailer tractor with an electric drive for inner-city night deliveries, as well as a variety of concepts for the recharging infrastructure in 2016.

As part of our future program TOGETHER – Strategy 2025, we plan to be producing more than 30 different types of purely battery-powered electric vehicles across the Group as a whole by 2025.

Alongside electric vehicles, natural-gas engines play a key role in achieving the goal of carbon-neutral mobility. Due to the chemical composition of natural gas, its $\rm CO_2$ emissions are around 25% below those of petrol. Volkswagen is expanding its range of eco-friendly drive concepts with the new 1.01 three-cylinder TGI engine, which has an output of 66 kW (90 PS) and achieves impressive consumption figures and compelling performance, thanks to the systematic refinement of its combustion process and supercharging.

Renewable fuels can play a big part in further reducing the CO₂ emissions of combustion engines and can complement e-mobility, e.g. on long-distance trips. They are also a fast way to cut the overall CO2 emissions of vehicles already on the road. Volkswagen plans to deploy and refine existing fuel solutions in a model region and to test new approaches. Beyond that, the Company is taking part in joint projects that examine the potential to produce petrol, diesel and gas from renewable energy sources. In 2016, Audi expanded its production capacity for sustainably generated e-gas and set a milestone with Germany's first power-to-gas facility using industrial-scale biological methanation. Furthermore, Audi unveiled another g-tron model. Like the A3 g-tron and the A4 g-tron, the Audi A5 Sportback g-tron can be operated with either climate-friendly Audi e-gas or natural gas (CNG) or with petrol.

Hydrogen will not be widely available as a fuel in the medium term. Both hydrogen filling stations and renewable hydrogen production plants will have to be constructed. Volkswagen has been working on fuel cell technologies for many years and has gained extensive experience operating test fleets. In the reporting period, Audi provided a concrete perspective of its hydrogen drives, presenting the h-tron quattro concept car, a hydrogen-powered sports SUV that can be completely refilled with hydrogen in about four minutes and has a range of 600 km.

Life cycle engineering and recycling

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Innovations and new technologies for reducing fuel consumption are not enough on their own to minimize the effect of vehicles on the environment. That is why we examine the entire product life cycle of our vehicles – including the production of both raw materials and components – and prepare life cycle assessments in accordance with ISO standards 14040 and 14044. On this basis, we can determine where improvements have the greatest effect and develop innovations that target these points directly. We call this life cycle engineering.

The Volkswagen Passenger Cars brand reports on the results in so-called environmental ratings. These ratings show the ecological advances in new vehicle models compared with their immediate predecessors. Audi publishes this information under the term "environmental footprint", while SEAT provides corresponding data in its product catalog. We also use life cycle assessments for the special subject of water, using them to calculate and analyze the amount of water consumed by a vehicle throughout its entire life cycle (water footprint). This enables us to take targeted action to reduce water consumption. We also use the results of our life cycle assessments to generate the Scope 3 inventory. We report on CO₂ emissions in twelve out of a total of 15 Scope 3 categories in accordance with the Scope 3 standard published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute. As a result, we are one of the leading companies in the automotive industry. You can find further information on this in the Volkswagen Group's Sustainability Report 2016.

As we wish to minimize our vehicles' impact on the environment in collaboration with our suppliers, Volkswagen joined the CDP supply chain program in 2015; this records greenhouse gas emissions throughout the value chain. We seek direct contact with our suppliers in specific workshops, where together we discuss and develop innovative approaches to the ecological optimization of particular components.

Recycling, too, is central to reducing the impact of our products on the environment and conserving resources. It is not just a matter of recycling vehicles at the end of their service life: we already pay attention to the recyclability of the required materials, the use of high-quality recycled material and the avoidance of pollutants when developing new vehicles. Therefore, our end-of-life vehicles are 85% recyclable and 95% recoverable. We also factor in aspects of the use phase, for instance the treatment and disposal of service fluids or high-wear components.

Building on the findings of the LithoRec research project (lithium-ion battery recycling), we are working on extending the useful life of such batteries and the recirculation of battery materials so as to conserve resources and cut costs. There is also the Volkswagen Passenger Cars brand's Genuine Exchange Parts program, whereby industrial reconditioning produces high-quality exchange parts that conserve resources and offer the same quality, functionality and warranty, but are on average 40% cheaper than the corresponding new parts.

Sustainable mobility and connectivity

Mobility is one of the key conditions for economic growth. The latest challenge is to cater to the growing demand for mobility despite diminishing resources and, in the process, reduce its negative effects on the environment. Holistic mobility concepts have to be efficient, sustainable, customeroriented and, above all else, designed in such a way that they are accessible anytime and anywhere. We at Volkswagen are researching and developing groundbreaking mobility solutions for our customers that will shape the future in this area. We do not limit our focus to automotive mobility, but take in other modes of transport as well and examine structural issues such as urbanization, urban development and the quality of transport infrastructure. We also take account of demand trends, such as the shared use of vehicles. One building block of our future program TOGETHER - Strategy 2025 is the establishment of a cross-brand mobility solutions business. Part of this is the new MOIA business unit, which will develop, participate in or acquire services that are tailored to customer requirements, such as ride hailing ser-

Volkswagen is working on a wide range of approaches, from novel vehicle concepts right through to research into innovative urban developments. We are sharing ideas with universities and associations, and presenting potential solutions to the specialized public for discussion. However, these measures can be fully effective only if they are interlinked and deployed in the right place at the right time. They require the efficient interplay of people, technologies, means of transport and infrastructure. With the aid of scientists and tests in model cities, we helped to derive indicators for sustainable mobility in cities within the WBCSD's Sustainable Mobility Project 2.0. In spring 2016, the European Commission announced that it would actively support the application of these 19 indicators throughout cities. Together with the SEAT brand, Volkswagen Group Research set up the interdisciplinary research platform CARNET (Cooperative

Automotive Research Network) in Barcelona. In over 20 joint projects, CARNET is working on concepts for efficient urban mobility, e.g. the SEAT Ateca Smart City Car, which connects with its environment through Smart City Connectivity, or the Barcelona Smart Shuttle.

The connection of vehicles to other vehicles, to the environment, to infrastructure and to mobile devices is advancing and increasing the safety, comfort and driving enjoyment of drivers, passengers and other road users. The latest generation of the Modular Infotainment Toolkit (MIB) has already brought corresponding innovations to numerous models of our Group brands.

Volkswagen has developed a self-learning, context-sensitive, personalized voice command system that can adapt to individual users and situations. We are also constantly refining the gesture control systems we install in our vehicles. Volkswagen's newest infotainment systems already use a proximity sensor. The new Golf is the first in its class to offer a cockpit with gesture control: without actually touching a screen, it is possible to operate the display and controls in virtual space with hand movements. This represents a clear gain in comfort and safety. Eye tracking is a further refinement of gesture control: the system tracks the driver's point of gaze, adapting the vehicle to suit the condition of the driver or his/her intended operations and preparing it for critical situations before they occur.

Audi is advancing the development of intelligent networking with the Audi Connect car-to-x services, with new infotainment modules and with high-precision digital maps from HERE. Audi is the first manufacturer to connect its models to the city infrastructure: the "time to green" feature is the world's first car-to-x service and provides information on the duration of the red light and the optimum speed for the "green wave" directly on the vehicle display.

Scania continued to refine its connected services in 2016. Examples include the fleet management service, which is based on data from 230,000 connected Scania vehicles, or the flexible maintenance program, which ensures that every truck receives exactly the right maintenance based on the actual usage.

Volkswagen Truck & Bus presented the new RIO brand in 2016. This cloud-based, multi-vendor platform serves the entire transport and logistics ecosystem and will be available in the second quarter of 2017. It combines and analyzes diverse data from the logistics value chain, using it to make specific recommendations to customers on how to optimize their transport and reloading processes and thus enhance efficiency and transparency.

Driver assistance systems and automated driving

In 2016, we extended the use of innovative driver assistance systems to further vehicles, systematically pursuing the strategy of making innovations from the luxury vehicle segments available in the volume segments. The gradual expansion of assistance systems and automated driving functions paves the way for autonomous driving and increasingly takes the pressure off the driver. Volkswagen's aim is to become the leader in this area of innovation.

The new Porsche Panamera is fitted with Porsche InnoDrive including Adaptive Cruise Control. This innovative driver assistance system uses navigation data and radar-video sensors to enhance vehicle efficiency, anticipating and factoring in speed limits, road gradients and the radius of bends. The new Tiguan and the SEAT Ateca are fitted, for example, with the driver assistance systems Traffic Jam Assist, Emergency Assist and Front Assist with Pedestrian Monitoring and City Emergency Braking. The new Golf with Traffic Jam Assist can drive in a semi-automated manner at speeds of up to 60 km/h thanks to the combination of Adaptive Cruise Control (ACC) and Lane Assist.

The new Blind Spot Monitor with Rear Traffic Alert represents another safety gain: when the vehicle is in motion, the sensor warns of any vehicles in the driver's blind spot; when the driver is backing out of a parking spot, the system even recognizes any vehicle or pedestrian approaching from the side near the rear of the vehicle and brakes automatically if there is danger of a collision.

Volkswagen is also working on an online driver assistance system. Users can deploy current or future mobile technologies to enter data in the system, which is then made available to the other online participants. The data in question, which is recorded on extremely detailed maps, can enhance both driving safety and convenience, and includes information on traffic signs and traffic lights, unoccupied parking spaces, or the road surface.

Driver assistance systems and automated driving functions are also gaining ground in heavy commercial vehicles. Scania presented its first studies on self-driving trucks and buses in 2016. A further variant is driving in a convoy, also known as platooning. Still in the development phase, platooning involves two or more trucks driving closely behind one another with the aid of driver assistance and control systems as well as truck-to-truck communication. Platooning not only reduces fuel consumption and CO₂ emissions, but also enhances safety and traffic efficiency. MAN and Scania gave an impressive demonstration of this technology at the European Truck Platooning Challenge 2016.

In November 2016, DB Schenker and MAN agreed on their first project devoted to platooning.

Leveraging synergies increases efficiency

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When developing vehicles, we cooperate closely with our brands to leverage synergies. The research and development strategy elaborated in our development alliance aims, for example, to keep the Group competitive in the long term by deploying resources more efficiently in the research and development of mobility-related technologies and concepts. The brands work together on key technologies in our development alliance and form Group-wide expertise networks addressing potential topics of the future. Moreover, the individual brands are making increasing use of the modular toolkits making synergies possible both between the various models of a product line and across product lines. The brands benefit from an intensive exchange of best practices, for example in the field of virtual development. A further aim is to reduce IT costs by developing IT tools jointly.

In 2016, MAN and Scania formulated clear principles for their joint development work and signed a corresponding memorandum of understanding. Going forward, teams of engineers from both brands will work together to develop core drivetrain components. This will result in shared platforms for engines, gearboxes, axles and exhaust gas aftertreatment systems, which can then be modified for each specific brand.

Pooling strengths with strategic alliances

One goal of our research and development strategy is to continue building and consolidating a partnership culture, and we have designed corresponding initiatives to achieve this goal. In order to attain the goal expressed in our future program TOGETHER – Strategy 2025, namely of transforming our core automotive business and establishing a new mobility solutions business, it is essential that we intensify our traditionally excellent innovative strength and place it on an even broader footing. That is why we will rely to a greater extent than previously on partnerships, acquisitions and venture capital investments. Investment selection will be

managed centrally so as to generate maximum value for the Group and its brands.

We are collaborating with experienced battery manufacturers in the research and further development of high-voltage battery systems for electric and plug-in hybrid drives. We not only continued, but also intensified, these cooperative projects in the reporting period. Our research community with Varta Microbattery GmbH made further progress with traction batteries in 2016.

Audi is developing the battery for an all-electric SUV on the basis of powerful cell modules from South Korean suppliers LG Chem and Samsung SDI. The partners wish to invest in cell technology in Europe and will supply Audi from their European plants.

We are also carrying out research into economical light-weight construction technologies for series production as part of the public-private partnership with Open Hybrid LabFactory in collaboration with the Lower Saxony Research Center for Vehicle Technology at the Technical University of Braunschweig, the Fraunhofer Gesellschaft and various other industry partners. LeichtbauCampus Open Hybrid LabFactory was inaugurated in September 2016 and research activities were commenced.

In the reporting period, AUDI AG, the BMW Group and Daimler AG continued their joint work on the HERE maps and positioning services business acquired from the Nokia Corporation in 2015. In combination with real-time vehicle data, HERE's high-precision digital maps create the basis for the next generation of mobility and positioning services, which in turn underpin the new driver assistance systems – right through to autonomous driving.

Audi is also pressing ahead with crucial key issues in the field of digitalization and is involved, for example, in six projects related to structural measures and communication technologies for the Digital Motorway Test Bed, a joint initiative of Germany's Federal Ministry of Transport and Digital Infrastructure with the state of Bavaria, the automotive and supplier industry, and the IT sector. Transmitters and sensors installed along several stretches of the A9 motorway connect vehicles with their surroundings as well as with each other.

Key R&D figures

In fiscal year 2016, we filed 6,465 (6,244) patent applications worldwide for employee inventions, around half of them in Germany. An increasing share of these applications is for driver assistance systems, conventional and alternative drive systems, and lightweight construction, thus underscoring our outstanding power to innovate.

In the reporting period, the Automotive Division's total research and development costs were 0.4% higher than in the previous year; total research and development expenditure as a percentage of the Automotive Division's sales revenue

(the R&D ratio) came to 7.3 (7.4)%. Along with new models, the main focus was on the electrification of our vehicle portfolio, a more efficient range of engines, lightweight construction, digitalization and the development of modular toolkits. The capitalization ratio rose to 42.1 (36.9)%. Research and development expenditure recognized in profit or loss in accordance with IFRS decreased to $\{11.5\}$ (11.9) billion.

As of December 31, 2016, the research and development function – including the equity-accounted Chinese joint ventures – employed 48,063 people (–1.4%) Group-wide or 7.7% of the total headcount.

RESEARCH AND DEVELOPMENT COSTS IN THE AUTOMOTIVE DIVISION

€ million	2016	2015
Total research and development costs	13,672	13,612
of which capitalized development costs	5,750	5,021
Capitalization ratio in %	42.1	36.9
Amortization of capitalized development costs	3,587	3,263
Research and development costs recognized in profit or loss	11,509	11,853
Sales revenue	186,016	183,936
Total research and development costs	13,672	13,612
R&D ratio	7.3	7.4

Future in Motion Group Management Report

Future in Motion

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Researching and shaping the future of mobility: a look ahead to the year 2025.

In the automotive industry, as in other sectors, the current decade has seen the scale of changes affecting the environment and competition reach unprecedented complexity. This is posing new challenges for research work at the Company and transforming the way we understand the future, turning it from something predictable into an exploratory and participatory space for creativity. The results of our research work are giving us an insight into the current and future trends in innovative areas of technology. This knowledge is of crucial importance to the direction of our research and development activities. Only armed with a reliable idea of technological possibilities and their limits, can we position the Group in a way that ensures sustainable growth.

Together with renowned research partners, we have identified key areas that will have an effect far beyond 2025. This is giving us the chance to help shape the answers to the questions of the future. The changes are also bringing challenges in the form of competitive pressure. We regard this as an opportunity to proactively build the future.

The issues we will face in the run-up to 2025 are challenging, and cooperation will be required over the next decade if we are to solve them. Such cooperative solutions are essential to answering the questions that will be asked of the mobility of the future and meeting the needs that will arise. We are reorienting our activities and strategic investment plans towards tomorrow's mobility. The Group faces the largest transformation in its history, which offers us great potential to mold and safeguard the future together and in a sustainable way.

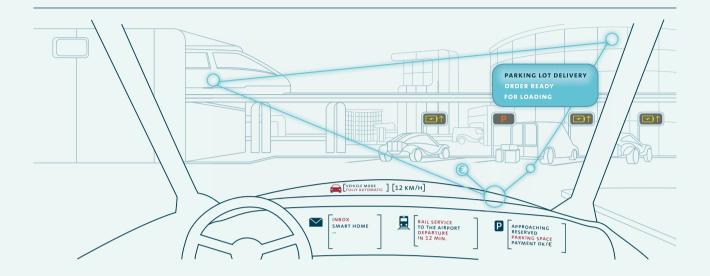
Recently, trends such as digitalization and the fusion of individual technologies have led to innovations in the field of automation. They have also created the environment needed to expand these innovations into further industries and areas of our lives. We are now gaining first-hand experience of the application of these technologies on a large scale thanks to Industry 4.0, digital assistants and the networking of everyday objects in the Internet of things. The relationship between people and technology will develop over the coming decades from one of interaction to a synchronized interplay. Service robots, smart traffic management systems and information technologies will mutually reinforce each other. Growing knowledge and new techniques in the area

of artificial intelligence in particular are enabling new innovative applications to emerge from these technologies. Predictive analyses reveal relationships and patterns within large quantities of data, allowing behavior and events to be predicted with a high degree of certainty. They provide a basis for customized solutions with global variations. The future world of mobility will enable people and goods to be transported by largely autonomous systems and optimize flows of traffic and travel in order to meet the sharp rise in demand for mobility. From 2020, highly and fully automated vehicles will be put to a range of uses in many regions.

The premises of 21st century mobility systems differ radically from those of the 20th century. The ways in which we move people, materials and products are shifting with new technological possibilities, changing values and economic innovations. Intelligent and integrated systems will have an impact on our mobility habits, lifestyles, urban communities and global supply chains. These systems will set the benchmarks against which the mobility providers of the future will be measured. Demand for mobility tailored to many different locations and deployment scenarios will also grow in future. However, industry cannot shape mobility alone. Cities, regions and politicians must develop strategies together. Smart cities are the first step towards rethinking the future shape of urban life. Integrating relevant infrastructure and optimizing the flow of supplies and transport are the key action

Making sure that the highly digitalized mobility systems of the future are secure will require comprehensive strategies for resilient infrastructures and consistent protection of sensitive data on people, technology and systems. These systems must respond effectively to changes and threats (such as cyberattacks, power cuts or hardware failure), recover swiftly from complications and even withstand disasters. The rapid growth of the Internet of things, which also includes vehicles, is expanding not only opportunities for value generation using digital data, but also creating potential targets. The resilience of these systems will be key, particularly where autonomous systems and the flow of digital data are concerned.

In the future, mobility will not only mean moving from place to place, but will be expected to create health benefits, too. Group Management Report Future in Motion 151



People's understanding of health will undergo a fundamental shift, with ever more of us taking responsibility for it into our own hands. Health will be understood not only in the physiological sense, but will encompass our all-round personal well-being. The design of future mobility systems will take this broader concept of health into account.

Above all, future mobility will involve a change in business models. Value creation in numerous industries is currently in a state of flux, and this transformation has already manifested itself in the mobility sector in a variety of ways. Shared use of goods, consideration of customer specifications in the product development process and the influence of social networks on products are all becoming increasingly important. Different regional solutions will also develop. Advancing digitalization is increasingly translating economic processes into algorithms, giving rise to completely new customer experiences. Developing new competencies in the area of agile and scalable business models will be a competitive factor over the next decade. These new business models must address the measures needed to ensure sustainable growth and reduce the impact on environmental systems.

An awareness of sustainability and the realization of social, environmental and economic goals to ensure the world remains livable for generations to come: these are the major challenges that we are facing. Though there have been positive developments such as the Paris climate agreement, many questions concerning the realization of set goals remain unresolved. To limit the adverse effects of climate change, consistent measures and regulations will have to be implemented in all areas in the near future. As it can also be assumed that purely technological solutions will be unable to meet this challenge – given that some environmentally

friendly technologies cannot be produced without an impact on the climate, and therefore involve feedback effects – it will also be essential for individuals to change their behavior. Strong, progressive regulation of the mobility sector can therefore be expected in the near future, and will shape the mobility of the future in a way that reaches beyond the question of how vehicles are powered. Proposals, models and strategies by individuals, cities and regions all around the world are already leading this development.

Our future program TOGETHER – Strategy 2025 is addressing forward-looking topics, thus laying the foundations needed to achieve our global sustainability goals. Over the coming years, we will make major investments in the technologies of the future that are necessary to realize our vision. This will include the electrification of the model range, the digitalization offensive throughout the Group, safe autonomous driving and the offering of mobility services.

The Volkswagen Group has achieved important milestones and embarked on new initiatives in these areas in 2016. We want to make a decisive contribution to shaping not only today's mobility, but tomorrow's as well.

PROCUREMENT

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The main tasks for procurement in fiscal year 2016 were to cover the Company's needs and safeguard its vehicle start-ups as well as to help ensure the competitiveness of its products. Beyond that, procurement calculated opportunities in new markets and shaped the Company's future partnerships with its suppliers through the Volkswagen FAST (Future Automotive Supply Tracks) initiative.

Procurement policy and strategy

The vision of Volkswagen Group procurement finds expression in the phrase: Together – best in customer value and cost. Procurement makes a key contribution to innovation and cost optimization by playing an active part in early project phases, through its price leadership with new technologies and through marketable concepts. Our mission is to have the world's highest performing and most attractive procurement organization.

At the time the new Group strategy was being developed, the strategy of Volkswagen Group procurement was refined accordingly. Key elements concern digitalization, future-proof process and organizational structures, and the everchanging supplier base. Sustainability plays an even more important role in the new strategy.

As the digital transformation gathers pace in the years ahead, we expect to see a sharp increase in procurement volumes of digital products and services. Examples of these are the components for autonomously driving vehicles, software and also services, especially in the area of new mobility. In this context, it is important to review and refine the decision-making parameters and methods we employ so that we can ensure that we achieve optimum prices, quality and data security in the digital world as well. Procurement will also harness the digital transformation to continue to optimize its own processes and structures, e.g. through the deployment of artificial intelligence or Big Data.

In the coming years, digitalization will further change the way we collaborate with our suppliers. When it comes to our traditional suppliers, we expect to see a sustained concentration of those companies that deliver directly to us. Suppliers that deliver upstream components such as processors or software will continue to gain in importance, and the number of suppliers from Asia, particularly China, will rise substantially.

Volkswagen Group procurement's Strategy 2025, which has been developed further within this framework in consultation with the brands, has six target dimensions:

- > Access to supplier innovations
- > Active cost structures
- > Forward-looking structures
- > People, expertise and attractiveness
- > Supply chain excellence
- > Group-wide synergies

The content of each of these target dimensions is described concisely, and specific KPIs have been assigned to the targets. The first initiatives were already successfully launched at the end of 2016.

Volkswagen FAST – progress and milestones

FAST is the central initiative of Group procurement, introduced in 2015 with the aim of making the Volkswagen Group and its supply network future-proof. The goal of FAST is to successfully implement the key topics of innovation and globalization by involving suppliers at an earlier stage and more intensively. The FAST initiative enhances the quality and speed of collaboration with our key partners, and thus enables us to coordinate global strategies and points of technological focus even more closely. The common goal is to make impressive technologies available to our customers even more quickly and to implement worldwide vehicle projects more effectively and efficiently.

Key milestones were reached in 2016. We held strategic dialogs with 55 suppliers for 61 competencies and agreed on joint targets. At our first strategy conference, these selected suppliers talked with members of the Board of Management and other representatives of the Volkswagen Group and its brands about the key topics and projects of the coming years. After its successful launch, the FAST initiative will now be expanded to include suppliers for other product groups, e.g. components for vehicle connectivity. We carried out an initial review of these strategic partnerships in 2016 and will continuously adapt the group of FAST suppliers where necessary. This means that suppliers who have not yet been selected still have an opportunity to qualify for the initiative.

We are continually adapting our methods for involving suppliers in the innovation process so that our customers get to experience impressive technologies even more quickly. One example is the Innovation Days introduced within the scope of FAST. We created this multi-step process to identify and assess our suppliers' innovative ideas at an early stage and integrate them in the Company's technology planning. We made good use of the very first Innovation Days in 2015 to discuss and design innovations for compact-class vehicles together with our suppliers. In 2016, we took this concept to

the next level, identifying with our suppliers innovations for a new generation of electric vehicles on the basis of the Modular Electric Toolkit (MEB). By inviting our suppliers to take part in competitions for new concepts, we are systematically supporting the cost-effective implementation of new technologies. We discuss and flesh out promising topics with our suppliers in our "Innovation Forum".

Procurement has responded to the impact of new technologies, adapting the issues it addresses and its organization accordingly. For example, for the first time, we have defined fixed contact persons within procurement who support their designated suppliers at every step in the innovation process. Close collaboration has been established with the e-mobility unit and additional competencies have been established in new product groups for electric drives, autonomous driving, new display and operating concepts as well as vehicle connectivity.

Procurement processes and procedures

Standardized procurement processes and systems that apply across the Group are the basis of all of our activities in procurement. We were able to build on this sound basis in the reporting period, continuing to work hand in hand with our suppliers to refine our systems, with the aim of creating a worldwide digital network of all of the procurement work processes. We also continued to enhance our variant-management processes: we want to help achieve cost-optimized product design and firmly anchor the idea of economic efficiency in our vehicle projects. In the reporting period, we largely completed our revision of the product development process, especially of the early phase, with the result that concept development and feasibility studies are to proceed in parallel in future.

Digitalization of supply

We are striving to develop an entirely digital supply chain, and our partners have a crucial role to play in this. In 2016, our process optimization program, supplier interaction management, provided us with additional supplier feedback across all brands and regions of the Volkswagen Group on the potential for efficiency gains and digitalization. Subsequently, we used that feedback to come up with ideas and approaches for further optimize and digitalize the points of contact in our collaboration, for example by deploying artificial intelligence when dealing with bottlenecks in the supply of purchase parts and raw materials. The Group Business Platform constituted an important milestone in 2016 with regards to optimizing and digitalizing our collaboration with

our suppliers. Thanks to the latest technical developments, the Volkswagen Group will be in a position going forward to make fast, cost-effective use of the most innovative technological trends offered by mobile and internet-based collaboration. By bringing together internal and external partners on a digital platform, we are making it possible for all those involved to communicate with each other in real time

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Supply situation for purchase parts and upstream materials

The systematic tracking of purchase parts so as to avoid bottlenecks continued to gain importance in 2016. Natural disasters such as earthquakes and floods impacted the availability of upstream materials, which Group demand management countered with comprehensive measures. In the reporting period, we were also able to avoid any large-scale stoppages in vehicle production apart from a few exceptions.

Management of purchase parts and suppliers

At the Volkswagen Group, purchase parts management comprises the technical unit within procurement that is responsible for ensuring the availability of purchase parts by means of an international network of tool and industrialization experts. Purchase parts management involves two aspects: preventive action before the start of series production in new vehicle and engine projects through the inspection of selected purchase parts volumes for the toolmaking process; and a reactive support when problems arise in the supply of purchase parts during series production. Purchase parts management's international network enables its experts to draw on the knowledge and experience of colleagues at various locations during global projects, thus enhancing the efficiency of start-ups. The purchase parts management experts work in close cooperation with their quality assurance colleagues across all divisions in the plants and carry out performance tests of suppliers at the individual milestones in the product development process in order to ensure that the required supplier capacities are available in the right quality for vehicle start-ups.

Sustainability in supplier relationships

As far as sustainability in supplier relationships is concerned, our activities in 2016 focused on exercising and implementing our corporate due diligence at all points in our supply chains.

In this context, we expanded Volkswagen Group's requirements for sustainability in relations with business partners (Code of Conduct for Business Partners) in 2016 to include a passage regarding our duty to promote responsible supply chains for minerals from countries beset by conflict or classified as high-risk. We also made corresponding revisions to the Volkswagen Guideline on Raw Materials from Conflict Regions. Our suppliers were informed of these changes through appropriate forms of communication.

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In the reporting period, we continued to enhance the knowledge of both our own staff, and also our suppliers' staff, as regards sustainability in supplier relationships – both online and face-to-face. As of the end of the reporting period, 25,000 supplier locations had completed our online training program. In addition, more than 900 employees from procurement and around 1,300 employees from more than 800 suppliers completed face-to-face training sessions in fiscal year 2016. The face-to-face training sessions for suppliers generally took place in cooperation with other automotive manufacturers and targeted suppliers in the Czech Republic, China and South Africa, as well as suppliers from the logistics industry.

In line with our established sustainability concept and processes, a total of 45 suppliers were audited by an external service provider in fiscal year 2016. In 19 of these cases, the audit findings prompted us to perform an immediate structured process for in-depth analysis. As a result, we agreed upon action plans with the suppliers in question with a view to improving their sustainability performance.

Around the world, we take care to enforce minimum sustainability standards especially with regard to human rights, occupational health and safety, environmental protection and the fight against corruption. In addition to that, we track the sustainability performance of our suppliers. The longstanding business relationships that result from this are beneficial to all the parties involved, namely the Group and its suppliers. We ensure the consistent quality of the goods and services provided and avoid disruptions to supplies and reputational risks.

Structure of key procurement markets

Through the procurement units in our markets and eight regional offices across the globe, we assist local suppliers close to our production plants in meeting our high quality requirements. Suppliers who meet our requirements also have an opportunity to move beyond their local markets and deliver their products to other Group locations around the world. In key regions, quality assurance, technical development and logistics provide support in this task, and are organized in procurement-led project teams. This approach is crucial in safeguarding the Company's global supplies and keeping purchasing prices at competitive levels. One example of the development of new procurement markets is the regional office opened in Bangkok in the reporting period. The objective of the new office is to continue expanding our supplier portfolio in the region and to increase the flow of goods from the ASEAN countries.

Procurement is present not only in new growth markets, but also in well-known and established ones such as Japan, South Korea and Israel. In this way, the department ensures that the Company has access at all times to the latest innovations and technologies of tomorrow.

Purchasing volume of Volkswagen Group procurement

Procurement purchases production materials, services and capex items. In 2016, the incoming goods and order volume amounted to €166.5 billion, including the figures for the Chinese joint ventures.

GROUP PROCUREMENT VOLUME

in percent



Europe/Other markets
North America
South America
Asia-Pacific
29%

PRODUCTION

We are creating and managing a global cross-brand production network. This is designed to safeguard the processes from the supplier to the factory and assembly line, and from the factory to dealers and customers. Enduring efficiency is a prerequisite for our competitiveness. We meet challenges of the future with holistic optimizations, pioneering innovations, flexible supply streams and structures, and an agile team. In fiscal year 2016, the global production volume passed the ten-million mark again. Productivity increased by around 4% year-on-year despite the continuing difficult conditions in many markets.

"Intelligently networked" production strategy

Production is supporting the future program TOGETHER – Strategy 2025 with the "intelligently networked" functional area strategy. This is the logical development of the Production Strategy 2018. It is based on the Company's strategic development into a world-leading provider of sustainable mobility as well as on current trends such as digitalization, electrification and the changing world of work. The Production Strategy 2018 began to define key action areas and carry out successful work in these fields already in 2010. Some of the measures and topics this covered have now become part of our day-to-day business or are managed through group-wide working groups, while others have been integrated into the Production Strategy 2025 and given a new direction.

Our aim is to intelligently connect people, brands and machines, and to combine the strength and potential of our global manufacturing and logistics partnerships in order to take long-term advantage of the resulting synergies. In doing so, we can make our business even more fit for the future and competitive in the longterm.

The four strategic target areas – versatile production network, efficient production, intelligent production processes and future-ready production – guide our strategic work.

Nine strategic initiatives of our production strategy incorporate aspects such as the competitive design of our global production network, the reduction and offsetting of environmental pollution along the production process, and digitalization and its impact on the processes involved in production as well as in other work and collaboration. The fundamental aim is to increase productivity and profitability.

Production locations

The Group began the 2016 fiscal year with 119 production locations. Sitech opened a new component production site in Wrzesnia, Poland, in August. In late September, the Audi brand opened the vehicle plant in San José Chiapa, its first production facility in Mexico. In October, Scania and MAN combined their production in Saint Petersburg, while the Volkswagen Commercial Vehicles brand opened a new manufacturing site for the Crafter in Wrzesnia, Poland. MAN moved its bus production in Poland from Poznan to Starachowice. The Volkswagen Group's global production network thus comprised 120 locations at the end of the reporting period, divided into 68 locations for passenger cars, commercial vehicles and motorcycles, and 52 locations for powertrains and components.

With 71 locations, Europe remains our most important production region for vehicle and component production; 28 of these sites are located in Germany alone. The Asia-Pacific region has 31 locations. In North America, we now have five locations, while the number of locations in South America remained unchanged during the reporting period at nine. The Group operates four locations in Africa.

In Europe, the plant in Wrzesnia, newly opened in 2016, is manufacturing the Crafter and has an annual capacity of 100,000 vehicles. The Portuguese plant in Palmela will also begin producing 150,000 Volkswagen T-Roc vehicles annually from the middle of the year. In Bratislava, production of the Audi Q8 will start at the beginning of 2018 with an annual capacity of 40,000 vehicles.

In order to secure and expand our market position in China, we increased capacity at the Chengdu site by 100,000 vehicles up until 2016. A further increase is planned for 2019. The new Ningbo II vehicle plant with a capacity of 150,000 vehicles per year will be opened at the end of 2017. In late 2017, capacity at one of the three vehicle plants in Anting will be increased by 75,000 units to 300,000 vehicles.

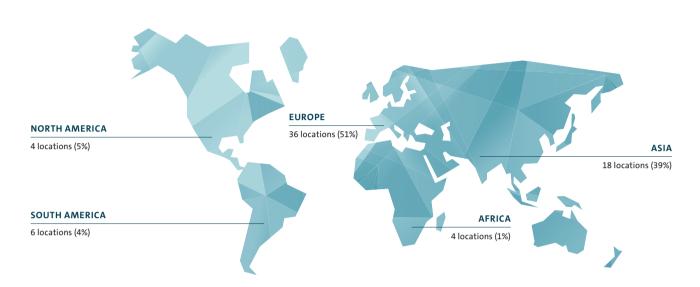
In the North America region, we plan to produce the longwheelbase Tiguan for the US market from the first quarter of 2017.

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

VEHICLE PRODUCTION LOCATIONS OF THE VOLKSWAGEN GROUP

Share of total production 2016 in percent

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In September 2016, Volkswagen entered into a collaboration with Kenyan importer DT Dobie to advance the development of further emerging markets in Africa. Partial assembly of the Polo Vivo at the Kenya Vehicle Manufacturers plant began in late 2016.

At engine and transmission plants, a wide range of new, more efficient powertrains will be integrated into existing production capacity in 2017. The new evo generation of the EA211 series, for example, will launch with the four-cylinder turbo petrol engine. This is the first in a series of highly efficient petrol engines that will be produced in the medium term by at least four engine plants, largely replacing the existing generation.

New start-ups and production milestones

In 2016, the Volkswagen Group implemented a total of 62 vehicle production starts in 31 locations across 16 countries; of these, 25 were new or successor product start-ups, while 37 start-ups were attributable to derivatives and product upgrades.

The Volkswagen Group passed some significant milestones in 2016. Volkswagen Passenger Cars produced the two millionth Touran. The 25,000th e-Golf also rolled off the production line in Wolfsburg. Audi began the year by celebrating the production of 30 million vehicles worldwide and one million units of the Q5 model in Ingolstadt. At ŠKODA, the five millionth Octavia left the factory at the start of the year. The Kassel plant celebrated two milestones: the completion of three million DQ200 gearboxes helped take the

total number of gearboxes produced at the site to 125 million. The MQB platform used across the Group was installed in the eight millionth vehicle in late 2016.

The Group's production system

To help us become the world's most sustainable, most powerful and most fascinating automotive production platform, we optimize and standardize our production processes. The Group's value-driven, synchronous production system provides us with the necessary methodologies and instruments for this. Our goal is to further expand the Group production system throughout the world at all brand and regional locations so as to achieve sustainable and continuous improvement.

We have already made substantial progress towards achieving this goal. In the future, we will increase the amount of attention we give to further strengthening the Group's system and increasing production its presence. Implementation is focusing on leadership, responsibility and corporate culture. As a first step in this direction, we are measuring the extent to which the methodologies and instruments are being implemented at the locations. The target/actual comparisons are used to identify fields of action. These are then defined in a project plan and worked through in a structured manner in the second step. As a synchronous company, we are including all business areas so as to systematically optimize processes.

As the complexity of products increases, a factory must work at optimal capacity so as to continue manufacturing high-quality products that give customers maximum

benefits at competitive prices. This is all made possible by the standardization of production processes and operating equipment at an early stage. The basis for this is consistent construction and design principles that are defined in the form of product standards. "Concept consistency" ensures that common design principles, joining techniques and joining sequences, but also installation and connection concepts, are applied in the brands' development and production areas. The principle of concept consistency is a fundamental component of the creation of efficient logistics and manufacturing processes.

Global production network

With twelve brands and 120 production locations, multibrand projects are an important aspect of the Volkswagen Group's forward-looking production. The corporate objective is to generate maximum synergies based on the platform strategy and enable several brands to use the same production locations.

The modular platforms and toolkits allow us to design our production sites to be flexible. They generate synergy effects that enable us to reduce capital expenditure and make better use of existing capacities. With these toolkits, we have created the conditions for using the production sites for several brands at the same time. Our so-called multibrand locations can respond flexibly to market requirements and further raise the Group's competitiveness. The Bratislava site, for example, produces vehicles for the Volkswagen Passenger Cars, Audi, Porsche, SEAT and ŠKODA brands. It will be joined by further multibrand locations in future, including in Tianjin, China. Currently, almost half of the 40 passenger car locations are already multibrand locations.

Another concept for volume flexibility is the "turntable". This is used, among other things, to compensate for fluctuations in demand or in segment shifts. One such "turntable" is formed by Volkswagen's sites in Emden (Passat), Zwickau (Passat and Golf) and Wolfsburg (Golf).

The Volkswagen Group is aiming to become one of the world's leading providers of battery-powered electric vehicles by 2025. We will therefore expand the product range and launch a new family of electric cars based on the Modular Electric Toolkit (MEB). We are also tackling this challenge in our production processes with the aim of integrating these new vehicles into existing conventional factories as efficiently as possible. In 2016, we prepared to adapt the production network to new products and technologies in vehicle and component manufacturing.

In order to design multibrand projects and e-mobility to be cost-effective in conjunction with existing concepts, it is important to make production highly flexible and efficient. We have begun the targeting process, standardization 2.0 and a reduction in the number of different options offered, and have hardwired these measures into the strategy. The targeting process serves the transparency and monitoring of cost types in the individual projects. Standardization 2.0 involves readjusting processes to formulate standards with an application- and user-based focus.

New technologies and product innovations

Modern, highly efficient car production like that at the Volkswagen Group would be inconceivable without reliable and extensive automation technology. Networking and digitalization in production already played an important role well before the term Industry 4.0 was coined. Volkswagen is exploring new technological solutions in many evaluation and implementation projects, including for identifying and localizing components and equipment, for energy management and predictive maintenance, for data-driven analysis and control of production processes, and for the use of wearables such as smartglasses in logistics processes. The aim is to increase equipment availability, flexibility and productivity, while also reducing the use of resources.

An important topic for the manufacturing of the future is human-robot collaboration (MRK). Volkswagen plans to support employees using robots equipped with special safety sensor technology, helping them to perform tasks that are physically uncomfortable or particularly monotonous. Assembly and logistics processes present a large potential field of application for MRK. Volkswagen is systematically analyzing the existing tasks in production lines and examining the technical abilities of the new robot systems. As part of a strategic cooperation with a renowned robot manufacturer in 2016, Volkswagen has defined a series of application projects and successfully implemented the first solutions in series production. The results of the pilot projects enable us to verify the expected ergonomic and economic benefits, and to take subsequent decisions on this basis. Volkswagen's approach is to build its own planning expertise for workplaces with MRK.

The design and introduction of new production technologies involve the affected staff in the redesign of workplaces and processes from the very outset. This is an important prerequisite if new technologies and solutions are to find the necessary acceptance.

Environmentally efficient production

The Volkswagen Group has set itself the goal of reducing the five key environmental indicators of energy and water consumption, waste for disposal, and CO₂ and VOC emissions in production by 25% for each vehicle produced – starting from

2010 levels – by 2018. This objective applies to all of the Group's production locations and is derived from our environmental requirements for production processes, which are anchored in the Group's environmental principles. As the charts on page 159 show, we have already made considerable progress towards reducing all these key indicators.

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The Volkswagen Group's brands contribute to achieving these goals with their own frameworks that reflect the specific features of their corporate culture and their brand image. Volkswagen Passenger Cars and Volkswagen Commercial Vehicles have established "Think Blue.Factory", Audi has its "ultra strategy", ŠKODA calls its program "Green Factory", SEAT calls its program "ECOMOTIVE Factory" and Bentley's program is called "Environmental Factory". Porsche has introduced "resource-efficient production". Scania and MAN are giving their commitment to the environment the names "Blue Rating" and "climate strategy", respectively.

We are encouraging close integration and communication between the brands worldwide in order to leverage synergies. Our environmental experts meet regularly in working groups; in addition, they train our employees on the topic of environmental protection.

Volkswagen uses various analytical techniques to examine and evaluate the flow of resources and energy in production as well as the resulting environmental impact. Processes can be made more transparent with the aid of material flow analyses. These identify action recommendations to reduce both the environmental burden and production costs. Various agents can use material flow analyses. The approach can assist in planning new, more resource-efficient equipment, and act as a decision-making aid when implementing measures, and help to raise awareness among staff regarding the resource-efficient use of process materials.

We record and catalog environmental measures in an IT system and make these available for a Group-wide exchange of best practice. In the reporting period, more than 1,600 implemented measures in the area of environment and energy were documented in this system. They serve to improve passenger car and light commercial vehicle production processes. These activities are not only worthwhile from an environmental perspective; they also lead to annual savings of around €49 million.

With a series of effective, innovative measures, we once again promoted the reduction of environmental indicators in the reporting period, while at the same time improving production processes. The following examples show the extent to which the measures contribute to improvement of the production processes and achievement of the target values for the five key environmental indicators:

One important lever for reducing energy consumption is tailoring the operation of all facilities to demand. In 2016, we reinforced the energy efficiency gains from the first pilot projects on load-dependent operation of paint dryers by rolling out the technology at further locations. The change has cut energy requirements by around 7,300 MWh a year, reducing CO_2 emissions by approximately 1,900 tonnes and saving some €290,000 annually.

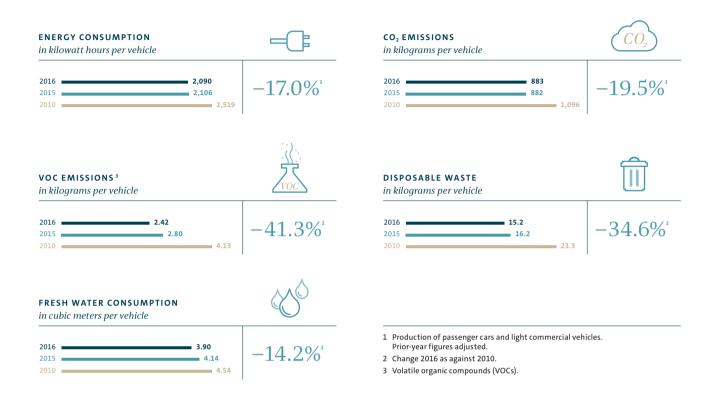
At the Foshan factory, the biological treatment plant was expanded to include an additional membrane step. This modern technology cleans wastewater especially thoroughly, enabling it to be reused on site. The facility cleans more than 70,000 m³ of wastewater a year, reducing the factory's environmental impact.

The Bratislava plant introduced an advanced waste management system in January 2016 to optimize waste logistics processes. Transponder technology (Data Matrix code) is used to identify waste at the point of origin and track it completely all the way to the final disposal location. At each stage of the disposal process in the factory, this documents the volume, fill level, degree of sorting, any wrongly disposed materials and the condition of container spaces. The specialist waste management department uses the information collected to develop effective measures together with the waste producers so that container volumes, collection intervals, container locations and disposal routes can be tailored optimally to production. This has achieved a 15% reduction in the quantity of cost-incurring residual waste within the space of nine months. Moreover, the time required for internal and external reporting of waste statistics has been considerably reduced and data quality increased. This waste management system also supports compliance with legal requirements for the transport and disposal of waste.

A new, environmentally friendly top coat paint line came on stream in Ingolstadt. This features ultramodern technology such as air circulation, dry scrubbing and waste air cleaning. The facility has reduced heat energy and water consumption by 20% per car. In addition, the air circulation system helps to reduce CO₂ emissions per painted car by 30%. Meanwhile, the cleaning of waste air reduces VOC emissions by 90%.

Measures have also been implemented in energy generation and consumption. We have set a particularly positive example in Brazil, switching to 100% renewable energy despite the current economic difficulties in the country. This measure reduces CO_2 emissions by approximately 21,000 tonnes per year.

KEY ENVIRONMENTAL INDICATORS FOR PRODUCTION IN THE VOLKSWAGEN GROUP 1



Green logistics

Together, our brands, regions and plants are designing the logistics of tomorrow in a digital automotive world and using new technologies. The massive rise in available information is making processes from the supplier to the production plant to the customer more and more transparent. We use animated planning tools for designing factories and supply streams and have already implemented the tracking of loaded trucks by GPS. Our production plants work in an automated and digitalized manner with driverless transport systems in logistics.

Throughout all this, the traditional logistics objective still applies: information, material and vehicles are to be in the right place at the right time in the right quality and quantity – at the optimum cost.

Logistics is contributing to the Volkswagen Group's increased focus on the environment, for example by analyzing the entire transport chain in respect of CO_2 emissions. The objective is to avoid transports or to shift to more environmentally friendly modes of transport and to reduce fuel consumption. We are working on measures and areas of action for optimizing the logistics processes across the brands.

An important starting point for reducing CO₂ emissions is the selection of the mode of transport. One of the most efficient options here is maritime transport. The Volkswagen Group is therefore involved in the Clean Shipping Network (CSN), an association of marine cargo owners. With the aid of the Clean Shipping Index rating tool, environmental efficiency figures can be compared, for example the emissions of individual ships on particular routes. This allows the environmental footprint of maritime transport to be analyzed and reduced.

The successful use of alternative drive technologies is of decisive importance in environmental and economic terms. E-mobility, gas and hybrid drives, fuel cells and other novel fuels offer interesting problem-solving approaches that are being examined for future use in logistics. To improve the environmental compatibility of vehicle transports by ship for the long term, the Volkswagen Group will use two carcarrying vessels powered by LNG (liquefied natural gas) between Europe and North America. Compared to conventional vessels, the LNG ships will reduce emissions of CO₂ by up to 25%, NO_x by up to 30%, soot particles by up to 60% and SO_x (sulphur oxide) by up to 100% per ship and year. Furthermore, use of an ultramodern dual-fuel marine engine

with direct injection and exhaust aftertreatment will deliver an additional emissions reduction.

The Volkswagen Group is constantly looking for alternatives and more environmentally friendly transport options both in vehicle and materials logistics. Materials from Turkey for the Volkswagen factory in Palmela, Portugal, have been transported by sea since late 2015. Previously, the materials travelled by truck. The change saves 240 tonnes of $\rm CO_2$ emissions a year and is also cutting costs for the Company.

The new logistics center in Bratislava, Slovakia, is another element in the optimization of materials transport in the Group. Optimal thermal insulation reduces heating costs, while the use of double doors in loading areas guarantees that less heat is lost. LED lighting reduces electricity consumption by some 50%. At the same time, consolidating loads enables a reduction in traffic of an average of 90 trucks for incoming goods and around 65 trucks for outgoing goods.

SALES AND MARKETING

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Our unique product portfolio is comprised of twelve successful brands including innovative financing services.

Brand diversity in the Volkswagen Group

At the Volkswagen Passenger Cars brand, the customer's wishes are the driving force behind our developments and decisions. This enables us to offer innovations and automotive solutions that excite our customers, and are at the same time affordable. The brand's vision is "Moving people and driving them forwards". Its medium-to-long-term objective is to become a world market leader in e-mobility. In light of the diesel issue in particular, the Volkswagen Passenger Cars brand has defined four areas of innovation: first, intelligent and attractive sustainability; second, automated driving; third, connecting customers, manufacturer and product; and fourth, intuitive usability. Our aim is to implement these innovations in an inspiring, future-oriented way. In addition, we are doing everything in our power to restore trust and to continue to convince our customers of the Volkswagen Passenger Cars brand.

"Vorsprung" is an active brand promise that is delivered throughout the world, making Audi one of the most highly desired brands in the premium segment. For the progressive target group, "Vorsprung" will also mean greater personal freedom for self-determined mobility in the future. Audi creates this freedom for its customers by giving them a simplified, surprising, interconnected brand experience. Intelligent concepts and excellent value for money are the hallmarks of the successful ŠKODA brand. "Simply Clever" combines future-oriented functionality with an impressive space concept that is technically simple but delivers sophisticated and practical features.

Design, passion, quality and ongoing evolution are the distinctive characteristics of the youthful, dynamic Spanish brand SEAT. Its goal of combining technological precision and superb engineering with emotional design is expressed in SEAT's "TECHNOLOGY TO ENJOY" slogan.

Exclusivity and social acceptance, tradition and innovation, performance and everyday usability, design and functionality – these are the brand values of sports car manufacturer Porsche. True to its philosophy of "achieving maximum output from minimum input", Porsche skillfully turns its work into speed and success.

Exclusivity, elegance and power – these are the defining qualities of our Bentley, Bugatti and Lamborghini brands in the luxury vehicle segments. They round off the Volkswagen Group's brand diversity in the passenger cars segment.

Volkswagen Commercial Vehicles stands for superior mobility with its three core values – reliability, economy and partnership. The vehicles are tailored to meet the respective transport needs of customers in trade and industry, as well as civil authorities and service providers, whilst private customers value our family-friendly MPVs and recreational motor homes

The Swedish brand Scania's core values are "customer first", "respect for the individual" and "quality". This successful company has been manufacturing high-performance and technologically highly innovative trucks and buses for more than 100 years, offering its customers efficient transport solutions that are complemented by excellent service offerings and financial services.

Customer focus, enthusiasm for the product and efficiency are the core values at MAN. Alongside trucks and buses, the company is a leading manufacturer of diesel engines, turbomachinery, turnkey power plants and special gear units.

Ducati is one of the most renowned manufacturers of premium motorcycles. Its emotionally charged products thrill the Italian brand's customers with their premium quality craftsmanship, uncompromising performance and challenging dynamics.

Offering appropriate products and services across all vehicle classes, Volkswagen Financial Services provides the key to mobility for the Volkswagen Group's private and business customers worldwide.

E-mobility and digitalization in Group Sales

The Volkswagen Group plans to launch over 30 new electric vehicles by 2025. Our e-mobility strategy also encompasses the development of customer-oriented products and business models around the vehicle, including arranging customer-specific charging infrastructure solutions. With such innovative products and services and our mobile online services, the Volkswagen Group will evolve from an automotive manufacturer into a mobility provider.

In sales, we make use of the opportunities that increasing digitalization offers. Our actions are guided by a clearly defined strategy that requires extensive cooperation between the brands to achieve the greatest possible synergies.

Digitalization will be decisive in creating a completely new product experience for our customers – one which captivates with seamless customer communications, from the initial interest in purchasing a vehicle to servicing and ultimately to the sale of the used car. At the same time we thus open up new business models and opportunities – relating in particular to mobility and other services – around the connected vehicle. This will increasingly make us an integral part of the customer's digital world of experience. We take great care to make all processes transparent so that customers always retain control of their own data.

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

Customer satisfaction and customer loyalty

The Volkswagen Group's sales activities focus consistently on increasing customer satisfaction – this is our top priority. Aided by the digitalization offensive in sales, we are placing even greater emphasis on customer requirements and on service; this offensive will sustainably shape our business.

The Group's brands regularly seek to identify customer satisfaction levels, focusing on products and services. They derive new measures from survey results to achieve even greater customer satisfaction.

In terms of customer satisfaction with their products, Audi and Porsche are leaders in the core European markets when compared with other Group brands and competitors. The other brands in the Group also score higher than competing brands. All Group brands achieve figures at or above the level of the competition with regard to customer satisfaction with dealers.

The Volkswagen Passenger Cars brand has maintained a high level of customer loyalty in its core European markets for several years in a row. However, the emissions issue had a negative impact on brand image, brand trust, and customer satisfaction with products compared with 2015. The loyalty of Audi, Porsche and ŠKODA customers has kept these brands in the upper rankings in comparison with competitors for a number of years.

The Group sales structure

The Volkswagen Group's multibrand structure helps to promote the independence of its brands. Nevertheless, we use overarching sales activities to increase sales volumes and market share, cut costs and improve earnings contributions.

We intensified our efforts to improve dealer profitability during the reporting period, increasing the business volume per dealer and putting new cost-cutting programs into action. Here, the focus was always on maintaining a close working relationship with dealers and ensuring their profitability. We use Group companies to manage our wholesale business in over 20 markets. A central department provides transparency and ensures that sales activities are cost effective. By creating synergies between the brands, this is making a major contribution to achieving the aims of our Strategy 2025. This makes it possible for the remaining wholesale companies to learn quickly and efficiently from the Group-wide benchmarking process and from the best practices adopted by individual companies. In the reporting period, we focused on optimizing structures with a view to further decentralization and improving logistics costs at our sales companies.

Fleet customer business

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

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

At 14.1 (14.1)%, the share of fleet customers in total registrations in Germany remained stable in fiscal year 2016 amid 4.6% growth in the market. The Volkswagen Group's share of this customer segment decreased to 47.1 (48.5)%. Registrations by fleet customers in Europe were 6.2% higher in total

than in the previous year; the Group's share of this was 28.5 (28.9)%. The clarification of the CO_2 issue and implementation of technical solutions for the diesel issue helped to ensure that there were no significant declines in volumes for the Volkswagen Group's fleet customer business in 2016.

After Sales and Service

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In After Sales, individual service and the timely provision of genuine parts are essential in ensuring passenger car customer satisfaction. We use a worldwide after-sales network with more than 120 of our own warehouses for this purpose. This ensures that we can supply almost all service partners around the globe within 24 hours. The genuine parts supplied by our passenger cars brands and the expertise of our service centers represent the highest level of quality and ensure the safety and value retention of our customers' vehicles.

The Volkswagen Group regards itself as a complete provider of all parts and services relevant to customers in the after-sales business. Together with our partners, we ensure the worldwide mobility of our customers. The partner businesses offer the entire portfolio of services, for example oil and tire changes, inspection, maintenance and repair, in all vehicle classes. We are continuously expanding our range of tailored services in order to improve convenience for our customers and increase customer satisfaction.

Around the world, our commercial vehicles business also prides itself on products of the highest quality and on strong customer focus. Fuel efficiency, maintenance and operating costs, the residual resale value of vehicles, and the purchase price – these are all critical buying criteria for our customers, in addition to availability.

Scania is adding services to its range of trucks, buses and engines that guarantee fuel efficiency, reliability and good vehicle availability. Among these are the Scania Rent Truck & Trailer service that helps to overcome short-term fleet capacity problems. Thanks to Scania Parts and the Genuine Parts Warranty, most replacement parts are available within 24 hours almost anywhere in the world. Driver behavior is the key factor influencing operating efficiency, service life of tires and parts, as well as road safety. Scania driver training teaches drivers how to drive more safely and efficiently. Scania's workshop service and service contracts offer customers a high degree of safety in addition to consistently high quality. Scania introduced Scania Maintenance during the reporting period, a new flexible maintenance service for trucks. Vehicles are called to the maintenance workshop whenever operating data shows that intervention is required. This solution reduces the time spent in service workshops and enables maintenance work to be optimized.

MAN offers service packages optimally geared to customer requirements. These reduce total operating costs and help vehicles retain their value. As well as contracts for servicing and repairs, the packages include proactive maintenance management (MAN ServiceCare), which enables optimized planning of maintenance work, thereby increasing vehicle availability. Active data exchange between vehicles, customers and the MAN service points is handled via the integrated MAN Telematic System. The comprehensive services enable downtimes to be minimized. MAN has more than 1,400 state-of-the-art service points worldwide with modern diagnostic systems and high-quality specialist tools.

In the Power Engineering segment, MAN PrimeServ ensures the availability of machinery. The global network of more than 100 PrimeServ locations guarantees excellent customer proximity and offers, among other things, replacement parts in original quality, qualified technical service and long-term maintenance contracts. The product range is continually improving and expanding. A comprehensive program at the numerous MAN PrimeServ Academies meets the high demand for customer training worldwide.

QUALITY ASSURANCE

The quality of our products and services plays a key role in maintaining customer satisfaction. Customers are particularly satisfied and remain loyal when their expectations of a product or service are met or even exceeded. Appeal, reliability and service determine quality as it is perceived by the customer throughout the entire product experience. Our objective is to positively surprise and excite our customers in all areas and thus win them over with our outstanding quality. We continued to aspire to this objective in the reporting period. The diesel issue has shown, however, that we must broaden our previous understanding of quality. Quality assurance now checks the compliance of our products more intensively.

We are also placing greater emphasis on our quality management system than before, thereby reinforcing the process-driven approach Group-wide across all business areas. Quality management in the Volkswagen Group is based on the standard ISO 9001: the requirements of this standard must be met to obtain the type approval for producing and selling our vehicles. Following the revision to the standard in 2015, we applied the new requirements to all the Group's locations and brands during the reporting period. One key change in content concerns the risk assessment for non-

compliance with defined processes. To ensure that these and other new requirements as well as official regulations are implemented and complied with, we have developed guidelines, recommendations and tips for quality management consultants, and provide them with support in their everyday work.

As a further step, we have reinforced application of the internal control principle – mutual support and control between the divisions – and built up important additional expertise, including in software security. This particularly affects the control mechanisms between technical development and quality assurance before and after the start of production. In product development, for example, we have introduced the same principle for the approval of powertrains. At the series production stage, too, we are working even harder to carry out conformity checks on our products with the participation of all business units involved and to perform assessments and make decisions on this basis. This applies particularly to exhaust emissions and fuel consumption.

With these and other measures, quality assurance makes sure that we not only meet all legal requirements imposed on us as a manufacturer but that our products do as well.

Observing regional requirements

Our customers in the different regions of the world have very diverse needs as far as new vehicle models are concerned. Identifying these specific regional factors and prioritizing them is an important task for quality assurance, so that they can then be reflected in the development of new products and the production of established vehicle models. Factors such as the available fuel quality, road conditions, traffic density, country-specific usage patterns and, last but not least, local legislation play a key role in this process. We mainly use market studies and customer surveys to determine region-specific customer requirements.

Product and supplier quality

In the reporting period, the large number of product startups made high demands on quality assurance. We nevertheless managed to maintain the high quality of the previous years. Our suppliers also made important contributions in helping us achieve this goal. We expect them to use sustainable practices, and to deliver the highest product quality and reliability of supply.

One of our key concerns is to integrate innovative technologies into new vehicles without harming customer satisfaction. We are therefore placing even greater emphasis than before on software quality and data security. Long before customers are able to experience a new product, quality assurance supports and analyzes new vehicle projects. The aim is to make our products even better and more

reliable, while taking into account as many customer wishes and special regional demands as possible.

In addition, quality assurance defines the quality targets and standards for the Volkswagen Group, and monitors compliance with them. It also identifies the cause of any faults and defines the process for removing them. In 2016, we continued to standardize our fault removal process, so that we can respond even more quickly and effectively to any problems. As a result, we can increase customer satisfaction, and at the same time reduce warranty and ex-gratia repair costs.

Service quality

We also continue to improve the quality of our service scope worldwide. As in previous years, this involved the further optimization of our warranty and ex-gratia instruments in 2016. Additional opportunities also presented themselves at our authorized dealers, who represent the direct interface with our customers: together we are working on identifying and preventing any problems that may occur in the emotional moment of vehicle handover at an early stage. The so-called dealer-plant teams – a proven concept, whose use in the reporting period included the market launch of the new Tiguan – are one measure taken in this area. Employees from various working areas inspect the quality of the vehicles delivered to the dealer on the forecourt and provide detailed feedback about any problems to the manufacturing plant in question.

Group quality standards

Whether they are buying a passenger car, commercial vehicle or motorcycle, our customers expect perfect quality from the Volkswagen Group. For more than 40 years now, auditors have therefore been deployed around the world to carry out an assessment from the customer's perspective of the vehicles ready for delivery. As the requirements are constantly changing, we continually revise the quality benchmarks used for such audits. Based on the guiding principles of precision and perfection, we successfully transferred the Group's audit system to the Commercial Vehicles Business Area in 2016, and trained and certified the brands' product auditors accordingly.

EMPLOYEES

The Volkswagen Group is one of the world's largest employers in the private sector. As of December 31, 2016, the Group, including the Chinese joint ventures, employed 626,715 people, 2.7% more than at the end of fiscal year 2015. The ratio of Group employees in Germany to those abroad remained stable in the reporting period. At the end of 2016, 44.9 (45.7)% were employed in Germany.

Pact for the future

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In the 2016 reporting period, the Volkswagen brand signed a pact for the future with the General Works Council for greater economic viability and a more secure future at the Company's German locations. Among other things, this envisages losses of up to 23,000 jobs in Germany over the coming years, which will be accomplished in a socially compatible way and without compulsory redundancies. The job cuts will take the demographic curve into account, which means that some of the positions that become vacant as a result of employees entering retirement will not be filled. At the same time, we are planning to build up new competencies at different locations and create about 9,000 additional jobs with a secure future, which will mainly be filled with existing employees.

Human resources strategy

The Volkswagen Group has long been providing stimulus for innovation in its employment policy. In its pursuit of personnel management excellence, the Company has been implementing an individualized approach to human resources management since 2008 with the primary objective of ensuring supreme performance by providing optimal personal support for employees.

EMPLOYEES BY CONTINENT in percent, as of December 31, 2016



Germany 45%
Rest of Europe 29%
America 9%
Africa 1%
Asia/Australia 16%

In October 2016, when adopting its program for the future TOGETHER – Strategy 2025, the Volkswagen Group also approved a new human resources strategy with five overarching objectives:

- The Volkswagen Group aims to be an excellent employer with all of its brands and companies worldwide.
- > Highly competent, dedicated employees strive for excellence in terms of innovation, added value and customer focus.
- > A sustainable work organization ensures optimal working conditions in factories and offices.

- > An exemplary corporate culture creates an open work climate that is characterized by mutual trust and collaboration.
- > The Board of Management department of the Volkswagen Group responsible for Human Resources ensures the greatest possible efficiency in its own structures and processes, meeting the requirements of high-quality personnel management at the same time.

Many of the goals of the human resources strategy are underpinned by measurable indicators, and the extent to which these are achieved is reviewed on a regular basis. They include the Group's attractiveness as an employer and diversity factors such as the proportion of women in management.

With its new human resources strategy, the Volkswagen Group is continuing the successful key approaches of its human resources policy. These include the pronounced stakeholder focus, the granting of comprehensive participation rights for employees, outstanding training opportunities and long-term service through systematic employee retention as well as the aspiration to appropriately balance performance and remuneration. The new human resources strategy is also setting innovative trends: modern forms of working such as agile work – whereby executives and team members work together to increase the efficiency with which all tasks are completed – will be expanded on a broad front in many areas.

Before 2020, the Volkswagen Group will introduce a diversity management system to prevent forms of discrimination such as of people with diminished capabilities. In addition, cultural change initiatives are currently concerned with anchoring flatter hierarchies, a more open form of collaboration and a greater focus on the big picture in the Company's divisions. Furthermore, working times and places of work will be designed to provide greater flexibility. We plan to give social sustainability more weight and tie it in with our human resources strategy: In the future, social and cultural megatrends such as the desire for employee participation in decisions will be implemented faster and more systematically in personnel management. A new "Human Resources Strategy and Sustainability" organizational unit has been established for this purpose.

The Code of Collaboration, which is part of the program for the future TOGETHER – Strategy 2025, defines the rules for working relationships in the Group and is therefore a key pillar of this strategy. A cross-functional team from different brands, countries, divisions and generations supported the development and implementation process from the outset. The Code of Collaboration was initiated at the Global Top Management Conference in June 2016. It describes the form of collaboration in the brand alliance with the terms "open and honest", "uncomplicated", "without prejudice", "on an equal footing" and "for one another".

The traditional focus areas of personnel management such as providing optimal support and training opportunities for employees as well as careful planning and

deployment of human resources will continue to apply in the new strategy.

Training within the vocational groups

Training at Volkswagen is organized very systematically on the basis of vocational groups. A vocational group includes all employees whose work activities are based on similar technical skills and who need related expertise in order to perform their job. The skills profiles lay down the functional and interdisciplinary skills for each job.

A broad range of qualification opportunities is available to employees. This enables them to continue to develop throughout their working lives and continuously deepen their knowledge. In this process, they also learn from more experienced colleagues, who act as experts in the vocational group academies – the learning centers of the vocational groups – and pass on their knowledge to others.

In the reporting period, the Governance Academy was established and the foundation of the Academy of Technical Development anchored in the pact for the future. Staff from the new model line organization will be supported by the existing Product Academy. From 2017 onward, skills development and training for all vocational groups at Volkswagen will be supported by an academy.

Dual vocational training

Dual vocational training, where theory and practice are closely interwoven and which meets the Group's high standards of expertise and quality, creates the basis for first-class performance. As with staff training, here, too, the content is developed based on the expertise required within each vocational group. The "Volkswagen Group Charter on Vocational Education and Training" adopted in June 2015 shows the high value Volkswagen places on education and training. In addition to high-quality education and training, good training conditions will be created and/or developed further at the relevant Group locations.

Volkswagen has introduced dual vocational training at many of the Group's international locations in the past few years and is continuously working on improvements. Over three-quarters of all the Group's vocational trainees now learn their trade through dual vocational training. As of the end of 2016, the Volkswagen Group had trained 19,490 young people in approximately 60 trades and 50 dual study programs.

After completing their vocational training, young people at the start of their career have the opportunity to take part in the "Wanderjahre" (Years Abroad) program, spending twelve months at one of the Group's international locations. In the reporting period, 42 trainees at 15 Volkswagen Group locations around the world took part in this development program, including employees from Volkswagen Truck & Bus and MAN Truck & Bus in Germany for the first time.

Once a year, Volkswagen honors its highest-achieving vocational trainees in the Group with the "Best Apprentice

Award". In 2016, nine young women and 36 young men at a total of 43 Group locations received this award for their excellent performance and technical expertise.

Developing university graduates

We offer structured programs for joining Volkswagen that are specially geared to university graduates. At Volkswagen AG, two trainee programs are available. In the StartUp Direct program, the trainees work in the target area from the outset, attending supplementary training seminars so as to get an excellent overview of the Company. In the StartUp Cross program, university graduates interested in working internationally are assigned to different locations at home and abroad. They get to know the various specialist areas throughout the value chain, broadening their knowledge and practical experience in the process. Volkswagen took on 114 trainees under the two programs in 2016; around 26% of them were young women.

Trainee programs are also offered at the international Group locations, among others at ŠKODA in the Czech Republic and at Scania in Sweden. In addition, the Volkswagen Group's StartUp Europe trainee program offers young engineers from Southern Europe an opportunity to gain international work experience.

Volkswagen uses a differentiated approach to ensure the loyalty of its young academic talent, which consists of two elements: the Student Talent Bank and the Academic Talent Pool

Through the Student Talent Bank, Volkswagen supports particularly high-achieving students in both functional and interdisciplinary areas. The aim here is to persuade former interns to join the Company and, by inviting them to specialist lectures, seminars, or visits, for example, to give them the best possible preparation for entering a profession in the world of Volkswagen.

Talented young high potentials are added to the Academic Talent Pool just before they complete their degree or doctorate. This puts selected high potentials on the radar at the Company, allowing them to be considered for an entry-level position in one of the functional areas.

Professional development, leadership and management programs

The Volkswagen Group Academy offers a broad range of qualification routes for specialists – from advanced training on general Company-related issues to training within the vocational groups to personal development programs. Here, too, the focus is on the basic dual training principle, which combines learning of theoretical content with practical experience.

We have standardized a large number of our development programs and selection processes for executives, foremen and managers across the Group. The Volkswagen Group Academy carried out a total of around 615 training programs

and assessment centers for executives, foremen and managers in 15 countries in the reporting period.

Impact of digitalization on training

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New technologies can usefully complement learning and the transfer of expertise. As the central training organization in the Group, the Volkswagen Group Academy incorporates this idea into different projects. In the digitalXperience program, the content and learning formats of the dual vocational training are reviewed for digitalization opportunities with a view to making vocational training fit for the future. These measures are flanked by skills development among the teaching staff at the Volkswagen Group Academy.

In parallel, the Volkswagen Group Academy is setting up an Education Lab designed to create stronger ties with education start-ups and translate the findings of the educational research into new technologies. These will then be tested in conjunction with the teaching staff and the students at Volkswagen to aid learning and the transfer of expertise.

Professional development at university level

Within the Volkswagen Group Academy, the AutoUni makes knowledge that is relevant for the future available to the Group by integrating internal senior experts and collaborating with universities. Its events are offered as programs and as cooperative study modules in a blended learning format, which combines classroom training with online content, and are supplemented by lectures and conferences. The 2016 offering included digitalization, sustainability, e-mobility, autonomous driving and Industry 4.0 as well as the workplace of the future. Around 9,200 interested employees from 59 locations attended over 160 AutoUni events around the world.

The AutoUni cooperates with internationally renowned universities, institutes and research centers on research projects, dissertations and theses and offers doctoral students in the Group a platform for exchanging ideas in addition to interdisciplinary training programs. At the end of 2016, more than 400 doctoral students were engaged in research at the various Volkswagen Group companies in Germany, investigating forward-looking, Company-related issues.

Advancement of women and family-friendly HR policies

For Volkswagen, family-friendly human resources policies are a key aspect of being an attractive employer and go a long way to achieving greater equality between the sexes. We therefore work continuously on further increasing the proportion of women in leadership positions. Targets have been set for every division in the company to encourage women with high potential in their decision to aim for a career in management in the Company.

This approach is supported by many different measures including the cross-brand "Management Mentoring Pro-

gram", which is designed to support women on the way to management positions. Volkswagen has also launched the "Career with Children" project that supports young mothers and fathers during and on their return from parental leave, helping them to continue their career as effectively as possible. Volkswagen offers the "Compass" program specifically to encourage women with high potential in their decision to aim for a career in management.

We use our Germany-wide Woman DrivINGAward and the Woman Experience Day to focus on female engineering and computer science students and graduates, so as to recruit them for technical positions at Volkswagen. We use target group-specific events to help the participants understand our products and give them an insight into the attractive tasks in our Company.

In the reporting period, Volkswagen AG reached the target quotas it had set for the proportion of women in management in accordance with the German law regarding the equal participation of women and men in leadership positions in the private and public sectors: by the end of the year, the proportion of women was 9.8% (target: 9.8%) in the first management level and 13.5% (target: 13.3%) in the second management level. For the new period up to the end of 2021, Volkswagen AG is aiming to have 13.0% women in the first management level and 16.9% women in the second management level.

PROPORTION OF WOMEN VOLKSWAGEN GROUP IN GERMANY 1 as of December 31, 2016

% 	2016	2015	
Total vocational trainees	29.5	28.3	
Industrial vocational trainees	23.3	22.6	
Commercial vocational trainees	58.6	57.0	
Students in traineeship schemes	33.5	33.4	
Total management	11.0	10.3	
Management	12.8	11.9	
Senior management	8.7	8.6	
Top management	4.7	3.8	

1 Excluding Scania, MAN and Porsche.

In addition, Volkswagen intends to raise the proportion of female skilled workers and forewomen in Germany to 10%; in fiscal year 2016, the proportion of women in the Volkswagen Group in Germany (without Scania, MAN and Porsche) was 7.6% working as skilled workers and 5.1% as forewomen. In order to increase the proportion of female vocational trainees in the industrial and technical area from the current 23.3% to 30%, Volkswagen specifically targets the recruitment of women, for example by arranging special work experience and orientation days for young women.

In the Volkswagen Group, a large number of operational arrangements are in force to enable individuals to combine the demands of work and home. These include working time flexibility, variable part-time working and shift models, leave of absence to care for close family members, as well as onsite, company-run childcare facilities.

Volkswagen is continuously working on further improving these options. In September 2016, Volkswagen AG introduced a far-reaching collective agreement for work performed outside the facility (mobile work). At AUDI AG, staff have had the opportunity to work in any location and with flexible working hours since October 2016, if this is compatible with the job tasks at hand. The collective agreements have fulfilled employees' request for greater flexibility with regard to working time and the place of work.

Employee participation

Codetermination and employee participation are important pillars of our human resources strategy. Volkswagen aims to promote high levels of technical expertise and a strong team spirit. We therefore invest in our people, offer employees attractive opportunities for development and promote a good working climate. This includes employees' opinions, assessments and constructive criticism being heard. Differentiated pay systems that reward individual and team effort are a further component of employee participation.

With our opinion survey, a uniform, Group-wide poll, we regularly gather information about employee satisfaction and open up feedback channels to receive suggestions for improvement. We conducted the opinion survey in a revised format in 2016, adding further questions for employees: new tools now systematically support managers and employees when discussing the results. The survey was carried out at 172 sites and companies in 45 countries. Of the 540,000

employees whom we asked to participate, some 440,000, or 81%, took part. The mood index – an important parameter in the opinion survey – was at 78 of a possible 100 index points in 2016.

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Since 2007, Volkswagen AG has been using a tool for involving its workforce in improving the Company's efficiency: the "Volkswagen Way". Our overarching goal here is to increase Volkswagen's competitiveness and safeguard employment. In fiscal year 2016, a particular focus was on improving collaboration and communication within the Company and on strengthening our leadership and participation culture. The evolution of the "Volkswagen Way" thus actively supports the Volkswagen Group's program for the future TOGETHER – Strategy 2025.

Ideas Management is an important leadership and motivational instrument for line supervisors because it facilitates active participation in planning and organizing work and is also underpinned by prizes with monetary incentives. Employees use their creativity, knowledge and initiative to take responsibility for process and product improvement at many of the Group's locations.

IDEAS MANAGEMENT IN THE VOLKSWAGEN GROUP¹ as of December 31, 2016

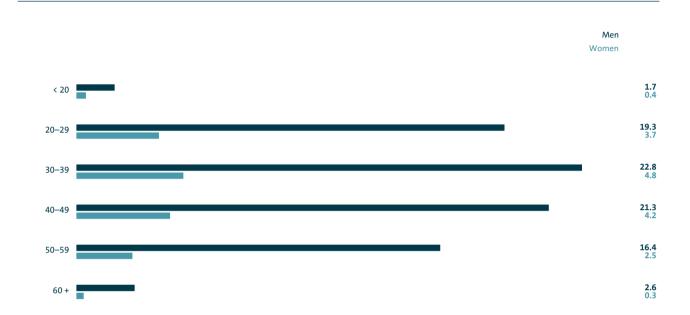
	2016	2015
Ideas for improvement suggested	583,017	536,081
Ideas for improvement implemented	482,453	360,454
Savings in € million	435.6	374.9
Bonuses in € million	40.0	38.7

^{1 46 (41)} participating production locations.

AGE STRUCTURE IN YEARS OF VOLKSWAGEN GROUP EMPLOYEES

as of December 31, 2016; in percent

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Preventive healthcare and occupational safety

Volkswagen's holistic healthcare management system extends beyond traditional preventive healthcare and occupational safety; it also covers aspects of work organization, workplace design, behavioral ergonomics, psychosocial aspects, rehabilitation and reintegration into working life as well as programs for preventing widespread diseases. The Group's Health Department performs standardized health audits for this purpose. The Overall Factory White Paper for vehicle production plants serves as the basis for planning new factories in the Group. In the latest edition of the White Paper, released in 2016, international requirements were added, which means that the topic of health now applies to all locations worldwide.

To maintain and improve employees' health and performance and help keep them fit, a free and comprehensive voluntary screening (check-up) is provided for all employees at almost all production facilities. In some cases, country-specific supplementary examinations, such as HIV and tuberculosis tests, have been added.

In light of the general increase in mental illness and stress, we also offer a broad range of services in this area to employees in the Group. This includes psychological training for managers and psychological support in emergencies – such as at SAIC Volkswagen in China – as well as a project for collecting information about psychosocial stress factors at SEAT in Spain and a psychosocial risk assessment and consultation at Audi in Hungary.

Another important action area in the Volkswagen Group is the continuous improvement of ergonomics. Volkswagen is aiming to ensure that the ergonomic quality of the workstations is taken into account throughout all production and work processes. With this in mind, we collaborate with scientists to combine state-of-the-art ergonomic workplaces with innovative work processes. As regards occupational safety, all Group companies covered by Group occupational safety management system used this to analyze their occupational safety organizations and processes. The results have been incorporated into a Group-wide benchmark and now provide the foundation for further improvements of the system.

EMPLOYEE BREAKDOWN¹ as of December 31, 2016

2016	2015	2014	2013	2012
	2013	2014	2013	2012
19,490	18,651	18,459	17,703	16,714
14,276	13,673	13,577	13,174	12,508
5,214	4,978	4,882	4,529	4,206
5,782	6,183	7,129	9,501	7,804
601,443	585,242	566,998	545,596	525,245
626,715	610,076	592,586	572,800	549,763
464,199	451,257	438,631	424,964	410,427
58,491	59,329	59,790	61,796	63,193
6,082	6,388	6,330	6,356	6,461
96,823	91,991	86,752	78,672	68,704
1,120	1,111	1,083	1,012	978
16.0	16.0	15.7	15.5	15.2
26.0	37.0	30.9	35.3	29.2
	14,276 5,214 5,782 601,443 626,715 464,199 58,491 6,082 96,823 1,120 16.0	19,490 18,651 14,276 13,673 5,214 4,978 5,782 6,183 601,443 585,242 626,715 610,076 464,199 451,257 58,491 59,329 6,082 6,388 96,823 91,991 1,120 1,111 16.0 16.0	19,490 18,651 18,459 14,276 13,673 13,577 5,214 4,978 4,882 5,782 6,183 7,129 601,443 585,242 566,998 626,715 610,076 592,586 464,199 451,257 438,631 58,491 59,329 59,790 6,082 6,388 6,330 96,823 91,991 86,752 1,120 1,111 1,083 16.0 16.0 15.7	19,490 18,651 18,459 17,703 14,276 13,673 13,577 13,174 5,214 4,978 4,882 4,529 5,782 6,183 7,129 9,501 601,443 585,242 566,998 545,596 626,715 610,076 592,586 572,800 464,199 451,257 438,631 424,964 58,491 59,329 59,790 61,796 6,082 6,388 6,330 6,356 96,823 91,991 86,752 78,672 1,120 1,111 1,083 1,012 16.0 16.0 15.7 15.5

- 1 Including the Chinese joint venture companies.
- 2 Volkswagen AG

INFORMATION TECHNOLOGY (IT)

With digitalization and networking in the ascendant on the whole, all of our business processes must also be supported digitally from end to end. At the same time, the establishment of new locations is posing high demands in terms of networking and coordination. A modern, tailor-made infrastructure and efficient application landscape are essential to meeting these requirements. The centerpiece is the Groupwide "Fertigungs-, Informations- und Steuerungssystem" (FIS – Production, Information and Control System). This enables us to efficiently produce vehicles at currently 43 plants worldwide – at the right time and with the right equipment. FIS is a key success factor for flexible, cross-brand manufacturing in the global production network.

In 2016, we have increased the Group-wide level of IT standardization for managing our plants to 88 (84)%. The "digital factory" is an example of an application launched only recently: even before the Company breaks ground on the construction of a new plant, our planners are able to take a virtual walk through the building, check their plans and thus ensure production can begin as intended.

The growing convergence of production and IT is opening up new opportunities. Big data processes help us to analyze faulty machinery and take action at an early stage. Volkswagen is addressing the trend towards digitalization in the Group's own IT labs. At these innovation centers, new IT solutions are developed in close cooperation between departments, research institutions and technology partners. The innovation centers act as test laboratories for the Group, as advisors on questions concerning the future of information technology and as liaison offices for start-up companies.

Our first IT lab, Data:Lab in Munich, is the center of expertise and innovation on topics involving big data, advanced analytics (process for systematic analysis of data in electronic form), machine learning and artificial intelligence.

Another center of innovation opened in Berlin in the reporting period – Digital:Lab. Among other things, the experts there are working on a digital platform that will enable us to provide our customers with mobility services, including information on fuel prices, parking and weather conditions.

We established the Smart.Production:Lab at the Wolfsburg location in August 2015. This acts as a center of expertise for Industry 4.0-related topics and is making an important contribution towards progressively turning the Volkswagen Group's production plants into smart factories.

Activities covering the Internet of things, data analytics, human-robot collaboration and wearables aim to comprehensively digitalize production and logistics. At the Smart.Production:Lab, we are helping to shape the future of car manufacturing.

We are also constantly increasing our efforts to network employees. Internal communities and the Company's internal Group Connect network are helping to establish new methods, means and ways of working within the Group and to put experts in touch with one another.

Volkswagen also actively seeks open discussions with start-ups in order to turn innovative ideas from young entrepreneurs into products suitable for series production. Internal and external hackathons (programming competitions) additionally create ideas for new products and services. At the CeBIT, for example, Group IT and SAP arranged the "InnoJam++" in which around 100 international mathematics, computer science, natural science, and technology students took part.

THE VOLKSWAGEN GROUP'S ENVIRONMENTAL STRATEGY

Climate change, resource availability and urbanization are some of the major global challenges faced by the Volkswagen Group. These challenges are also reflected in the growing demands placed on the Group – from politicians enforcing ambitious environmental regulations around the world, from investors who expect us to anticipate and manage the resulting risks, and from customers who are increasingly interested in low-emission, environmentally friendly vehicles.

Our goal is to become a role model in all things related to the environment and to actively support the implementation of the United Nations' Sustainable Development Goals (SDGs).

Targets and guidelines

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The Volkswagen Group's future program, TOGETHER – Strategy 2025, reveals how Volkswagen plans to excel. By taking responsibility, we intend to become a role model in all things related to the environment. To this end, we have defined the following targets:

- > To continuously reduce our carbon footprint
- > To continuously reduce the harmful emissions
- > To continuously reduce the resource consumption

In our quest to become a role model in all things related to the environment, we have drawn up several guidelines:

> In addition to addressing the global challenge of climate change (reducing CO₂ emissions), our approach covers all other environmental resources, especially conserving water, soil and air quality as well as energy and raw materials. Our decades of experience and the expertise we have built up as a result will come to fruition both globally and locally.

- > We employ a holistic approach by researching, developing and democratizing environmentally friendly innovations, significantly reducing the environmental burden in the process.
- > We significantly reduce the environmental burden throughout the entire product life cycle by setting ourselves ambitious goals and acting as a driving force in both the production phase (supply chain) and the usage phase of our products.
- > We communicate our measures, achievements and projects as transparently as possible.
- Our achievements are substantiated by high rankings in environmental awards.

We can only reach our goals if we firmly entrench environmentally relevant issues in our organizational and decisionmaking processes. Our long-established environmental management system provides the basis for this.

All environmental protection activities in the Volkswagen Group are centered around our global principles, which have been expanded and improved over the years, and which are binding for all Group brands:

- Group Environmental Principles for Locations/Production (2007)
- > Group Environmental Principles for Product (2008)
- > Mission Statement on Biodiversity (2008)
- > Group Environmental Policy (2010)

Group environmental protection bodies

The Group Board of Management is the highest internal decision-making authority on environmental matters. Since 2012, it has simultaneously functioned as the Group's Sustainability Board. The Group-wide management of environmental protection is the responsibility of the Group Steering Committee for the Environment and Energy, with support from numerous specialist bodies such as:

- > the Group Life Cycle Engineering working group
- > the Group Steering Committee for CO₂
- > the Vehicle Recycling Steering Committee
- > the Group Energy working group

These committees assess and analyze environmental opportunities and risks. To cover the entire value chain (life cycle approach), the corresponding divisions of the Group are represented in the Group Steering Committee for the Environment and Energy.

The brands and companies are independently responsible for environmental organization at their headquarters and locations, but base their environmental policies on the targets, guidelines and principles that apply throughout the Group.

2014 saw the inception of the Environmental Task Force, mandated with identifying and implementing potential savings at the locations. This team of analysts from Group research environment acts as a networking intermediary in the Company between departments, such as planning, main-

tenance and operations. The broad-based knowledge of the Environmental Task Force, the many solutions and ideas from the locations and the transfer of measures via the massnahmen@web IT tool all help to promote a lively Groupwide dialog.

Engaging the workforce

Only a well-informed, qualified workforce can implement the specific measures derived from our environmental strategy and achieve the set targets. Already since 1976, environmental officers at our European locations have regularly convened to share their knowledge and experience. Regular Group Environmental Conferences were introduced in 1998 as a forum for the Group's Environmental Officers and experts to discuss strategies, measures and projects, and draw up joint action plans.

2013 saw the introduction of environmental protection ambassadors, as specially trained environmental experts. Worldwide, more than 1,000 ambassadors are now operating as front-line contacts and opinion leaders for production employees. Also, so-called Energy Experts receive special advanced training. The Wolfsburg facility alone has more than 70 of those experts helping their colleagues to save energy. Cross-brand, inter-departmental steering committees and working groups also operate at both management and expert level. Employee engagement is supported by an intranet portal showcasing best-practice examples and facilitating direct contact with all the relevant colleagues. The portal also outlines fundamental energy-saving guidelines and tips, including a number generated by the central ideas management program.

Biodiversity

Biodiversity means the variety of life on our planet, and covers the variety of species, the genetic differences within species and the diversity of ecosystems. We rely on it as the basis for our continued existence: healthy food, clean water, fertile soils and a balanced climate. Protecting biological diversity is one of the greatest challenges of our time. The United Nations has therefore declared the current decade to be the "UN Decade on Biodiversity".

Volkswagen has been committed to protecting biodiversity since 2007 and is a founder member of the Biodiversity in Good Company e.V. initiative. In our mission statement, we have committed to supporting the protection of species at all locations. For this, we are collaborating with local suppliers. As a consequence of the diesel issue, our membership in the Biodiversity in Good Company e.V. initiative is on hold until this issue has been clarified. Protecting biodiversity is a component of our environmental management. We have, among other things, appointed Volkswagen AG's environmental management officer as the Biodiversity Officer. We contribute to achieving the targets of the UN Convention on Biological Diversity (CBD) by reducing greenhouse gas emissions and utilizing resources as efficiently as possible. Volkswagen supports networking between the various players in the fields of business, politics, society and academia with a view to increasing public awareness of biodiversity conservation and to increase knowledge about the issue.

The thirteenth meeting of the Conference of the Parties (COP 13) on the Convention on Biological Diversity was held in Cancún in December. A representative of Volkswagen de México was invited to speak at the 2016 CBD Business and Biodiversity Forum in the run-up to the event. A statement in which the participating companies reaffirm their commitment to protecting biodiversity was also published for the first time. Volkswagen de México is one of the signatories of this Business and Biodiversity Pledge.

Our long-standing cooperation agreement with the Naturschutzbund Deutschland e.V. (NABU – German Nature and Biodiversity Conservation Union) expired on December 31, 2015. Nevertheless, the collaboration between Volkswagen Financial Services AG and NABU continued in 2016 under an agreement on a moorland conservation project and another agreement on environmentally friendly fleet management. Rewetting of moorland is an efficient measure for climate protection and nature conservation and serves to protect biotopes with highly specialized species.

At our international sites, we support the protection of nature with various partners. Volkswagen de México, for example, has been sponsoring reforestation in the Iztaccíhuatl-Popocatépetl National Park since 2008. Volkswagen has made around €1.4 million available for planting a total of 490,000 conifers. 39 suppliers have provided funding for the project. One of the aims of this project is to channel rainwater and meltwater into Puebla's aquifers.

In Xinjiang, Volkswagen supports the SuMaRiO (Sustainable Management of River Oases along the Tarim River) project, making – also from the perspective of the United Nations – an important contribution to environmental protection, to biodiversity and to combating desertification.

External environmental awards

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The Volkswagen Group's models and its brands received numerous awards for environmentally friendly features in 2016. Here are some examples:

Vehicles from the Passenger Cars brand received top marks for energy efficiency in a test conducted by Brazil's "Quatro Rodas" magazine. Of all the automobiles with petrol-powered drives, the speed up! was the most fuel-efficient, followed by the take up! and the Fox BlueMotion. The new Gol Comfortline with its 1.0 MPI engine and the Audi A1 Sport 1.4 TFSI also made the list of the most fuel-efficient vehicles.

In the China Eco-Car Assessment Program (C-ECAP), the Golf TSI was awarded a platinum medal and the ŠKODA Octavia 1.4 TSI DSG and the Volkswagen Lamando 230 TSI with DSG were awarded gold medals. The vehicles were rated in six categories, including energy savings and the recycling rate.

The eco up! and its sisters Mii from SEAT and Citigo from ŠKODA repeated earlier success by winning in the environmentally friendly car list (Switzerland). The Audi A3 TFSI gtron and the Golf TGI, which came second and third, rounded off the successful performance of the Group's efficient natural gas models in the top ten.

The editorial team from Engadget, a leading online technology magazine in the United States, conferred on the BUDD-e this year's "Best of CES" award in the Best Innovation category. Special mention was made of the vehicle's range and quick charging mode. The online guide SlashGear, which mainly rates smartphones, cars, computers and digital life, also named the BUDD-e the overall winner.

In the competition organized by Verkehrsrundschau and Trucker magazines, the Volkswagen Caddy came out on top among the vans, receiving the "Green Van 2016" award. The Caddy delivered the best overall result regarding fuel consumption, payload and load capacity. The EfficientLine 2 fuel-efficient package for the MAN TGX received the "Green Truck Innovation" accolade for proven reduction of emissions in air pollutants, greenhouse gases and noise. Scania received the "Green Truck Future Innovation 2016" environmental award in the category of promising innovations for its hybrid module for distribution trucks. The 235 kW (320 PS) hybrid truck achieves fuel savings of up to 18% compared with trucks run solely on diesel. It can operate solely in electric mode, or the electric power can be combined with pure biodiesel.

REPORT ON POST-BALANCE SHEET DATE EVENTS

There were no significant events after the end of fiscal year 2016.